Clean Air Act Section 115: Is the IPCC a "Duly Constituted International Agency"?

ADAM D. ORFORD*

ABSTRACT

Does the Environmental Protection Agency's ("EPA") receipt of the Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC) trigger the agency's duties under Section 115 of the Clean Air Act? The law requires EPA to take action to prevent or eliminate air pollution endangering the public health or welfare of foreign nationals under certain circumstances. If triggered, the argument goes, the law could justify, or compel, EPA's imposition of nationwide greenhouse gas regulation to combat climate change. One way to do so is to trigger EPA's duties "upon receipt of reports, surveys or studies from any duly constituted international agency." This Article considers whether EPA could reasonably interpret the IPCC to qualify as such an entity, and concludes not, but that a better candidate might exist.

TABLE OF CONTENTS

Introduction 216
I. The Argument that the IPCC Is a "Duly Constituted International Agency" 219
II. The Ambiguous Plain Language 224
A. The Many Meanings Of "(International) Agency" 225
B. "Duly Constituted" Vagaries 227
III. The Legislative History 230
A. 1902–1946: Constituting The IJC 231
1. 1902–1909: The Boundary Waters Treaty 231
2. 1910–1912: Enabling Legislation and the Nature of the IJC . . 233
3. 1912–1928: The First Water Pollution Reference 235
4. 1928–1941: The First Air Pollution Reference 236
B. 1946–1963: The Postwar IJC and Early Federal Environmental Law . . . 238
1. 1944–1950: The Second Water Pollution Reference 238
2. 1949–1963: The Second Air Pollution Reference 239
3. 1963: Federal Abatement in the Clean Air Act 240

* Assistant Professor, University of Georgia School of Law. JD, MPP, PhD. The author wishes to thank the participants at the CU Boulder workshop, and particularly Doug Kysar and Melissa Powers, for their generous and perceptive comments and suggestions.

C. 1964–1967: Section 115 Enacted 242
1. 1964–1965: The Purpose of the International Abatement Authority. 242
2. 1965–1967: Post-Enactment Intentions and Delay 248
D. 1965–1977: Section 115 Revised 249
1. 1967: The First Amendment 250
2. 1970: The Second Amendment 251
3. 1977: The Third Amendment 253
E. 1977–1990: Section 115 and Acid Rain 258
F. 1990–2009: Section 115 and Climate Change 263
IV. Is the IPCC A "Duly Constituted International Agency"? 270
Conclusion: Hope Springs Eternal 272

INTRODUCTION

Section 115 of the Clean Air Act ("Section 115") requires the Environmental Protection Agency ("EPA"), under certain conditions, to take regulatory action against air pollution originating in the United States and endangering public health or welfare in other countries.[1] Recently, several scholars have embraced Section 115 as a potential solution to the United States' long failure to respond to climate change, arguing that this law could be used to justify, or compel, EPA's imposition of a nationwide regulatory program on greenhouse gas emissions.[2]

But Section 115 is an odd law. Its language is complex and obscure, it is poorly integrated into the rest of the Clean Air Act, and its legislative history is not well

1. Clean Air Act ("CAA") § 115, 42 U.S.C. § 7415. The statute states in full:

International air pollution.

(a) Endangerment of public health or welfare in foreign countries from pollution emitted in United States. Whenever [EPA], upon receipt of reports, surveys or studies from any duly constituted international agency has reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country or whenever the Secretary of State requests [EPA] to do so with respect to such pollution which the Secretary of State alleges is of such a nature, [EPA] shall give formal notification thereof to the Governor of the State in which such emissions originate.

(b) Prevention or elimination of endangerment. The notice of [EPA] shall be deemed to be a finding under [42 U.S.C. § 7410(a)(2)(H)(ii)] which requires a plan revision with respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment referred to in subsection (a). Any foreign country so affected by such emission of pollutant or pollutants shall be invited to appear at any public hearing associated with any revision of the appropriate portion of the applicable implementation plan.

(c) Reciprocity. This section shall apply only to a foreign country which [EPA] determines has given the United States essentially the same rights with respect to the prevention or control of air pollution occurring in that country as is given that country by this section.

(d) Recommendations. Recommendations issued following any abatement conference conducted prior to August 7, 1977, shall remain in effect with respect to any pollutant for which no national ambient air quality standard has been established under [42 U.S.C. § 7409] unless [EPA], after consultation with all agencies which were party to the conference, rescinds any such recommendation on grounds of obsolescence.

2. *Cf.* materials examined *infra* Part I.

documented. Stranger still, although it was enacted in 1965, it has never served as the foundation for a regulatory program. The powers it grants are breathtakingly broad, and yet it contains so many conditions that it is difficult to imagine how it was intended to be used. One of those conditions is the subject of this Article.

As relevant here, to trigger Section 115's duties, three things must happen.[3] First, EPA must have "reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country" (the endangerment condition). Second, the foreign country in question must be one that EPA "determines has given the United States essentially the same rights with respect to the prevention or control of air pollution occurring in that country as is given that country by" the United States via Section 115 (the reciprocity condition). Third, EPA's endangerment finding must derive from EPA's "receipt of reports, surveys or studies from any duly constituted international agency" (the international agency condition). Proponents of Section 115 have posited that EPA's receipt of the Assessment Reports of the Intergovernmental Panel on Climate Change ("IPCC") satisfies the international agency condition. That is, they have argued that the IPCC is a "duly constituted international agency." But the logic underlying their claims to date has been weak. This Article, consequently, undertakes to examine as carefully as possible whether the IPCC qualifies, requiring a detailed investigation into what Congress meant by that key, undefined term.

Before proceeding, two initial caveats are in order. First, nothing in this Article should be taken as opposition to national greenhouse gas regulation in the United States. Quite the contrary: the United States Congress should have directed EPA to regulate greenhouse gas emissions long ago. But legal arguments formulated to circumvent Congress, if actually pursued, will face challenges brought by powerful and sophisticated litigants. It would make little sense to encourage the federal government to build a national regulatory program on a legal basis that cannot survive a hostile response. Indeed, it would be counterproductive, as the time and resources devoted to the cause would provide Congress with further excuses for delay while the matter worked its way through the courts, and divert limited EPA resources away from developing, implementing, and defending

3. Section 115 also contemplates initiation via request by the Secretary of State. 42 U.S.C. § 7415(a). However, there are several serious ambiguities in this language, the analysis of which is beyond the scope of this Article. They include the requisite basis for such a request from the Secretary of State (also reports, etc., from a duly constituted international agency, or elsewhere?); the requisite nature of the Secretary's request to EPA (to make the requisite endangerment finding, or to initiate implementation plan revisions under section 115(b)?); the requisite content of the Secretary's allegation (that certain pollution may reasonably be anticipated to endanger public health or welfare in a foreign country, or actually does so, or that the source is in the United States, or something else?); the administrative prerequisites of such a request (is it subject to notice and comment?); and whether such a request could subsequently be revoked. *See* 42 U.S.C. §§ 7415(a), 7415(b).

better-grounded regulatory programs. If nationwide climate regulation is the ultimate aim, it is advisable to scrutinize any proposed judicial solution very carefully.

Second, in the same spirit, nothing in this Article should be understood as a criticism of the IPCC or its work. The IPCC is one of the most valuable and successful government-coordinated science initiatives in human history. It deserved its 2007 Nobel Peace Prize.[4] Its Assessment Reports amply document what is known about climate change, and amply justify worldwide action to mitigate greenhouse gas emissions.[5] But such recognition is not the same as accepting the proposition that Congress has enacted a law that imposes regulatory duties on the federal government upon the receipt of the IPCC's Assessment Reports.

The inquiry below is limited to whether the U.S. federal courts are likely to agree that the IPCC meets Section 115's international agency condition, should EPA so claim. It is not argued that this is the only important question related to Section 115, or that an adverse ruling on this question would entirely vitiate the use of Section 115 for greenhouse gas regulation. But the status of the IPCC under the statute has been key to the recent calls to use Section 115, and there has never been a careful inquiry into the meaning of the key term that is the subject here.[6] At the end of the analysis, this Article concludes that the courts are unlikely to agree that Section 115 can be read to encompass IPCC reports, and proposes an alternative strategy for pursuing greenhouse gas regulation under Section 115.

This Article proceeds in four Parts. Part I examines the arguments made to date for considering the IPCC to be a "duly constituted international agency" under Section 115. Part II examines the language of the statute to consider whether a plain meaning might be found and concludes that the language is ambiguous. Part III, the bulk of the Article, turns to the history of Section 115—not only between 1965 and 1977 when it was enacted and amended, but between 1902 and

---

4. *Press Release: The Nobel Peace Prize for 2007*, THE NOBEL PRIZE (Oct. 12, 2007), https://www.nobelprize.org/prizes/peace/2007/summary/ [https://perma.cc/3MTJ-9SBD].

5. The IPCC published five Assessment Reports between 1990 and 2014, and is in the process of publishing a sixth in 2021–2022. *See Reports*, IPCC, https://www.ipcc.ch/reports/ [https://perma.cc/W88D-9RJM] (last visited Mar. 14, 2022). These reports review and summarize what is known about the physical science of climate change, its impacts, and the available response strategies. *See id.; see*, *e.g.*, *Climate Change 2021: The Physical Science Basis*, IPCC, https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/ [https://perma.cc/3H34-XLFU] (last visited Mar. 14, 2022).

6. There have been two significant published examinations of the legislative history of Section 115, but each has limitations. The best and most recent publication is Philip S. Barnett's *The Legislative History of Section 115,* which is concerned with marshalling all available evidence to demonstrate that Section 115 can be used to mitigate climate change, but does not examine the term "duly constituted international agency" (to the extent relevant to the discussion of the IPCC and international agency condition, its arguments are discussed further in Part III, *infra*). Philip S. Barnett, *The Legislative History of Section 115*, *in* COMBATING CLIMATE CHANGE WITH SECTION 115 OF THE CLEAN AIR ACT 15–40 (Michael Burger ed., 2020). For an older but historically important analysis, see ACID RAIN AND FRIENDLY NEIGHBORS: THE POLICY DISPUTE BETWEEN CANADA AND THE UNITED STATES 327 n.56 (Jurgen Schmandt et al., eds., *rev'd* ed. 1988). *See also* Sullivan, *infra* note 211, at 209; Caplan, *infra* note 211, at 583 (containing very brief discussions of legislative history).

1965 when the model for the statute's structure was developed; and between 1977 and the present day, when Section 115 was recruited into arguments that EPA had more authority than it was using. Part IV examines the IPCC in light of the statutory language and legislative history.

I. THE ARGUMENT THAT THE IPCC IS A "DULY CONSTITUTED INTERNATIONAL AGENCY"

Congress did not define "duly constituted international agency;" no court has provided definitive guidance on the meaning of the words; and no court has considered whether the IPCC might qualify. Therefore, it is useful to begin by reviewing the arguments made to date in support of using Section 115 to regulate greenhouse gases by way of the IPCC's reports. These arguments trace back to the Supreme Court's decision in *Massachusetts v. EPA*.[7] That decision held that the words "air pollutant" in Clean Air Act Section 202 could include greenhouse gases even though the original drafters of the statute had not specifically contemplated such an outcome.[8] Although the Supreme Court subsequently limited its holding,[9] Congress's ongoing failure to legislate on climate change has led to pressure on EPA to use every other existing authority available to it to regulate greenhouse gases.[10]

The first post-*Massachusetts* articulation of the Section 115 solution, including the first claim that the IPCC is a "duly constituted international agency," argued as follows:

---

7. 549 U.S. 497 (2007).

8. *Id*. at 532. Subsequently, EPA issued its "endangerment finding," concluding that greenhouse gas emissions from vehicles do, in fact, endanger the public health and welfare. EPA, *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule*, 74 Fed. Reg. 66495 (Dec. 15, 2009), upheld in relevant part by Coalition for Responsible Regulation v. EPA, 684 F.3d 102 (D.C. Cir. 2012), *rev'd other grounds* Util. Air Reg. Group v. EPA, 573 U.S. 302 (2014), *aff'd sub nom*. Coalition for Responsible Reg. v. EPA, 606 F. App'x 6 (D.C. Cir. 2015), *cert. denied* Energy-Intensive Manufacturers Working Group on Greenhouse Gas Reg. v. EPA, 557 U.S. 1103 (2016).

9. *See* Util. Air Reg. Group v. EPA, 573 U.S. 302 (2014) (court declined to read greenhouse gases into other parts of the statute that also used the word "pollutant"). The decision is also a rich source of arguments regarding the potential applicability of Section 115, but that is largely outside the scope of this analysis.

10. EPA requested commentary on the use of several parts of the Clean Air Act, including Section 115, in its first responsive rulemaking to *Massachusetts v. EPA*. *Regulating Greenhouse Gas Emissions Under the Clean Air Act*, 73 Fed. Reg. 44354, 44483 (July 30, 2008). However, although several of the responses touched on Section 115, none of them addressed the question of the meaning of "duly constituted international agency." *See Advanced Notice of Proposed Rulemaking for Greenhouse Gases Under the Clean Air Act, Comments Archive – Docket EPA-HQ-OAR-2008-0318*, PROQUEST REGULATORY INSIGHT, https://regulatoryinsight.proquest.com/regulatoryinsight/docview/t109.d109.epa-hq-oar-2008-0318?accountid=11091 (last visited Apr. 3, 2022) (searches for "115" and variations returned three results). For a free version of the docket, see EPA, *Advanced Notice of Proposed Rulemaking for Greenhouse Gases Under the Clean Air Act,* REGULATIONS.GOV, https://www.regulations.gov/docket/EPA-HQ-OAR-2008-0318 (last visited Apr. 3, 2022) (Docket ID: EPA–HQ–OAR–2008–0318).

> The IPCC is a scientific intergovernmental body created by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). Its constituency is open to all member countries of WMO and UNEP. The IPCC is a United Nations body, and its work ''aims at the promotion of the United Nations human development goals.'' It is clear [EPA] has received a copy of this report . . . . Thus, EPA may consider the 2007 IPCC Report as the basis for a Section 115 endangerment finding since it was issued by a duly constituted international agency.[11]

The argument did not explain its logic in any further detail. It did not explain why a "scientific intergovernmental body" should be considered an "agency" under the statute, nor why the appropriate criteria for being considered an "international agency" should be that the organization was created under the auspices of the United Nations (WMO, UNEP, or otherwise) and open to all member states. And it did not explain the relevance of the fact that, in the authors' words, the IPCC exists to promote UN human development goals.

Nonetheless, this initial statement inspired further commentary. An analysis the following year added a review of the case law, explaining:

> In the only two cases that have ever reached the courts under § 115, both relating to attempts by Canadian provinces and environmental groups to force EPA to act on acid rain under § 115, the D.C. Circuit has regarded as self-evident the determination of whether an organization is a "duly constituted international agency." In both cases, the court noted without further explication that the International Joint Commission, an organization created by the U.S. and Canada in the Boundary Waters Treaty, is "concededly a 'duly constituted international agency' for purposes of section 115(a)." There is no reason that the IPCC, an intergovernmental body established by [UNEP] and the [WMO], is not similarly a duly constituted international agency.[12]

In other words, this new argument proposed that the IPCC is a "duly constituted international agency" because it is "an intergovernmental body established by [UNEP] and the [WMO]," and there is "no reason" to think otherwise. But it was not explained why or how the two D.C. Circuit decisions about the IJC would or should apply to the IPCC, a different organization, and there is no acknowledgement that this would be necessary in a contested litigation. Rather, the logic

---

11. Roger Martella & Matthew Paulson, Regulation of Greenhouse Gases Under Section 115 of the Clean Air Act, BNA DAILY ENV'T REP. (Mar. 9, 2009) (citations omitted), https://perma.cc/4SLR-4UBY. *See also* Larry Parker & James E. McCarthy, *Climate Change: Potential Reg. of Stationary Greenhouse Gas Sources Under the Clean Air Act*, CRS REP. R40585, at 13–14 (May 14, 2009), https://perma.cc/EY42-B8QQ.

12. HANNAH CHANG, CAP-AND-TRADE UNDER THE CLEAN AIR ACT? RETHINKING SECTION 115, WORKING PAPER, COLUMBIA L. SCH. CTR. FOR CLIMATE CHANGE LAW (Apr. 2010) (citing Her Majesty the Queen v. EPA, 912 F.2d 1525 (D.C. Cir. 1990); and then citing Thomas v. New York, 802 F.2d 1443 (D.C. Cir. 1986)), *subsequently published as* Hannah Chang, *Cap and Trade under the Clean Air Act: Rethinking Sec. 115*, 40 ENV'T L. REP. NEWS & ANALYSIS 10894 (2010).

appears to be that the courts did not subject the question to careful scrutiny in the cases cited, implying that the statute does not present a high bar. But there is another, more likely explanation for the brevity of the treatment in those decisions: that the litigants did not contest the point. A court, confronted with the question squarely, would examine it carefully, and there is no guarantee that it would be obvious that the IPCC's status would be found to be the same as the IJC's.

In 2013, the issue was pursued further in a Petition for Rulemaking to EPA demanding regulation under Section 115, and relying on the same logic. The petitioners argued:

> Though the statute does not define "duly constituted international agency," courts have found the meaning to be self-evident. The only two cases that treat Section 115 . . . found the [IJC] to "concededly" be a duly constituted international agency, highlighting that the [IJC] was established by treaty and charged with the responsibility of resolving trans-boundary water disputes. Perhaps also relevant, the [IJC's] membership is split between the United States and Canada, and experts from both countries submit evidence to the body.
>
> The [IPCC] shares all those relevant characteristics and, therefore, is also a duly constituted international agency. The Panel was established by two United Nations organizations and endorsed by a United Nations General Assembly Resolution, which charged the Panel with conducting a comprehensive review of the state of knowledge of climate change, the social impact of climate change, and possible response strategies. The Panel is composed of members from several countries, including the United States. Scientists from around the world contribute to the Panel's reports, which are reviewed and approved by member countries. Congress has even instructed U.S. federal agencies to base their climate change plans on the reports of the [IPCC].[13]

That is, the petitioners drew comparisons between the IPCC and IJC to demonstrate their similarity. The problem, however, is that the comparisons are not convincing. Being "established by treaty" (IJC) is not the same as being "established by two United Nations organizations and endorsed by a United Nations General Assembly Resolution" (IPCC). Being "charged with resolving trans-boundary water disputes" (IJC) is not the same as being "charged . . . with conducting a comprehensive review of the state of knowledge . . . social impact . . . and possible response strategies" to climate change (IPCC). Being composed of appointed members from two countries according to a bilateral treaty (IJC) is not the same as being composed of members from several countries (IPCC).[14] And it is not

13. Michael A. Livermore et al., *Petition for Rulemakings and Call for Information under Section 115, Title VI, Section 111, and Title II of the Clean Air Act to Regulate Greenhouse Gas Emissions*, INST. FOR POL'Y INTEGRITY, NYU SCH. OF LAW 4–5 (Feb. 19, 2013), https://perma.cc/A7SM-FE4M.

14. EPA never acted on the petition. Subsequent commentary did not evaluate the issue in any more depth and is cited here for completeness' sake. *See* David R. Baake, *International Climate Action Without Congress:*

obvious why contribution from scientists around the world, or use of the reports by the U.S. government, would be requisite criteria of "any duly constituted international agency."

The preceding arguments nevertheless were incorporated into a 2016 policy paper endorsed by faculty at multiple law schools, arguing:

> The [IPCC] ... undoubtedly constitutes a "duly constituted international agency." The IPCC was established by the [WMO] and [UNEP] in 1988, and subsequently endorsed by the [UN] General Assembly and charged by it with the mandate "to provide internationally co-ordinated scientific assessments of the magnitude, timing and potential environmental and socio-economic impact of climate change and realistic response strategies." A United Nations body, open to all member countries of the WMO and UNEP and in which the United States actively participates, the IPCC is recognized as the most authoritative voice on the scientific and technical issues involved with climate change, and has, in effect, become the scientific arm of the United Nations Framework Convention on Climate Change.[15]

Again, this assumes the truth of the point that needs to be established: that the IPCC, by virtue of the circumstances of its creation, somehow qualifies as a "duly constituted international agency" under Section 115. The additional argument in this instance appears to be that the United States actively participates in the IPCC, which in some way legitimates the IPCC's putative status. The explicit argument, however, is only that the IPCC "undoubtedly" qualifies—a dangerously thin rationale upon which to hang a regulatory program encompassing the entire industrial economy of the United States, the initiation of which would provoke fierce resistance from anti-regulatory political interests. The argument, nonetheless, was repeated essentially in the same form in the 2020 book-length expansion of the 2016 policy paper, as follows:

> The [IPCC] was created in 1988 by two agencies of the United Nations - the [WMO] and [UNEP]. In endorsing its creation, the United Nations General Assembly declared the IPCC's purpose to be "to provide internationally coordinated scientific assessments of the magnitude, timing and potential environmental and socio-economic impact of climate change and realistic response strategies." Thus the IPCC is unquestionably a "duly constituted international agency" within the meaning of Section 115. . . .

Does § 115 of the Clean Air Act Provide Sufficient Authority?, 44 ENV'T L. REP. NEWS & ANALYSIS 10562 (2014); David A. Wirth, *The International and Domestic Law of Climate Change: A Binding International Agreement Without the Senate or Congress?*, 39 HARV. ENV'T L. REV. 515 (2015).

15. Michael Burger et al., Legal Pathways to Reducing Greenhouse Gas Emissions Under Section 115 of the Clean Air Act (2016) (citing Chang, *supra* note 12, and then citing Martella & Paulson *supra* note 11). This analysis was subsequently updated and published as the following: Burger et al., *Legal Pathways to Reducing Greenhouse Gas Emissions Under Section 115 of the Clean Air Act*, 28 GEO. ENV'T L. REV. 359 (2016).

> Although that phrase "duly constituted international agency" is not defined and does not appear to exist in any other statutory context, the IPCC, as an agency created pursuant to a treaty to which the United States is a party, falls within the heartland of any reasonable definition. It would strain credibility for [EPA] to claim that the IPCC, an organization established, in part, by [UNEP] and representing 195 member governments, is not a "duly constituted international agency."[16]

That is the entirety of the analysis of the issue in the book. Here, the new argument is that the IPCC is an "agency created pursuant to a treaty to which the United States is a party." But—setting aside whether the IPCC is an "agency"—this statement does not accurately characterize the IPCC, which was "created pursuant to a Treaty" only to the extent that the IPCC was a project of the WMO (created by the World Meteorological Convention of 1947), UNEP (created by General Assembly Resolution 2997),[17] and the individual UN member states operating in the larger framework of the United Nations (itself created by treaty). The IPCC was not created by or within the UN Framework Convention on Climate Change, nor its subsidiary protocols or agreements, and the United States has not entered into any treaty at all regarding the IPCC.

In summary, then, the argument for concluding that the IPCC qualifies as a "duly constituted international agency" seems to be that the IPCC was created by the United Nations for the purpose of producing highly credible reports on climate science, and does so. Because EPA is in receipt of these reports, Section 115 is triggered. The precise arguments for why the IPCC should be considered a "duly constituted international agency" for the purposes of Section 115 have been conclusory, but appear to rely heavily on the argument that it was organized under UN processes in which the United States actively participated, and is international in character. The author is not aware of any further scholarly analysis of the question.

In a federal court, these arguments would raise matters of statutory interpretation. If a litigant sought to force EPA to regulate on this theory, and EPA declined; or if EPA concluded that the statute did permit or require it to regulate, and acted on that conclusion, and litigants challenged that action, courts would review EPA's interpretation of the statute and attempt to determine whether it is consistent with Congress's intentions.[18] To courts, the best evidence of this intent is the statutory language, and the first step in such an inquiry is to determine

---

16. Michael B. Gerrard, *The Environmental Case for Action Under Section 115*, and Cale Jaffe & Michael A. Livermore, *EPA's Nondiscretionary Duties to Act under Section 115*, *in* COMBATING CLIMATE CHANGE WITH SECTION 115 OF THE CLEAN AIR ACT 64–65, 199 (Michael Burger ed., 2020).

17. G.A. Res. 2997 (XXVII) at 43 (Dec. 15, 1972).

18. Chevron v. NRDC, 467 U.S. 837, 842–43 (1984). There are countless applications of *Chevron* to statutory text. For a recent example discussing the relevant principles, *see In re Rail Freight Surcharge Antitrust Litigation*, 520 F. Supp. 3d 1 (D.C. Cir. 2021) ("The function of the courts is to construe the language so as to give effect to the intent of Congress" (quotations omitted)).

whether Congress spoke directly to the issue, meaning that courts will evaluate whether the statutory language in question is susceptible to a single plain meaning, either standing on its own or within the context of its surrounding statutory text.[19] If no plain meaning is discernible (for example where the statute is ambiguous) Courts will consider whether the agency's action is based on a permissible construction of the law, and if so, grant that interpretation considerable deference.[20] Although the exact role of legislative history in this process is inconsistent and debated, modern courts regularly cite to and rely on legislative history as evidence of statutory meaning and Congressional intent throughout this process.[21] Consequently, Part II, below, examines whether the words "duly constituted international agency" can be understood by reference to the text of the statute; and Part III considers whether the legislative history, including the history of claims about the legislative history, resolves the statute's ambiguity or otherwise informs the statute's meaning. In each case the focus is on what Congress meant by the words under examination: "duly constituted international agency" as used in Section 115.

II. THE AMBIGUOUS PLAIN LANGUAGE

This Part examines, as succinctly as possible, the variety of reasonable but conflicting interpretations that might apply to the words "duly constituted international agency," and concludes that the term is fundamentally ambiguous.

What is now Section 115 was first added by the 1965 amendments to the 1963 Clean Air Act, and then revised in each of the 1967, 1970, and 1977 amendments to that law.[22] The relevant provision has always included the words "any duly constituted international agency," and that term has never been defined. The phrase also does not appear in any other section of the U.S. Code except the equivalent section of the Clean Water Act, which was copied from the Clean Air Act and where the phrase is also not defined.[23] Lacking definitions and faced with

---

19. *E.g.*, Bostock v. Clayton Cty., GA, 140 S. Ct. 1731, 1749 (2020) ("when the meaning of the statute's terms is plain, our job is at an end. The people are entitled to rely on the law as written, without fearing that courts might disregard its plain terms based on some extratextual consideration."). On the reading of text within statutory context, *see FDA v. Brown & Williamson*, 529 U.S. 120, 132 (2000) ("a reviewing court should not confine itself to examining a particular statutory provision in isolation. The meaning—or ambiguity—of certain words or phrases may only become evident when placed in context.").

20. *Chevron*, 467 U.S. at 843.

21. *Bostock* acknowledged the propriety of using legislative history to resolve textual ambiguity. 140 S. Ct. at 1749. Many courts have used legislative history in this way; many others to assess the reasonableness of agency interpretation. *See generally* John F. Manning, Chevron *and Legislative History*, 82 GEO. WASH. L. REV. 1517 (2014).

22. 42 U.S.C. § 7415, enacted as CAA § 105(c)(1)(D), Pub. L. No. 89-272 §102(a), 79 Stat. 992, 995 (Oct. 20, 1965), amended Pub. L. No. 90-148 § 2 (Nov. 21, 1967) (renumbering CAA § 105(c) to § 108(d)); Pub. L. No. 91-604 §§ 4(a), (b), 84 Stat. 1676, 1678, 1688 (Dec. 31, 1970) (renumbering CAA § 108 to CAA § 115 and amending); Pub. L. No. 95-95 § 114, 91 Stat. 685, 710 (Aug. 7, 1977) (amending CAA § 115).

23. 33 U.S.C. § 1320, enacted Pub. L. No. 89-753 § 206, 80 Stat. 1246, 1250 (Nov. 3, 1966) (amending Federal Water Pollution Control Act (FWPCA) § 10(d)).

a task of statutory interpretation, courts will undertake to determine the statute's ordinary meaning by exhausting "all the textual and structural clues" available to them,[24] examining dictionaries and other evidence of plain meaning,[25] considering the language within the larger context of the statute as a whole,[26] and "giv[ing] effect, if possible, to every word Congress used."[27]

As discussed below, however, the words "duly constituted international agency" are almost comically inscrutable. The word "agency" is ambiguous, the words "international agency" are ambiguous, and the words "duly constituted" are, if not ambiguous, unhelpful in clarifying what the other words mean. There is no "plain meaning" of this unusual phrase.

A. THE MANY MEANINGS OF "(INTERNATIONAL) AGENCY"

The word "agency," used by itself, might imply an instrumentality of government, and might not. An influential definition of the word is found in the Administrative Procedure Act ("APA"), which defines it, with exceptions not relevant here, as "each authority of the Government of the United States."[28] Courts have interpreted this to mean any entity holding "the authority to act with the sanction of government."[29] Consistent with the APA's approach, dictionary entries can be found to support the idea that an "agency" must be an instrumentality of the government.[30] And so, when Congress says "agency," it often means it in the APA sense. It might be argued that Congress must have meant it this way in Section 115.

The problem with such an argument is that there are many other competing definitions of the word, and many of them are not limited to governmental subdivisions. As one court looking at the matter closely has said, the word "agency" is a term "of considerable breadth" and "susceptible of different meanings in different contexts."[31] Black's Law Dictionary, for example, defines it as primarily, but

---

24. Niz-Chavez v. Garland, 141 S. Ct. 1474, 1480 (2020).

25. Metro One Telecomm. v. C.I.R., 704 F.3d 1057, 1061 (9th Cir. 2012) (dictionaries generally).

26. Guam v. U.S., 141 S. Ct. 1608, 1613 (2021).

27. Nat'l Ass'n of Mfrs. v. Dep't of Def., 138 S. Ct. 617, 632 (2018).

28. 5 U.S.C. §§ 551(1), 701(b). Substantially the same definition was first adopted in Pub. L. No. 79-404 § 2(a), 60 Stat. 237 (Jun. 11, 1946), and was retained when the APA was recodified. *See* Pub. L. No. 89-554, 80 Stat. 378 (Sep. 6, 1966).

29. *E.g.,* Indep. Bankers Ass'n of Am. v. Nat'l Credit Union Admin., 936 F. Supp. 605, 614 (W.D. Wis. 1996).

30. *E.g.*, John M. Rogers, Michael P. Healy & Ronald J. Krotoszynski Jr., *Administrative Law* 1 (2d ed. 2008), *quoted in* BRYAN GARNER, DICTIONARY OF LEGAL USAGE 38–39 (3d ed. 2011). Garner writes:

> Why exactly, you may wonder, is a government agency called an *agency*? The answer has to do with the principal-agent relationship . . . . "Those who actually do this work [of government] are the agents of the government, hence the word 'agencies.' In a sense, they are necessary if government is to do anything."

Id. (quoting Rogers, Healy & Krotoszynski, *supra*).

31. Guardian Industry Corp. v. Comm'r Internal Revenue, 143 T.C. 1 (U.S.T.C. 2014) (reviewing judicial interpretations of the word and finding it to be ambiguous, in tax regulation context).

not exclusively, government-related.[32] Other dictionaries, both legal and non-legal, do the same.[33] At its broadest, the word can be used as essentially a synonym of "organization,"[34] and it is possible to argue that Congress must have meant it that way in Section 115 as well.

Unfortunately, the remainder of the text of the Clean Air Act offers little help. On the one hand, the law has always included definitions of "air pollution control agencies," and has only ever done so in the context of government organizations holding some public "power," "duty," or "authority,"[35] and it might be argued that the "agency" in what is now Section 115 should be informed by these uses. But on the other hand, Section 115 does not say "international air pollution control agency," but rather just "international agency," and the difference might imply a distinction. In any event, elsewhere in the statute the word "agency" is used in expressly non-governmental fashion: versions of the law concurrent with the language of Section 115 discussed "public and private agencies, institutions, and organizations,"[36] raising the possibility of "private agencies" and making it difficult to determine whether the word in Section 115 means anything other than "organization."[37]

The word "international" only compounds the complexity, as it has both a literal sense—"between nations," that is, involving interactions between national governments—and a more general or descriptive sense of "in several nations," as

---

32. It should be noted, however, that this definition was not used in Black's during the period 1965–1977, when Section 115 was enacted and revised. Black's 4th ed. (1951) and 4th ed. revised (1968) include definitions of "agency" only in the contractual sense. BLACK'S LAW DICTIONARY (4th ed. 1968).

33. *E.g.*, MERRIAM-WEBSTER'S DICTIONARY OF LAW (2016) (multiple governmental and non-governmental definitions); BALLANTINE'S LEGAL DICTIONARY AND THESAURUS (1995) (definitions include both "short for administrative agency" and "a private organization or unit of government organized to provide a particular service or type of service"); WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE, UNABRIDGED (1967) (multiple governmental and non-governmental definitions).

34. *See* BLACK'S LAW DICTIONARY (11th ed. 2019) (defining "organization" generally as a "group that has formed for a particular purpose").

35. The 1955 Air Pollution Control Act included two agency definitions: a "State air pollution control agency" was "the State health authority"; and a "local government air pollution control agency" included any "city, county, or other local government health authority," or any other local "agency" with air pollution control responsibility. Air Pollution Control Act, Pub. L. No. 84-159, §§ 6(b), (c), 69 Stat. 322, 323 (1955). These definitions were amended by the 1963 Clean Air Act, which consolidated them into a general category of "air pollution control agency," defined in circular fashion as any "agency" with responsibility for air pollution control, under a variety of jurisdictional permutations—local, inter-municipal, state, and interstate. Clean Air Act, Pub. L. No. 88-206, 77 Stat. 392, §§ 9(b)(1-4), (c)(1-2) (1963). The 1967, 1970, and 1977 amendments did not make changes to the agency definitions: Pub. L. No. 90-148, 81 Stat. 485, 485, § 2, (1967) (enacting Clean Air Act, § 302); Pub. L. No. 91-604, §§ 15(a)(1), (c)(1) (1970); Pub. L. No. 95-95, §§ 111(d)(3), 218(c), 301(a-c) (1977). The Act's agency definitions were not amended again until 1990, when the existing structure was retained, and the definition of "air pollution control agency" was expanded to include "an agency of an Indian tribe." Pub. L. No. 101-549, § 107 (1990). That amendment is not relevant to this analysis.

36. CAA §§ 3(a)(2), (3)(b)(2), (3), (4), (7) (1963) (emphasis added).

37. Although the Administrative Procedure Act definition is unambiguously focused on governmental organizations, it is not obvious whether the APA definition applies to the Clean Air Act generally, or to Section 115 specifically.

in an international business or other organization. Just so, an "international agency" might be understood as meaning an agency organized between nations (for example, an inter-state agency, a regional agency, an inter-national agency), or an organization operating in multiple countries. This ambiguity is present in dictionaries.[38] It is present in the U.S. Code.[39] It is present in the International Organizations Immunities Act.[40] Indeed, Congress has often used the words "international agency" and "international organization" interchangeably; the clearest example is a report from 1947 titled *International Agencies in which the United States Participates*, and its 1950 update, covering many of the same bodies, titled *International Organizations in which the United States Participates*.

While more could be said, the result would not change. When Congress said "international agency" in Section 115, it might have meant a federal agency working on issues abroad; or a subdivision of a foreign government; or a nongovernmental organization working abroad; or a multinational cooperative organization; or a bilateral treaty organization with supranational powers in which the United States agreed to participate, or some of these, or something else.

B. "DULY CONSTITUTED" VAGARIES

Because it is not immediately clear what Congress meant by international agency, it is also not immediately clear what it might have meant by specifying one that was "duly constituted," nor to what degree those words might restrict the kinds of entities that might qualify.

---

38. The American Heritage Dictionary, for example, defines "agency" as "[a]n administrative division of a government or international body." THE AMERICAN HERITAGE DICTIONARY, https://ahdictionary.com/word/search.html?q=agency (last visited Feb. 6, 2022), https://perma.cc/63SN-6HGK.

39. *See* (in order of enactment): 22 U.S.C. § 290e-1; 7 U.S.C. § 136o(b); 42 U.S.C. § 242k(k)(5)(A)(v); 22 U.S.C. § 2394; 30 U.S.C. § 1602(2); 22 U.S.C. § 3101(a)(8); 21 U.S.C. § 1402(b)(2); 33 U.S.C. §§ 1268(c)(1)(A), 1330(j)(1)(C); 34 U.S.C. §§ 10142(3), 20111(c)(4); 16 U.S.C. § 1881c(d); 22 U.S.C. § 2220a(B); 49 U.S.C. § 44936(a)(1)(A); 42 U.S.C. §§ 247d-6(a)(2)(D), 247d-7e(c)(4)(A)(II)(I); 22 U.S.C. § 7634(c)(2)(E); 8 U.S.C. § 1232(a)(5)(A); 50 U.S.C. § 167n(a)(2); 7 U.S.C. § 6971(e)(4)(C). Two examples deserve special highlighting: the 1965 Water Resources Planning Act used the term "international agency" once, but in all other contexts discussed "international commissions," including particularly three bilateral boundary commissions: the International Joint Commission, entities established pursuant to the Columbia River Basin Treaty, and the U.S.–Mexico International Boundary and Water Commission. Water Resources Planning Act, 42 U.S.C. § 1962b-3(2), enacted Pub. L. No. 89–80 § 204, 79 Stat. 248 (1965). And in the 1978 National Climate Program Act, Congress directed cooperation in "coordinating the activities of the Program with the climate programs of other nations and international agencies and organizations, including the World Meteorological Organization, the International Council of Scientific Unions, the United Nations Environment Programme, the United Nations Educational, Scientific, and Cultural Organization, the World Health Organization, and Food and Agriculture Organization." 15 U.S.C. § 2904(f)(2), enacted Pub. L. No. 95-367 § 5, 92 Stat. 601, 603 (1978). However, in neither of these contexts is it clear exactly what organizations were meant by "international agencies," nor whether the other organizations discussed should be considered to qualify. Arguments could be made either way.

40. 22 U.S.C. § 288.

The United States Code provides some support for the idea that only instruments of government can be "duly constituted." Congress has exclusively reserved the words for governmental organizations and authorities,[41] using them to indicate the laws or processes by which the organization is formed. The problem, however, is it is generally clear which laws or rules would require consultation—for example, it is relatively simple to decide which laws might be consulted to determine a state's "duly constituted taxing authority," or a city's "duly constituted zoning authority," or the U.S. Senate's "duly constituted committees"—but when the function of the organization in question is not specified, that clarity disappears. The Code also supports the reading of the phrase as being used to set apart an organization as legitimate as against other claimants to legitimacy: for example, the "duly constituted governing body of an Indian Tribe"[42] might be understood as an expression of the U.S.'s power to recognize a legitimate tribal government, and the "duly constituted Government of . . . Afghanistan"[43] might be understood in the context of a civil war in that country where the U.S. supports one side. This interpretation also finds support in Black's Law Dictionary.[44] But in that case, there is typically some unspoken pretender in the wings, being excluded from consideration, again raising the question of what it might mean if this is not otherwise the case.

Although it requires a lengthy aside, it is also the case that the governmental interpretation finds support in the history of the words themselves. The phrase "duly constituted" has its origin in another phrase: "constituted authorities." The traditional etymologies of that earlier term trace two competing meanings: "constituted authorities" were, first, the authorities created under a constitution, and second, government authorities generally.[45] But there was also a third

---

41. *See* (in order of enactment) 16 U.S.C. § 812; 7 U.S.C. § 610(i); 4 U.S.C. §§ 105(a), 106(a); 4 U.S.C. § 111(a) ("duly constituted taxing authority"); 25 U.S.C. § 231 ("duly constituted governing body" of a Native American tribe); 42 U.S.C. § 4023 ("duly constituted State or local zoning authority"); 42 U.S.C. § 3371(a); 15 U.S.C. § 77s(d)(1); 21 U.S.C. § 1703(b)(6) ("duly constituted committees and subcommittees of the House of Representatives and of the Senate"); 42 U.S.C. § 9661(a); 42 U.S.C. § 300cc-13(b)(2)(B)(ii); 28 U.S.C. § 297(a); 49 U.S.C. § 11301(d)(1); 20 U.S.C. § 7011(14)(A) ("duly constituted governing body of an Indian tribe"); 22 U.S.C. § 8401(2)("duly constituted Government[] of . . . Afghanistan").

42. 20 U.S.C. § 7011.

43. 22 U.S.C. § 8401.

44. BLACK'S LAW DICTIONARY (4th ed. 1968). "Duly constituted" is not defined, but see *judicature*, 1. "the action of judging or of administering justice through duly constituted courts"; and in *writ of privilege*, where a source is quoted as follows: "It has always been held to extend to every proceeding of a judicial nature taken in or emanating from a duly-constituted tribunal which directly relates to the trial of the issues involved." *Id*. *See also legislation*, 1. "the process of making or enacting a positive law in written form, according to some type of formal procedure, by a branch of government constituted to perform this process"; and *constituted authority*, "each of the legislative, executive, and judicial departments officially and rightfully governing a nation, people, municipality, or other governmental unit; an authority properly appointed or elected under organic law, such as a constitution or charter." *Id*.

45. *See* JOHN MARSHALL, 5 LIFE OF WASHINGTON 66, 96 (1807) (concerning government authorities created by the U.S. Constitution). Later, John Pickering (citing Marshall) wrote that "constituted authorities" meant: "The officers of government collectively, in a kingdom, city, town, &c. This

meaning, involving a distinction between the non-legitimacy of non-governmental organizations as opposed to the legitimacy of "the constituted authorities." This meaning first appeared in the language of the Federalist opposition to Democratic-Republican clubs and the development of the Sedition Act of 1798. There, a distinction arose between popular political clubs (the predecessors of the modern political parties) and the "well-constituted organs of the People's will," that is, the legislatures; with the former beginning to be described as "self-constituted authorities," and the latter as, variously, "the regularly constituted authorities of the nation," the "constituted authorities of the people," or simply "the constituted authorities."[46] This legitimacy valence also appeared in work by Chief Justice Marshall,[47] and appears to have become a dominant meaning thereafter.[48] The Civil War and Reconstruction—involving competing national governments and conflict over state government legitimacy—saw an increased need for this distinction. In 1871, the phrase appeared four times in the Ku Klux Klan Act of 1871, each time in reference to the "constituted authorities" of the State governments.[49]

The words "duly constituted" emerged because, in injecting this question of legitimacy, it was possible to qualify the words "constituted authorities" with a word like "proper," or "duly."[50] For example, in the landmark post-Civil War case *Ex parte Milligan*, the Supreme Court spoke in this way, where "duly"

---

expression has been adopted by some of our writers from the vocabulary of the French Revolution." John Pickering, A VOCABULARY, OR PHRASES WHICH HAVE BEEN SUPPOSED TO BE PECULIAR TO THE UNITED STATES OF AMERICA 69 (1816). In fact, the words were used in the United States much earlier: *See, e.g.*, George Washington, Farewell Address (September 17, 1796), https://perma.cc/58EL-NPVK (warning against political parties: "All obstructions to the execution of the laws, all combinations and associations, under whatever plausible character, with the real design to direct, control, counteract, or awe the regular deliberation and action of the constituted authorities, are destructive of this fundamental principle, and of fatal tendency.").

46. James P. Martin, *When Repression Is Democratic and Constitutional: The Federalist Theory of Representation and the Sedition Act of 1798*, 66 U. CHI. L. REV. 117, 132, 137 (1999).

47. *Ex parte Bollman*, 8 U.S. 75, 115 (1807) (Marshall, C.J.) ("But if the constituted authorities of the United States should be suppressed but for one hour, and the territory of Orleans revolutionized but for a moment, it would be treason.").

48. For example, President James Monroe, in his third inaugural address (Dec. 7, 1819), in discussing the subject of the "Long Expedition" (the unauthorized military incursion into Spanish Texas in June 1819), used the phrase to distinguish the legitimate government of Spanish Texas, as distinct from the filibusters organized against it. Similarly, in 1841–1842, during the Dorr Rebellion in Rhode Island, the language appeared in correspondence between President Tyler and the two competing state governments, where Tyler referred to the existing state government as "the constituted authorities." *See also* William Partlett, *The American Tradition of Constituent Power*, 15 INT'L J. CONS. L. 955, 973 (2017) (quoting Appendix to Elisha R. Porter, Considerations on the Questions of the Adoption of a Constitution, and Extension of Suffrage in Rhode Island 55–56 (1842)).

49. Public Laws 1871, ch. 22, 17 Stat. 13, §§ 2, 3, 4 (Apr. 20, 1871). *See generally* David Achtenberg, *A "Milder Measure of Villainy": The Unknown History of 42 U.S.C. § 1983 and the Meaning of "Under Color of" Law*, 1999 UTAH L. REV. 1 (providing legislative history of the Act).

50. *See* Higginson v. Mein, 8 U.S. 415, 419 (1807) (Marshall, C.J.) ("The lands, at the time of the treaty, remained unsold, and the government, claiming them a confiscated, stipulates through the proper constituted authorities for their liability to this mortgage.").

appears to have been added to emphasize the legitimacy of certain authorities, as against others claimed or putative. Summarizing charges of treason levied by a military commission against U.S. citizens, their actions were described as being undertaken "for the purpose of overthrowing the Government and duly constituted authorities of the United States."[51] From this point, and into the twentieth century, it appears that the words "duly constituted" became separated from the earlier phrase "constituted authorities," and were used as a general indicator of lawfulness or legitimacy. To be "duly constituted," then, meant being a legitimate organ of government.

The difficulty with this interpretation is that "duly constituted" also literally means "constituted according to some appropriate process," and contains no internal limitation to government. Thus, in considering an "international agency," and whether it is legitimate or properly established according to some pre-defined or external rules or laws, it is still necessary to know what kind of "agency" one means. If a nonprofit non-governmental organization is an "international agency," it might be "duly constituted" by filing appropriate corporate registrations and holding regular board meetings. If a supranational or bilateral governmental organization is intended, being "duly constituted" might require a treaty ratified by the U.S. Senate. Thus, in Section 115, it is arguable that the words "duly constituted" eliminate some of the ambiguity of "international agency," in that the words "duly constituted" are rarely associated with non-governmental organizations. On the other hand, it is possible to understand the words as reflecting creation according to a set of governmental rules—that is, a duly constituted corporation being one established in accordance with state law—not necessarily limited to government authorities.

In summary, a restrictive reading of "duly constituted international agency" might limit the term to a supranational governmental organization established according to a defined set of rules and for defined purposes. A permissive reading might include a nonprofit operating in multiple countries that has bylaws. The words alone are insufficient to determine what Congress intended. Thus, it is necessary to turn to another important indicator of intent: the legislative history.

III. THE LEGISLATIVE HISTORY

This Part examines the legislative history of the language that is now Section 115. Given that the U.S.–Canadian International Joint Commission is the only

51. Ex parte Milligan, 71 U.S. 2, 1866 U.S. LEXIS 861, 5 (1866). The connection to conflicts over legitimacy of authority follows in *Boyd v. Nebraska*, 143 U.S. 135, 185–86 (1892) ("Would the court call upon the general government to send an army into the State to force upon it a governor who has been declared by its duly constituted authorities not to be entitled to the office and to oust the one who has been declared by them to be entitled to it?").

organization to have been held to meet Section 115's international agency condition, this Part also examines the origins and nature of that body, and its role with respect to pollution between 1909 and 1965. In so doing, it concludes that the IJC was the organization on the mind of the original drafters of what is now Section 115, and that the words were most likely left ambiguous intentionally to encompass some as-then-unknown equivalent of the IJC between the United States and Mexico. This Part also examines what happened next—the new powers of Section 115 were never used on behalf of Canada due to the reciprocity condition, while the U.S.–Mexico organization never materialized, leaving a narrow authorization that Congress later preserved but does not seem to have intended to expand. With this history long forgotten, and in the face of increasing partisan and ideological resistance to environmental legislation, Section 115's broad language led to its recruitment into arguments that the EPA's regulatory mandates extend beyond specific Congressional instruction: first for acid rain, and then for climate change.

A. 1902–1946: CONSTITUTING THE IJC

As explained further below, understanding Section 115 is easier when one understands the International Joint Commission, and therefore, although it seems something of an aside, the history of the IJC from its creation through the 1960s is, in fact, the essential beginning point for analyzing what is a "duly constituted international agency." This section therefore examines the years prior to World War II and shows that the International Joint Commission was created by a treaty that left the organization's fundamental nature unresolved. Opinions differed from the beginning as to whether it was supposed to function as a supranational tribunal, or a joint venture between administrative divisions of the two national governments. But either way, the United States and Canada were never willing to cede it decision-making authority, and it remained a fundamentally ambiguous "international agency" with more investigatory and advisory than adjudicatory powers. In this way it became responsible for creating reports, surveys, and studies of air pollution originating in the United States and alleged to endanger the health and welfare of residents of a foreign country: the type of activity, by the type of entity, later contemplated by what is now Section 115.

1. 1902–1909: The Boundary Waters Treaty

After years of conflict over the border waters, in 1902 the United States invited Canada "to join in the formation of an international commission" that would be

authorized to resolve their ongoing disputes.[52] The result was not the International Joint Commission (IJC), but rather the International Waterways Commission (IWC), which began operations in 1905. It transpired, however, that the two parties had different understandings of the IWC's mandate, and the IWC itself found it necessary to propose its own replacement: a better defined and more permanent organization to be created via a new treaty.[53] The negotiations for this new treaty took place between 1906 and 1909.[54] The result was the Treaty Between the United States and Great Britain Relating to Boundary Waters, and Questions Arising Between the United States and Canada, more commonly called the "Boundary Waters Treaty" (or "BWT"), which created the IJC.[55]

The Boundary Waters Treaty declared that the U.S.–Canadian boundary waters would remain "free and open for the purposes of commerce" forever; that water diversions on either side of the boundary would never harm the residents on the other; that the flows and levels of the boundary waters would never be impeded; and that those waters would never "be polluted on either side to the injury of health or property on the other."[56] To oversee the many questions and conflicts that would arise over these commitments, the treaty created what it called "an International Joint Commission," tasked to approve any "uses, obstructions, and diversions" of the boundary waters and any "remedial or protective works or any dams or other obstructions" in those waters; and to measure and apportion the water rights in rivers crossing the boundary.[57] The parties also agreed that this Commission would handle "any other questions or matters of difference arising between them involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along the common frontier between

52. The conflicts giving rise to treaty negotiation are reviewed in Meredith Demming, *Construction of a Keystone: How Local Concerns and International Geopolitics Created the First Water Management Mechanisms on the Canada-US Border*, *in* DANIEL MACFARLANE & MURRAY CLAMEN, THE FIRST CENTURY OF THE INTERNATIONAL JOINT COMMISSION, 71, 78–82 (2020). The first proposals for some kind of joint commission between the U.S. and Canada (and the U.S. and Mexico) were made in 1894. F.J.E. JORDAN, AN ANNOTATED DIGEST OF MATERIALS RELATING TO THE ESTABLISHMENT AND DEVELOPMENT OF THE INTERNATIONAL JOINT COMMISSION, PREPARED FOR THE CANADIAN SECTION OF THE INTERNATIONAL JOINT COMMISSION 1 (1967). The Congressional invitation was enacted in the Rivers and Harbors Act of 1902, Pub. L. No. 154, 1902 Laws ch. 1079 § 4, 32 Stat. 331, 373 (July 13, 1902). The proposal was transmitted to Great Britain and forwarded to the Canadian government, which agreed to join. Canadian Members of the IWC, First Progress Report 4 (Dec. 24, 1905).

53. The IWC's troubled history is reviewed in David Whorley, *From IWC to BWT: Canada-US Institution Building, 1902–1909*, *in* MACFARLANE & CLAMEN, *supra* note 52, at 35, 42–53.

54. The treaty negotiations and ratification process are described in Demming, *supra* note 52, at 91–102. For a "diplomatic historiography" of the Boundary Waters Treaty, *see id.* at 91–92, 103.*See also* JORDAN, *supra* note 52, at 10–97.

55. Boundary Waters Treaty, U.S.–G.B., Jan. 11, 1909, 36 Stat. 2448, T.S. 548. The Treaty was not ratified by Great Britain until March 31, 1910, and by the United States on April 1, 1910. The ratification debate is described in JORDAN, *supra* note 52, at 98–111.

56. Boundary Waters Treaty, *supra* note 55, at Arts. I–IV.

57. *Id.* Arts. III, IV, VI.

the United States and the Dominion of Canada."[58] Such matters would "be referred from time to time" to the IJC at the initiative of either party, with the IJC authorized to issue findings and recommendations on such references, and even to issue binding judgments on disputes, although only "by the consent of the two Parties . . . . it being understood that on the part of the United States any such action will be by and with the advice and consent of the Senate[.]"[59] To implement these arrangements, the parties agreed "to adopt such legislation as may be appropriate and necessary to give the Commission the powers above mentioned on each side of the boundary."[60]

These treaty commitments created the conditions of possibility for the first international pollution control agency. The IJC was authorized to investigate transboundary water pollution and issue findings and recommendations on disputes over it and allowed to issue binding judgments on remedial action if the parties agreed to submit themselves to such judgments in advance. On the U.S. side, the authorization for binding judgments was expressly made subject to the advice and consent of the Senate, but under these very limited circumstances the United States and Canada had, in theory, developed a pathway for domestic pollution control via the judgments of a supranational adjudicatory body. Senators concerned about the implications of this power for state and national sovereignty were assured that the provision would rarely, if ever, be used.[61]

2. 1910–1912: Enabling Legislation and the Nature of the IJC

After the treaty was finalized, the two governments needed to pass legislation to enable the IJC to function. In doing so, they immediately had to confront many unanswered questions raised by the existence of a novel joint-national commission theoretically empowered to resolve disputes between nations. It had not been made clear what the organization's "nature" was. Was it to be a supranational judicial tribunal, or a joint administrative agency? An extension of the diplomatic

58. *Id.* Art. IX.
59. *Id.* Arts IX, X.
60. *Id.* Art XII.
61. *See* JORDAN, *supra* note 52, at 100–11. During Senate consideration, Sen. Knute Nelson (R-MN) stated his concern that the pollution provision would be an encroachment of States' rights. *Id.* at 100–02. The Department of State responded that the IJC "had no jurisdiction over the water pollution clause and since that clause referred only to pollution on one side of the boundary having an adverse effect on the other, there would seldom be an occasion on which it could be invoked by either country" and there "was little possibility of pollution of boundary waters becoming a serious problem." *Id.* at 102. In correspondence during the ratification debate, the U.S. inquired whether the Canadians would be willing to drop the pollution clause; but the Canadians felt that although it "was not important" it "should be retained for application in extreme cases;" and Nelson ultimately used his opposition to secure a rider to the treaty protecting Minnesota's water rights and dropped his concern over the pollution provision. *Id.* at 103–11.

services, or apart from them? Independent, or dependent, or both? These ambiguities were not resolved in the enabling legislation.

The process began with a proposal for legislation to "enable the [U.S.] to meet and carry out its obligations under the [Boundary Waters Treaty.]"[62] Congress was asked to ratify an appointment process for the U.S. commissioners that included Senate confirmation, to appropriate funds for their salaries, staff, and expenses, and to provide them with the powers necessary to carry out the agreed-upon functions of "the International Joint Commission constituted by the treaty" (the first time the IJC was said to have been "constituted").[63] The subsequent Congressional debate focused on appropriations,[64] and on whether the U.S. Commissioners should be authorized to conduct any work other than that contemplated by the treaty,[65] and delayed the bill's passage for some time. After further debate,[66] the appropriations bill finally passed, with Congress agreeing to fund all costs associated with the U.S. commissioners' activities, and "one-half of all reasonable and necessary joint expenses of the International Joint Commission incurred under the terms of the treaty."[67] This bill created what is now called the U.S. "section" of the

---

62. THE "WATERWAYS TREATY": MESSAGE FROM THE PRESIDENT OF THE UNITED STATES, TRANSMITTING A REPORT OF THE SECRETARY OF STATE CONCERNING LEGISLATION NECESSARY UNDER THE TREATY WITH GREAT BRITAIN, COMMONLY KNOWN AS THE "WATERWAYS TREATY," 61st Cong., 2d Sess., Senate Doc. No. 561, at 1–2 (May 24, 1910) (containing the original request) [hereinafter PRESIDENTIAL MESSAGE RE: WATERWAYS TREATY]. *See* S. 8354 (May 24, 1910), *ref'd* S. Comm. on Foreign Relations; H.R. 26235, 61st Cong. (May 24, 1910) (identical companion bill), *ref'd* H. Comm. on Foreign Affairs. The bill also said the IJC was "constituted by" the BWT. *See id.*

63. PRESIDENTIAL MESSAGE RE: WATERWAYS TREATY, *supra* note 62, at 2.

64. S. Comm. on Foreign Relations proposed amendment "to appropriate $75,000 to pay the salaries and expenses and the one-half share of all reasonable and necessary joint expenses of the commission incurred under the terms of the treaty," ref'd to Senate Appropriations Committee for inclusion in the "sundry civil appropriations bill," 45 CONG. REC. 7,190 (June 1, 1910). The bill, as amended, passed the Senate on a voice vote and was transmitted to the House, 45 CONG. REC. 7,567 (June 7, 1910). It was referred to H. Comm. on Foreign Affairs, 45 CONG. REC. 8,017 (June 13, 1910). That committee recommended its approval without amendment. H. Rep. No. 1612, 61st Cong., 2d Sess. (June 16, 1910), 45 CONG. REC. 8,364 (June 16, 1910).

65. S. Comm. on Foreign Relations proposed amendment to change the IJC's work authorization to "such other duties *of like or similar kind* as they may be called upon to perform under the direction of the Secretary of State," 45 CONG. REC. 7,453 (June 6, 1910) (proposed addition in italics). The bill was first offered on unanimous consent, and failed on this objection, 45 CONG. REC. 491–92 (Dec. 19, 1910). The House resumed debate on this and related matters in February 1911. The debate was part of a more general concern regarding the proliferation of federal commissions, and the potential to use appointments to them, and salaries and funds appropriated for them, as political spoils rather than to do serious or necessary work. 46 CONG. REC. 3,158–59 (Feb. 22, 1911), 46 CONG. REC. 3,336 (Feb. 24, 1911).

66. 46 CONG. REC. 3,424–83 (Feb. 25, 1911) (debate on sundry appropriations); 46 CONG. REC. 3,482 (Feb. 25, 1911) (re-inclusion of the proviso including the authorizations for the Commission's work); 46 CONG. REC. 3,721 (Feb. 28, 1911) (House debate on whether to permit spending funds on rental and furnishing); 46 CONG. REC. 4,023 (Mar. 3, 1911) (Senate review of House bill, adding authorization to pay salaries of clerks).

67. Sundry Civil Appropriations Act for 1912, Pub. L. No. 61-525, 1911 Stats. Ch. 285, p. 1364 (Mar. 4, 1911). The law also provided the Commission with quasi-judicial powers still codified at 22 U.S.C. § 268. The appropriations were repeated in future years. *E.g.,* Sundry Civil Appropriations for 1913, Pub. L. No. 62-302, 1912 Stat. 417, 478 (Aug. 24, 1912) (same funding); Sundry Civil Appropriations for 1914, Pub. L. No. 63-3, 1913 Stats. 4, 66 (same).

IJC, wholly funded and controlled by the U.S. government, and acknowledged that the American IJC commissioners also would handle certain functions jointly with the Canadians, although it was not clear whether they were supposed to function as national partisans or independent arbiters of international disputes.

After the U.S. and Canadian commissioners were appointed in 1911, it became clear that there were "diverse views on the role and function of the commission," primary among them whether it was supposed to function as a supranational judicial tribunal with the ability to bind the two national governments to outcomes that their leadership did not like, replacing the customary process of diplomatic resolution of international disputes with an international court.[68] This debate played out for many years both within the IJC and within the governments of its two member countries. Notwithstanding more expansive language in the treaty, and the initial idealism of some of those involved, the diplomatic process would win out: the national governments slowly came to curtail the IJC's potential authority by agreeing to refer to it only those matters that both nations agreed in advance (diplomatically) would be examined, thus limiting the work the IJC could perform.

Thus was the IJC "duly constituted." Its formal nature was left ambiguous, and its every action would be the result of diplomatically negotiated instructions from the two national governments.

3. 1912–1928: The First Water Pollution Reference

Although the Boundary Waters Treaty had created the pathway, the decisions made about the IJC's role meant that the countries would never consent to binding judgments from the IJC over pollution questions. Rather, the two countries would only ever agree to ask the IJC to issue reports and recommendations on limited questions related to transboundary pollution, formulated, per the treaty language itself, as questions related to public health. This is the genesis of Section 115's unusual trigger, by which an "international agency" provides "reports," etc., on whether pollution threatens health and welfare in a foreign country.[69]

The first such reference came in mid-1912, when the U.S. and Canada issued a joint request to the IJC "for examination and report upon the facts and circumstances of" the following questions: "To what extent and by what causes and in what localities have the boundary waters . . . been polluted so as to be injurious to the public health and unfit for domestic and other uses?" and "In what way or manner . . . is it possible and advisable to remedy or prevent the pollution of these

68. The historical debate over the IJC's nature and function is masterfully set out in JORDAN, *supra* note 52, at 154–280.

69. CAA § 115(a), 42 U.S.C. § 7415(a).

waters . . . ?"[70] The IJC would investigate pollution and provide reports, the receipt of which would trigger no further legal responsibilities whatsoever. The Commission spent six years on its investigation, took over 18,000 water samples, gathered testimony from dozens of sanitary engineering experts in both countries, and concluded that water pollution was being created on each side of the boundary, to the injury of the health and welfare of the people on the other.[71]

The problem of what should happen next was recognized as paramount even then. As part of its 1918 report, the IJC recommended that it be granted authority in both the United States and Canada to set binding wastewater treatment standards to be enforced along the tributary waterbodies.[72] This recommendation would have "empower[ed] the Commission on its own initiative to investigate and determine sources of pollution and would [have] oblige[d] the governments [of the United States and Canada] to enact legislation whereby enforcement measures could be taken."[73] However, although the IJC prepared a draft treaty that would have granted it this pollution control authority, the two governments did not pursue the matter further, and the question of pollution control authority on each side of the international boundary was left unresolved.[74] By 1929, it was clear that these efforts at an international water pollution control treaty had failed, and the trials of the Great Depression, and then World War II, prevented further action on pollution questions until the postwar years.[75]

Thus did the IJC become an international agency responsible for creating reports, surveys, or studies on pollution from sources in the United States alleged to be endangering the health and welfare of residents in a foreign country. The question of abatement or enforcement authority flowing from such findings was left unresolved.

4. 1928–1941: The First Air Pollution Reference

The Boundary Waters Treaty does not discuss air pollution at all, only water pollution. However, the Boundary Waters Treaty allowed the parties to refer to the IJC "any other questions or matters of difference arising between them involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along the[ir] common frontier."[76] The IJC's first air

---

70. Letter from U.S. Secretary of State P.C. Knox to the Int'l Joint Commission of the U.S. and Canada (Aug. 1, 1912); *see also* Letter from British Embassy, Washington, to the Int'l Joint Commission of the U.S. and Canada (Aug. 1, 1912).

71. IJC, Final Report on the Pollution of Boundary Waters Reference (1918).

72. *Id.* at 50–51, 52.

73. F.J.E. Jordan, *Great Lakes Pollution: A Framework for Action*, 5 OTTAWA L. REV. 65, 69 (1971). *See also* Jamie Benidickson, *The International Joint Commission and Water Quality in the Bacterial Age*, *in* MCFARLANE & CLAMEN, *supra* note 52, at 115, 136.

74. Jordan, *supra* note 73, at 68–69.

75. Benidickson, *supra* note 73, at 137.

76. Treaty Between the United States and Great Britain Relating to Boundary Waters between the United States and Canada, U.S.–Gr. Brit., art. IX., Jan. 11, 1909, 36 Stat. 2448, T.S. 548.

pollution reference arrived under the general authority, again via a request for investigation and advice, only.[77]

The Trail Smelter Case is a well-known dispute involving smelter emissions in Trail, British Columbia, that were damaging property in the United States.[78] The U.S. and Canadian governments eventually agreed to refer the matter to the IJC for investigation and recommendations.[79] The IJC ultimately recommended that the Trail Smelter be required to install pollution control equipment to the extent necessary to reduce harm to lands in the United States.[80] This recommendation, however, did not satisfy the United States, which resisted calls to allow the IJC to resolve the matter with finality, leading to the enactment of a separate U.S.–Canadian treaty to establish an arbitration tribunal to finally resolve the matter.[81] That tribunal worked on the trail smelter case from 1935 to 1941, and ultimately its decision closely followed the IJC's earlier recommendations. The primary difference was that, unlike the IJC, the arbitration panel had been empowered in a treaty between both countries to decide the dispute.

Again, then, the IJC had become an international agency responsible for creating reports, surveys, or studies on pollution—this time, air pollution, and this time released from sources in Canada and alleged to be endangering the health and welfare of residents in the United States. Again, it was not trusted or empowered to issue a binding judgment. Rather, implementation of its recommendations was left to a secondary mechanism—this time, an arbitration panel that required a separate treaty negotiation. This resolution process was triggered by the IJC's recommendations, but the resulting decision-making infrastructure had been purpose-built, and, lacking any other governance infrastructure, would need to be uniquely tailored to the single dispute at issue, without general jurisdiction over similar disputes elsewhere along the border. The solution would be to replace this bespoke post-recommendation process with a single, uniform, pre-negotiated domestic pollution control authority triggered by the IJC's reports. Given that international waters were a federal concern, this solution would first require the development of federal authority in the area of air and water pollution control.

---

77. Frank B. Kellogg (U.S. Secretary of State), I.J.C. Doc. 25 (Aug. 5, 1928).

78. *See generally* TRANSBOUNDARY HARM IN INTERNATIONAL LAW: LESSONS FROM THE TRAIL SMELTER ARBITRATION (Rebecca M. Bratspies & Russel A. Miller eds., 2006) [hereinafter TRANSBOUNDARY HARM].

79. The IJC's proceedings are summarized in Trail Smelter Case (USA and Canada), 3 R.I.A.A. 1905–82 (IJC 1938). *See also* Owen Twemby and Don Munton, *The International Joint Commission and Air Pollution: A Tale of Two Cases*, in MACFARLANE & CLAMEN, *supra* note 52, at 313, 317–20; *see also* John E. Read, *The Trail Smelter Dispute* [Abridged], *in* TRANSBOUNDARY HARM, *supra* note 78, at 27.

80. IJC, REPORT IN THE TRAIL SMELTER REFERENCE 4 (1931).

81. Convention for Settlement of Difficulties Arising from Operation of Smelter at Trail, B.C., U.S.–Can., Apr. 13, 1935, *ratified* Aug. 3, 1935, T.S. 893.

B. 1946–1963: THE POSTWAR IJC AND EARLY FEDERAL ENVIRONMENTAL LAW

After World War II, the two governments re-initiated the IJC's investigations into water and air pollution. In each case, this re-initiation was thought to be necessary because local pollution control authorities felt that they were not able to act due to the international nature of the boundary waters and had requested federal assistance. The subsequent IJC investigations were supported by the federal Public Health Service ("PHS"), and ran parallel to an ongoing debate in the United States over the appropriate role of the federal government in water and air pollution control. That debate resulted in the first laws empowering the federal government to directly abate pollution.

1. 1944–1950: The Second Water Pollution Reference

In early 1944, residents of Detroit, Michigan and Windsor, Ontario noticed that their tap water tasted off. Subsequent investigations revealed that the probable source of the problem was industrial pollution into the St. Clair River, the source of both cities' drinking water. Local authorities were at a loss: they had no public health jurisdiction over the international boundary waters. The State and Provincial water and health authorities appealed to their federal governments for aid, and following negotiations that involved Michigan's Senators—and the end of the industrial production pressures of World War II—the two governments agreed to ask the IJC to investigate.[82]

In early 1946, the U.S. and Canadian governments sent letters to the IJC reporting that they had "been informed" that certain boundary waters were "being polluted by sewage and industrial wastes," and requested the IJC "inquire into and report" on whether this was in fact the case.[83] In response, the IJC created a number of technical advisory committees staffed on the United States' side by state and federal sanitary engineers, and then conducted "necessary surveys and studies" elsewhere, called an "investigation" across "61 municipalities, 101 industries[,] and the vessels navigating the waters under reference. More than 100,000 laboratory determinations for bacteriological, limnological, physical and chemical characteristics were made from water samples."[84] This investigation was followed by public hearings "to obtain information on waste treatment processes in use or proposed, estimates of cost and time required for institution of the necessary pollution control measures, and to obtain the views of all concerned towards the specific objectives for pollution control which the Commission had adopted."[85] The work took four years.

---

82. A.J. Brian, *Pollution of River Is Studied: International Body Makes Inquiry*, WINDSOR STAR 5, July 8, 1946.

83. IJC, REPORT ON THE POLLUTION OF BOUNDARY WATERS 1 (1950).

84. *Id.* at 4.

85. *Id.*

In its 1950 report, the IJC concluded, as it had in 1918, that the boundary waters were heavily contaminated by sewage that created a "serious health menace," and that, unlike in 1918, industrial pollutants had also now become "a major problem."[86] The IJC recommended primary and secondary sewage treatment and a number of new industrial pollution control practices, and argued that "the costs of the necessary remedial measures should be borne by the municipalities, industries, vessel owners and others responsible for the pollution."[87] The problem remained, however, what would happen next: "With respect to pollution originating from sources other than vessels, the Commission finds that there is adequate legal and administrative authority in each country to enforce proper waste disposal objectives;" but, "[o]ne of the principal requirements for enforcement of quality control objectives in these boundary waters is a procedure whereby an official determination that improper waste disposal practices exist can be brought to the attention of the appropriate enforcement authority."[88] What process would the IJC's findings trigger?

Again, the IJC recommended that it be "authorized by the two Governments to establish and maintain continuing supervision over boundary waters pollution through boards of control appointed by the Commission."[89] But nothing came of it. The United States had only just passed the Federal Water Pollution Control Act of 1948 ("FWPCA"), which had firmly established the principle of limited federal involvement in pollution control.[90] U.S. conservatives in 1950 were increasingly suspicious of international organizations.[91] There was little chance that they would support a *federal* agency with the powers the IJC proposed; there was no chance they would support ceding regulatory authority to a joint commission with Canada.

2. 1949–1963: The Second Air Pollution Reference

Air pollution entered the national agenda following the October 1948 smog-related deaths at Donora, Pennsylvania. This disaster resulted in a great deal of interest in what, at the time, was called "smoke abatement," focusing on the reduction of coal smoke from rail, industry, home heating, and vessel uses.[92] Immediately after Donora, in late 1948, the smoke control authorities in Detroit and Windsor jointly concluded that they lacked jurisdiction to control smoke from ferries operating in the international waters between the two cities, which,

86. *Id*. at 5.
87. *Id*. at 9.
88. *Id*.
89. *Id*. at 9–10.
90. Pub. L. No. 80-845, 62 Stat. 1155 (Jun. 30, 1948); PAUL CHARLES MILAZZO, UNLIKELY ENVIRONMENTALISTS: CONGRESS AND CLEAN WATER, 1945-1972 at 19–20 (2006).
91. *See*, *e.g*., J. ALLEN BROYLES, THE JOHN BIRCH SOCIETY: ANATOMY OF A PROTEST 107–11 (1964).
92. *See* Adam D. Orford, *The Clean Air Act of 1963: Postwar Environmental Politics and the Debate Over Federal Power*, 27 HASTINGS ENV'T L. REV. 1, 20–24 (2021).

they thought, could be blowing harmful pollution toward locals on both sides. The two cities jointly requested that their national governments intervene by referring the matter to the IJC.[93] The result was the 1949 Reference to the IJC to investigate vessel-related air pollution in the Detroit–Windsor international boundary area. As usual, the reference was framed as a request for investigation and reports, only. The IJC thereby began an investigation into transboundary air pollution that would continue for the next twenty-three years.

As part of its investigation, the IJC engaged the U.S. Public Health Service occupational health division to conduct investigatory work. In 1949, PHS was not authorized to investigate air pollution wherever it wanted. But it had been called in to Donora to investigate, and after its experience there it was looking for opportunities to expand its air pollution research program further. The IJC's investigation provided it with an opportunity to do that work without requiring Congressional authorizations beyond relevant appropriations.[94] Into the 1960s, therefore, the IJC would remain an international agency responsible for producing surveys, reports, and studies on air pollution originating in the United States and impacting the health and welfare of Canadians.[95] PHS would support the IJC's work, but, given the limited federal role in air pollution control, could do little with the information it was helping the IJC generate.

3. 1963: Federal Abatement in the Clean Air Act

In 1963, after three years of debate, Congress passed the Clean Air Act.[96] Two points about that law are relevant here: first, the 1963 Act provided the federal government, for the first time, with authority to abate air pollution directly; and second, that those abatement processes could not be triggered by pollution threatening the health and welfare of people in foreign countries.

With respect to the first point, the history of the Clean Air Act's federal abatement authority is told elsewhere.[97] In summary, in a significant departure from

---

93. *Border Cities Smoke Plan Gets Action*, WINDSOR STAR 5, Jan. 13, 1949.

94. *See* ANNUAL REPORT OF THE FEDERAL SECURITY AGENCY 1949: PUBLIC HEALTH SERVICE 109–110 (1949); ANNUAL REPORT OF THE FSA 1950: PHS 56 (1950); ANNUAL REPORT OF THE FSA 1951: PHS 44 (1951); ANNUAL REPORT OF THE FSA 1952: PHS 51 (1952). *Dep't of State Approps. for 1951: Hearings before the H. Comm. on Approps.* ("H. App")., 81st Cong. 980–84 (1950); *Dep'ts of State, Justice, Com. and the Judiciary Approps. for 1951: Hearings before the S. Comm. on Approps.* ("S. App.")., 81st Cong. 848–52 (1950); *Dep't of Labor – FSA Approps. for 1952: Hearings before H. App.,* 82nd Cong. 582 (1951); *Dep't of State Approps. for 1952: Hearings before H. App.,* 82nd Cong. 529-30 (1951); *Labor – FSA Approps. for 1952: Hearings before S. App*., 82nd Cong. at 650 (1951); *Dep'ts of State, Justice, Com., and the Judiciary Approps. for 1952: Hearings before S. App*., 82nd Cong. 1537–38 (1951); *Dep'ts of Labor & Health, Ed., and Welfare Approps. for 1955: Hearings before H. App*., 83rd Cong. 168–69 (1954).

95. IJC, REPORT ON THE POLLUTION OF THE ATMOSPHERE IN THE DETROIT RIVER AREA (1960); IJC, TERMINATION OF COMMISSION ACTIVITIES IN THE DETROIT RIVER AREA UNDER THE 1949 AIR POLLUTION REFERENCE (1967).

96. Pub. L. No. 88-206, 77 Stat. 392 (1963).

97. The history of this development is the subject of Orford, *supra* note 92.

historical arrangements, Congress empowered the Department of Health, Education, and Welfare ("HEW") (meaning, in practice, the Public Health Service with authorization from the HEW Secretary) to take direct action against interstate air pollution threatening human health and welfare if state authorities failed to do so after an investigation designed to determine the scope and nature of the pollution problem.[98]

With respect to the precise triggers for the federal abatement authority, the 1963 Act's procedure is referred to here as "conference-abatement," because the investigation occurred at a conference and the federal enforcement action was an abatement suit brought against the polluters in federal court.[99] Under the 1963 Act, PHS had a non-discretionary duty to call a conference if it received a request from a state or local government that alleged that air pollution from another U.S. state was endangering health and welfare. PHS was also *permitted* to call a conference "after consultation with State officials of all affected States . . . whenever, on the basis of reports, surveys, or studies, [it had] reason to believe that any pollution [alleged to be endangering health and welfare] is occurring and is endangering the health and welfare of persons in a State other than that in which the discharge or discharges originate."[100] That is, PHS had a mandatory duty to call an investigatory conference upon request from a state alleging harmful interstate pollution, and a discretionary duty to call one on its own authority upon receipt of information leading it to believe that human health was threatened by interstate air pollution. The conference process would always be held under threat of federal abatement action if state and local efforts did not mitigate the public health threat, although that abatement authority was itself discretionary, not mandatory.

While conference-abatement was a powerful new tool to fight pollution, it was carefully defined. The concern was to protect public health in the United States, and there was no mechanism in FWCPA 1961 or CAA 1963 to authorize the U.S. federal government to do anything about water or air pollution harming individuals outside the United States. Federal authority to act against pollution was strictly circumscribed, and Congress, sensitive to traditional views of federalism, had allowed it only at the behest of state governments or on a finding of harm to U.S. citizens from pollution coming from another U.S. state. PHS was not authorized to act to interfere with polluting activities solely based on harm to Canadians. At the same time, however, the IJC's investigations—conducted by PHS—were demonstrating significant transboundary pollution harms, and the question of what was to be done with the IJC's conclusions and recommendations had been left unanswered for over fifty years.

---

98. Clean Air Act § 5(c-i).

99. The conference-abatement process had first been enacted in the 1948 Federal Water Pollution Control Act. Pub. L. No. 80-845, 86 Stat. 816 (1948). It had been made more complex in amendments to that law. Pub. L. No. 84-660, 70 Stat. 498 (1956); Pub. L. No. 87-88, 70 Stat. 498 (1961). The 1963 Clean Air Act process is based on the 1961 FWPCA process.

100. Pub. L. No. 88-206, § 5(c)(1)(C), 77 Stat. 396.

And so, PHS proposed a new authority for itself.

C. 1964–1967: SECTION 115 ENACTED

What is now Section 115 was first proposed by the Department of Health, Education, and Welfare in April 1965, to pave the way for the Public Health Service's increased participation in the International Joint Commission's planned air pollution investigation at the Detroit–Windsor border area. The administration's proposal passed through the Senate without significant amendment, but was changed by the House to include the express requirement that the new statute's duties could only be triggered if the foreign country in question had provided the U.S. with reciprocal rights (an approach that would be copied the following year in amendments to FWPCA). In its deliberations on these amendments, Congress considered only transboundary pollution between the United States and Canada, and the United States and Mexico, and the available evidence strongly points toward the conclusion that the statute's ambiguous wording was used intentionally because Congress wanted to leave open the possibility for an equivalent to the IJC between the U.S. and Mexico.

1. 1964–1965: The Purpose of the International Abatement Authority

The language of what is now Section 115 was first proposed during early oversight of the Clean Air Act of 1963. Sen. Edmund Muskie (D-ME), chair of the Senate Public Works Committee's Special Subcommittee on Air and Water Pollution (the "Muskie Subcommittee"), had begun investigating air pollution late in the 1963 Act's development.[101] He began to take a more active role the next year, when he scheduled a series of oversight hearings to track the 1963 Act's implementation.[102] During these proceedings the question of international (transboundary) pollution abatement was never raised.[103] In January 1965, Muskie's suite of proposed amendments to the 1963 Act also did not address it.[104]

Rather, as was typical protocol for bills under serious consideration, Muskie's amendments were forwarded to interested federal executive departments for review and comment, and a hearing was scheduled to discuss the bill. It was

---

101. *See* Orford, *supra* note 92, at 60, 71–72.

102. *See Clean Air – Field Hearings Held on Progress and Programs Relating to the Abatement of Air Pollution: Hearings before the Special Subcomm. on Air and Water Pollution of the S. Comm. on Pub. Works* ("Muskie Subcomm."), 88th Cong. (1964); *Clean Air – Technical Hearings Held on Progress and Programs Relating to the Abatement of Air Pollution: Hearings before the Muskie Subcomm.*, 88th Cong. (1964).

103. *See Clean Air: Field Hearings Held on Progress and Programs Relating to the Abatement of Air Pollution before the Muskie Subcommittee*, 88th Cong. (1964); *Clean Air: Technical Hearings Held on Progress and Programs Relating to the Abatement of Air Pollution before the Muskie Subcommittee*, 88th Cong. (1964).

104. *See* S. 306, 89th Cong. 111 CONG. REC. 370, 375–77 (1965).

during this process that what is now Section 115 was first proposed. It appeared as a request for further amendments from HEW, which said:

> [W]e believe that it would be desirable that consideration be given to additional amendments to the Clean Air Act . . . to permit abatement action with respect to air pollution originating in the United States and endangering the health or welfare of persons in a neighboring country. The Secretary should, we believe, be authorized to commence such proceedings on his own initiative or on the request of appropriate representatives of the country concerned. The present act does not include legal remedies which could be used to abate pollution in such circumstances. Our friendly relations with bordering countries and our international obligations with them make desirable the availability of such legal remedies to be applied by the Federal Government.[105]

That is, HEW requested an extension of its existing abatement authority to tackle sources of international (transboundary) pollution impacting "neighboring countries." HEW later repeated that the proposed amendment would:

> extend the present Federal abatement authority to cases in which air pollution originating in the United States is endangering the health or welfare of persons in a neighboring country. Our national policy regarding the maintenance of friendly relations with the nations bordering us and our obligations as members of the international community make it desirable that, in cases such as these, legal remedies be available which can be applied by the Federal Government.[106]

In testimony, HEW explained further:

> As far as the recommendation on the international air pollution problem . . . this is just one thing in the brief experience we have had under the Clean Air Act of 1963. We have situations on the Canadian border where frankly we are not being very good neighbors. When we have looked at the situation and looked at the [1963] act we find that we are powerless, we do not have the authority to act. If this pollution were occurring between Pennsylvania and New Jersey we might be able to act. But if it is occurring between Michigan and Canada, we can't.
>
> We are suggesting that in the face of this the committee might very well consider an amendment to the Clean Air Act which would authorize the Secretary to move in this area.[107]

HEW was referring to its conference-abatement authority under the 1963 Act, which it had begun using as a part of its persuasive toolset in interstate air pollution cases. Given its reference to Michigan and Canada, it appears likely that

---

105. *Air Pollution Control: Hearings on S. 306 before the Muskie Subcomm.*, 89th Cong. 12 (1965) (submitted by HEW Secretary Anthony J. Celebrezze, Apr. 5, 1965).

106. *Id.* at 26 (statement of HEW Assistant Secretary James M. Quigley).

107. *Id.* at 30.

HEW wished to have the same authority available in its work on the Detroit-Windsor problem before PHS and the IJC.

Although HEW submitted proposed language, the hearing record does not contain it.[108] Nonetheless, the language of what is now Section 115 was added into Muskie's bill during committee markup, as explained in the Senate Public Works Committee's report on Muskie's bill, which also referenced the connection to the IJC, saying:

> The committee believes that it is important that the Clean Air Act be amended so that not only is there provided a basis for action to abate pollution in our country but also to adopt a procedure whereby we can cooperate with foreign countries in cases involving endangerment of health or welfare. It is expected that [HEW] will initiate actions involving Canada, upon advice from the International Joint Commission, and the appropriate governmental agency in the case of situations involving Mexico. The language of the bill provides for enforcement proceedings to correct international pollution problems originating in the United States. The committee urges the administration to seek agreements with Canada and Mexico to help protect U.S. citizens from air pollution originating in those countries . . . .
>
> The Clean Air Act prescribes a procedure for actions to abate air pollution in State and interstate areas of the Nation. However, there is no provision which would authorize cooperative action with foreign countries when air pollution is endangering the health or welfare or their people. It is important that we, in the interest of international amity and in fairness to the people of other countries, afford them the benefit of protective measures. International negotiations will be necessary to provide reciprocal benefits for U.S. citizens.[109]

Muskie's subcommittee, in other words, adopted HEW's request as its own amendment and instructed HEW to do what HEW had asked for authority to do, and the full Senate Public Works Committee had agreed. In doing so, they were resolving a problem that had traditionally been within the domain of Congressional foreign affairs committees and the State Department: what the U.S. would agree to do upon receipt of information from the IJC that U.S. pollution was harming its neighbors. Rather than submit the matter to arbitration, the country would now reserve the right to place the federal government in a pollution control role traditionally reserved to state and local authorities. The State Department, in coordination with the Canadian government, would retain control over what information the IJC would generate, but the stakes of requesting that information be generated would increase dramatically, at least for the United States.

The statements above make it clear that the perceived issue in need of remedy was transboundary pollution with countries directly adjacent to, neighboring, or

---

108. *See id.*

109. S. REP. NO. 192 on S. 306, 89th Cong. 4, 6, 10, adding CAA § 105(c)(1)(D) (May 14, 1965).

bordering the contiguous United States, meaning primarily Canada, but also Mexico. Congress specifically contemplated the statutes' duties being triggered by the IJC in situations involving Canada, that is, specifically contemplated the IJC as a "duly constituted international agency."[110] However, Congress did not know how matters would be handled in "situations involving Mexico," where Congress said only that the statute would be triggered by "the appropriate governmental agency," because no equivalent to the IJC existed at the U.S.–Mexico boundary.[111] This uncertainty with respect to future transboundary pollution problems with Mexico is the best explanation for the statute's use of the phrase "any duly constituted international agency."[112] There would have to be some sort of authority set up with responsibility to receive requests to investigate and advise on questions of transboundary pollution at the southern border, the results of which would trigger U.S. domestic federal pollution control actions.

Introducing the bill for vote, Muskie explained that part of its purpose was to "[p]rovide for enforcement procedures for the abatement of air pollution adversely affecting a foreign country."[113] It passed the Senate without further discussion.[114] The bill then made its way to the House, but the House hearing did not directly discuss the new process for international abatement.[115] Only one letter was submitted to the record in opposition, from the Greater Detroit Board of Commerce—the organization representing the businesses that would be most harmed by an abatement action brought by the U.S. federal government on behalf of the people of Canada in the Detroit–Windsor case.[116] Thereafter the House Committee recommended an amendment to the Senate version:

> Extension of the existing Federal abatement authority to cases of air pollution affecting neighboring countries is a reasonable and desirable step. The boundaries that separate the United States from Canada and Mexico do not block the flow of pol[1]ution originating within our borders, nor do they shield persons living in those countries from the adverse effects of such pollution. As a member of the North American community, the United States cannot in good conscience decline to protect its neighbors from pollution which is beyond their legal control. Therefore the bill provides remedies for foreign countries adversely affected by air pollution emanating from the United States, if reciprocal rights are granted to the United States.[117]

---

110. *See id*. at 18.
111. *See id*. at 4.
112. *See id*. at 18.
113. 110 CONG. REC. 10,782 (1965) (introducing amended bill to Senate).
114. *Id*. at 10783 (1965) (bill passed Senate as amended).
115. *Clean Air Act Amendments: Hearings on H.R. 463, H.R. 2105, H.R. 4001, H.R. 7065, H.R. 7394, H.R. 7429, H.R. 8007, H.R. 8398, H.R. 8723, H.R. 8800, and S. 306 before the Subcomm. on Pub. Health and Welfare of the H. Comm. on Com.*, 89th Cong. (1965).
116. *Id*. at 427 (letter from Greater Detroit Board of Commerce).
117. H.R REP. NO. 899 at 6 (1965).

That is, the House inserted language requiring the foreign nation in question provide reciprocal rights as a condition to triggering the international abatement authority.[118] Again, the House spoke in terms of transboundary pollution between Canada and Mexico, that is, adjacent bordering nations, and it is notable that the House used the term "North American community"—a departure from HEW's earlier framing toward the "international community"—as further indication that it had no intention to create a global atmospheric regulatory regime.[119]

The House was duly informed of the new reciprocal limitation from its own committee:

> [T]he bill would amend the Clean Air Act so as to permit a foreign country in the case of air pollution emanating from the United States which endangers the health or welfare of persons in such foreign country to participate in conferences called by the Secretary of HEW and, for the purposes of such conferences and proceedings resulting therefrom, have all the rights of a State air pollution control agency. This privilege is conditioned, however, upon the foreign country granting reciprocal rights to the United States.[120]

The following day, in the introduction to the House debate, the provision was again explained:

> [T]his bill would also provide that the Secretary may call a conference with respect to air pollution adversely affecting persons in Mexico or Canada. Where such a conference has been called, the representatives of those two nations, Mexico and Canada, would have all the rights of a State air pollution control agency. But this provision contained in the bill as provided by the other body [the Senate] was amended [by the House committee] to provide that a foreign country would have such rights as provided in this section only if reciprocal rights are provided for persons in the United States by such foreign countries. We think that is a reasonable provision and a reasonable requirement.[121]

During House debate, a member inquired how the statute would work in a case involving pollution going from Buffalo, NY, and into Canada.[122] Another member said the problem would be recognized, so long as the people in Canada agreed to reciprocal treatment.[123] The House then passed the bill without debating the

---

118. *Compare* S. REP. No. 192 at 9 (1965) *with* H.R REP. NO. 899 at 57 (1965) (House adding the words "This subparagraph shall apply only to a foreign country which the Secretary determines has given the United States essentially the same rights with respect to the prevention or control of air pollution occurring in that country as is given that country by this subparagraph.").

119. *See* H.R. REP. NO. 899, at 6 (1965); *Air Pollution Control: Hearings on S. 306 before the Muskie Subcommittee*, 89th Cong. 12 (1965) (submitted by HEW Secretary Anthony J. Celebrezze).

120. 111 CONG. REC. 24,941 (1965) (amended bill introduced in House).

121. 111 CONG. REC. 25,050 (1965).

122. 111 CONG. REC. 25,052 (1965).

123. *Id.*

reciprocity issue further.[124] On its return to the Senate, Sen. Muskie discussed the House version and had this to say about the House's new reciprocity requirement:

> Both versions ... contain amendments to the Clean Air Act authorizing enforcement procedures in cases where pollution from the United States endangers the health or welfare of persons in another country. The House amended the Senate version to make this provision applicable only in those cases where there is a reciprocal agreement with the affected country. The subcommittee does not object to this change.[125]

Expressing his satisfaction with the other House amendments, Muskie moved that the Senate concur in the House version, which it promptly did, again on unanimous consent.[126] The bill became law on October 20, 1965.[127]

Thus was the original language of Section 115 enacted. Its original purpose was to provide PHS with authority to initiate conference-abatement proceedings triggered by the IJC's ongoing investigations of air pollution at the U.S.–Canada border. By use of the words "any duly constituted international agency," the law left room for equivalent coordination with Mexico in the future.[128] There is no evidence that Congress ever contemplated or imagined at this time the law applying to situations in countries other than Canada or Mexico, no evidence that Congress understood at this time that such long-range impact was even possible, and no indication that by using other general terms like "foreign country" elsewhere in the statute, Congress at this time intended to expand the scope of the law beyond Canada or Mexico.[129] Although the law's structure did not preclude such application to other nations, it would require that a "duly constituted international agency" exist, and again, the only such agency that Congress considered was the bilateral transboundary model of the IJC.

The above understanding is reinforced by the history of the adoption of the equivalent language in the following year's FWCPA amendments. In February 1966, Sen. Muskie submitted a bill that included a similar (but not identical) international authority for water pollution under FWPCA.[130] In April, Rep. Dingell (D-MI) submitted a competing formulation of this authority copying the Clean Air Act's language exactly, and this version eventually became the final law.[131] While the international abatement authority was barely discussed, the final law did include one indication that Congress's intention remained to provide

---

124. *Id. a*t 25,052–25,073 (1965) (House passes bill as amended).
125. 111 CONG. REC. 25,851 (1965) (Senate receives amended bill from House).
126. *Id.* (Senate accepts House amendments).
127. 111 CONG. REC. 25,851 (1965) (Senate receives amended bill from House).
128. *See id*. at 995.
129. *See id*.
130. 112 CONG. REC. 4,233–34 (1966) (discussing S. 2986).
131. H.R. 14,456, 89th Cong. (1966). *See also Federal Water Pollution Control Act – 1966: Hearings before H. Comm. on Pub. Works*, 89th Cong. 167–68 (1966) (statement of Rep. Dingell, explaining reasoning for provision); S. Rep. No. 1367 at 35–36 (1966) (reporting S. 2947 with new

abatement authority for transboundary matters with Canada and Mexico: the final bill reserved all rights under the U.S.–Canada Boundary Waters Treaty, and the U.S.–Mexico Water Utilization Treaty of 1944, each of which might otherwise have been implicated by a new U.S. commitment to abate domestic pollution on the basis of information generated by international agencies constituted pursuant to those treaties.[132]

2. 1965–1967: Post-Enactment Intentions and Delay

To understand what happened after 1965, it is necessary to examine records from Congressional appropriations hearings, which contain annual reports from PHS demonstrating that, after it received its international abatement authority, PHS had great difficulty using it.

PHS immediately approached Congress to request appropriations to carry out its new mandates.[133] In explaining its budget request, PHS testified that "[a] matter of [air] pollution originating in the United States which allegedly endangers health and welfare in Canada is currently on the agenda of the [IJC]," but the IJC had "deferred action on this matter pending passage" and implementation of the 1965 Act.[134] PHS therefore testified that it expected that the IJC's activities would require PHS to initiate an international abatement proceeding in 1966, requiring "a comprehensive field survey, preliminary consultation, and a formal conference" regarding the Detroit area, in what would "probably be the first action that we will take under" the international authority.[135] Again, then, the original version of Section 115 had been thought necessary for PHS to support a renewed effort at the IJC to tackle transboundary pollution.

Then, however, the House's reciprocity requirement derailed PHS's plans. The IJC received its third air pollution reference shortly afterwards, requiring it to investigate and report on all sources contributing to transboundary air pollution in the Detroit–Windsor *and* the Port Huron–Sarnia areas,[136] a diplomatic compromise that balanced an area where a Canadian city (Windsor, Ontario) was alleged to be impacted by pollution from the United States against one where a U.S. city (Port Huron, Michigan) was alleged to be impacted by pollution from Canada.[137]

---

language providing international abatement authority); Clean Water Restoration Act of 1966, Pub. L. No. 89-753 § 206, 80 Stat. 1246, 1250 (1966) (adding FWPCA § 10(d)(2)).

132. Clean Water Restoration Act, Pub. L. No. 89-753 § 206, *amending* FWPCA § 10(d), 80 Stat. 1246, 1250 (Nov. 3, 1966).

133. *Supplemental Approps. for 1966: Hearings before S. App.*, 89th Cong. 191-197 (1965).

134. *Id.* at 193.

135. *Id.* at 193, 195, 197.

136. Letter from Assistant Sec'y of State John M. Leddy to the International Joint Commission (Sep. 23, 1966) (regarding air pollution between Canada and the U.S.), https://perma.cc/347H-VV6X. *See also* INTERNATIONAL JOINT COMMISSION 85R (1966), https://perma.cc/S7JF-3SRJ.

137. This compromise is discussed at Owen Temby & Don Munton, *The International Joint Commission and Air Pollution: A Tale of Two Cases*, in MACFARLANE & CLAMEN, *supra* note 52, at 326–27.

This new reference allowed the IJC to terminate its monitoring under the 1949 reference and to initiate broader investigations using the PHS,[138] and, theoretically, would have permitted PHS to initiate conference-abatement proceedings in response. But no such proceedings ever happened.

In early 1966, PHS reported that it had found it necessary to push off its international abatement activities until the following year, but did not explain the reason for the delay.[139] Then, a year later, PHS reported another delay and explained what had happened: "Canadian officials have not elected to avail themselves of the international abatement provision, and have not provided the prerequisite assurance regarding rights which will be accorded the United States in case of air pollution arising in Canada."[140] The inclusion of Port Huron-Sarnia in the IJC proceedings, and the requirement for reciprocal rights to authorize PHS abatement, had put off the Canadians. Thus, as of 1967, the Clean Air Act's international abatement authority had never been used. And it never would be.

D. 1965–1977: SECTION 115 REVISED

Between 1963 and 1977, air pollution legislation in the United States followed a pattern: Congress would pass a bill; conduct oversight hearings; develop legislation to address outstanding issues; study, amend, and debate the proposed legislation; pass it as amended; and then repeat the process. In this way, the Clean Air Act received significant amendments in 1965, 1967, 1970, and 1977.[141] The original version of Section 115 was enacted in the 1965 cycle, but was changed in each of the three subsequent cycles. Thus, whatever Congress's original intentions, it is necessary to examine whether in undertaking a later revision that intention ever changed.[142]

Contrary to claims that Section 115's legislative history is spare, Congress left an extensive record on its deliberations. Although that record is less detailed on the topic of the international abatement authority than on many others, there is still ample evidence of Congress's intentions. What happened was this: PHS's original plan to use conference-abatement in the IJC's Detroit–Windsor air pollution proceeding was quickly abandoned and never taken up again. Congress

---

138. Memorandum from International Joint Commission on Termination of Commission Activities on Vessel Smoke Surveillance in the Detroit River Area Under the 1949 Air Pollution Reference (Mar. 1, 1967) https://perma.cc/ZPS4-EB49; Memorandum from International Joint Commission on Transboundary Air Pollution: Detroit and St. Clair River Areas 4-5 (1972) (describing investigation), https://perma.cc/GF8H-A28Z.

139. *Dep'ts of Labor & HEW Approps. for 1967: Hearings before H. App.*, 89th Cong. 541-581, at 578 (1966) (statement of Vernon MacKenzie, Chief. Division of Air Pollution); *Labor – HEW Approps. for FY 1967: Hearings before S. App.* 767-785 (1966).

140. *Air Pollution – 1967 (Air Quality Act): Hearings before the Muskie Subcommittee*, 90th Cong. 1316 (1967) (statement of Smith Griswold, PHS Assoc. Dir. for Abatement and Control).

141. Evolution of the Clean Air Act, EPA, https://perma.cc/FB6W-VUP9.

142. Courts have often ruled that amendments should be afforded some meaning. *E.g.*, United States v. Wilson, 503 U.S. 333, 336 (1992); Stone v. INS, 514 U.S. 386, 397 (1995).

nonetheless retained the international abatement process unchanged until 1977. In 1977, Congress made two key changes to the law: it added more conditions to the statutory trigger, and it changed what happened after the trigger conditions were met.[143] But what Congress did not do was ever reconsider the nature of the organizations that could trigger international abatement—"any duly constituted international agency." There is no indication that Congress ever contemplated including entities other than the bilateral boundary organizations originally contemplated, and, more importantly, there is no indication that Congress intended in its several revisions to preserve the sort of flexibility or discretion that could, in the future, permit this to happen without further Congressional action.

1. 1967: The First Amendment

The Clean Air Act's international abatement authority was first amended in 1967 as part of a larger effort to streamline the law's conference-abatement procedures. These amendments occurred as part of the larger 1967 amendment cycle, which itself had a complex and difficult history. What began as a proposed bill from PHS that would have given it additional powers was altered significantly in the full Senate Public Works Committee, where Sen. Muskie's ambivalence toward several key proposals led to weakening of the bill via amendments offered by a more industry-friendly Senate Public Works Committee Chair Sen. Jennings Randolph (D-WV).[144] As part of this amendment process, it was proposed that the conference-abatement procedures be reworked to remove several steps.[145] The precise thinking behind each change in language was never discussed on the record,[146] and it appears that what changes were made were proposed following industry experience with, and complaints about, the domestic conference-abatement process—and international abatement was simply made to conform. The upshot was that the circumstances under which abatement could be initiated were not changed.[147] That is, the international abatement trigger remained conditioned as it had been.

This amendment coincided with PHS's final abandonment of its efforts to actually use its international abatement authority. In its 1967 appropriations request, PHS no longer reported that it specifically intended to initiate abatement

143. KATE C. SHOUSE & RICHARD K. LATTANZIO, CONG. RSCH. SERV., RL30853, CLEAN AIR ACT: A SUMMARY OF THE ACT AND ITS MAJOR REQUIREMENTS, EVERYCRSREPORT.COM, https://perma.cc/6PNA-G6SB.

144. *See* CHRISTOPHER J. BAILEY, CONGRESS AND AIR POLLUTION: ENVIRONMENTAL POLITICS IN THE USA 125–36 (1998).

145. Air Quality Act of 1967, Pub. L. No. 90-148, § 2, 81 Stat. 485, 494–97 (Apr. 6, 1967).

146. *See Air Pollution: 1967 (Air Quality Act) – Parts 3 & 4: Hearings before the Muskie Subcommittee*, 90th Cong. (1967) (taking testimony after introduction of Amendment 154 to S. 780); S. Rep. No. 403, at 30-31 (Jul. 15, 1967) (discussing amendments to "abatement conference" procedures).

147. *Compare* Pub. L. No. 89-272, § 102, 79 Stat. 992 (1965) (adding CAA § 105(c)(1)(D)) *with* Pub. L. No. 90-148, § 2, 81 Stat. 485 (1967) (renumbering CAA § 105(c) to § 108(d), and making other amendments, but retaining international abatement trigger unchanged).

on the Canadian border.[148] Instead, it listed Detroit–Windsor and several other Canadian border areas as under study for "potential future" abatement actions,[149] holding out hope for two abatement conferences "as a result of the requirements of the international authority" at some point in the future.[150] In 1968, even this hope disappeared, as international abatement was not discussed as part of PHS's ongoing or planned activities in any way.[151] In 1969, PHS again reported at length on its domestic abatement program, but on international abatement said only that the matter had been transferred to the Office of the Commissioner of the new National Air Pollution Control Administration, the mandate of which included "such services as program planning, regional designations, international air pollution matters, and a broad range of administrative management support services."[152] In other words, by the late 1960s PHS continued to support the IJC's investigation, but no longer appeared to have any intention of using the international abatement authority it had requested in 1965. International considerations had been moved upstairs to the director's portfolio, but were no longer contemplated to be an active part of the federal air pollution regulatory program.

2. 1970: The Second Amendment

The 1970 amendments to the Clean Air Act created a national regulatory program and empowered the newly created Environmental Protection Agency to take a more aggressive approach to fighting the nation's air pollution. As relevant here, the international abatement authority that is now Section 115 was retained in the 1970 revision.[153] The only Congressional intent discernible was to retain the existing authority unchanged. But it was now less useful because EPA would not need authority to clean up pollution when the health and welfare of the people of Windsor was threatened, because it would be able to act—for the first time—to limit pollution to protect the health and welfare of the people of Detroit.

The new regulatory scheme of the 1970 revisions involved EPA setting national ambient air quality standards (NAAQS) for certain important air pollutants, and requiring states to submit implementation plans to achieve those standards.[154] This was combined with a new enforcement authority that replaced the

148. *Labor & HEW Approps. for 1968: Hearings before S. App.*, 90th Cong. 1347 (1967).

149. *Labor & HEW Approps. for 1968: Part 4 (Pub. Health Svc.): Hearings before H. App.*, 90th Cong. 414–15 (1967).

150. *Labor & HEW Approps. for 1968: Hearings before S. App.*, 90th Cong. 1347 (1967).

151. *Hearings before H. App.*, *supra* note 149, at 481–532; *Labor & HEW Approps. for 1969: Hearings before S. App.*, 90th Cong. 1149–71 (1968).

152. *Labor & HEW Approps. for 1970: Part 3 (Pub. Health Svc.): Hearings before H. App.*, 91st Cong. 284 (1969); *Labor & HEW Approps. for 1970: Hearings before S. App.*, 91st Cong. 401-402, 412 (1969).

153. *See* Clean Air Act Revisions, Pub. L. No. 91-604 § 4(a), 84 Stat. 1676, 1678 (Dec. 31, 1970) (renumbering CAA § 108 to CAA § 115); *id.* § 4(b), 84 Stat. 1688–89 (amending new CAA § 115).

154. *Id.* §§ 107–112.

old conference-abatement procedures from earlier versions of the Act.[155] The old conference-abatement process was retained in only two special circumstances: 1) for interstate pollution threatening public health and welfare where the pollutant in question was not subject to a NAAQS, and 2) in cases of international air pollution, regardless of whether the pollutant was subject to a NAAQS.[156] In other words, NAAQS-enforcement generally replaced conference-abatement, but not for non-NAAQS interstate and any international (transboundary) pollution. In the international case, the HEW Secretary (not EPA)[157] was still obligated, as before, to call a conference whenever in receipt of a request from the Secretary of State, or sufficient reports from "any duly constituted international agency."

The House Report makes clear that the purpose of the 1970 amendments with respect to international abatement was to leave the international conference-abatement process unchanged.[158] The Senate version of the 1970 law—Muskie's version—would have entirely eliminated the conference-abatement procedures, and in doing so would have entirely eliminated the unused international abatement authority.[159] The bill's conference managers resolved these differing approaches by retaining the conference-abatement process only for those matters not covered by the new NAAQS-enforcement process.[160] Although other portions of the law changed in ways that might have implicated conference-abatement—for example, the definition of "effects on welfare" was expanded to include effects on climate—there is no evidence that Congress considered these relationships in any way in its decision to retain conference-abatement in these two situations.

---

155. *Id*. § 113.

156. *See id*. §4(b), *amending* CAA § 115(b)(4) (interstate pollution conference-abatement limited to non-NAAQS pollutants); *and* § 115(c) (international pollution conference-abatement, no NAAQS limitation).

157. The functions of the National Air Pollution Control Administration, including presumably the unused international abatement authority, were transferred to the Environmental Protection Agency via Reorganization Plan No. 3 of 1970, 84 Stat. 2086, 2087 (1970). However, the 1970 Clean Air Act amendment came after that plan's effective date. Had the international abatement authority been used between 1970 and 1977, it would have been unclear whether EPA or HEW would have been able to use it.

158. H.R. REP. NO. 91-1146 at 9 (1970) (discussing unchanged elements of section 108: "Air pollution will continue to be subject to control or abatement in accordance with the conference procedure set out under existing law . . .").

159. S. REP. NO. 91-1196 at 21 (1970) ("The bill would also delete the cumbersome conference and hearing procedures in the existing law. Such administrative procedures were appropriate when criteria did not exist and when evidentiary-gathering devices were needed to relate pollution to ambient air quality."). *Id*. at 80 (deleting CAA § 108(d)(1)(D)).

160. H. REP. NO. 91-1783, at 46 (1970) ("The conference substitute retains the enforcement provision of existing law for abatement of international pollution problems and abatement against certain sources of pollution not covered by these amendments. Past enforcement action and requirements are preserved."); *See also* 116 CONG. REC. 42,383-86 (1970) (Muskie submits summary of conference report to Senate); 116 CONG. REC. at 42,519-24 (House consideration of conference report, international abatement not discussed).

In any event, following the 1970 amendment the international conference-abatement authority was entirely ignored. This disregard was amply demonstrated with the 1972 publication of the IJC's report on transboundary air pollution—the final work product of the 1966 air pollution reference that had prompted the enactment of the international abatement authority in the first place.[161] The IJC—the original "duly constituted international agency"—concluded that pollution from the U.S. was endangering the health and welfare of the people of Canada.[162] And then nothing happened.

More precisely, it was not necessary for anything to happen, because the EPA was already hard at work abating Detroit's air pollution through the new powers granted to it under the Clean Air Act's 1970 amendments, and international pollution issues were receiving attention via the diplomatic process. This, however, was limited to water pollution: in 1972, the United States and Canada entered into the Great Lakes Water Quality Agreement (GLWQA), which instructed the IJC to coordinate water quality investigations and generate annual reports on the achievement of new water quality objectives in the boundary waters which would serve as the basis for future decision-making.[163]

3. 1977: The Third Amendment

Between 1970 and 1977, the United States suffered massive economic dislocations and saw a great deal of blame placed on government overregulation. The Clean Air Act became increasingly controversial throughout the decade, resulting in much more contention in the next amendment cycle. A new round of amendments had passed in the Senate in August 1976, but the House had passed a much broader bill the next month and the conference process to reconcile the two had dragged into late September.[164] Although the conference bill hewed closely to the Senate version, its late arrival provided the opportunity for its strongest opponents to filibuster until the scheduled end of session, killing the bill until the next year.[165] The revisions would thus not become law until August 1977.[166] They contained the final revision to what is now Section 115.

These revisions first appear in the public record, in substantially their final form, in Sen. Muskie's March 1976 bill submission following committee markup.[167] This revision made several substantial changes to the 1970 conference-abatement

161. IJC, TRANSBOUNDARY AIR POLLUTION: DETROIT AND ST. CLAIR RIVER AREAS 4–5 (1972).

162. *Id.* at 55–56.

163. Great Lakes Water Quality, Agreement between the U.S. and Canada, Apr. 15, 1972, Art. Can.-U.S.

164. 122 CONG. REC. 25,891 (1976) (Senate passage); 122 CONG. REC. 30,511 (1976) (House passage); 122 CONG. REC. 34,390 (1976) (conference timing).

165. 122 CONG. REC. 34,417 (1976) (filibuster succeeds).

166. 123 CONG. REC. 26,856 (1977) (final passage of 1977 Clean Air Act amendments).

167. S. 3219, 94th Cong. § 12 (as reported by S. Comm. on Pub. Works, Mar. 29, 1976).

provision. First, it removed interstate pollution entirely from the section (it was now handled elsewhere), leaving only the international abatement authority in the law. Second, it revised what happened when the law was triggered, streamlining the consequences by finally eliminating the conference-abatement process entirely, and replacing it with a SIP revision instead. Third, it changed the responsible decisionmaker from the HEW Secretary to the EPA Administrator. The Committee Report explained Congress's thinking:

> Before 1970 the principal legal means for control or abatement of air pollution was the enforcement conference procedure. The Clean Air Amendments of 1970 substantially changed that. . . . The basic tool of enforcement became the State implementation plan with its enforceable requirements for every source. This replaced the abatement conference, a lengthy and uncertain process . . . .
>
> The 1970 amendments, however, retained in section 115 the conference procedure for abatement of interstate air pollution, as well as international situations. The authority of section 115 has not been used, and the implementation plan approach for interstate air quality control regions has proven to be more successful in dealing with air pollution problems involving more than one State.
>
> In fact, the Committee believes that the implementation plan approach is also more appropriate than the enforcement conference for international air pollution. Section 115 as revised, therefore, provides that the determination that emissions of air pollutants in the United States are endangering the health or welfare of citizens of a foreign country will require the State in which the source of those emissions is located to revise its implementation plan to control those emissions.[168]

That is, the express intention of the drafters was to change the process that resulted when redress was appropriately requested, and, other than confirming the pre-existing transfer of authority to EPA, the Senate drafters said nothing whatsoever about changing the statute's trigger.

These changes were so uncontroversial that, although the law would be argued over, filibustered, and revised continually until its final passage in August 1977, the Section 115 revisions were not discussed further until the last step in the process.[169] The House and Senate again passed competing versions, and the Conference Committee assigned to synthesize them documented that the Senate

---

168. S. REP. NO. 94-717 at 44 (1976).

169. The March 1976 language submitted by Muskie had no equivalent in the House bill, but was retained in the conference bill that failed in September 1976. It was retained in the same form when the bill was reintroduced in January 1977. S. 252, 95th Cong. § 12 (as introduced in Senate, Jan. 14, 1977). A report accompanying the resubmission explained: "This provision was not controversial." STAFF OF MUSKIE SUBCOMMITTEE, 95TH CONG., A SECTION-BY-SECTION ANALYSIS OF S. 252 AND S. 253: CLEAN AIR ACT AMENDMENTS 17–18 (Comm. Print 1977). The language was retained in the subsequent Senate markup. S. REP. NO. 95-127, at 56-57 (1977). Subsequent Senate debate—which occurred over several days in June 1977—never mentioned Section 115. The House version of the 1977 bill did not include any revision to Section 115. H.R. REP. NO. 95-564, at 136 (1977) (Conf. Rep.) (stating House bill had "no comparable provision." in Joint Explanatory Statement of the Committee of Conference).

version of Section 115 was discussed, and that the House managers pushed to have several limitations added before agreeing to allow it to remain in the final bill.[170] The House accepted the Senate revision:

> with amendments to (1) reflect the test of 'reasonably may be anticipated' to endanger health adopted in this legislation; (2) require a request by a duly constituted international agency as a condition for the Administrator to act; and (3) require a plan revision only to the extent necessary to prevent or eliminate the endangerment in the foreign country.[171]

The "duly constituted international agency" language was already in the Senate bill, and the other two revisions are now reflected as additions to sections 115(a) ("may reasonably be anticipated to") and 115(b) ("which requires a plan revision with respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment referred to").[172] With that, today's Section 115 was finalized.[173]

The 1977 amendments are by far the most important of the three cycles, and are likely to form the basis of any argument that Congress changed its intentions following the initial creation of PHS's international abatement authority in 1965. One possible interpretation is that the 1977 amendments demonstrate no intention to expand the kind of "duly constituted international agency" that could trigger the statute's duties, reflecting an intention to continue to confine such entities to the traditionally contemplated agencies: the IJC and some future, equivalent, bilateral transboundary pollution control investigatory authority at the U.S.–Mexico border. This is effectively the position of anyone who argues that Section 115 is a transboundary pollution control statute with no modern relevance to multinational environmental governance or global atmospheric pollution.[174]

Such a restrictive reading, however, faces several problems. First, Congress demonstrated an awareness that the trigger had never been used, and revised the

---

Therefore, the House Report on the 1977 Amendments did not discuss it in any way, H.R. REP. NO. 95-294 (1977), and the House did not debate or discuss the question at all either.

170. H.R. REP. NO. 95-564, at 136 (1977) (Conf. Rep.).

171. *Id.* (summarizing discussion of Section 114 of the 1977 law in Joint Explanatory Statement of the Committee of Conference).

172. Sullivan argues that the change from "persons" to "public" in the 1977 amendments indicates an intention to expand the scope of the law. *See* Sullivan, *infra* note 211, at 209. This argument does not appear to be true—each of the House amendments had the effect of limiting the law's scope: adding a "reasonableness" standard subjected the Administrator's determination to higher scrutiny, changing the target from "persons" to "public" eliminated the possibility that endangerment of two individuals could trigger the statute; and requiring plan revisions only to the extent necessary to address pollution ensured the plan revisions would be tailored to the problem, and not overly broad.

173. Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 114, 91 Stat. 685, 710–11.

174. *See, e.g., Is CO_2 a Pollutant and Does EPA Have the Power to Regulate It?: Joint Hearings before the Subcomm. on Nat'l Econ. Growth, Nat. Res., and Regul. Aff. of the Comm. on Gov't Reform and the Subcomm. on Energy and Env't of the H. Comm. on Sci.*, 106th Cong. 39–40 (1999). (testimony of Peter Glaser, Shook, Hardy, and Bacon LLP).

statute in order to allow it to be used. This revision could reflect an interest in liberalizing the requirements of the trigger. Second, by 1977 Congress was aware of the enormous changes in environmental science and governance that had transpired since 1965, 1967, and 1970. Climate change, ozone depletion, atmospheric transport of persistent organic pollutants, and acid deposition through precipitation were all under active investigation and discussion in Congressional hearings throughout the 1970s. In other words, Congress might be credited with an increasingly sophisticated understanding of atmospheric science by 1977. Third, global environmental governance had taken great strides forward since 1970. The IJC was increasingly marginalized,[175] while global coordination of environmental information gathering and treatymaking through the United Nations was on the rise.[176] It is possible to argue, then, that in revising the statute, Congress must also have reimagined the kind of organization that could trigger Section 115. Doing so would have provided EPA with administrative flexibility to tackle new and emerging pollution problems—exactly the sort of flexibility that the Supreme Court found, in *Massachusetts v. EPA*, justified reading greenhouse gases into the Clean Air Act even if they were not specifically contemplated by the drafters.[177]

But there are significant problems with this interpretation as well. First, the bill retained the reciprocity requirement that had been part of the law since 1965. This requirement had been a powerful barrier to using the international abatement authority prior to 1977, and would remain so in the future. This persistence does not reflect an interest in liberalization. Second, the House conference managers insisted not only on two new restrictive amendments, but specifically insisted on retaining the condition of a report from a duly constituted international agency. Although the record does not demonstrate that the House carefully considered which organizations would qualify, it appears that the House believed this condition would provide a check on EPA's discretion, not expand it. Third, the 1977 amendments adopted a different approach to global atmospheric pollution than would be suggested by a broad reading of the new Section 115. In the first efforts to protect stratospheric ozone, the international approach was contemplated to be one of "cooperative research" whereby the country would seek, in the future, to "negotiate multilateral treaties, conventions, resolutions, or other agreements" with respect to the problem. There was no indication, anywhere, that Section 115 could or would be used to deal with ozone, at least not without further treatymaking and, perhaps, the intentional creation of an ozone-relevant "duly constituted international agency." And similarly, fourth, during the debate over the 1977 amendments, Congress was already conducting its first hearings on climate

175. MACFARLANE & CLAMEN, *supra* note 52, at 533, 540.

176. *See generally* MARIA IVANOVA, THE UNTOLD STORY OF THE WORLD'S LEADING ENVIRONMENTAL INSTITUTION: UNEP AT FIFTY (2021).

177. Massachusetts v. EPA, 549 U.S. 497, 532 (2007).

change. These hearings, held in May 1976 and April and June 1977—that is, while the 1977 amendments were under consideration—would result in the enactment of the first federal climate change law in 1978, which was confined to research.[178] In other words, Congress's knowledge of climate change in 1977 evidences an intent to take a different regulatory approach—studying the problem—which is not consistent with an intention to authorize future regulatory action under Section 115, and nothing in Section 115's legislative history indicates that Congress intended Section 115 to be triggered by the results of that research, at minimum without further action consistent with a ratified treaty.

Congress's intent in the 1977 Clean Air Act amendments will remain the subject of dispute and discussion unless and until the courts resolve this question. But in this author's opinion the weight of evidence points toward Congress's final intent being to leave Section 115 theoretically available to respond to international complaints of harmful air pollution originating in the United States, but under strict conditions that would be almost impossible to use: reciprocity, population-level harm, closely tailored response actions, and a restrictive reading of the words "any duly constituted international agency." There is no evidence that Congress intended to leave Section 115 open to being triggered by reports from multinational scientific research organizations in which the United States participated, or otherwise contemplated it to be a blanket authorization to EPA to regulate long-range transboundary or global air pollution without prior agreement flowing from diplomatic negotiations. In this reading, a "duly constituted international agency" is one empowered to investigate international air pollution and issue findings that the nations involved acknowledge and accept will trigger their domestic abatement responsibilities under Section 115 and any foreign equivalent.

In any event, immediately following its final amendment, Section 115 remained unused. Between 1977 and late 1980, EPA made no findings triggering its duties, and no SIP calls responsive to its purpose. It was not discussed in the academic literature. And this neglect did not change until the final months of the Carter Administration, amid efforts to have the federal government do something about acid rain.

---

178. *The Nat'l Climate Program Act: Hearings before the Subcomm. on the Env't and the Atmosphere of the H. Comm. on Sci. and Tech.* 94th Cong. 2 (1976) (describing the first hearings on the topic); Cong. Research Service, A Primer on Climatic Variation and Change, H.R. Doc. No. 76–372 (Sep. 1976); *The Nat'l Climate Program Act: Hearings before the Subcomm. on the Env't and the Atmosphere of the H. Comm. on Sci. and Tech.* 95th Cong. 2 (1977); *The Nat'l Climate Program Act: Hearings before the Subcomm. on Sci., Tech., and Space of the S. Comm. on Com., Sci., and Transp.*, 95th Cong. 1 (1977); Nat'l Climate Program Act, Pub. L. No. 95-367, 92 Stat. 601 (1978).

E. 1977–1990: SECTION 115 AND ACID RAIN

Acid rain's challenging regulatory history has been told in detail.[179] The problem was raised many times throughout the 1970s.[180] It began to rise to national prominence as damage to northeastern habitats became more acute in the late 1970s.[181] It also caused tensions with Canada, the recipient of much of the U.S.'s coal plant pollution.

The primary pollution control activity between the United States and Canada in the late 1970s was the 1972 GLWQA, which provided the IJC with specific investigatory and reporting instructions. In 1978, the two countries substantially updated the GLWQA, but did not tackle the issue of long range transport of pollutants causing acid rain directly in that document.[182] Rather, the two countries engaged in a series of diplomatic exchanges between 1978 and 1980 that created a Bilateral Research Consultation Group on Long Range Transport of Air Pollutants, a Joint Statement on Transboundary Air Quality, and a Memorandum of Intent to enter into negotiations for a permanent treaty on the topic.[183] The G7 nations, including the United States and Canada, committed to increasing coal use "without damage to the environment;"[184] President Carter announced a ten-year acid rain research program to accompany his coal-heavy energy policy;[185] Congress received, considered, and passed, the Acid Precipitation Act of 1980, codifying and expanding the ten-year research program;[186] and the IJC began

---

179. *See generally* CHRIS C. PARK, ACID RAIN: RHETORIC AND REALITY 157–219 (Muethen and Co. Ltd. 1987) (tracing modern development of awareness of acid rain as a global environmental problem, particularly after 1972); ACID RAIN AND FRIENDLY NEIGHBORS, *supra* note 6, 64–184 (reviewing U.S.–Canadian cooperation and negotiation between 1970s and mid-1980s).

180. ProQuest Congressional identifies over 200 results for "acid rain" in Congressional hearing transcripts throughout the 1970s. The earliest is: *Water Pollution 1970: Part 3, Hearings before the Subcomm. on Air and Water Pollution of the S. Comm. on Pub. Works*. 91st Cong. 949 (1970) (statement by Dr. Herbert Bormann: "Acid rain water is fairly common in New York and New England. [. . .] Acidification of rain water by sulfur pollutants has also been shown over much of central Europe.") (internal citations omitted).

181. PARK, *supra* note 179, at 198–99.

182. U.S. and Canada, Agreement on Great Lakes Water Quality, Nov. 22, 1978, 1153 U.N.T.S. 18177.

183. Jeffrey Maclure, North American Acid Rain and International Law, 7 FLETCHER FORUM 121, 130–32 (1983); Katherine Wilshusen, *U.S.–Canadian Research Groups*, in ACID RAIN AND FRIENDLY NEIGHBORS, *supra* note 6 at 83–102 n.15.

184. G7 RESEARCH GROUP, *Declaration* (1979), http://www.g7.utoronto.ca/summit/1979tokyo/communique.html.

185. President Carter, Environmental Message to Congress, PRES. DOC. 15, at 1321, 1372 (Aug. 2, 1979).

186. Acid Precipitation Act of 1980, in Energy Security Act of 1980, Pub. L. No. 96-294, 94 Stat. 611, Title VII (1980). The legislation was a project of the New York congressional delegation, which had a special interest in acid rain. In September 1979, citing "over 300 lakes in my State that are now sterile," Sen. Pat Moynihan (D-NY) put forward a bill to initiate a ten-year research program in coordination with the negotiation of the "complex interstate and international agreements" that would be necessary to finally solve the problem. 96 CONG. REC. 24,625 (daily ed. Sep. 14, 1979) (statement of Sen. Pat Moynihan); *see also id.* at 24631–33 (Sen. Moynihan's introductory speech); CONG. REC.

mentioning acid rain in its GLWQA annual reports.[187] Meanwhile, various Congressional committees began to take up the question of acid rain in detail,[188] and it was during these hearings that Section 115 was first proposed as a mechanism for EPA to regulate.

The idea seems to have come from Edmund Muskie's office. In March 1980, EPA Administrator Douglas Costle was called to testify before the Muskie Subcommittee on the environmental impacts of the Carter Administration's proposal to increase domestic coal use for energy.[189] Costle explained that EPA was "reviewing what regulatory opportunities might exist under the Clean Air Act, as it is now structured, to deal with this problem," and would decide whether it had "clear statutory authority under the Clean Air Act to reduce damage from acid rain in a timely fashion," or needed to ask Congress for more.[190] Costle, however, did not go into any detail about what "regulatory opportunities" EPA was considering, and this reticence on specifics may have induced Sen. Muskie's response.[191] In a letter to Costle dated April 2, 1980, Muskie set out an argument for an expansive reading of Congressional intent:

> Knowledge about every link between the emission of a pollutant and an adverse impact is not required before action can be taken. The Agency can rely on indirect evidence and reasoned scientific judgment as the basis for taking quick and strong action to reduce air pollution. The statement of purpose in the Act and the legislative history indicate that the Clean Air Act was written with the anticipation that the Executive Branch would move aggressively to control pollution when it concluded that a problem existed.

30,477 (daily ed. Oct. 31, 1979), (introducing to House and ref'd to House Foreign Commerce and Science and Technology Comms), 96 CONG. REC. 32,236 (daily ed. Nov. 19, 1979) (statement of Rep. Vento). Although the bill then went to committee, Moynihan successfully introduced it as a floor amendment to what would become the Energy Security Act of 1980, arguing that provisions for the research and development of synthetic fuels technologies needed to be balanced with research into the possible negative effects of increased coal use. 96 CONG. REC. 31583, 31,598-610 (daily ed. Nov. 8, 1979) (amending S. 932).

187. *Compare* IJC, FIFTH ANNUAL REPORT: GREAT LAKES WATER QUALITY (1977) (referencing long range transport in passing with no discussion of acid rain) *to* IJC, SIXTH ANNUA REPORT: GREAT LAKES WATER QUALITY (1978) (mentioning acid rain and 1978 GLWQA long range transport provisions).

188. *Acid Rain: Hearings before the Subcomm. on Oversight and Investigations of the H. Comm. on Interstate and Foreign Com.*, 96th Cong. (1980); *Env't Effects of the Increased Use of Coal: Hearings before Subcomm. on Env't Pollution of the S. Comm. on Env't and Pub. Works*, 96th Cong. (1980), ("Muskie Acid Rain Hearing"); *Powerplant Fuels Conservation Act of 1980*: *Hearings before the Subcomm. of Energy Reg. of the S. Comm. on Energy and Nat. Res.,* 96th Cong. (1980); *Effects of Acid Rain*: *Hearings before the S. Comm. on Energy and Nat. Res.,* 96th Cong. (1980); *Effects of Acid Rain: Hearing before the Subcomm. on Energy Conservation & Supply of the S. Comm. Energy and Nat. Res.*, 96th Cong. (1980); *Economic Impact of Acid Rain: Hearings before the Select Comm. on Small Bus. and the S. Comm. on Env't and Pub. Works*, 96th Cong. (1980).

189. *Env't Effects of the Increased Use of Coal*, *supra* note 188, at 7–29 (statement of Douglas M. Costle, Administrator, EPA).

190. *Id.* at 11.

191. *See also id.* at 386–453, 413 (reproducing a letter from Susanne L. Wellford, Acting Director, EPA, which repeats Administrator Costle's testimony almost verbatim).

> You and your Agency have made the judgment that acid rain is a problem. Congressional hearings have confirmed that judgment. Quite some time ago the Agency appeared to have reached a judgment that sulfates and other fine particles are a health hazard. I urge you to move swiftly to use all available authority of the Clean Air Act in a comprehensive effort to solve these problems.[192]

Muskie then argued that a wide variety of existing Clean Air Act authorities already permitted EPA to act against the sources of pollutants causing acid rain. Among these, Muskie said, was the "[u]se of Section 115 to trigger notification . . . of appropriate Governors" of an endangerment finding for the Canadian people, leading to a SIP call.[193] This 1980 letter from Senator Muskie is the first public proposal to use Section 115 for anything specific since PHS had abandoned its efforts at international abatement in Detroit–Windsor in the late 1960s.

In the next hearings before Muskie's committee, Costle acknowledged Muskie's letter and said that he had "organized a group of high-level EPA staff from a number of offices to expeditiously study the various options that could provide the necessary control mechanism[s]," including those suggested by Muskie. He continued: "We anticipate that the analysis will take some time before definitive results are available and control strategies are identified. We look forward to working with you in this effort. . . . My staff is exploring each of the avenues you have suggested."[194] Section 115 quickly became the primary target of analysis. EPA and its Canadian counterpart hired an outside consultant to study Section 115 around this time.[195] The consultant quickly focused on Section 115's reciprocity condition, and in the process of research interviewed numerous Canadian officials, which, according to Environment Canada, "was instrumental in focusing Canadian Government attention on the issue."[196] Over the next six months, that attention would create a new Canadian law intended to satisfy the Section 115 reciprocity condition.

The record is not clear on who, exactly, proposed and pursued the Canadian legislation. In addition to EPA and its consultant, the State Department and the junior senator from Maine were involved—and both, in their way, were now working for Edmund Muskie. On April 21, 1980, the U.S. Secretary of State resigned, and a week later President Carter asked Senator Muskie to serve as the replacement. Muskie accepted, resigned from the Senate, and became Secretary

---

192. *Id.* at 144–45 (reproducing a letter from Sen. Edmund Muskie to EPA Administrator Douglas Costle).

193. *Id.*

194. *Id.* at 144.

195. EMI was run by an attorney who had served as counsel for the Department of State and the International Joint Commission in 1969 and had gone on to a career in international environmental law. *See Acid Rain: Hearings before the Subcomm. on Arms Control, Oceans, Int'l Operations & Env't of the S. Comm. on Foreign Relations*, 97th Cong. 60–62 (1982).

196. *Id.*

of State on May 8, 1980. One of his first actions in that role was to sign a Memorandum of Intent with Canada to negotiate an acid rain treaty. In the Senate, meanwhile, Muskie's seat was filled by George Mitchell, Muskie's chief of staff in the 1960s and a close ally. One of Sen. Mitchell's first projects was to work to convince the Canadian government to pass reciprocity legislation.[197] The Canadian law was negotiated within the Canadian government in late 1980 and finally passed on December 17, 1980. Immediately following its enactment, Sen. Mitchell sent a letter to Administrator Costle,[198] informing the EPA director that the Section 115 reciprocity situation was now resolved and demanding a determination on acid rain under Section 115. Mitchell stated plainly: "I believe that this [Canadian] legislation, in conjunction with findings made in the reports noted below . . . oblige you to take action under Section 115 to remedy the problem of acid precipitation emitted in the United States which is affecting Canada."[199] The following day, Muskie's State Department "issued a public statement committing the United States to evaluate whether this Canadian legislation provides essentially the same rights as are provided by Section 115 of the Clean Air Act."[200] Mitchell's letter identified reports from two organizations—the IJC's 1979 report under the GLWQA, and a recent report of the Bilateral Research Consultation Group on Long Range Transport of Air Pollutants, and argued that "both the IJC and the RCG are duly constituted international agencies."[201]

By the time Canada had enacted its reciprocity legislation, and Mitchell had made his demand, and Muskie had made his press release, and the IJC had published its Seventh Annual Report, and EPA's consultants had finished their report on reciprocity, and Administrator Costle was considering his reply, however, the United States had elected Ronald Reagan to be its next president. It had also elected enough Republican Senators to flip control of the Senate to that party for the first time since 1955. Costle had no time to initiate a formal rulemaking or adhere to any administrative niceties. Rather, he wrote his response in a letter back to Senator Mitchell dated January 13, 1981—one week before Reagan took office—formally concluding that pollution in (unidentified) U.S. states was

197. *Clean Air Act Oversight (Field Hearings) Part 6: Hearings before the S. Comm. on Env't and Pub. Works*, 97th Cong. 2–5 (1981) (Statement of Canadian MP Ronald Irwin). *See also id.* at 42 (including the statement of Adele Hurley, Executive Coordinator, Canadian Coalition on Acid Rain, discussing Canadian political agreement and quick passage of law); John Roberts, *The Transnational Implications of Acid Rain: Introductory Remarks*, 5 Can.-U.S. L. J. 2, 7–8 (1982) (providing the Canadian Minister of the Environment's comments regarding enactment).

198. *Acid Rain: Hearings before the Subcomm. on Arms Control, Oceans, Int'l Operations and Env't*, *supra* note 195, at 44 (showing a letter from Sen. George Mitchell to Administrator Douglas M. Costle).

199. *Id.*

200. *Id.* at 45–48 (showing a letter from Administrator Douglas M. Costle to Sen. George Mitchell).

201. *Id.* at 44. The IJC had also just filed its Seventh Annual Report, which discussed acid rain for an unprecedented eight pages, and encouraged the two countries to do something about it. *See* IJC, *7th Annual Report: Great Lakes Water Quality*, at 48–55 (Oct. 1980), https://www.ijc.org/en/id622-seventh-annual-great-lakes-water-quality-ijcpdf [https://perma.cc/K2KC-LQZE].

causing and contributing to acid rain, threatening the public health and welfare of the people of Canada.[202] In his response, Costle did not directly evaluate the contention that the IJC and RCG were "duly constituted international agencies," but he based his determination only on the IJC Seventh Annual Report—indicating, possibly, that he or someone at EPA did not agree with Sen. Mitchell's assertion that a research group was also an appropriate agency. Immediately after sending his response, Costle instructed his staff to document which states should be notified of a SIP call as a result, but they had not finished by the time the new Administration arrived, and Muskie and Costle both resigned as part of the transition.[203]

In doing so, Costle would leave a lasting legacy of administrative litigation and an undying hope among environmental advocates. The Section 115 idea was quickly picked up by environmental nonprofits eager to see government action on acid rain mitigation. Soon, clean air advocacy organizations were adopting the policy as their own.[204] It would appear repeatedly in advocacy to Congress throughout the 1980s. This was because, following Reagan's assumption of office, the Reagan EPA under Anne (Burford) Gorsuch declined to take further action. Meanwhile, the Republican Senate blocked acid rain legislation repeatedly throughout the 1980s, and this position did not change substantially when the Democrats retook Congress in 1986.[205] National action on acid rain would not occur until the Bush Administration announced support for comprehensive legislation in 1989,[206] culminating in the acid rain components of the Clean Air Act Amendments of 1990, which created CAA Title IV-A on acid deposition control.[207]

In addition to the legislative battle, and perhaps because of it, the 1980s saw the continued development of the argument that no new legislation was necessary, because action was possible under Section 115. In 1981, midwestern utilities sued EPA to have the Costle determination set aside and Ontario intervened, although the suit was quickly dismissed as moot.[208] Shortly afterward, states and environmental groups sought to force the recalcitrant Reagan EPA to move forward following Costle's determination, resulting, six years later, in the D.C.

---

202. *Id*. at 45.

203. Cong. Off. Tech. Assessment, *Mechanisms for the Control of Interstate and Transboundary Air Pollution*, *in* THE REGIONAL IMPLICATIONS OF TRANSPORTED AIR POLLUTANTS: AN ASSESSMENT OF ACIDIC DEPOSITION AND OZONE, VOLUME II—APPENDICES (INTERIM DRAFT), at MM-45–59 (1982) (citing internal EPA memorandum and FOIA's response).

204. Statement of James N. Barnes on behalf of multiple environmental organizations, (reporting on a resolution of the Canada-United States Environmental Council, a "group of more than forty . . . environmental organizations," supporting use of Section 115), *in Clean Air Act: Hearings before the Subcomm. on Energy Dev. & Application of the H. Comm. on Sci. and Tech*., 97th Cong. 249–80 (1981).

205. BAILEY, *supra* note 141, at 220–38.

206. *Id*. at 229–32.

207. *Id*. at 230–38; Pub. L. No. 101-549 104 Stat. 2399, 2584–634 (1990).

208. These lawsuits are described in Caplan, *infra* note 211, at 573–79.

Circuit's dismissal of the suit due to Costle's failure to provide notice and comment as part of his determination.[209] The Section 115 idea also formed the foundation of a petition for rulemaking on the same theory, which EPA denied on the theory that it could not yet identify the states and sources of pollution to the degree necessary to craft a remedy, which the D.C. Circuit also upheld.[210] The primary result was a number of law review articles on the topic.[211] None of this work carefully examined what a "duly constituted international agency" meant beyond the IJC.[212] Although the hopes for Section 115 were never realized, the advocacy model had been developed.

F. 1990–2009: SECTION 115 AND CLIMATE CHANGE

Whatever the shortcomings of the 1980-81 attempt to use Section 115 to regulate the air pollutants causing acid rain, the fact remains that acid rain was (as relevant here) a transboundary pollution problem between the United States and Canada that had been subject to the review of a treaty-constituted organization developed in order to assist the two nations to resolve their disputes, according to diplomatically negotiated investigatory requests endorsed by both countries, with, if not a clear awareness, at least the possibility of recognizing that the findings of the inquiry could, if all other conditions were met, result in mandatory domestic pollution abatement duties—meaning exactly the kind of problem, under exactly the circumstances, that Congress had, however briefly, intended Section 115 be available to resolve. The same could not be said for global atmospheric problems not involving direct transboundary pollutant transport and deposition, never referred to a treaty-constituted investigatory body via a diplomatic process, and never accompanied by a clear understanding that doing so would trigger domestic pollution control responsibilities.

---

209. New York v. Thomas, 613 F. Supp. 1472 (D.D.C. 1985), *rev'd sub nom.* Thomas v. New York, 802 F.2d 1443, 1448 (D.C. Cir. 1986) (Scalia, J.).

210. Her Majesty the Queen in Right of Ontario v. EPA, 912 F.2d 1525, 1533–34 (D.C. Cir. 1990).

211. John L. Sullivan, *Beyond the Bargaining Table: Canada's Use of Section 115 of the United States Clean Air Act to Prevent Acid Rain*, 16 CORNELL INT'L L. J. 193 (1983); Bennett A. Caplan, Note, *The Applicability of Clean Air Act Section 115 to Canada's Transboundary Acid Precipitation Problem*, 11 B.C. ENV'T AFFS. L. REV. 539 (1984); Joseph MacDonald Schwartz, *On Doubting Thomas: Judicial Compulsion and Other Controls of Transboundary Acid Rain*, 2 AM. U. J. INT'L L. & POL'Y 361 (1987); Carol Garland, *Acid Rain over the United States and Canada: The D.C. Circuit Fails to Provide Shelter Under Section 115 of the Clean Air Act While State Action Provides a Temporary Umbrella*, 16 B.C. ENV'T AFFS. L. REV. 1 (1988); Stuart N. Keith, *The EPA's Discretion to Regulate Acid Rain: A Discussion of the Requirements for Triggering Section 115 of the Clean Air Act*, 36 CLEV. ST. L. REV. 133 (1988), Erik K. Moller, Note, *The United States-Canadian Acid Rain Crisis: Proposal for an International Agreement*, 36 UCLA L. REV. 1207 (1989).

212. Sullivan argues that research groups created by the U.S-Canada acid rain MOI, as well as the bilateral Research Consultation Group (BCG) would qualify. *See* Sullivan, *supra* note 211, at 209. Caplan only examined the IJC, concluding (correctly) that "it appears that the IJC is exactly the type of body to which [Section 115] is addressed." Caplan, *supra* note 211, at 582.

Not coincidentally, during the entire effort to use it for acid rain, Section 115 was never once proposed to combat climate change. This was true although Congress could be attributed an increasingly sophisticated understanding of the phenomenon throughout the 1960s and 1970s,[213] and had held several dozen hearings on climate change during and after the acid rain debates: at least twelve between 1978 and 1987,[214] nine in

---

213. Congress considered climate change as early as 1962, as the world began contemplating the peaceful uses of post-Sputnik satellite technologies. *See* G.A. Res. 1721 (XVI), International Cooperation in the Peaceful Uses of Outer Space (Dec. 20, 1961), *reprinted in Meteorological Satellites: Hearings before the Subcomm. on Applications & Tracking & Data Acquisition of the H.R. Comm. on Sci. and Astronauts*, 87th Cong. 359–62 (1962) [hereinafter *Satellites Hearings*]; WMO, *Modification of Weather and Climate*, Appx E. to FIRST REPORT ON THE ADVANCEMENT OF ATMOSPHERIC SCIENCES AND THEIR APPLICATION IN LIGHT OF DEVELOPMENTS IN OUTER SPACE (1962), *reprinted in Satellite Hearings*, *supra*, at 367. CO_2's greenhouse effect was explained to Congress thoroughly as early as 1966. *Population Crisis: Hearings before Subcomm. on Foreign Aid Expenditures of S. Comm. on Gov't Operations* 734–36 (1966) (Statement of William Vogt). By 1975, the U.S. space and science agencies had initiated climate research programs that were regularly discussed before Congressional science committees. *1975 Nat'l Science Foundation Authorization: Hearings on H.R. 12816 before the Subcomm. on Sci., Rsch., and Dev. of the H. Comm. on Sci. and Astronautics*, 93rd Cong. 149 (1974) (statement of Dr. Edward C. Creutz, Assistant Dir. for Rsch., Nat'l Sci. Found.); *Fed. Ocean Programs Review: Hearings on the Various Aspects of the Federal Ocean Programs and the Interagency Coordination of Ocean Activities before the Subcomm. on Oceanography of the H. Comm. on Merch. Marine and Fisheries*, 93rd Cong. 142 (1974) (statement of Dr. Thomas F. Malone, Member, Nat'l Advisory Comm. on Oceans and Atmosphere); *Env't R. & D. Posture: Hearings before the Subcomm. on the Env't and the Atmosphere of the H. Comm on Sci. and Tech.*, 94th Cong. 26 (1975) (letter from H. Guyford Stever, Dir., Nat'l Sci. Found.); *Nat'l Oceanic and Atmospheric Admin.: Oversight Hearings before the Subcomm. on the Env't and the Atmosphere of the H. Comm on Sci. and Tech.*, 94th Cong. 16 (1975) (statement of Dr. Robert M. White, Adm'r, Nat'l Oceanic and Atmospheric Admin. of the Dept. of Comm.); *Atmospheric Research Control Act: Hearings before the Subcomm. on Oceans and Atmosphere of the S. Comm. on Com.*, 94th Cong. 268 (1976). Congress debated and enacted a national climate policy and program between 1976 and 1978. JOHN R. JUSTUS, CONG. RSCH. SERV., THE NATIONAL CLIMATE PROGRAM ACT OF 1978: BACKGROUND AND LEGISLATIVE HISTORY (1979), *reprinted in Implementation of the Nat'l Climate Act: Hearings before the Subcomm. on Nat. Res. and Env't of the H. Comm. on Sci. and Tech.*, 96th Cong. 197–208 (1979).

214. *Implementation of the Nat'l Climate Act: Hearings before the Subcomm. on Nat. Res. and Env't of the H. Comm. on Sci. and Tech.*, 96th Cong. (1979); *Implementation of the Nat'l Climate Program Act: II: Hearings before the Subcomm. on Nat. Res. and Env't of the H. Comm. on Sci. and Tech.*, 96th Cong. (1979); *Effects of Carbon Dioxide Buildup in the Atmosphere: Hearings before the S. Comm. on Energy and Nat. Res.*, 96th Cong. (1980); *Reauthorization of National Climate Program Act: Hearings on S. 1391 before the Subcomm. on Sci., Tech., and Space of the S. Comm. on Commerce, Sci., and Transp.*, 96th Cong. (1980); *Oversight of the Nat'l Climate Program: Hearings before the Subcomm. on Nat. Res., Agric. Rsch. and Env't of the H. Comm. on Sci. and Tech.*, 97th Cong. (1981 and 1982); *Nat'l Climate Program Authorizations: Hearings on Nat'l Climate Program Authorization before the Subcomm. on Sci., Tech., and Space of the S. Comm. on Commerce, Sci., and Transp.*, 97th Cong. (1981); *Carbon Dioxide and Climate: The Greenhouse Effect: Hearings before the Subcomm. on Nat. Res., Agric. Rsch. and Env't and the Subcomm. on Investigations and Oversight of the H. Comm. on Sci. and Tech.*, 97th Cong. (1981); *Carbon Dioxide and Climate: The Greenhouse Effect: Hearings before the Subcomm. on Nat. Res., Agric. Rsch. and Env't and the Subcomm. on Investigations and Oversight of the H. Comm. on Sci. and Tech.*, 97th Cong. (1982); *1984 National Science Foundation Authorization: Hearings on H.R. 2066 before the Subcomm. on Sci. and Tech. of the H. Comm. on Sci. and Tech., 98th Cong.* (1983); *Global Environmental Change Research: Hearings on Global Climate Change Due to Manmade Changes in the Earth's Atmosphere before the Subcomm. on Sci., Tech., and Space of the S. Comm. on Com., Sci., and Transp.*, 100th Cong. (1987); *The Nat'l Climate Program Act and Global*

1988,[215] fifteen in 1989,[216] three in 1990,[217] seven in 1991,[218] and nine in

Climate Change: Hearings before the Subcomm. on Nat. Res., Agric. Rsch. and Env't and the Subcomm. on Int'l Sci. Coop. of the H. Comm. on Sci., Space, and Tech., 100th Cong. (1987); *Greenhouse Effect and Global Climate Change: Hearings on Greenhouse Effect and Global Climate Change before the S. Comm. on Energy and Nat. Res.*, 100th Cong. (1987).

215. *Global Climate Changes: Greenhouse Effect: Hearings before the Subcomm. on Hum. Rts. and Int'l Org. of the H. Comm. on Foreign Aff.*, 100th Cong. (1988); *Greenhouse Effect and Global Climate Change Part 2: Hearing on Greenhouse Effect and Global Climate Change before the S. Comm. on Energy and Nat. Res.*, 100th Cong. (1988); *Technologies for Remediating Global Warming: Hearing before the Subcomm. on Nat. Res., Agric. Rsch., and Env't and the Subcomm. on Sci., Rsch., and Tech. of the H. Comm. on Sci., Space, and Tech.*, 100th Cong. (1988); *Energy Policy Implications of Global Warming: Hearings on Serial No. 100–299 before the Subcomm. on Energy and Power of the H. Comm. on Energy and Com.*, 100th Cong. (1988); *Global Change Research: Hearings on Global Change Research and S. 2614 before the S. Comm. on Com., Sci., and Transp.*, 100th Cong. (1988); *Nat'l Energy Policy Act of 1988 and Glob. Warming: Hearings before S. Comm. on Energy and Nat. Res.*, 100th Cong. (1988); *The Glob. Env't Prot. Act of 1988: Hearings before the Subcomm. on Haz. Wastes and Toxic Substancesand Subcomm. on Env't Protection of the S. Comm. on Pub. Works*, 100th Cong. (1988); *Implications of Glob. Warming for Nat. Res.: Hearings before the Subcomm. on Water and Power Res. of the H. Comm. on Interior and Insular Aff.*, 100th Cong. (1988); *The Potential Impact of Glob. Warming on Agric.: Hearings before the S. Comm. on Agric.*, 100th Cong. (1988).

216. *Glob. Warming: Hearings before the Subcomm. on Env't Protection of the H. Comm. on Com.*, 101st Cong. (1989); *Nat'l Glob. Change Research Act of 1989: Hearings before S. Comm. on Sci.*,101st Cong. (1989); *Nat'l Energy Policy Act of 1989: Hearings before S. Comm. on Energy and Nat. Res.*, 101st Cong. (1989); *Policy Options for Stabilizing Glob. Climate: Hearings before the Subcomm. on Env't Protection of the S. Comm. on Pub. Works*, 101st Cong. (1989); *Glob. Change – An Ocean Perspective: Hearings before the Nat'l Ocean Policy Study of the S. Comm. on Com., Sci., and Transp.*, 101st Cong. (1989); *Climate Change and Ag.: Joint Hearing before the Subcomm. on Dep't. Ops., Rsch., and Forest Agric, and Subcomm. on Forests, Family Farms, and Energy of the H. Comm. on Agric.*, 101st Cong. (1989); *Glob. Warming and CAFE Standards: Hearing before the Subcomm. on the Consumer of the S. Comm. on Com., Sci., and Transp.*, 101st Cong. (1989); *Glob. Climate Change: Hearings before the Subcomm. on Oceanography and the Great Lakes of the H. Comm. on Merch. Marine and Fisheries*, 101st Cong. (1989); *Climate Surprises: Hearing before the Subcomm. on Sci., Tech., and Space of the S. Comm. on Com., Sci., and Transp.* ,101st Cong. (1989); *Glob. Warming and Its Implications for California: Hearing before the S. Comm. on Energy and Nat. Res.*, 101st Cong. (1989); *The Glob. Change Rsch. Act of 1989: Hearings before the Subcomm. on Nat. Res., Agric. Rsch., and Env'tand the Subcomm. on Int'l Sci. Coop. of the H. Comm. on Sci., Space, and Tech.,* 101st Cong. (1989); *Responding to the Problem of Glob. Warming: Hearings before the Subcomm. on Env't Protection of the S. Comm. on Pub. Works,* 101st Cong. (1989); *Glob. Climate Change: Hearings before the Subcomm. on Hum. Rts. and Int'l Org. of the H. Comm. on Foreign Aff.,* 101st Cong. (1989); *Glob. Climate Change Prevention Act of 1989 – S. 1610: Hearings before the S. Comm. on Agric., Nutrition, and Forestry*, 101st Cong. (1989); *Glob. Warming: Hearings before the Nat'l Ocean Policy Study of the S. Comm. on Com., Sci., and Transp.*, 101st Cong. (1989).

217. *Glob. Climate Change: Special Hearings before S. App.*, 101st Cong. (1990); *Coral Bleaching: Hearings before the Nat'l Ocean Policy Study of the S. Comm. on Com., Sci., and Transp.*, 101st Cong. (1990); *Glob. Climate Change and Greenhouse Emissions: Hearings before the Subcomm. on Health and the Env't of the H. Comm. on Interstate and Foreign Com.*, 102nd Cong. (1991).

218. *Glob. Warming and Other Consequences of Energy Strategies: Hearing before the Subcomm. on Env't Protection of the S. Comm. on Pub. Works*, 102nd Cong. (1991); *Policy Implications of Greenhouse Warming: Hearings before the S. Comm. on Com., Sci., and Transp.*, 102nd Cong. (1991); *Techs. and Strategies for Addressing Glob. Warming: Hearings before the H. Comm. on Sci., Space, and Tech.* (1991); *Glob. Climate Change and Stratospheric Ozone Depletion: Hearings before the Subcomm. on Env't Protection of the H. Comm. on Env't and Pub. Works* (1991); *Glob. Change Rsch.: the Role of Clouds in Climate Change: Hearings before the S. Comm. on Com., Sci., and Transp.* (1991);

1992.[219] These hearings coincided with rising public and governmental concern over climate change, a UN effort to coordinate an international response, the development and passage of the Global Climate Protection Act of 1987,[220] the creation of the IPCC in 1988, an unsuccessful effort in Congress to incorporate climate change regulation into what became the Clean Air Act Amendments of 1990,[221] the enactment of the Global Change Research Act of 1990 instead,[222] and the development and eventual ratification of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992.[223]

The records of these activities offer a great deal of evidence that Congress had no intention of addressing climate change using the Clean Air Act. There was never any conception in Congress that the extensive research being conducted with the knowledge and support of the U.S. government was being undertaken with regulatory stakes. There was never once any recognition that the reports, surveys, or studies being created by all this activity, by a bewildering array of organizations, could ever trigger regulation. Nonetheless, the Supreme Court's decision in *Massachusetts v. EPA*, recognizing that the Clean Air Act incorporated, in some instances, a flexibility sufficient to encompass climate regulation at the point when climate harms triggered regulatory thresholds, means that such later Congressional awareness might not necessarily matter.[224] A great deal more could be said, and the hearings offer a rich trove of information that defies simplistic generalization or characterization, but for the purposes of this discussion, two facts about them are most relevant for assessing Congressional intent with respect to Section 115: first, that Congress was aware of but not involved in the creation of the IPCC, and second, that Congress simultaneously and subsequently

---

Priorities in Glob. Climate Change Rsch: Hearings before the Subcomm. on Sci. of the H. Comm. on Sci., Space, and Tech. (1991).

219. *Glob. Change Rsch: Indicators of Glob. Warming and Solar Variability: Hearings before the S. Comm. on Com., Sci., and Transp.* (1992); *Glob. Warming: Hearings before the Subcomm. on Energy and Power of the H. Comm. on Energy and Com.* (1992); *Strategies for Control of Greenhouse Emissions: Hearings before the Subcomm. of Health and the Env't of the H. Comm. on Energy and Com.* (1992); *Glob. Change Rsch.: Glob. Warming and the Biosphere: Hearings before the S. Comm. on Com., Sci., and Transp.* (1992); *CO_2, Stabilization and Econ. Growth: Hearings before the S. Joint Econ. Comm.* (1992); *Glob. Climate Change: Hearings before the S. Comm. of Energy and Nat. Res.* (1992); *U.S. Glob. Change Rsch. Program: Hearings before Subcomm. on Env't of the S. Comm. on Sci., Space, and Tech.* (1992); *Glob. Change Rsch, Glob. Warming, and the Oceans: Hearings before S. Comm. on Com., Sci., and Transp.* (1992); *Glob. Climate Change and the Pacific Islands: Hearings before S. Comm. on Energy and Nat. Res.* (1992); *U.N. Framework Convention on Climate Change (Treaty Doc. 102-38): Hearings before S. Comm. on Foreign Relations* (1992).

220. Foreign Relations Authorization Act of 1987, Pub. L. No. 100-204, 101 Stat. 1331 (1987).

221. *See* S. 2663, 100th Cong. Part B (1988) ("Act to reduce and stabilize atmospheric concentrations of carbon dioxide," amending CAA §§ 111, 202). *See also* Clean Air Act Amendments of 1990, Pub. L. No. 101-549 § 831, 101 Stat. 2685, 2699 (1990) (eventual CAA amendments related to climate change).

222. Global Research Act of 1990, Pub. L. No. 101-606, 104 Stat. 3096 (1990).

223. U.N. Framework Convention on Climate Change, May 9, 1992, S. Treaty Doc No. 102-38, 1771 U.N.T.S. 107.

224. *See* Massachusetts v. EPA, 549 U.S. 497, 532 (2007).

resisted all treaty obligations that would have imposed binding greenhouse gas emissions reduction targets on the United States without reciprocity from developing nations.

With respect to the creation of the IPCC, in brief, in response to efforts by UNEP to push the United States to enter into negotiations for a multilateral climate treaty, the United States, cognizant of the intense economic ramifications of such action, responded by suggesting an "intergovernmental mechanism" to coordinate ongoing worldwide climate change assessments, an approach intended both to buy time and ease the passage of an international agreement in the future.[225] In reports to Congress, the State Department explained that it had urged the IPCC's creation because calls for policy responses were premature, and research was required to reduce uncertainty and place policy discussions on a firmer basis. The U.S. therefore proposed that UNEP and the WMO "jointly . . . explore and establish an intergovernmental mechanism 'to carry out internationally coordinated scientific assessments of the magnitude, timing and potential impact of climate change.'"[226] Its objective would be "to see that there is an effective interface between the science and policymakers."[227] It would not "undertake scientific research itself or duplicate existing scientific cooperation mechanisms," but instead "see that there is an effective interface between the science and policymakers,"[228] and "help ensure an orderly international process of activities on global climate change."[229] It would "assess scientific understanding of the magnitude, timing and possible effects of climate change," which would "provide a basis for considering a wide range of options to deal with the global climate issue, including the possibility of a climate convention."[230] That is, Congress was told that the IPCC was created in order to support negotiations for what would become the UNFCCC, and would inform policy. It was officially created via informal coordination between WMO and UNEP, later documented in a Memorandum of

225. Shardul Agrawala, *Context and Origins of the Intergovernmental Panel on Climate Change*, 39 CLIMATIC CHANGE 605, 611-615 (1998).

226. *The Nat'l Climate Program Act and Glob. Climate Change: Hearings before the H. Subcomm. on Nat. Res., Agric. Rsch, and Env't and the Subcomm. on Int'l Sci. Coop. of the H. Comm. on Sci., Space, and Tech.*, 574 (1987) (statement of Andrew Sens (State Department)).

227. *Greenhouse Effect and Glob. Climate Change: Hearings before the S. Comm. on Energy and Nat. Res.,* 160 (1987) (statement of William A. Nitze (State Department)).

228. *Glob. Climate Changes: Greenhouse Effect: Hearings before the Subcomm. on Hum. Rts. and In't Orgs. of the H. Comm. on Foreign Aff.* (1988) (statement of Richard J. Smith (Dep't of State)).

229. *Id.* at 39 (statement of Linda J. Fisher (EPA)).

230. *See Global Climate Changes: Greenhouse Effect*, *supra* note 215 at 50. *See also Energy Policy Implications of Glob. Warming: Hearings before the Subcomm. on Oceanography and the Great Lakes of the H. Comm. on Merch. Marine and Fisheries* 86, 90, 104; *see also Glob. Warming: Hearings before the Subcomm. on Env't Protection of H. Comm. on Com.* 29–32, 164 (Feb. 2 & May 4 1989) (discussing IPCC's purpose in similar terms).

Understanding between those two organizations, actions that were later endorsed by the U.N. General Assembly.[231]

With respect to Congressional resistance to actions that would bind the United States to emissions reductions, a complete telling of this resistance has yet to be told.[232] In the hearings discussed here, it is first evident in the rising hostility of Republican legislators. By 1992, it was clear that the UNFCCC would be acceptable to them exactly because it did not include any such binding commitments, and that this lack of commitments was necessary to get the UNFCCC through the Senate. As part of the Senate's inquiry, EPA repeatedly assured the Senate that the U.S. entry into the UNFCCC "will not require any new implementing legislation, or any added regulatory programs."[233] In the face of this categorical assurance, there was no discussion of UNFCCC commitments eventually triggering regulation under Section 115.

The situation changed with the proposed incorporation of binding targets into the UNFCCC. This change occurred during the first meeting of the parties to the convention. At this meeting, the parties agreed that the developed nations' commitments were "not adequate" and formally agreed to begin to "set quantified limitation and reduction objectives within specified time-frames, such as 2005, 2010 and 2020, for their anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol."[234] This commitment led directly to the negotiation of what became the Kyoto Protocol in December 1997.[235] During subsequent oversight hearings, increasingly hostile conservative Senators grilled the Clinton State Department over its intentions. The UNFCCC had been ratified because it had not included binding targets, and the Senate had repeatedly expressed concern over adopting such targets only for the United States while exempting developing nations, and now the State Department was seeking to bind the United States to this course all the same. It was in this process that Section 115 was first mentioned. In questions submitted after that hearing, Sen. Frank Murkowski (R-AK), a leading opponent of U.S. climate regulation,[236] attempted to formulate a theory that entry into what would

231. *See About: History of the IPCC*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, https://www.ipcc.ch/about/history/ [https://perma.cc/9XKX-V255] (last visited Apr. 17, 2022) (see linked documents on this webpage as well).

232. *See generally*, Nathaniel Rich, LOSING EARTH: A RECENT HISTORY (2019). There is still much work to be done by political scientists and historians to understand the development of climate resistance.

233. *U.N. Framework Convention on Climate Change (Treaty Doc. 102-38): Hearings before S. Comm. on Foreign Relations* (1992), app. 92

234. Report of the Conference of the Parties on its First Session, FCCC/CP/1995/7/Add.1, Decision 1/CP.1, pmbl., pt. II § 2(a) (June 6, 1995).

235. Joanna Depledge, TRACING THE ORIGINS OF THE KYOTO PROTOCOL: AN ARTICLE-BY-ARTICLE TEXTUAL HISTORY 6–9 (Nov. 25, 2000).

236. *See* Robert Falkner, BUSINESS POWER AND CONFLICT IN INTERNATIONAL ENVIRONMENTAL POLITICS 116–18 (2008) (discussing Murkowski's role in opposition to the Berlin Mandate and Kyoto Protocol).

become the Kyoto Protocol would *violate* Section 115, because that law required reciprocity for international pollution abatement.[237] The State Department's answer spoke past Murkowski's question, but confirmed that no reciprocity was being contemplated.[238] Although Section 115 was never again mentioned as a bar to entry into Kyoto, the associated demand for reciprocity ultimately was embodied in the Byrd-Hagel resolution, which objected to climate treaty obligations that did not include emissions reductions for developing nations, and which passed the Senate 95–0—effectively killing the Kyoto Protocol before it was even signed.[239]

It was within this context—Congressional disapproval of U.S. entry into the Kyoto Protocol, and increasing likelihood of domestic legislative deadlock circa 1998—that EPA General Counsel Jonathan Z. Cannon wrote a memorandum to EPA Administrator Carol Browner outlining existing authorities that EPA could use to regulate greenhouse gases. The Cannon memorandum, like the letter sent to Douglas Costle by Sen. Muskie's office in 1980, took an aggressive stance on the boundaries of the Clean Air Act and identified Section 115 as one of many potentially available regulatory pathways without detailed analysis.[240] Cannon's inclusion of Section 115 in his memorandum assured that it would be present in future discussions of EPA's authority.

With that, the table was set. In 1999, an environmental group petitioned EPA to regulate greenhouse gases under Clean Air Act Section 202. That petition led, eight years later, to *Massachusetts v. EPA*. During the pendency of that petition and litigation, no further significant discussion occurred regarding the use of Section 115 to regulate greenhouse gases. But the successful conclusion of that litigation set in motion the search for further regulatory authorities, resulting, as explained in Part I, in the present calls for the use of Section 115 to fight climate change, all of which have pointed to the IPCC as the statutorily requisite "duly constituted international agency."

The legislative history described above is by no means complete. Further archival research might reveal analysis and opinion at EPA, PHS, the IJC, or Congress, which might support either side of the argument. But it is hoped that the preceding investigation will serve to better frame any future discussion of the nature of Section 115's international agency condition.

---

237. *Glob. Climate Change: Hearings before the S. Comm. on Energy and Nat. Res.,* 104th Cong., at 99–100 (1996).

238. *Id.*

239. S. Res. 98, 105th Cong. (1997).

240. Memorandum from Johnathan Z. Cannon, Gen. Couns., EPA, to Carol Browner, Adm'r, EPA (Apr. 10, 1998) ("Cannon Memo"), *reprinted in Is CO_2 a Pollutant and Does EPA Have the Power to Regulate It*, *supra* note 160, at 21–26.

IV. IS THE IPCC A "DULY CONSTITUTED INTERNATIONAL AGENCY"?

The above history provides support for both sides of any debate over the IPCC's status. This Article concludes that interpreting the IPCC's status requires a careful comparison to the IJC, and the discussion above, as summarized in this Part, reveals many substantial and potentially material differences between the two organizations. It is in considering the problem of materiality that this Article proposes a standard for assessing how "similar to" the IJC an agency ought to be to qualify under Section 115.

To summarize, many of the key differences between the IJC and IPCC relate to the amount of oversight and control imposed upon them by the U.S. Congress. For example:

- The IJC is, in part, an authority of the government of the United States. The IPCC is not.
- The IJC was created by a treaty that was ratified by the United States upon advice and consent of the U.S. Senate. The IPCC was created at the suggestion of the United States State Department via an MOU between two UN bodies that did not require U.S. Senate input or approval.
- Three of the IJC Commissioners and all the IJC's U.S. Section staff are employees of the United States government, and have been delegated by Congress certain governmental powers necessary to carry out their duties under a treaty. This is not the case for the IPCC.
- The IJC's ongoing existence and functioning is subject to Congressional approval via the budget authorization process. The IPCC's is not. While it is true that the United States has been the primary financial supporter of the IPCC, and that Congress could prohibit that spending, U.S. financial contributions could be replaced by contributions from other member states. If Congress did not fund the U.S. Section and joint expenses of the IJC, it would cease to operate.

There are also differences related to the purposes of the two organizations, and their reports:

- The IJC's original purpose was to resolve disputes between the United States and Canada. The IPCC's original purpose was to resolve uncertainty over climate change science, impacts, and response actions, and to inform future policymaking activities, including, originally, the negotiation of a multilateral treaty.
- Both the IJC and the IPCC fulfill their purposes, in part, by issuing reports. The IJC issues reports of various kinds consistent with instructions given to it under the Boundary Waters Treaty and, later, the GLWQA. The IPCC issues reports that review the state of knowledge of the science of, impacts of, and available responses to climate change, consistent with an operating process developed by its participants and consistent with its mission.

- The IJC's reports require endorsement by majority vote from a group of commissioners evenly divided between its two signatory parties. The IPCC's reports and conclusions are developed by scientific committee review with government input.
- The IJC was empowered to conduct its own scientific investigations and regularly did so, but later also became responsible for writing regular advisory reports under the GLWQA. The IPCC is not empowered to conduct its own investigations, but rather to review the state of knowledge about climate change.

There is also a key difference with respect to the knowledge attributable to Congress with respect to the two organizations. The U.S. and Canadian governments were aware in advance of the potential consequences of referring investigatory questions to the IJC, and tailored their references based on that awareness by jointly agreeing in advance to the scope of investigations; by declining to provide the IJC with final decision-making authority, and by passing a law (the original Section 115) that provided carefully tailored regulatory consequences for the action, with oversight and input from both houses of Congress. No such awareness accompanied the creation of the IPCC, and in fact the opposite is true. The IPCC's reports were assumed to inform independent policymaking and treaty-making processes that would ultimately require further Congressional oversight and approval.

The extent to which these differences are material turns on the ultimate meaning of "any duly constituted international agency," and here, finally, this Article offers a conclusion: by "any duly constituted international agency," Congress meant "the IJC or something like it between the United States and Mexico." Given the general language in Section 115, it is reasonable to interpret the words to also allow for bilateral arrangements with countries other than Canada and Mexico, and even multilateral organizations with similar powers and duties. This interpretation, however, leaves open the question of what the core relevant attributes of the IJC might be. The legislative history demonstrates only one absolutely necessary attribute of the IJC as a "duly constituted international agency" in 1965: that Congress was willing to allow the IJC's air-pollution-related findings to trigger federal domestic air pollution abatement activities without further Congressional approval. Evidence for Congress's willingness includes notices to Congress that such a thing was possible, Congressional review of that possibility, and Congressional imposition of multiple conditions on that possible outcome. *The international agency condition, therefore, was intended to be triggered by reports from any organization with power to produce credible information on international pollution, provided only that Congress had accepted the possibility of domestic regulation as a result*. To the extent that the logic is circular, it nonetheless appears to be Congress's logic on this question. In the case of both transboundary pollution with Canada in 1918, and climate change a century later, this

interpretation is consistent with Congress's unyielding commitment to national sovereignty, and Congress's repeated unwillingness to place the United States in a position to clean up pollution without reciprocal commitments from other nations.

In the entire history of Section 115, the only way that Congress ever actually considered reports and investigations happening was via diplomatic reference to the IJC. This casts some doubt on Administrator Costle's reliance, in 1981, on an annual status report issued by the IJC under the GLWQA. It also casts heavy doubt over the use of the IPCC assessment reports to trigger regulation. Congressional majorities have repeatedly refused to accept that information about climate change, however credibly generated, should ever form the basis of domestic regulation without further Congressional approval. The IPCC was created specifically to generate the necessary support for that approval, and it failed to do so when the Senate indicated its unwillingness to ratify the Kyoto Protocol. Congress has repeatedly refused the possibility that something like the IPCC could trigger Section 115, and therefore the reading of Section 115 most consistent with the intent of Congress is that the IPCC reports cannot do so.

Therefore, if EPA were to conclude that the IPCC did not qualify, that conclusion should survive judicial scrutiny. If EPA were to conclude otherwise, that conclusion would face considerable litigation risk. Of course, there is more than adequate evidence to support arguments to the contrary, and ultimately it will fall to a court to resolve, if Section 115's proponents seek to push EPA into a decision subject to judicial review.

CONCLUSION: HOPE SPRINGS ETERNAL

Section 115's history is a tale of unfulfilled hope. In large part by design, it has proved impossible to use. It is a relic of an older regulatory model that seems to have no place in the Clean Air Act's post-1970 statutory scheme, that even Sen. Edmund Muskie himself once proposed eliminating. Yet Congress has seen fit to preserve it, and the power that it grants if its conditions are met is so broad that, in times of legislative deadlock, its potential to break the logjam is, quite simply, too attractive to ignore.

In that spirit, the above analysis need not be the end. Rather, it should inform the strategies available to harness Section 115 toward the desired end: regulation of greenhouse gases under the Clean Air Act. Although Congress never indicated any intention to allow the IPCC's reports to trigger regulation, and therefore, in this Article's analysis, the IPCC reports cannot do so, Congress did create *one* clear pathway toward Section 115 regulation: the IJC.

Consistent with the Boundary Waters Treaty and long-established practice, the United States and Canada could jointly refer the matter of climate change to the IJC under either Article IV (on the theory that greenhouse gas emissions alter

water quality) or Art. IX (on the theory climate change is a "matter of difference" between the U.S. and Canada). That reference could require the IJC to investigate and make findings on the endangerment of U.S. and Canadian citizens by greenhouse gas emissions from the other nation. Senate consent for such a reference was granted long ago, when the Boundary Waters Treaty was ratified in 1909. Presumably, the reference would be made in coordination with the Canadian government to ensure that Canada has provided commitments to the United States reciprocal to those given to Canada under Section 115. In the likely case that the IJC's findings supported it, EPA would then be justified in making the necessary findings under Section 115 as Congress contemplated when it enacted the first version of Section 115 in 1965. Learning from the lessons of the 1980 acid rain process, EPA would need to make its findings in full compliance with the Administrative Procedure Act. Once that was done, and assuming EPA's determination survived the subsequent legal assaults (which would extend far beyond the question of the international agency condition), EPA might find itself free to regulate greenhouse gases emitted in the United States to the extent necessary to protect the health and welfare of the people of Canada—with likely significant co-benefits to the health and welfare of the people of every other nation on Earth. It would be a difficult path, but it would adhere more closely to the statutory process that Congress has set out.

The U.S. Senate ratified the Boundary Waters Treaty, the State Department and the government of Canada adopted the practice of joint referrals, and the U.S. Congress empowered EPA to act upon receipt of information generated by IJC investigatory references. Under existing treaties, the U.S. State Department and government of Canada could, if they agreed to do so, order the IJC to conduct an investigation into climate change that could, if its findings were sufficient, trigger Section 115 regulation without further Congressional consent. It would require transformation of the IJC into something closer to what its more idealistic early founders originally intended, but nothing in the law appears to prevent it, and much could be gained in the attempt.

Is the IPCC a "duly constituted international agency"? Not likely. Is the IJC? Without question, yes. A strategy to use Section 115 to regulate greenhouse gas emissions should take this into account.