

Notes

RESURRECTING A DOCTRINE ON ITS DEATHBED: REVISITING FEDERAL COMMON LAW GREENHOUSE GAS LITIGATION AFTER *UTILITY AIR REGULATORY GROUP V. EPA*

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ABSTRACT

This Note considers how the Supreme Court's decision in Utility Air Regulatory Group v. EPA (UARG) may have created a new opening for federal common law nuisance litigation as a means to address climate change. The Court's earlier decision in American Electric Power v. Connecticut (AEP) held that federal nuisance claims targeting greenhouse gas emissions were completely displaced by the Clean Air Act. However, the holding in AEP was premised on the assumption that the Clean Air Act uniformly addressed greenhouse gases throughout the statute. UARG upended this assumption, holding that there are sections of the Clean Air Act that do not encompass greenhouse gases. Therefore, there may be sources of greenhouse gas emissions that are not regulated by the statute. Based on the displacement analysis employed in AEP, this would mean that the federal common law of nuisance would not be displaced as to these sources.

The Clean Air Act's coverage of the greenhouse gas emissions from one important category of sources—existing stationary sources—is an open question. Until recently, the D.C. Circuit appeared poised to answer at least part of this question in West Virginia v. EPA, the case challenging the Obama administration's signature carbon dioxide regulation—the Clean Power Plan. The Clean Power Plan was premised on Section 111(d) of the Clean Air Act, and the D.C. Circuit's en banc decision would have resolved whether and to what extent Section 111(d) can be used to regulate certain existing sources' greenhouse gas emissions. However, the Trump administration has proposed to rescind the regulation, and it appears increasingly unlikely

that the D.C. Circuit will issue a decision on the merits of the litigation. Therefore, it remains unclear whether Section 111(d) addresses existing sources' greenhouse gas emissions. As this Note shows, the only other section of the Clean Air Act that might encompass these sources' greenhouse gas emissions is Section 115, but this is far from certain.

This Note argues that a federal common law nuisance suit should be leveraged in the face of this uncertainty. The result would be salutary, win or lose. On the one hand, the suit could result in a holding that either Section 111(d) or Section 115 encompasses greenhouse gases, which would mean that the federal common law would indeed be displaced. This holding could then be used to force the Environmental Protection Agency (EPA) to regulate existing sources' greenhouse gas emissions under those sections. On the other hand, if the court finds that the Clean Air Act does not address existing sources' greenhouse gas emissions, then these sources would be subject to substantial litigation risk. This exposure, in turn, could induce these sources to ask Congress to draft legislation that addresses their greenhouse gas emissions, thereby displacing any future common law claims. In the end, the desired outcome of the federal nuisance suit is the same: to catalyze comprehensive regulatory or legislative coverage of greenhouse gas emissions in the United States, which is imperative to avert the most devastating effects of climate change.

INTRODUCTION

In *American Electric Power Co. v. Connecticut* (AEP),¹ eight states, New York City, and three nonprofit land trusts sued the five largest emitters of carbon dioxide in the United States—electric power plants which, at the time of the suit, emitted 2.5 percent of humanity's total annual carbon pollution.² The plaintiffs alleged, among other things, that the defendants' contribution to global warming constituted a public nuisance under federal common law.³ The Second Circuit agreed with the plaintiffs,⁴ but the Supreme Court reversed. Finding that the Clean Air Act Section 111(d)⁵ provides “a means to seek limits

1. Am. Elec. Power Co. v. Connecticut (AEP), 564 U.S. 410 (2011).

2. *Id.* at 418.

3. *Id.* A public nuisance is a “substantial and unreasonable interference with public rights.” *Id.* Despite the familiar holding in *Erie Railroad Co. v. Tompkins*, 304 U.S. 64 (1938), the federal common law—as distinct from the general common law—continues to exist, primarily around interstate issues where no single state's law would apply. See *infra* Part I.A.

4. Connecticut v. Am. Elec. Power Co., 582 F.3d 309 (2d Cir. 2009).

5. Clean Air Act, Pub. L. No. 88-206, § 111(d), 77 Stat. 392, 84 Stat. 1684 (codified at 42 U.S.C. § 7411(d)). For a discussion of this provision of the Clean Air Act, see *infra* Part I.B.

on emissions of carbon dioxide from domestic powerplants,” the Court held that the Clean Air Act displaced the plaintiffs’ “parallel” federal common law claim.⁶

Industry groups and their counsel embraced the decision, declaring that “[t]he federal common law of public nuisance [has] died after a long illness” and that the doctrine is an “extinct tort.”⁷ Commentators and scholars broadly agreed, concluding that “the decision in *AEP* has completely foreclosed any avenue to enjoin any type of air pollution under the federal common law of nuisance.”⁸ Climate change plaintiffs too have abandoned the tort.⁹ Nevertheless, this Note contends that this use of the federal common law has been laid to rest prematurely.¹⁰ Industry’s success at limiting the Clean Air Act’s coverage of greenhouse gases has already injected glimmers of life into the doctrine, and the doctrine stands to come surging back if ongoing efforts to limit the Clean Air Act’s coverage of greenhouse gases are successful.

Indeed, the Supreme Court’s decision in one industry victory—*Utility Air Regulatory Group v. EPA (UARG)*¹¹—may have laid the grounds for the doctrine’s resurrection. In *UARG*, a clandestine

6. *AEP*, 564 U.S. at 425. The plaintiffs in *AEP* were only seeking injunctive relief, but the Ninth Circuit subsequently clarified that the Clean Air Act also displaces federal nuisance claims for damages. *Native Vill. of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849, 857 (9th Cir. 2012), *cert. denied*, 133 S. Ct. 2390 (2013).

7. *The Death of Environmental Common Law?*, MCGUIREWOODS (Oct. 3, 2012), <https://www.mcguirewoods.com/Client-Resources/Alerts/2012/10/Death-Environmental-Common-Law.aspx> [<https://perma.cc/RTU6-Y734>]; *see also* Keith Goldberg, *No Future for Climate Change Torts*, *Attys Say*, LAW360 (May 23, 2013, 6:25 PM), <http://www.law360.com/articles/444225/no-future-for-climate-change-torts-attys-say> [<https://perma.cc/5FD3-UE4S>] (noting that “*AEP* laid down the gauntlet—the [Clean Air Act] is one-stop shopping for questions under climate change” (emphasis added)).

8. Damian M. Brychcy, Note, *American Electric Power v. Connecticut: Disaster Averted by Displacing the Federal Common Law of Nuisance*, 46 GA. L. REV. 459, 486 (2012); *see also* R. Trent Taylor, *The Obsolescence of Environmental Common Law*, 40 ECOLOGY L. CURRENTS 1, 1 (2013) (finding that federal climate change litigation is “on the verge of obsolescence”); David R. Brody, Case Comment, *American Electric Power Co. v. Connecticut*, 36 HARV. ENVTL. L. REV. 297, 302 (2012) (declaring that environmental claims under federal common law are “[m]ostly [d]ead”).

9. *See* Juscelino F. Colares & Kosta Ristovski, *Pleading Patterns and the Role of Litigation as a Driver of Federal Climate Change Legislation*, 54 JURIMETRICS 329, 333 (2014) (noting that there have been only four federal nuisance claims around climate change and only one since *AEP*).

10. As Mark Twain once quipped after discovering that a newspaper had prematurely published his obituary, “[t]he reports of my death have been greatly exaggerated.” PETER MESSENT, *THE CAMBRIDGE INTRODUCTION TO MARK TWAIN* 22 (2007).

11. *Util. Air Regulatory Grp. v. EPA (UARG)*, 134 S. Ct. 2427 (2014).

collective of electric utilities and trade groups¹² challenged efforts of the Environmental Protection Agency (EPA) to require certain stationary sources of greenhouse gases to obtain permits and install pollution control technology under the Prevention of Significant Deterioration (PSD) and Title V requirements of the Clean Air Act.¹³ *UARG* held that, even though the Clean Air Act has one act-wide definition of “air pollutant,” the statute does not uniformly treat greenhouse gases as air pollutants throughout each of its sections.¹⁴ Thus, the Court found that the EPA “may not treat greenhouse gases as a pollutant” for the purpose of determining whether a source may be subject to PSD and Title V requirements.¹⁵

UARG’s holding undermined a basic assumption of *AEP*—that the Clean Air Act comprehensively addressed greenhouse gases¹⁶—and has therefore created a potential opening for federal nuisance claims. Ultimately, however, a federal nuisance suit would be viable only if *no* section of the Clean Air Act is found to provide a basis to regulate the defendant’s greenhouse gas emissions, and many of the Clean Air Act’s sections have not yet been tested in the courts.¹⁷ Until recently, the D.C. Circuit appeared poised to resolve at least part of this question in *West Virginia v. EPA*,¹⁸ the case challenging the EPA’s landmark carbon dioxide regulation—the Clean Power Plan.¹⁹ The Clean Power Plan was premised on Section 111(d) of the Clean Air Act, and the D.C. Circuit’s en banc decision would have resolved whether and to what extent that section can be used to regulate greenhouse gases from existing sources. However, the Trump

12. See John Walke, *Is Your Power Company Fighting in Court Against Safeguards from Mercury and Toxic Air Pollution?*, NRDC: EXPERT BLOG (May 25, 2012), <https://www.nrdc.org/experts/john-walke/your-power-company-fighting-court-against-safeguards-mercury-and-toxic-air> [<https://perma.cc/ZQ5M-2TKY>] (noting that UARG has no online presence but that it appears to be linked with a Washington, D.C. law firm and has “no obvious independence” from the firm). Walke wondered “whether one reason for UARG’s creation was to shield the names of member companies from general public awareness when UARG advocates for dirtier results on the companies’ behalf.” *Id.*

13. For a primer on these provisions of the Clean Air Act, see *infra* Part I.B.

14. *UARG*, 134 S. Ct. at 2449.

15. *Id.*

16. For a discussion of this assumption, see *infra* Part III.A.

17. For a discussion of each section of the Clean Air Act that might be used to regulate greenhouse gases, see *infra* Part III.B.

18. *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. argued Sept. 27, 2016).

19. See *id.*; see also *Clean Power Plan Case Resources*, ENVTL. DEF. FUND, <https://www.edf.org/climate/clean-power-plan-case-resources> [<http://perma.cc/MFV3-32MR>] (documenting the ongoing litigation in *West Virginia v. EPA*).

administration has issued a proposal to repeal the regulation,²⁰ and it appears increasingly unlikely that the court will issue a decision on the merits.²¹ Therefore, it remains unclear whether or to what extent Section 111(d) addresses existing sources' greenhouse gas emissions. As this Note demonstrates, the only other section that might credibly be used to regulate existing sources' greenhouse gas emissions is Section 115, but it has never been tested in the courts.

A federal nuisance suit should be leveraged in the face of this uncertainty. On the one hand, a federal nuisance suit could force the courts to clarify that sections of the Clean Air Act do indeed provide for the regulation of greenhouse gases from specific sources, in which case the federal common law would be displaced. And this finding could be used to force the EPA to regulate greenhouse gases under those sections.²² Regulations issued under these sections could provide for effective and efficient mechanisms to address climate change.

On the other hand, if a court finds that no section of the Clean Air Act provides for the regulation of a given source's greenhouse gas emissions, a federal nuisance suit could be leveraged to provide wide-reaching remedies to states, and possibly to others,²³ injured by that source's emissions. Although these remedies could probably not avert climate change significantly,²⁴ they could pose vast litigation risks and regulatory uncertainty for heavily polluting fossil fuel-reliant industries. These substantial liabilities could persuade industry actors—many of whom have stridently argued that the Clean Air Act does not address greenhouse gases—to warm to national legislation

20. Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48035 (proposed Oct. 16, 2017) (to be codified at 40 C.F.R. pt. 60).

21. For a discussion of the Clean Power Plan litigation, see *infra* Part III.B.2.

22. For a discussion of how clarifying that certain sections of the Clean Air Act address greenhouse gases could force the EPA to regulate under those sections, see *infra* Part IV.

23. The Supreme Court has never indicated whether private citizens or political subdivisions of states may assert federal nuisance claims. *AEP*, 564 U.S. 410, 422 (2011). Therefore, while this Note is primarily addressed to states impacted by climate change, the argument here intentionally leaves open the possibility that others might assert these claims too.

24. It should be noted that a court's inability to issue a remedy that would fully stem the tides of climate change would not be an insurmountable bar to standing. See *Massachusetts v. EPA*, 549 U.S. 497, 525 (2007) (“[A] plaintiff satisfies the redressability requirement when he shows that a favorable decision will relieve a discrete injury to himself. He need not show that a favorable decision will relieve his *every* injury.” (alteration in original) (quoting *Larson v. Valente*, 456 U.S. 228, 244 n.15 (1982))).

that *does* comprehensively address these pollutants, thereby displacing federal nuisance suits.²⁵

In either case, the desired outcome of a federal nuisance suit would be the same: to catalyze comprehensive regulatory coverage of greenhouse gases in the United States.²⁶ This is critical. Global temperatures are rapidly increasing toward a “tipping point,” above which climate change and the associated environmental, social, and political upheavals are projected to become increasingly catastrophic and self-reinforcing.²⁷ Yet Congress has not made any significant efforts to address climate change since the Waxman-Markey Bill failed in 2009,²⁸ and it is unlikely to do so in the near future. And the current administration has aggressively sought to withdraw Obama-era climate policies, and has reneged on the U.S. commitment to the 2015 Paris Climate Agreement.²⁹ Still, national-level action is ever more critical to

25. See Colares & Ristovski, *supra* note 9, at 332 (suggesting that the “imposition of variable, potentially inconsistent and more costly litigation outcomes [could induce] industry to seek preemptive federal legislation to reign in such costs”).

26. However, given the current political climate, Congress could also pass a bill that expressly eviscerates the federal common law and the Clean Air Act, leaving no opportunities to target greenhouse gas emissions. Therefore, as a tactical matter, litigants should delay bringing federal nuisance claims until there is a more pro-environmental administration.

27. We have already warmed the earth by more than one degree Celsius above preindustrial levels, more than halfway to the two-degree threshold that scientists have identified as the maximum degree of warming the earth can tolerate before the climate reaches a “tipping point.” *Climate Change*, NASA, <http://climate.nasa.gov/evidence> [<https://perma.cc/622G-2NF5>]. Past this point, the warming effects will become self-perpetuating: as more polar ice melts, more global warming gases will be released and more dark surfaces will be exposed, causing places like Greenland to absorb more heat than they reflect—like giant asphalt parking lots. John Carey, *Is Global Warming Happening Faster than Expected?*, SCI. AM. (Nov. 1, 2012), <https://www.scientificamerican.com/article/is-global-warming-happening-faster-than-expected> [<https://perma.cc/R4VE-U9WK>]. Weather changes will cause extreme droughts across much of the equator, increasingly intense wildfires, and much more devastating storms. *Global Warming Impacts*, UNION OF CONCERNED SCIENTISTS, <https://www.ucsusa.org/our-work/global-warming/science-and-impacts/global-warming-impacts#.WFToIZJOkp8> [<https://perma.cc/CA97-YNN8>]. Global food production and water availability will be severely disrupted, *id.*, leading to mass population upheaval. John Vidal, *Global Warming Could Create 150 Million ‘Climate Refugees’ By 2050*, THE GUARDIAN (Nov. 2, 2009), <https://www.theguardian.com/environment/2009/nov/03/global-warming-climate-refugees> [<https://perma.cc/24ER-8SAW>].

28. H.R. 2454, 111th Cong. (2009).

29. *Climate Deregulation Tracker*, SABINE CTR. FOR CLIMATE CHANGE L., <http://columbiaclimatelaw.com/resources/climate-deregulation-tracker> [<https://perma.cc/99P8-8W2T>].

averting the most devastating impacts of climate change,³⁰ and the federal common law may be a wedge to push policies in this direction.³¹

This Note proceeds in four parts. Part I reviews the federal common law and displacement doctrines and discusses the relevant case law pertaining to the displacement of federal nuisance suits involving greenhouse gases. Part II analyzes the displacement test used in *AEP* and concludes that *AEP* and its progeny demonstrate that the Clean Air Act must provide a “sufficient”³² regulatory framework to displace a nuisance claim against a given source’s greenhouse gas emissions. Part III argues that because *UARG* demonstrates that the Clean Air Act does not comprehensively address greenhouse gases, it cannot be assumed that the Clean Air Act automatically provides a “sufficient” framework to regulate all stationary sources’ greenhouse gases.³³ Because the Clean Air Act contains multiple regulatory

30. The world is currently emitting about thirty-six billion tons of carbon dioxide per year, and the United States is the second largest emitter. *CO2 Time Series 1990–2014 per Region/Country*, EMISSIONS DATABASE FOR GLOB. ATMOSPHERIC RES., <http://edgar.jrc.ec.europa.eu/overview.php?v=CO2ts1990-2014&sort=des9> [<https://perma.cc/8RCG-MXNJ>]. At the current rate of emissions, scientists project that we will exceed the two-degree Celsius threshold as early as 2050. *Global Warming Set To Pass 2C Threshold in 2050: Report*, PHY.ORG (Sept. 29, 2016), <https://phys.org/news/2016-09-global-2c-threshold.html> [<https://perma.cc/QW5W-P24P>].

31. Other climate litigation strategies, though important, may not be sufficient to deal with an interstate—and international—issue like climate change. For instance, state common law, unlike federal common law, requires a “clear and manifest” congressional purpose before federal legislation can preempt it. *City of Milwaukee v. Illinois (Milwaukee II)*, 451 U.S. 304, 316 (1981). However, the strategy of using state common law to target interstate pollution suffers from several defects, namely that it is dependent on the laws of the source state (where the pollution originates), not the receptor state. Source states may be more permissive of pollution and may even prohibit receptor states from suing on behalf of their citizens. *See, e.g., North Carolina v. Tenn. Valley Auth.*, 615 F.3d 291, 309 n.2 (4th Cir. 2010) (observing that Alabama and Tennessee law may not permit North Carolina to bring a nuisance suit on behalf of its citizens).

Another climate litigation strategy, based on the doctrines of due process and the public trust, has had traction in the District Court of Oregon. *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016), *motion to certify appeal denied*, No. 6:15-CV-01517-TC, 2017 WL 2483705 (D. Or. June 8, 2017). The *Juliana* plaintiffs—including a group of young people between the ages of eight and nineteen—have asserted that the United States government’s contributions to climate change have infringed on the plaintiffs’ fundamental rights to a sustainable climate system and violated the government’s fiduciary duties to protect the nation’s natural resources for the benefit of its present and future citizens. *Id.* at 1233, 1239, 1254. Although this strategy is intriguing, it is relatively untested and is far from a slam dunk. Therefore, it should be pursued in tandem with federal nuisance litigation, not to its exclusion.

32. *Michigan v. U.S. Army Corp of Eng’rs*, 667 F.3d 765, 777 (7th Cir. 2011).

33. This Note only discusses stationary sources of greenhouse gases because the Clean Air Act apparently does permit the regulation of mobile sources’ greenhouse gas emissions. *See Massachusetts v. EPA*, 549 U.S. 497, 528 (2007) (holding that the Clean Air Act permits the EPA to regulate greenhouse gas emissions from new motor vehicles).

authorities, this Part undertakes a section-by-section analysis of which provisions might allow for the regulation of greenhouse gas emissions. It concludes that the Clean Air Act's coverage of greenhouse gas emissions from existing stationary sources is uncertain and argues that federal nuisance suits may be viable against these types of sources. Part IV then argues that climate litigants should leverage federal nuisance claims in the face of this uncertainty to force more comprehensive statutory or regulatory coverage of greenhouse gases.

I. BACKGROUND

This Part provides an overview of the federal common law of nuisance, the displacement doctrine, and the relevant case law and statutory background concerning the displacement of greenhouse gas federal nuisance claims. It also provides a primer on the sections of the Clean Air Act that are relevant for the purposes of this Note.

A. *The Federal Common Law of Nuisance and Its Statutory Displacement*

1. *Historical Roots of Federal Common Law of Nuisance.* Despite the familiar admonition in *Erie Railroad Co. v. Tompkins*³⁴ that “[t]here is no federal general common law,”³⁵ it is “well accepted that the federal courts retain common lawmaking powers in particular areas.”³⁶ Federal common law has historically been fashioned around interstate issues where resort to an individual state's laws would be inappropriate to resolve the problem.³⁷ Interstate environmental pollution is one area in which federal courts have traditionally retained their common law authority to fill “‘statutory interstices’ and, if necessary, even ‘fashion federal law.’”³⁸

Federal common law environmental litigation has predominantly involved claims of public nuisance, which the *Restatement (Second) of Torts* defines as an “unreasonable interference with a right common to

34. *Erie R.R. Co. v. Tompkins*, 304 U.S. 64 (1938).

35. *Id.* at 78.

36. Ernest A. Young, *Preemption and Federal Common Law*, 83 NOTRE DAME L. REV. 1639, 1640 (2008). See generally Henry J. Friendly, *In Praise of Erie—And of the New Federal Common Law*, 39 N.Y.U. L. REV. 383 (1964) (advocating for federal common law despite *Erie*).

37. See Dan Mensher, Note, *Common Law on Ice: Using Federal Judge-Made Nuisance Law To Address the Interstate Effects of Greenhouse Gas Emissions*, 37 ENVTL. L. REV. 463, 467 (2007) (discussing how and why courts fashion federal common law).

38. *AEP*, 564 U.S. 410, 421 (2011) (quoting Friendly, *supra* note 36, at 421–22).

the general public.”³⁹ Courts commonly reference the Restatement’s definition when considering cases arising under the federal law.⁴⁰ Public nuisance claims are typically brought by states against other governments or private parties to vindicate their own interests or those of their citizens and usually involve “significant interference with public health, safety, peace, comfort, or convenience.”⁴¹

Federal common law nuisance litigation has a pedigree dating back to the early twentieth century,⁴² but the seminal modern federal nuisance case—and the doctrine’s apex—is *Illinois v. City of Milwaukee (Milwaukee I)*.⁴³ In that case, the State of Illinois was seeking injunctive relief against the City of Milwaukee and other Wisconsin cities, which it alleged were discharging two hundred million gallons of raw or undertreated sewage per day into Lake Michigan in violation of Illinois law.⁴⁴ Though the Court declined to exercise original jurisdiction over the matter,⁴⁵ it nevertheless affirmed that “[w]hen we deal with air and water in their ambient or interstate aspects, there is a federal common law.”⁴⁶ The Court acknowledged that Congress had addressed the matter of interstate water pollution in the Federal Water Pollution Control Act (FWPCA),⁴⁷ but declared

39. RESTATEMENT (SECOND) OF TORTS § 821B(2)(a) (AM. LAW INST. 1979).

40. *Michigan v. U.S. Army Corps of Eng’rs (Asian Carp Case)*, 667 F.3d 765, 780 (7th Cir. 2011).

41. *Michigan v. U.S. Army Corps of Eng’rs*, 758 F.3d 892, 900 (7th Cir. 2014).

42. Robert V. Percival, *The Frictions of Federalism: The Rise and Fall of the Federal Common Law of Interstate Nuisance 2–3* (Univ. of Md., Pub-Law Research Paper No. 2003-02, 2003), <https://ssrn.com/abstract=452922> [<https://perma.cc/B9F8-BPMN>]. The original federal nuisance case concerning interstate air pollution was *Georgia v. Tennessee Copper Co.*, 206 U.S. 230 (1907) in which the Attorney General of Georgia sought and received an injunction enjoining a copper smelter in Tennessee from emitting sulfur gases. *Id.* at 236–37. Courts continued to develop the federal common law of interstate nuisance after *Erie*. See James D. Lawlor, Annotation, *Federal Common Law of Nuisances as Basis for Relief in Environmental Pollution Cases*, 29 A.L.R. Fed. 137 (1976) (“A number of cases, decided both before and after the Supreme Court’s decision in *Erie R. Co. v. Tompkins* support the proposition that a federal common-law nuisance action exists in environmental pollution cases.” (citation omitted)). The earliest modern iteration of the federal common law of interstate nuisance was *Texas v. Pankey*, 441 F.2d 236 (10th Cir. 1971) where the State of Texas sought to enjoin New Mexican farmers’ use of chlorinated pesticides that were allegedly harming surface waters in Texas. *Id.* at 237–38. The *Pankey* court also held that federal district courts had jurisdiction to adjudicate claims of federal common law nuisance. *Id.* at 242.

43. *Illinois v. City of Milwaukee (Milwaukee I)*, 406 U.S. 91 (1972).

44. *Id.* at 93.

45. *Id.* at 99. The Court found that original jurisdiction was inappropriate because of the availability of lower court action. *Id.*

46. *Id.* at 103.

47. Federal Water Pollution Control Act, Pub. L. No. 80-845, 62 Stat. 1155 (1948).

that “[t]he remedy sought by Illinois is not within the precise scope of remedies prescribed by Congress”⁴⁸ and that “[u]ntil the field has been made the subject of comprehensive legislation or authorized administrative standards, only a federal common law basis can provide an adequate means for dealing with such claims as alleged federal rights.”⁴⁹ But the Court presciently noted that “new federal laws and new federal regulations may in time [displace] the field of federal common law of nuisance.”⁵⁰

2. *Displacement of Federal Common Law Nuisance Claims.*

Displacement occurs when federal legislation abrogates the federal common law. The test for whether a federal statute displaces federal common law is not as demanding as the test for whether it “preempts”⁵¹ state law,⁵² but if Congress is legislating against a backdrop of “long-established and familiar principles” of federal common law, it “does not write upon a clean slate.”⁵³ Rather, “courts may take it as a given that Congress has legislated with an expectation that the [federal common law] principle will apply except ‘when a statutory purpose to the contrary is evident.’”⁵⁴ Thus, preexisting federal common law is displaced only if it is evident that Congress intended to displace the common law, either expressly or implicitly.⁵⁵

A federal statute may implicitly displace the federal common law through either “field displacement” or “conflict displacement.”⁵⁶ Field displacement occurs when a statute comprehensively “occupies the

48. *Milwaukee I*, 406 U.S. at 103.

49. *Id.* at 107 n.9.

50. *Id.* at 107.

51. Displacement and preemption are distinct concepts but are often conflated in the literature. Displacement refers to the federal statutory abrogation of *federal* common law, whereas preemption involves the federal abrogation of *state* law.

52. *See Milwaukee II*, 451 U.S. 304, 317 (1981) (noting that a court will only find that a federal statute preempts traditional state law if it discerns a “clear and manifest purpose” of Congress to do so (quoting *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947))).

53. *United States v. Texas*, 507 U.S. 529, 534 (1993) (first quoting *Isbrandtsen Co. v. Johnson*, 343 U.S. 779, 783 (1952); then quoting *Astoria Fed. Sav. & Loan Ass’n. v. Solimino*, 501 U.S. 104, 108 (1991)).

54. *Id.* (quoting *Astoria Fed. Sav. & Loan Ass’n.*, 501 U.S. at 108).

55. *Id.* (“In order to abrogate a common-law principle, the statute must ‘speak directly’ to the question addressed by the common law.” (quoting *Mobil Oil Corp. v. Higginbotham*, 436 U.S. 618, 625 (1978))).

56. Thomas W. Merrill, *Global Warming as a Public Nuisance*, 30 COLUM. J. ENVTL. L. 293, 311 (2005).

field,” leaving no room for the common law claim.⁵⁷ Under the field displacement theory, a comprehensive statute that is silent on an issue might still displace the common law, given that Congress may have intended to exempt the subject from regulation *and* common law claims.⁵⁸ Conflict displacement, on the other hand, occurs when the statute conflicts with the common law, providing a “distinctly different remedy than would be available under the federal common law.”⁵⁹ Scholars have disagreed about whether the courts have applied field or conflict displacement analyses in determining whether federal nuisance claims are displaced by environmental laws.⁶⁰

The leading case on federal common law displacement, until *AEP*, was *City of Milwaukee v. Illinois (Milwaukee II)*.⁶¹ The case was based on the same controversy in *Milwaukee I*, which had worked its way through the lower courts back to the Supreme Court. Writing for the majority, Chief Justice Rehnquist held that the newly revised FWPCA—now known as the Clean Water Act⁶²—displaced federal common law nuisance suits for interstate point source water

57. *Id.*

58. *Id.* at 313. For example, in the state law preemption context (the case law on preemption is much more developed than the displacement literature, and, though they have different standards, they also share many similarities), the Supreme Court has found that federal alien registration law completely preempts state laws on the matter, even when the state laws complement the federal law, because the federal statute “was designed as a ‘harmonious whole’” which reflected Congress’s intent to foreclose any regulation in the area. *Arizona v. United States*, 567 U.S. 387, 401–03 (2012) (quoting *Hines v. Davidowitz*, 312 U.S. 52, 72 (1941)).

59. Merrill, *supra* note 56, at 311–12. One example—again in the context of state law preemption—is *Crosby v. National Foreign Trade Council*, 530 U.S. 363 (2000) which held that a state law barring state entities from transacting with Burma was preempted because it directly conflicted with a federal statute that gave the President sole discretion to control economic sanctions against the country, and it penalized individuals and conduct that Congress expressly exempted from sanctions. *Id.* at 374–76, 378.

60. See, e.g., Van Fischer, *Climate Change and Federal Common Law Nuisance: Time for Displacement*, 4 FED. CTS. L. REV. 471, 479 (2011) (advocating for field displacement theory); Merrill, *supra* note 56, at 311 (noting that “*Milwaukee II* is ambiguous as to what the standard for displacement of federal common law should be”); P. Leigh Bausinger, Note, *Welcome to the (Impenetrable) Jungle: Massachusetts v. EPA, the Clean Air Act, and the Common Law of Public Nuisance*, 53 VILL. L. REV. 527, 533 n.36 (2008) (discussing the confusion in this area and attributing it in part to the loose distinction between preemption and displacement); Mensher, *supra* note 37, at 467 (advocating for a conflict displacement theory); Sarah Olinger, Note, *Filling the Void in an Otherwise Occupied Field: Using Federal Common Law To Regulate Carbon Dioxide in the Absence of a Preemptive Statute*, 24 PACE ENVTL. L. REV. 237, 250 (2007) (suggesting that *Milwaukee II* is “[a] classic example of field [displacement]”).

61. *City of Milwaukee v. Illinois (Milwaukee II)*, 451 U.S. 304 (1981).

62. The FWPCA was thoroughly overhauled in 1972, shortly after *Milwaukee I*, and has not changed significantly since. See *History of the Clean Water Act*, EPA, <https://www.epa.gov/laws-regulations/history-clean-water-act> [<https://perma.cc/6YM2-FC2E>].

pollution.⁶³ The Court found that the statute was a “comprehensive regulatory program supervised by an expert administrative agency” under which “[e]very point source discharge is prohibited unless covered by a permit.”⁶⁴ Because the only issue was “whether the field has been occupied, not whether it has been occupied in a particular manner,”⁶⁵ the Court found that the Clean Water Act spoke “directly to [the] question” at hand, leaving no room for the federal common law of nuisance.⁶⁶

Before turning to how the Clean Air Act has been said to displace federal common law claims involving greenhouse gases, a more nuanced understanding of the mechanisms of the Clean Air Act is necessary.

B. Primer on the Clean Air Act

Adopted in its contemporary form in 1970, the Clean Air Act was intended to protect the public from air pollution caused by various sources broadly categorized as either mobile or stationary. The statute is often cited as the archetype of cooperative federalism, where the delegation of authority to set regulatory standards and enforce them is split between the EPA and the states.⁶⁷ The statute contains different, overlapping frameworks for addressing air pollution, and any given source or pollutant could potentially be regulated under multiple sections of the Clean Air Act. This Section provides an “aerial” view of the Clean Air Act’s sections and mechanisms that are relevant for the purposes of this Note.

The linchpins of the Clean Air Act are the “national ambient air quality standards” (NAAQS), which are ambient standards that apply to “criteria pollutants” emitted by diverse sources. Under Section 108, the EPA has significant discretion to identify and list criteria pollutants,⁶⁸ but once it does, it must set maximum permissible ambient

63. *Milwaukee II*, 451 U.S. at 332.

64. *Id.* at 317–18 (emphasis omitted) (footnote omitted).

65. *Id.* at 324.

66. *Id.* at 315. Two months later, in *Middlesex County Sewerage Authority v. National Sea Clammers Ass’n*, 453 U.S. 1 (1981), the Supreme Court went one step further, declaring “that the federal common law of nuisance in the area of water pollution is entirely pre-empted by the more comprehensive scope of the [CWA].” *Id.* at 22.

67. John P. Dwyer, *The Practice of Federalism Under the Clean Air Act*, 54 MD. L. REV. 1183, 1197–99 (1995).

68. 42 U.S.C. § 7408 (2018). Different sections of the Clean Air Act are generally referred to as they appear in the Clean Air Act itself, as opposed to the corresponding provisions of the

levels—NAAQS—for each pollutant under Section 109.⁶⁹ The EPA has only listed NAAQS for six pollutants—carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide.⁷⁰

Once the EPA sets the NAAQS, states must submit “[s]tate implementation plans” that ensure compliance with the NAAQS for each criteria pollutant.⁷¹ These plans are flexible and apply to both mobile and stationary sources of pollutants. If the state does not submit a state implementation plan or the plan is deficient, the EPA can promulgate a “[f]ederal implementation plan” instead.⁷² There are also various mechanisms to prevent one state from interfering with another state’s compliance with the NAAQS.⁷³

Once the EPA promulgates a NAAQS for a criteria pollutant, states must determine whether they comply with the ambient standard. Areas within a state that comply are considered attainment areas, and those that do not are designated nonattainment areas.⁷⁴ To keep attainment areas from getting dirtier, the Prevention of Significant Deterioration (PSD) program in Sections 160–169 of the Clean Air Act requires new and modified major stationary sources of “any air pollutant”⁷⁵ in those areas to obtain permits and install the “best available control technology” (BACT) for their emissions. The BACT is set on a source-by-source basis.⁷⁶

For nonattainment areas, under the Clean Air Act Sections 171–193, new and modified major sources must install control technology to meet the “lowest achievable emission rate.”⁷⁷ In addition, both new and existing sources must use “reasonably available control technology” to reduce their emissions.⁷⁸

United States Code. For a list of the conversions between the Clean Air Act and the Code sections, see *Clean Air Act Overview*, EPA, <https://www.epa.gov/clean-air-act-overview/clean-air-act-text> [<https://perma.cc/3ZU4-EGSB>].

69. 42 U.S.C. § 7409.

70. *Criteria Air Pollutants*, EPA, <https://www.epa.gov/criteria-air-pollutants> [<https://perma.cc/4PJ7-LVYK>].

71. 42 U.S.C. § 7410.

72. *Id.*

73. *E.g. id.* § 7410(a)(2)(D)(i) (SIP challenges); *id.* § 7426(b) (petitions to the EPA); *id.* § 7410(k)(5) (SIP calls).

74. *Id.* § 7407(d).

75. The definition of air pollution here is the issue in *UARG*. For a discussion of the Court’s interpretation in *UARG*, see *infra* Part I.C.3.

76. 42 U.S.C. §§ 7470–7492.

77. *Id.* §§ 7501–7515.

78. *Id.*

Apart from the NAAQS process, the Clean Air Act contains various authorities that set emission standards for stationary sources of air pollutants without reference to an area's attainment or nonattainment status. For instance, under Section 111, the EPA sets "new source performance standards" for emissions of air pollutants from new or modified stationary sources that fit within categories of sources designated by the EPA. These standards are based on the "best system of emission reduction" and must consider cost.⁷⁹ Under Section 111(d), the EPA may also set best system of emissions reduction standards for existing categories of stationary sources if they could be regulated as new sources under the new source performance standards.⁸⁰

In addition, under Section 112, the EPA promulgates "national emission standards for hazardous air pollutants," including mercury and other air toxics.⁸¹ Major sources of hazardous air pollutants must install the "maximum achievable control technology" to reduce their emissions.⁸² This technology-based standard is supplemented by a health-based backstop, which requires the EPA to issue more stringent standards to reduce residual health risks if the maximum achievable control technology has not reduced the pollutant to a level that is protective of public health.⁸³

Other relevant portions of the Clean Air Act include: Title V, Section 115 and Title VI. Title V contains no substantive emissions limits, but requires that all other emissions requirements for major facilities be compiled into one permitting document.⁸⁴ Section 115 of the Clean Air Act allows the EPA to require states to adjust their state implementation plans to address international harms caused by domestic emissions.⁸⁵ Title VI contains various mechanisms for addressing stratospheric ozone depletion.⁸⁶

79. *Id.* §§ 7411(a)–(c).

80. *Id.* § 7411(d). There is also a question of whether Section 111(d) requires that the source not be regulated under Section 112. For a discussion of the litigation involving this issue, see *infra* Part III.B.2.

81. Clean Air Amendments of 1970, Pub. L. No. 91-604, § 112, 84 Stat. 1685 (codified as amended at 42 U.S.C. § 7412).

82. 42 U.S.C. § 7412(g)(2).

83. 42 U.S.C. § 7412.

84. *Id.* §§ 7602(j), 7661–7661f.

85. *Id.* § 7415.

86. *Id.* §§ 7671–7671q.

On the whole, the Clean Air Act provides various mechanisms for regulating a given source of air pollution. These mechanisms may be available at the EPA's discretion or automatically applicable depending on the nature of the pollutant itself, what type of source is emitting the pollution, the volume of pollution the source has the potential to emit, whether the source is stationary or mobile, and where the source is located. Emission reductions are achieved either by the EPA setting maximum ambient pollutant levels, which are attained through state implementation plans (with federal backstops), or by the EPA requiring specific sources or source categories to meet technological or performance standards for emissions of specific pollutants. As it turns out, the interlocking yet distinct mechanisms by which the Clean Air Act addresses air pollution play a critical role in the displacement (or lack thereof) of greenhouse gas nuisance claims.

C. The Displacement of Federal Greenhouse Gas Nuisance Claims and Its Potential Undoing

There are three Supreme Court cases relevant to the displacement of federal common law nuisance claims involving greenhouse gases: *Massachusetts v. EPA*,⁸⁷ *AEP*, and *UARG*. The first, *Massachusetts v. EPA*, held that the Clean Air Act's broad statutory definition of "air pollutant" plainly encompassed greenhouse gases. The second, *AEP*, found that, because the Clean Air Act addressed greenhouse gases, it also displaced federal common law claims involving those pollutants. The third, *UARG*, held, contrary to an implicit assumption in *AEP*, that the Clean Air Act's coverage of greenhouse gases is not in fact comprehensive, but is section- and context-specific.

1. *Massachusetts v. EPA: The Clean Air Act Plainly Encompasses Greenhouse Gases.* The harbinger of *AEP* was *Massachusetts v. EPA*, which answered a long-asked question: whether the Clean Air Act addresses greenhouse gas emissions.⁸⁸ The case traces back to 1999, when a group of nineteen private advocacy groups petitioned the EPA to regulate greenhouse gases from new motor vehicles under Section

87. *Massachusetts v. EPA*, 549 U.S. 497 (2007).

88. *Id.* at 505. *Massachusetts* is more widely known for its contribution to constitutional standing doctrine—that states in their capacity as “quasi-sovereign[s]” enjoy “special solicitude” in the standing analysis. *Id.* at 520. Though standing (and states’ comparative advantage in overcoming the hurdle of demonstrating the particularized injury element thereof) would be an important factor in any federal nuisance suit, it is not the focus of this Note and is therefore not discussed further.

202 of the Clean Air Act.⁸⁹ After the EPA declined, Massachusetts and several other non-state plaintiffs asked the D.C. Circuit to review the EPA's decision.⁹⁰ The D.C. Circuit found that the EPA had permissibly exercised its discretion not to regulate greenhouse gases,⁹¹ and the Supreme Court granted certiorari in 2006.⁹²

The Supreme Court, with Justice Stevens writing for the majority, found that the Clean Air Act's "capacious" definition of air pollution plainly encompassed greenhouse gases.⁹³ Accordingly, the Court held that the "EPA has the statutory authority to regulate the emission of such gases from new motor vehicles"⁹⁴ and that its decision whether to regulate under Section 202 could only rest on the factors prescribed in that section—whether greenhouse gases "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare."⁹⁵ Because the EPA had relied on other factors in choosing not to regulate greenhouse gases, the Court found that the decision was arbitrary and capricious.⁹⁶

Four years after *Massachusetts v. EPA*, the Court in *AEP* relied on *Massachusetts* when it found that a federal nuisance suit concerning several power plants' greenhouse gas emissions was displaced by the Clean Air Act.⁹⁷

2. *AEP: The Ostensible Death Knell for Federal Nuisance Claims for Greenhouse Gases.* In *AEP*, the plaintiffs sought a court injunction that would require four private companies and the Tennessee Valley Authority (TVA) to "cap [their] carbon dioxide emissions and then reduce them by a specified percentage each year for at least a decade."⁹⁸ The plaintiffs alleged that the defendants' contributions to global warming violated the federal common law of nuisance, or

89. *Massachusetts v. EPA*, 415 F.3d 50, 56 (D.C. Cir. 2005).

90. *Id.* at 53.

91. *Id.* at 58.

92. *Massachusetts v. EPA*, 548 U.S. 903 (2006) (mem.).

93. *Massachusetts*, 549 U.S. at 500.

94. *Id.* at 532.

95. *Id.* at 506 (quoting 42 U.S.C. § 7521(a)(1) (2012)).

96. *Id.* at 534. Instead, the EPA argued, *inter alia*, that existing executive branch programs already effectively addressed climate change and that regulating greenhouse gas emissions might impair the President's ability to negotiate internationally. *Id.* at 536.

97. For a discussion of *AEP*'s reliance on *Massachusetts*, see *infra* Part III.A.

98. *AEP*, 564 U.S. 410, 419 (2011) (citation omitted).

alternatively, the nuisance laws of the source states.⁹⁹ The district court dismissed the case, finding that it presented a political question,¹⁰⁰ but the Second Circuit reversed, finding that the issue was justiciable.¹⁰¹ Turning to the merits, the Second Circuit held that the defendants' actions constituted a public nuisance under federal common law, which was not displaced because the EPA had not yet regulated in the area.¹⁰²

On appeal, the Supreme Court reversed the Second Circuit and held that the plaintiffs' federal nuisance claim was displaced by the Clean Air Act.¹⁰³ Surveying the case law, Justice Ginsburg articulated a deceptively simple summary of the displacement doctrine: "The test for whether congressional legislation [displaces] federal common law is simply whether the statute 'speak[s] directly to [the] question' at issue."¹⁰⁴ Because "*Massachusetts* made plain that emissions of carbon dioxide qualify as air pollution subject to regulation under the [Clean Air] Act," the Court found that it was "equally plain that the [Clean Air] Act 'speaks directly' to emissions of carbon dioxide from the defendants' plants."¹⁰⁵ Accordingly, the Court found that, because the Clean Air Act speaks directly to the issue of greenhouse gas emissions, the federal common law was displaced.¹⁰⁶

Justice Ginsburg went on to note that Section 111 of the Clean Air Act enables the EPA to set performance standards for new and existing stationary sources of greenhouse gases, including power plants. She emphasized that the Clean Air Act "provides multiple avenues for enforcement" of these standards, including civil and criminal penalties enforceable by the EPA, states, and private citizens.¹⁰⁷ And if the EPA fails to promulgate these standards, states and private parties may

99. *Id.* at 418. In general, if the federal common law is available, then state common law claims are not. *See Int'l Paper Co. v. Ouellette*, 479 U.S. 481, 488 (1987) (noting that if a case "should be resolved by reference to federal common law" then "state common law [is] preempted").

100. *Connecticut v. Am. Elec. Power Co.*, 406 F. Supp. 2d 265, 274 (S.D.N.Y. 2005), *vacated*, *Connecticut v. Am. Elec. Power Co.*, 582 F.3d 309 (2d Cir. 2009), *rev'd*, *AEP*, 564 U.S. 410 (2011).

101. *Am. Elec. Power Co.*, 582 F.3d at 332, *rev'd*, *AEP*, 564 U.S. 410 (2011).

102. *Id.* at 379 (alteration in original) ("We cannot say, therefore, that EPA's issuance of proposed findings suffices to regulate greenhouse gases in a way that 'speaks directly' to Plaintiffs' problems and thereby displaces Plaintiffs' existing remedies under the federal common law.").

103. *AEP*, 564 U.S. at 429.

104. *Id.* at 424 (second and third alteration in original) (quoting *Mobil Oil Corp. v. Higginbotham*, 436 U.S. 618, 625 (1978)).

105. *Id.* (citing *Massachusetts v. EPA*, 549 U.S. 497, 528–29 (2007)).

106. *Id.*

107. *Id.* at 425.

petition the EPA to regulate, after which those parties have a right to review in federal court.¹⁰⁸ Therefore, the Court concluded that “[t]he Act itself thus provides a means to seek limits on emissions of carbon dioxide from domestic powerplants—the same relief the plaintiffs seek by invoking federal common law. We see no room for a parallel track.”¹⁰⁹

In addition, Justice Ginsburg rejected the Second Circuit’s analysis that the federal common law is only displaced when the EPA regulates the matter in fact. Citing *Milwaukee II*, the Court noted that “the relevant question for purposes of displacement is ‘whether the field has been occupied, not whether it has been occupied in a particular manner.’”¹¹⁰ “The critical point,” according to Justice Ginsburg, “is that Congress delegated to [the] EPA the decision whether and how to regulate carbon-dioxide emissions from powerplants; the delegation is what displaces federal common law.”¹¹¹ The Court remanded the state common law claims because the parties had not briefed the issue of whether the Clean Air Act preempts state common law.¹¹²

3. *UARG: The Clean Air Act’s Greenhouse Gas Coverage Is Not Comprehensive.* In *UARG*, several states and industry groups challenged two interrelated EPA rules—the “Triggering Rule”¹¹³ and the “Tailoring Rule”¹¹⁴—that sought to force certain new and modified sources of greenhouse gases to install BACT and obtain Title V permits.¹¹⁵ Before issuing the rule, the EPA had issued a finding that it believed that greenhouse gases endangered public health¹¹⁶ and then proceeded to regulate mobile sources’ greenhouse gas emissions under

108. *Id.*

109. *Id.*

110. *Id.* at 426.

111. *Id.*

112. *Id.* at 429. Because a federal law must evince a clear statement of intent to displace a state law, *AEP*’s finding that the federal common law was displaced by the Clean Air Act did not necessarily mean that state common law was also preempted. *Id.*

113. Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs, 75 Fed. Reg. 17,004 (Apr. 2, 2010).

114. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31,514 (June 3, 2010).

115. *UARG*, 134 S. Ct. 2427, 2437 (2014).

116. Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496, 66,497 (Dec. 15, 2009). The six pollutants were carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. *Id.*

Section 202.¹¹⁷ The EPA believed that once it regulated greenhouse gases as “air pollutants” under Section 202, it was also required to regulate them under the PSD and Title V programs, which both contain mandatory regulatory requirements for specified sources that have the potential to emit “major” quantities of “any air pollutant.”¹¹⁸ But because greenhouse gases are often emitted in much greater quantities than other pollutants, the EPA issued a “Tailoring Rule,” that restricted the PSD and Title V requirements only to sources already subject to PSD requirements because of their emission of criteria pollutants—so called “anyway sources”—and to sources with the potential to emit more than one hundred thousand tons of carbon dioxide per year.¹¹⁹

In the initial litigation in the D.C. Circuit,¹²⁰ a unanimous panel held that the EPA’s interpretation that new and modified “major” sources of greenhouse gases would be subject to the PSD requirements was “compelled by the statute.”¹²¹ Thus, the court found it was “crystal clear that PSD permittees must install BACT for greenhouse gases.”¹²² The petitioners appealed, and in 2013, the Supreme Court granted certiorari on the issue of whether the EPA had permissibly determined that its regulation of greenhouse gases from mobile sources triggered the PSD or Title V requirements.¹²³

The Supreme Court in *UARG* held that the phrase “any air pollutant” used in the PSD and Title V sections could not be construed

117. Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. 25,324, 25,326–27 (May 7, 2010).

118. The PSD program requires, among other things, that a new or modified “major emitting facility” in an attainment area obtain a PSD permit. 42 U.S.C. §§ 7475(a)(1), 7479(2)(C) (2018). A “major emitting facility” has the potential to emit 250 tons per year of “any air pollutant,” or, for certain sources, one hundred tons per year. *Id.* § 7479(1). Among other requirements of the PSD program, the source must install emission controls that reflect “best available control technology” for “each pollutant subject to regulation under” the Clean Air Act. *Id.* § 7475(a)(4). In addition, Title V requires “major source[s]” to obtain a permit that reflects all of the other emission standards required under the rest of the Clean Air Act. *Id.* § 7661a(a). For the purpose of Title V, a “major source” has the potential to emit one hundred tons per year of “any air pollutant.” *Id.* §§ 7661(2)(B), 7602(j); *see also UARG*, 134 S. Ct. at 2435–36 (discussing the PSD and Title V requirements).

119. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. at 31,516.

120. Certain challenges to regulations issued under the Clean Air Act must be brought directly in the D.C. Circuit. 42 U.S.C. § 7607(b)(1).

121. *Coal. for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 133–34 (2012) (per curiam), *rev’d sub nom. UARG*, 134 S. Ct. 2427 (2014).

122. *Id.* at 137.

123. *UARG*, 134 S. Ct. 2427, 2438 (2014).

to include greenhouse gases.¹²⁴ However, the Court nevertheless found that the EPA could continue to treat greenhouse gases as “pollutant[s] subject to regulation” for the purpose of requiring BACT for “anyway” sources, which are already subject to PSD regulations because of their criteria pollutant emissions.¹²⁵

Writing for the majority, Justice Scalia found that the EPA’s interpretation of the triggering language in the PSD and Title V programs was unreasonable because it would subject thousands of relatively small sources of carbon dioxide to heavy regulatory burdens without a clear statement of congressional intent to do so.¹²⁶ Justice Scalia distinguished *Massachusetts*, noting that the Act-wide definition of air pollutant “is not a command to regulate, but a description of the universe of substances the EPA may consider regulating under the Clean Air Act’s operative provisions.”¹²⁷ The Court emphasized that the regulation must be reasonable in the context of the section at issue.¹²⁸ Because the PSD and Title V programs carry “heavy substantive and procedural burdens,”¹²⁹ Justice Scalia found that it was unreasonable to regulate sources under those programs merely for their capacity to emit greenhouse gases. Justice Scalia noted that the vast economic reach of the EPA’s interpretation reduced the deference due by the Court to the EPA, and stressed that “[w]e expect Congress to speak clearly if it wishes to assign to an agency decisions of vast ‘economic and political significance.’”¹³⁰ The Court found that the EPA’s interpretation could not be saved by its Tailoring Rule, because the rule was effectively an administrative rewrite of the unambiguous language of the Clean Air Act.¹³¹

Nevertheless, the Court held that the BACT requirements could still apply to “anyway sources.” Justice Scalia noted that the BACT language, which applies only to “each pollutant subject to regulation,”

124. *Id.* at 2448–49. Perhaps acknowledging that this was not the obvious textual reading of the Clean Air Act, the Court conceded that “[t]o be sure, Congress’s profligate use of ‘air pollutant’ where what is meant is obviously narrower than the Act-wide definition is not conducive to clarity.” *Id.* at 2441.

125. *Id.* at 2449.

126. *Id.* at 2443–44.

127. *Id.* at 2441 (emphasis omitted).

128. *Id.* (stressing that “words of a statute must be read in their context and with a view to their place in the overall statutory scheme” (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 133 (2000))).

129. *Id.* at 2443.

130. *Id.* at 2444 (quoting *Brown & Williamson*, 529 U.S. at 160).

131. *Id.* at 2446.

was far less open-ended and less subject to “dramatic expansion of agency authority” than the triggering language in the PSD and Title V sections.¹³² Moreover, sources that were already subject to the PSD and Title V requirements because of their criteria pollutant emissions would be larger and more capable of shouldering the burdens of complying with BACT and Title V regulatory requirements for their greenhouse gas emissions.¹³³

Thus, *UARG* demonstrated that the Clean Air Act does not comprehensively address greenhouse gases throughout its sections. Instead, it set out a context-specific test whereby any given section may only be said to encompass greenhouse gases if it can be reasonably construed to do so, given the economic impact of a regulation under that section and the clarity of the statutory language.

II. ANALYZING THE DISPLACEMENT TEST EMPLOYED IN *AEP*

This Part argues that *AEP*'s displacement analysis demonstrates that merely legislating in the area of greenhouse gases or being silent on the issue is insufficient to imply a legislative purpose to displace the federal common law. Rather, as two post-*AEP* cases show, a statute must provide for source-specific emission standards, enforcement options, and remedies before it can be said to provide a “sufficient” regulatory framework to displace the federal common law.

A. *AEP: A Hybrid of Conflict and Field Displacement*

Commentators have disagreed about whether *AEP* used a field or conflict displacement analysis in determining whether the Clean Air Act displaced federal nuisance claims.¹³⁴ Language in the opinion supports both theories. For instance, Justice Ginsburg rearticulated the classic field displacement language from *Milwaukee II*, stating that “the relevant question for purposes of displacement is ‘whether the field has been occupied, not whether it has been occupied in a particular

132. *Id.* at 2448.

133. *Id.* at 2448–49.

134. Compare Sidney F. Ansbacher, *Lawyers Weigh in on AEP v. Conn.*, LAW360 (June 20, 2011, 8:00 PM), <http://www.law360.com/articles/252467/lawyers-weigh-in-on-aep-v-conn> [<https://perma.cc/RUK4-3LGF>] (arguing that *AEP* recognized a field displacement theory, which “follows logically from the court’s decision in *Massachusetts v. USEPA* that held greenhouse gases are pollutants that the Clean Air Act regulates”), with Molly M. Watters, Note, *Fish and Federalism: How the Asian Carp Litigation Highlights a Deficiency in the Federal Common Law Displacement Analysis*, 2 MICH. J. ENVTL. & ADMIN. L. 535, 557 (2013) (noting that “[t]he Court [in *AEP*] applied the conflict displacement rationale”).

manner.”¹³⁵ The Court seemed to conclude that the field was indeed occupied, noting that “*Massachusetts* made plain that emissions of carbon dioxide qualify as air pollution subject to regulation under the [Clean Air] Act.”¹³⁶

On the other hand, Justice Ginsburg’s analysis also contained elements of conflict displacement. Section 111, the opinion posited, provides a means for the EPA to regulate greenhouse gas emissions from power plants.¹³⁷ It contains enforcement mechanisms and enables citizens and states to petition the EPA to regulate specific sources or pollutants.¹³⁸ Moreover, states and citizens may seek redress in the courts for the EPA’s failure to regulate.¹³⁹ Accordingly, Justice Ginsburg concluded that:

[t]he Act itself thus provides a means to seek limits on emissions of carbon dioxide from domestic powerplants—the same relief the plaintiffs seek by invoking federal common law. We see no room for a parallel track.¹⁴⁰

This suggests that the field displacement theory contending that silence in a comprehensive statute may evince a legislative intent *not* to regulate is incompatible with *AEP*’s reasoning.¹⁴¹ Otherwise, the Court could have simply stopped once it concluded that the Clean Air Act regulates greenhouse gases. Instead, it carefully parsed the text of the statute and emphasized that the Clean Air Act must provide a “means to seek limits on emissions of [greenhouse gases] from [a specific source]” for federal nuisance claims to be displaced as to that source.¹⁴²

Accordingly, it seems that merely legislating in the field of greenhouse gas nuisance law is insufficient to displace the federal common law. Rather, the Court must be satisfied that Congress delegated the authority to regulate the particular matter by “speak[ing] directly to [the] question” in the statutory text.¹⁴³ Though Congress is

135. *AEP*, 564 U.S. 410, 426 (2011) (quoting *Milwaukee II*, 451 U.S. 304, 324 (1981)).

136. *Id.* at 424 (citing *Massachusetts v. EPA*, 549 U.S. 497, 528–29 (2007)).

137. *Id.* at 424–25.

138. *Id.*

139. *Id.* at 425.

140. *Id.*

141. *Cf.* *United States v. Texas*, 507 U.S. 529, 534 (1993) (stressing that statutory silence is insufficient to displace long-standing federal common law).

142. *AEP*, 564 U.S. 410, 425 (2011).

143. *Milwaukee II*, 451 U.S. 304, 315 (1981).

free to choose the “particular manner” by which to address an issue, it nevertheless must “provide[] a *sufficient* legislative solution to the particular [issue] to warrant a conclusion” that the legislation speaks directly to it.¹⁴⁴ The question then becomes: “[H]ow much congressional action is enough?”¹⁴⁵

B. What Constitutes A “Sufficient Legislative Solution”

Two post-*AEP* cases, *Michigan v. U.S. Army Corps of Engineers (Asian Carp Case)*,¹⁴⁶ and *Native Village of Kivalina v. ExxonMobil Corp.*,¹⁴⁷ have sought to answer this question. In the *Asian Carp Case*, five states bordering the Great Lakes brought a federal common law public nuisance suit against the Army Corps of Engineers to enjoin it from permitting the introduction of invasive carp into the Great Lakes.¹⁴⁸ Considering the displacement doctrine espoused by *AEP* and its predecessors, the Seventh Circuit found that “[t]he important displacement question is whether Congress has provided a sufficient legislative solution to the particular interstate nuisance here to warrant a conclusion that this legislation has occupied the field to the exclusion of federal common law.”¹⁴⁹ Applying this test, the court held that that the states’ nuisance claim was not displaced even though “Congress has not been mute on the subject of the carp.”¹⁵⁰ The court emphasized that Congress’s “narrow delegation” of power to the Corps to investigate and study invasive carp did not contain “any enforcement mechanism or recourse for any entity or party negatively affected by the carp.”¹⁵¹ Thus, the court concluded that the legislation had not displaced the states’ claim, because it was more similar to the original Federal Water Pollution Control Act at issue in *Milwaukee I* than the Clean Air Act

144. *Native Vill. of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849, 856 (9th Cir. 2012) (second alteration in original) (emphasis added) (quoting *Asian Carp Case*, 667 F.3d 765, 777 (7th Cir. 2011)).

145. *Id.*

146. *Michigan v. U.S. Army Corps of Eng’rs (Asian Carp Case)*, 667 F.3d 765 (7th Cir. 2011).

147. *Native Vill. of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849 (9th Cir. 2012).

148. *Asian Carp Case*, 667 F.3d at 768.

149. *Id.* at 777.

150. *Id.* Congress had permitted the Corps to construct an electric barrier preventing the carp from passing through the Chicago River Ship and Sanitary Canal into the Great Lakes, and had provided for numerous studies on how to control aquatic nuisance species. *Id.* at 779–80.

151. *Id.* at 780.

or the amended Clean Water Act at issue in *AEP* and *Milwaukee II*, respectively.¹⁵²

In *Kivalina*, the Alaskan city of Kivalina and a village of Inupiat Native Alaskans brought a federal nuisance claim against multiple energy companies.¹⁵³ The tribe and village were seeking damages for “[m]assive erosion” threatening the “imminent devastation” of their community, which they alleged was caused by global warming attributable to the defendants’ energy production.¹⁵⁴ The Ninth Circuit applied the analysis in the *Asian Carp Case* to the Clean Air Act, asking whether the statute presented a “sufficient legislative solution” to displace the plaintiffs’ federal nuisance claim for damages.¹⁵⁵ The Ninth Circuit emphasized that “the lack of a federal remedy may be a factor to be considered in determining whether Congress has displaced federal common law,” but it clarified that, unlike the traditional conflict displacement theory, the type of remedy provided by Congress was not to be considered when evaluating whether the Clean Air Act displaces federal nuisance claims.¹⁵⁶ Thus, the court found that *AEP* applied, and that the Clean Air Act displaced the plaintiffs’ federal nuisance claim, even though they were seeking damages, not injunctive relief.¹⁵⁷

This gloss on the displacement analysis suggests that the Clean Air Act must contain three major components to constitute “a sufficient legislative solution”¹⁵⁸ displacing the federal common law: (1) authority to set regulatory standards; (2) a mechanism to enforce those standards; and (3) some sort of remedy or recourse for affected parties. Because Justice Ginsburg in *AEP* was satisfied that the Clean Air Act contains all three elements as applied to greenhouse gases, she concluded that the federal nuisance claim was displaced. But, as discussed below, this basic assumption was undermined by *URG*.

152. *Id.* Decided in 2011 before *URG*, this case also apparently assumed that the Clean Air Act comprehensively regulated greenhouse gases. *See id.* at 778 (noting that, in *AEP*, “[t]he Court found it important that the Clean Air Act requires the EPA to identify and establish performance standards for *all* carbon-dioxide emitters” (emphasis added)).

153. *Native Vill. of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849, 853–54 (9th Cir. 2012).

154. *Id.* at 853.

155. *Id.* at 856.

156. *Id.* at 857 (emphasis added).

157. *Id.* at 858.

158. *Asian Carp Case*, 667 F.3d 765, 777 (7th Cir. 2011).

III. REEVALUATING THE CLEAN AIR ACT'S DISPLACEMENT OF FEDERAL COMMON LAW GREENHOUSE GAS NUISANCE CLAIMS AFTER *UARG*

This Part contends that *UARG* undermined a core premise of *AEP*—that the Clean Air Act comprehensively addresses greenhouse gases—and instead set out a contextual test for determining whether a given section of the Clean Air Act can be construed to address those pollutants. Applying this test to the five sections of the Clean Air Act that might be used to regulate greenhouse gas emissions from stationary sources, this Part finds that only two sections, Sections 111(d) and 115, might credibly encompass greenhouse gas emissions, but both sections' coverage is far from certain. This Part concludes that, if these sources are not regulated under either of these sections, then the Clean Air Act cannot be said to present a “sufficient legislative solution” as required by *AEP*, and federal nuisance claims would again be available as to those sources.

A. *UARG Undermined AEP and Created a New Context-Specific Test*

In *UARG*, Justice Scalia found that the D.C. Circuit's opinion upholding the EPA's interpretation of the PSD and Title V triggering language was based on a flawed syllogism: “Under *Massachusetts*, the general, Act-wide definition of ‘air pollutant’ includes greenhouse gases; the Clean Air Act requires permits for major emitters of ‘any air pollutant’; therefore, the Clean Air Act requires permits for major emitters of greenhouse gases.”¹⁵⁹ But Justice Scalia noted that “[t]he conclusion follows from the premises only if the air pollutants referred to in the permit-requiring provisions (the minor premise) are the same air pollutants encompassed by the Act-wide definition as interpreted in *Massachusetts* (the major premise).”¹⁶⁰ This proposition, according to the Court, was “obviously untenable.”¹⁶¹

The Court in *AEP* seems to have rested its decision on the same flawed syllogism. *AEP* employed none of *UARG*'s contextual analysis; it did not ask whether interpreting Section 111 to regulate greenhouse gases would be reasonable, or whether a “clear statement” should be required given the potentially vast economic and political significance

159. *UARG*, 134 S. Ct. 2427, 2439 (2014).

160. *Id.*

161. *Id.*

of regulating greenhouse gases under the section. Instead it unhesitatingly assumed that Section 111 provided for the regulation of greenhouse gases, noting that because “*Massachusetts* made plain that emissions of carbon dioxide qualify as air pollution subject to regulation under the [Clean Air] Act,” it was “equally plain that the [Clean Air] Act ‘speaks directly’ to emissions of carbon dioxide from the defendants’ plants.”¹⁶²

AEP’s uncritical conclusion that Section 111 provided for the regulation of greenhouse gases appears to have been based on an assumption drawn from *Massachusetts v. EPA* that the Clean Air Act comprehensively addressed greenhouse gases.¹⁶³ Indeed, the D.C. Circuit, the EPA and many others apparently believed this exact premise—that the Clean Air Act’s act-wide definition of “air pollutant” meant that greenhouse gases were addressed throughout the statute.¹⁶⁴ But because *UARG* demonstrates that the Clean Air Act does not comprehensively address greenhouse gases, it can no longer be assumed that federal nuisance suits against stationary sources’ greenhouse gas emissions are displaced in every context. Instead, the claims would only be displaced if a specific section or sections of the Clean Air Act provide for “sufficient” regulation of those sources.¹⁶⁵

162. *AEP*, 564 U.S. 410, 424 (2011) (citing *Massachusetts v. EPA*, 549 U.S. 497, 528–29 (2007)).

163. Even Justice Alito, who concurred in the judgment of *AEP*, seemed to assume that *Massachusetts* held that the Clean Air Act comprehensively addressed greenhouse gases. *Id.* at 430 (Alito, J. concurring) (“I concur in the judgment, and I agree with the Court’s displacement analysis on the assumption (which I make for the sake of argument because no party contends otherwise) that the interpretation of the Clean Air Act, adopted by the majority in *Massachusetts v. EPA*, is correct.” (citations omitted)).

164. See, e.g., *Regulating Greenhouse Gas Emissions Under the Clean Air Act*, 73 Fed. Reg. 44,354, 44,354 (July 30, 2008) (discussing “the various [Clean Air Act] provisions that may be applicable to regulate [greenhouse gases]” and noting that *Massachusetts* “ruled that the Clean Air Act . . . authorize[d] regulation of greenhouse gases”); Coal. for Responsible Regulation, Inc. v. EPA, 684 F.3d 102, 113 (D.C. Cir. 2012) (per curiam), *rev’d sub nom.*, *UARG*, 134 S. Ct. 2427 (2014) (noting that *Massachusetts* “clarified that greenhouse gases are an ‘air pollutant’ subject to regulation under the Clean Air Act”); cf. RICHARD REVESZ, ENVIRONMENTAL LAW & POLICY 687 (3d ed. 2015) (noting that the basic approach of the Clean Air Act, like other command-and-control statutes, is to “list a number of pollutants and regulate them *comprehensively*” (emphasis added)).

165. It should be noted that it does not appear that any other statutes provide a sufficient legislative solution to be said to displace federal public nuisance suits in the context of greenhouse gases. See *Connecticut v. Am. Elec. Power Co.*, 582 F.3d 309, 379 (2d Cir. 2009), *rev’d*, 564 U.S. 410 (2011) (surveying all federal legislation concerning greenhouse gases and concluding that none of it displaced federal nuisance claims); see also Mensher, *supra* note 37, at 484 (reaching the same conclusion). Environmental groups have petitioned the EPA to use other federal environmental statutes like the Toxic Substances Control Act and the Endangered Species Act

Determining whether a given section of the Clean Air Act provides for the regulation of a source's greenhouse gas emissions requires the same contextual analysis employed in *UARG*. There are two questions central to the *UARG* test: first, whether it is reasonable in the context of a given section to assume that the provision's use of the term "air pollutant" encompasses greenhouse gases; and second, for cases in which the regulation would grant the EPA authority of "vast 'economic and political significance,'" whether the text "speak[s] clearly" to the matter.¹⁶⁶

B. Applying the UARG Test to the Clean Air Act: Are There Gaps in Greenhouse Coverage?

Applying this test, *UARG* itself found that greenhouse gas emissions of "anyway sources"—new or modified stationary sources located in attainment areas—can be regulated under the PSD and Title V programs. Because these programs apparently provide for the regulation of covered sources' greenhouse gas emissions, federal nuisance claims against these sources are probably displaced. But there are still many other stationary sources—especially existing sources that have not been modified, which are not covered under these sections. Whether federal nuisance claims against these sources are displaced requires a careful analysis applying the *UARG* test to each potentially relevant section of the Clean Air Act.

Five sections of the Clean Air Act might be used to address existing sources' greenhouse gas emissions. They are Sections 108 and 109 (the NAAQS program); Section 111(d) (performance standards for certain categories of existing sources); Section 112 (hazardous air pollutants); Section 115 (international air pollution); and Section 615 (stratospheric ozone). Only if none of these sections apply would a federal nuisance suit be viable.

to create substantive limitations on greenhouse emissions, but they have not been successful. *See, e.g.*, Carbon Dioxide Emissions and Ocean Acidification; TSCA Section 21 Petition; Reasons for Agency Response, 80 Fed. Reg. 60,577 (Oct. 7, 2015) (denying a petition to regulate greenhouse gases under TSCA).

166. *UARG*, 134 S. Ct. 2427, 2444 (2014) (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 160 (2000)); *see also* Lisa Heinzerling, *The Power Canons*, 58 WM. & MARY L. REV. 1933, 1943 (2017) (discussing the "power canons," including the "clear statement" doctrine espoused in *UARG*); *cf.* *Michigan v. EPA.*, 135 S. Ct. 2699, 2707 (2015) (citing *UARG* in declining to give deference to the EPA's interpretation that the Clean Air Act Section 112(j) does not require the consideration of cost).

1. *Sections 108 and 109—NAAQS.* Sections 108 and 109 provide mechanisms for the EPA to develop ambient standards for criteria pollutants, which states then apply to new and existing mobile and stationary sources. Section 108 directs the EPA Administrator to list criteria air pollutants which “in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare” and “the presence of which in the ambient air results from numerous or diverse mobile or stationary sources.”¹⁶⁷ For each criteria pollutant, Section 109 in turn directs the EPA to promulgate a national ambient air quality standard at a level “requisite to protect the public health” with an “adequate margin of safety.”¹⁶⁸

It is unlikely that Sections 108 and 109 could be interpreted to address greenhouse gases, as doing so would yield the same untenably high administrative costs and regulatory burdens that the Court recoiled from in *UARG*. For one, designating greenhouse gases as criteria pollutants would cause PSD and Title V requirements to apply to the same small sources that *UARG* already found could not be regulated under those programs.¹⁶⁹ Moreover, the EPA is not permitted to consider costs when determining the ambient levels of greenhouse gases that are protective of public health with an adequate margin of safety,¹⁷⁰ which could result in crushing costs on states and industry to come into compliance with whatever standard is chosen by the EPA. And because greenhouse gases are globally mixing pollutants, it would be difficult if not impossible for a state to individually attain any ambient standard set by EPA. Thus, it appears that, under the contextual reasonableness test of *UARG*, Sections 108 and 109 probably do not provide for the regulation of greenhouse gases.

2. *Section 111(d)—Existing Source Performance Standards.* Section 111 enables the EPA to set new source performance standards for designated categories of new and modified stationary sources¹⁷¹ and symmetrical standards for existing sources.¹⁷² The *AEP* Court explicitly assumed that greenhouse gases could be regulated under Section

167. 42 U.S.C. § 7408(a)(1) (2018).

168. *Id.* § 7409(b)(1).

169. For a discussion of Justice Scalia’s criticism of this issue in *UARG*, see Part I.C.3.

170. *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 471 (2001) (“The text of § 109(b) . . . unambiguously bars cost considerations from the NAAQS-setting process . . .”).

171. 42 U.S.C. § 7411(b).

172. *Id.* § 7411(d).

111,¹⁷³ and the *UARG* Court conceded that the section might not be “ill suited to accommodating greenhouse gases.”¹⁷⁴ Despite these powerful pronouncements, opponents have challenged the EPA’s authority to regulate power plants’ emissions of greenhouse gases under Section 111.¹⁷⁵

In 2015, the EPA issued its final rule on greenhouse gas emissions from existing power plants: the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, known colloquially as the Clean Power Plan.¹⁷⁶ The Clean Power Plan established state-specific requirements for carbon dioxide reductions from the power sector, based on a combination of increased efficiency, trading, and transitions to natural gases and renewables.¹⁷⁷ On the same day the Plan was published, twenty-seven states and a broad coalition of industry opponents sued the EPA in the D.C. Circuit, levelling a bevy of statutory and constitutional challenges against the EPA’s interpretation of Section 111(d).¹⁷⁸ The Supreme Court stayed the Clean Power Plan pending a decision by the D.C. Circuit.¹⁷⁹ However, on October, 16 2017, the Trump administration issued a proposal to repeal the regulation,¹⁸⁰ and the D.C. Circuit has granted the

173. *AEP*, 564 U.S. 410, 425 (2011) (examining Section 111 and concluding that “[t]he Act itself thus provides a means to seek limits on emissions of carbon dioxide from domestic powerplants”).

174. *UARG*, 134 S. Ct. 2427, 2441 n.5 (2014).

175. The main case challenging the EPA’s 111(b) authority to regulate greenhouse gas emissions from new and modified power plants is *North Dakota v. EPA*, No. 15-1381 (D.C. Cir. filed Oct. 23, 2015). However, the primary arguments in *North Dakota* are not whether Section 111(b) permits the regulation of new sources’ greenhouse gas emissions, but rather how the EPA went about developing the regulations. *See* State Petitioner’s Opening Brief at 13–24, *North Dakota v. EPA*, No. 15-1381 (D.C. Cir. filed Oct. 23, 2015) (arguing that the EPA did not apply the correct legal standard to its determination that a proposed system of emission reduction was adequately supported). Since it is not substantially contested that Section 111(b) provides for the regulation of greenhouse gases from new or modified major sources, federal common law nuisance claims against these sources—which may also be subject to BACT due to their criteria pollutant emissions—are probably displaced. Thus, the main question is whether existing sources of greenhouse gases can be regulated under Section 111(d).

176. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015) (codified at 40 C.F.R. pt. 60).

177. *Id.*

178. *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. argued Sept. 27, 2016); *Clean Power Plan Case Resources*, *supra* note 19.

179. *West Virginia v. EPA*, 136 S. Ct. 1000 (2016) (mem.).

180. Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48035 (proposed Oct. 16, 2017) (to be codified at 40 C.F.R. pt. 60).

administration's request to hold the case in abeyance during the repeal process.¹⁸¹

Ultimately, it seems unlikely that the D.C. Circuit will issue a decision on the merits in this case, leaving resolution of the scope of the EPA's ability to regulate greenhouse gases under Section 111(d) for another day.¹⁸² However, the arguments raised by the petitioners in *West Virginia* remain relevant to this Note because their resolution is necessary to determine whether, and to what extent, Section 111(d) provides for the regulation of greenhouse gases. The major arguments can be broken into three categories: first, that the EPA impermissibly regulated beyond the "fence line" of the source facilities;¹⁸³ second, that sources which are regulated under Section 112 cannot be regulated under Section 111(d); and third, that the Clean Power Plan unconstitutionally commandeers the states' authority to regulate their power sectors.¹⁸⁴

The petitioners' first argument—that the EPA cannot regulate beyond the fence line—addresses the question of whether, in crafting the Clean Power Plan, the EPA improperly considered emissions reductions that could not be accomplished by the equipment within the boundaries of the source facilities themselves. In the Clean Power Plan, the EPA construed Section 111's "best system of emission reduction" requirement to include market-scale, generation-shifting measures and increased use of renewables.¹⁸⁵ The petitioners have argued that this was an impermissible construction of the statute and that Section 111(d) permits the EPA to set emissions standards based *only* on measures that can be applied to individual sources, such as adopting

181. The D.C. Circuit first granted the Trump administration's request to hold the case in abeyance while it reconsidered the regulation in April 2017. *See* Order Granting Motion to Hold Case in Abeyance, *West Virginia v. EPA*, No. 15-1363 (Apr. 28, 2017), ECF No. 1668274. After EPA published its notice of repeal in the Federal Register, the D.C. Circuit issued an order on its own motion extending the period of the abeyance for another sixty days. Order Continuing Abeyance, *West Virginia v. EPA*, No. 15-1363 (Nov. 9, 2017), ECF No. 1703889.

182. *See* Ellen M. Gilmer, *Sidelined Climate Rule Suffers Another Blow in the Courtroom*, E&E NEWS (Aug. 9, 2017), <https://www.eenews.net/energywire/stories/1060058556/search?keyword=clean+power+plan> [<https://perma.cc/5FT5-LGST>] (discussing the Clean Power Plan's "deep freeze").

183. In other words, it considered emissions reductions that could not be accomplished by the equipment within the boundaries of the facilities themselves.

184. *See* LINDA TSANG & ALEXANDRA M. WYATT, CONG. RESEARCH SERV., CLEAN POWER PLAN: LEGAL BACKGROUND AND PENDING LITIGATION IN *WEST VIRGINIA V. EPA* 16–30 (2017), <https://fas.org/sgp/crs/misc/R44480.pdf> [<https://perma.cc/RC6F-53GK>] (overviewing the main litigation challenging the Clean Power Plan).

185. *Id.* at 7.

pollution control devices.¹⁸⁶ Because the EPA considered factors outside of the “fence line” of the power plants when setting the performance standard, they contend that it overstepped its authority under Section 111(d).¹⁸⁷

The petitioners’ argument would still permit source-specific greenhouse gas emissions regulation under Section 111, but certain heavily polluting sources might be exempted due to the costs of compliance. Because Section 111 requires the EPA to consider cost when developing its performance standards,¹⁸⁸ there would likely be some sources that are so outdated and dirty that any “fence line” upgrades would be economically unfeasible.¹⁸⁹ In the oral arguments for *West Virginia*, Judge Cornelia Pillard pressed this point, asking whether, under the fence line argument, certain sources could be “necessarily immunized from regulation under Section 111(d).”¹⁹⁰ The petitioners’ counsel responded that “it’s [a] question of what tools Congress has given.”¹⁹¹ He continued: “[I]n the *UARG* case the Supreme Court found that notwithstanding the importance of climate change, notwithstanding the purpose of the Clean Air Act, some of those regulations were unlawful because they exceeded [the] EPA’s authority, and that’s all we’re saying here.”¹⁹² This suggests that, if the EPA cannot regulate beyond the fence line, there may be a small subset of heavily polluting existing sources that cannot be regulated under Section 111(d) because requiring efficiency upgrades would be too costly.

The petitioners’ second argument—that sources regulated under Section 112 cannot be regulated under Section 111(d)—stems from the fact that conflicting versions of an amendment to Section 111(d) were *both* passed and codified into law in the 1990 Clean Air Act Amendments.¹⁹³ Under the Senate version, Section 111(d) cannot be

186. *Id.* at 19–20.

187. *Id.*

188. Section 111 requires that costs be “tak[en] into account” when developing best system of emissions reduction regulations under this section. 42 U.S.C. § 7411(a)(i).

189. *Cf. Portland Cement Ass’n v. Ruckelshaus*, 486 F.2d 375, 387 (D.C. Cir. 1973) (finding that Section 111 does not require a full cost-benefit analysis but that regulations under that section must still be economically and technologically feasible).

190. Transcript of Oral Argument at 94–95, *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. Sept. 27, 2016).

191. *Id.* at 95.

192. *Id.* at 95–96.

193. TSANG & WYATT, *supra* note 184, at 21.

used to regulate any “air pollutants” regulated under Section 112.¹⁹⁴ The House version, on the other hand, prohibits Section 111(d) from regulating air pollutants “emitted from a *source category* which is regulated under” Section 112.¹⁹⁵ The petitioners have argued that the House amendments should control. Because power plants are regulated under Section 112 for their emissions of mercury, this version of Section 111(d) would not allow the EPA to regulate those plants’ carbon dioxide emissions in any manner.¹⁹⁶ Thus, the petitioner’s reading of Section 111(d) would create a loophole where existing sources like power plants could not be subject to performance standards for their emissions of carbon dioxide or *any other* pollutants.¹⁹⁷

The petitioners’ third claim is based on the Tenth Amendment, and contends that, in issuing the Clean Power Plan, the EPA impermissibly arrogated to itself traditional state control of the power grid and commandeered the states and their legislatures.¹⁹⁸ Petitioners have argued that the cooperative federalist structure of the Clean Air Act, which enables the EPA to issue a federal implementation plan if states choose not to issue their own state implementation plan, does not cure the problem because it nevertheless “leaves States no choice but to alter their laws and programs governing electricity generation and delivery to accord with federal policy.”¹⁹⁹ If this argument is correct, it would mean that Section 111(d) could not be used to regulate the power sector and might call into question the cooperative federalism components of the Clean Air Act in general.

3. *Section 112—Hazardous Air Pollutants.* Section 112 enables the EPA to set technological standards for new and existing stationary sources of hazardous air pollutants (HAPs). To be considered a HAP, the pollutant must present “through inhalation or *other routes of exposure*, a threat of adverse human health effects . . . or adverse

194. Act of Nov. 15, 1990, Pub. L. No. 101-549, § 302(a), 104 Stat. 2399, 2574.

195. *Id.* § 108(g), 104 Stat. at 2467 (codified at 42 U.S.C. § 7411(d)(1)(A)(i) (2018)) (emphasis added).

196. Among their arguments, the petitioners point to a footnote in *AEP* which states that the “EPA may not employ [Section 111(d)] if existing stationary sources of the pollutant in question are regulated under . . . § [1]12.” TSANG & WYATT, *supra* note 184, at 22 (alterations in original) (quoting Opening Brief of Petitioner’s on Core Legal Issues at 61–74, *AEP*, 564 U.S. 410 (2011) (No. 10-174)).

197. TSANG & WYATT, *supra* note 184, at 23.

198. *Id.* at 23–24.

199. *Id.* at 23.

environmental effects.”²⁰⁰ The EPA must develop emission standards for major stationary sources emitting more than ten tons per year of any one HAP or twenty-five tons per year of any combination of HAPs.²⁰¹ These standards must reflect the “maximum achievable control technology” achieved by the best performing 12 percent of existing sources of those HAPs.²⁰²

Applying the *UARG* test, it seems unlikely that Section 112 could be construed to address greenhouse gases. Section 112 has historically been used only to regulate toxic substances that have direct effects on human health when emitted at relatively low quantities.²⁰³ Though the text also permits the regulation of air pollutants that affect the environment, it still seems to require that those pollutants affect the environment directly through some “route[] of exposure.”²⁰⁴ Because greenhouse gases primarily affect the environment indirectly through their contribution to global warming, they may not fit within the plain text of the section.²⁰⁵ Even more problematically, every stationary source that emits more than ten tons of greenhouse gases per year would be subject to maximum achievable control technology standards. This threshold is ten times less than triggering levels in the PSD and Title V provisions, and would subject thousands of small sources to burdensome regulatory requirements.²⁰⁶ Therefore, greenhouse gases probably cannot be regulated under Section 112.

200. 42 U.S.C. § 7412(b)(2) (emphasis added).

201. *Id.* § 7412(a)(1).

202. *Id.* §§ 7412(d)(3), (g)(2).

203. *E.g.*, *EPA Announces Biggest Air Toxic Reduction in Agency History*, EPA (Mar. 1, 1994), <https://archive.epa.gov/epa/aboutepa/epa-announces-biggest-air-toxic-reduction-agency-history.html> [<https://perma.cc/C5UV-9CBV>].

204. *Id.* § 7412(b)(2).

205. *See* *Regulating Greenhouse Gas Emissions Under the Clean Air Act*, 73 Fed. Reg. 44,354, 44,368 (July 30, 2008) (discussing the applicability of Section 112 to greenhouse gases and concluding it would be “inappropriate” to regulate them under Section 112). *But see* Mark Bond, *Can and Should Greenhouse Gases Be Regulated as Hazardous Air Pollutants Under Clean Air Act Sect. 112?*, SABINE CTR. FOR CLIMATE CHANGE L. 4 (2016), https://web.law.columbia.edu/sites/default/files/microsites/climate-change/bond_-_ghgs_regulated_as_haps.pdf [<https://perma.cc/BFP4-MS3L>] (arguing that it is possible to regulate greenhouse gases under this section).

206. *See UARG*, 134 S. Ct. 2427, 2443–44 (2014) (“[W]e think it beyond reasonable debate that requiring permits for sources based solely on their emission of greenhouse gases at the 100– and 250–tons–per–year levels set forth in the statute would be ‘incompatible’ with ‘the substance of Congress’ regulatory scheme.” (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 156 (2000))).

4. *Section 115—International Air Pollution.* Section 115 authorizes the EPA to regulate domestic air pollution that endangers other countries.²⁰⁷ The regulations are implemented through state or federal implementation plans, and could apply to all sources of the pollutant, including new and existing mobile and stationary sources.²⁰⁸ Two conditions must be satisfied before the EPA can regulate under the section: first, the EPA must determine, after “receipt of reports . . . from any duly constituted international agency” that an “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”; and second, the foreign country must give 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 [Section 115].”²⁰⁹ If these prerequisites are met, the EPA must require the polluting states to revise their state implementation plans with “respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment.”²¹⁰

Section 115 seems to pass step one of the *UARG* test, but it is unclear how it would fare at step two. Because states—or the EPA through a federal implementation plan—could flexibly determine how to accomplish the emissions reductions, small sources incapable of shouldering heavy regulatory burdens would not necessarily be subject to the unavoidable regulatory requirements that the *UARG* Court found “obviously untenable.”²¹¹ However, because a Section 115 regulation could potentially apply to every economic sector in every state, its opponents would argue that construing the section to encompass greenhouse gases requires a “clear statement” from Congress, which—the argument would go—is not present in the text of the section.²¹²

5. *Section 615—Stratospheric Ozone Protection.* Section 615 requires the EPA to “promptly promulgate” regulations respecting the

207. 42 U.S.C. § 7415.

208. *Id.* § 7415(b).

209. *Id.* § 7415(a), (c).

210. *Id.* § 7415(b).

211. *UARG*, 134 S. Ct. at 2439.

212. *But see* Michael Burger et al., *Legal Pathways To Reducing Greenhouse Gas Emissions Under Section 115 of the Clean Air Act*, 28 GEO. ENVTL. L. REV. 359, 370–93 (2016) (arguing that Section 115 can and should be used to regulate greenhouse gases).

control of “any substance, practice, process, or activity” that the EPA believes endangers the public health or welfare by affecting the stratosphere, especially stratospheric ozone.²¹³

Whether greenhouse gases could be addressed under this section depends on two central questions: first, whether the gases’ effect on the stratosphere in fact causes danger to the public health or welfare;²¹⁴ and second, whether the statute is read as speaking clearly to the issue of greenhouse gases. Although some greenhouse gases do deplete the ozone, many of these have been phased out and replaced with chemicals that have high global warming potential but no effect on the ozone.²¹⁵ Thus, not all greenhouse gases would fall under the umbrella of Section 615.

Moreover, it is far from clear whether the section speaks clearly to the issue of greenhouse gases at all. Title VI of the Clean Air Act is dedicated to protecting stratospheric ozone, but a regulation concerning greenhouse gases would be primarily devoted to preventing climate change.²¹⁶ Therefore, it is unclear whether Section 615 addresses greenhouse gases, but it seems less promising than Section 115.

C. These Potential Gaps in Greenhouse Gas Coverage Might Create Openings for Federal Common Law Nuisance Claims

The above analysis indicates that Sections 108 and 109, 112, and 615 probably do not encompass greenhouse gases and therefore would not themselves displace the federal common law. That leaves two sections—Sections 111(d) and 115—as potential candidates for regulating existing sources greenhouse gases, but there are strong arguments against their applicability.²¹⁷ If these sections are found not

213. 42 U.S.C. § 7671n.

214. See REVESZ, *supra* note 164, at 550 (suggesting that “[s]tratospheric ozone may be affected by increases in concentration of GHGs”).

215. *Reducing Hydrofluorocarbon (HFC) Use and Emissions in the Federal Sector Through SNAP*, EPA, <https://www.epa.gov/snap/reducing-hydrofluorocarbon-hfc-use-and-emissions-federal-sector> [<https://perma.cc/7EYY-LMFS>].

216. *Cf. Mexichem Fluor, Inc. v. EPA*, 866 F.3d 451, 458–59 (D.C. Cir. 2017) (holding that non-ozone-depleting substances cannot be regulated under Section 612, which has much broader language than Section 615).

217. One other candidate might be the new source review provisions for existing stationary sources located in nonattainment areas, which are required to comply with “reasonably available control technology” (RACT). 42 U.S.C. §§ 7501–7515. Because the nonattainment section of the Clean Air Act parallels the PSD provisions, *compare* 42 U.S.C. §§ 7501–7515 (providing tiered pollution control requirements for nonattainment areas), *with* §§ 7471–7493 (providing tiered

to address existing sources' greenhouse gas emissions, then these gaps in coverage could be filled by the federal common law.

Regarding Section 111(d), each of the arguments advanced by the petitioners in the Clean Power Plan lawsuit—the fence line argument, the Section 112 challenge, and the anti-commandeering challenge—would create different gaps for the federal common law to fill.²¹⁸ First, if the petitioners' fence line argument is right, then federal nuisance claims might be leveraged against the dirtiest sources of greenhouse gases. The inevitable counterargument—that Section 111(d)'s requirement of cost consideration evinces a legislative intent to exclude sources for which compliance would be too costly—is unavailing. The lack of a legislative remedy under Section 111(d) should not be construed as an explicit choice by Congress to exempt these sources from pollution controls altogether; indeed, these same sources may be subject to regulation for their emissions of other pollutants under other Clean Air Act sections that do not allow cost consideration. Rather, it means only that Section 111(d) does not provide a framework to address these sources' greenhouse gas emissions. As *AEP* and its progeny demonstrate, to implicitly displace federal nuisance claims, the Clean Air Act must provide a “sufficient” framework to address a given source's greenhouse gases. If these mechanisms are not available for extremely dirty power plants' greenhouse gas emissions, then the federal common law cannot be said to be displaced.

Second, if the Section 112 argument is valid, then potentially all sources regulated under Section 112 could be subject to federal nuisance claims. The counterargument here (in addition to an argument like the fence line objection) would be that the EPA still has the authority to regulate these sources' greenhouse gas emissions—it would just need to undo the Section 112 regulations first. But the delegation of this choice is not itself sufficient to displace the federal common law—the statute must contain a “sufficient legislative

pollution control mechanisms for attainment areas), *UARG's* analysis would probably be the same, and existing sources subject to RACT because of their emissions of “criteria pollutants” would presumably also be potentially subject to RACT for their greenhouse gas emissions. Though RACT is a more lenient standard than BACT, it would still mean that a source's greenhouse gas emissions can be regulated, and therefore federal nuisance claims would be displaced. But because RACT applies to only to a relatively small subset of sources, see *Counties Designated “Nonattainment,”* EPA (June 20, 2017), <https://www3.epa.gov/airquality/greenbook/mapnpoll.html> [<https://perma.cc/BFC3-PB72>] (identifying relatively few areas of nonattainment where RACT would apply), this Note does not address this provision further.

218. Assuming that no other section would provide for the regulation of those sources' greenhouse gas emissions either.

solution.”²¹⁹ As the EPA observed, the agency “would have to choose between regulating HAP or Section 111 air pollutants, leaving a ‘gap’ and allowing the ‘unregulated emission of pollutants not listed as ‘hazardous’ . . . but nonetheless dangerous to public health or welfare.’”²²⁰ During oral arguments for the Clean Power Plan litigation, Judge Patricia Millet observed that the petitioners’ position was a “bait and switch,” and portentously asked whether accepting their argument would place the law “back in the land of having to just deal with all . . . greenhouse gases [with] common law nuisance actions.”²²¹ Indeed, it does.

Finally, if the petitioners’ commandeering argument is accepted, then nuisance claims would seem to be viable against power plants and other sources that are heavily regulated by state law. The likely objection here would be based on federalism and judicial restraint—that if the EPA cannot commandeer the states then neither should the federal courts. This seems unlikely to succeed, as the courts have a long history of compelling compliance with federal law.²²² But even if a federal court declined to issue an injunction forcing the power industry to reduce its emissions, a substantial damages award could be very effective in catalyzing regulatory change.²²³

The Section 115 analysis is simpler: it is all or nothing. If Section 115 is found to embrace greenhouse gases, then the Clean Air Act could be used to comprehensively regulate greenhouse gas emissions and the federal common law would be displaced. But if not, federal

219. *Asian Carp Case*, 667 F.3d 765, 777 (7th Cir. 2011). As the Seventh Circuit pointed out, the statement in *AEP* that “the delegation [of regulatory authority from Congress to the agency] is what displaces federal law” must be read in the context—*AEP* merely meant that the EPA does not have to regulate before the common law may be said to be displaced. *Id.* (alteration in original) (quoting *AEP*, 564 U.S. 410, 426 (2011)). Rather,

Congress’s decision to assign a particular problem to an executive agency . . . may be evidence of displacement, but the ebb and flow of agency action neither diminishes nor increases the role of federal common law. The important displacement question is whether Congress has provided a sufficient legislative solution to the particular interstate nuisance

Id.

220. TSANG & WYATT, *supra* note 184, at 22 (emphasis omitted) (quoting Respondent EPA’s Initial Brief at 83–84, *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. Mar. 28, 2016)).

221. Transcript of Oral Argument at 172, *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. Sept. 27, 2016).

222. *E.g.*, *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316, 426 (1819) (“[T]he [C]onstitution and the laws made in pursuance thereof are supreme . . . they control the [C]onstitution and laws of the respective [s]tates, and cannot be controlled by them.”).

223. For further discussion of the possible benefits of substantial damage awards, see *infra* Part IV.

common law nuisance claims would be viable against those sources not addressed under other sections.

In sum, if any of the arguments challenging Section 111(d) are correct, then federal nuisance claims would probably be available against certain existing sources of greenhouse gas emissions, unless Section 115 encompasses greenhouse gases. Section 115 is a fine candidate, but its coverage of greenhouse gases would be hotly contested. If neither Section 111(d) nor Section 115 fully encompass greenhouse gases, then there would be no standards, enforcement mechanisms, or remedies to address certain existing sources' greenhouse gas emissions. In other words, the Clean Air Act would not represent the "sufficient legislative solution" required under *AEP*'s own analysis to address these sources' emissions. This would mean that federal common law nuisance claims against those sources would not be displaced, creating an important opening for the doctrine to fill the Clean Air Act's gaps in greenhouse gas coverage.

IV. USING THE FEDERAL COMMON LAW TO CATALYZE COMPREHENSIVE GREENHOUSE GAS REGULATION

As discussed in Part III, the Clean Air Act's coverage of existing sources' greenhouse gas emissions is far from certain. A federal nuisance suit in the face of this uncertainty could have two outcomes. On one hand, such a suit could compel a court to clarify that Section 111(d) and/or Section 115 do indeed encompass greenhouse gases, thereby displacing the common law, which ultimately could force the EPA to regulate those gases under those sections. On the other hand, if the common law is found not to be displaced, industry actors facing enormous liabilities may be incentivized to lobby Congress for more comprehensive legislation that *is* preemptive. Ultimately, the objective of either outcome is the same: to catalyze comprehensive regulatory coverage of greenhouse gases in the United States.

The Clean Air Act's coverage of most existing sources' greenhouse gas emissions primarily hinges on two sections: Section 111(d) and Section 115. But, as discussed in Part III, whether and to what extent these two sections provide for the regulation of greenhouse gases from existing sources is an open question, particularly because the D.C. Circuit signaled it would no longer issue a decision on the merits of the Clean Power Plan—which was premised on Section 111(d). Given this uncertainty, a court hearing a federal nuisance suit against existing sources would need to determine whether

either section provides for the regulation of the defendant's greenhouse gas emissions before it could dismiss the suit.²²⁴ The resolution of this issue would be salutary, win or lose.

On the one hand, a judicial finding that either Section 111(d) or Section 115 addresses existing sources' greenhouse gas emissions and thereby displaces the federal common law would mean that the EPA could regulate greenhouse gases under those sections. Either section could be used by the EPA to create effective market-based regulations that could substantially reduce greenhouse gases at much lower costs than traditional command-and-control approaches used in other sections of the Clean Air Act.²²⁵

That judicial finding could also be used to force the EPA to develop greenhouse gas regulations under these sections. For instance, under Section 115, if the two threshold requirements are met—international endangerment and reciprocity—then the statute provides that the EPA “shall” notify the states and require them to amend their state implementation plans as necessary to “prevent or eliminate the endangerment.”²²⁶ Since greenhouse gases emitted from the United States undisputedly contribute to climate change, which is dangerous to every country,²²⁷ and international agreements like the Paris Agreement seem to satisfy the reciprocity requirement,²²⁸ then both threshold requirements would seem to be met. This would create a nondiscretionary duty for the EPA to regulate greenhouse gases under

224. It would not be enough merely to say that other sections *might* address greenhouse gases. A statute cannot “speak directly” to the question without addressing the question to begin with. In every case in which courts have found the common law to be displaced, they have found that the statute affirmatively addressed the issue, not merely that it *might* have. If that were the case, it would have been unnecessary for *AEP* to discuss *Massachusetts* or Section 111(d) at all.

225. See, e.g., Burger et al., *supra* note 212, at 360–63 (discussing the mechanisms of a Section 115 regulation and noting that the “EPA and the states could use the provision to establish an economy-wide, cross-sectoral GHG emissions trading program that incorporates both stationary and mobile sources”).

226. 42 U.S.C. § 7415(a)–(c) (2018).

227. Indeed, the EPA's endangerment finding for greenhouse gases under Section 202 of the Clean Air Act was based in part on research from the International Panel on Climate Change, which showed that anthropogenic greenhouse gas emissions were contributing to climate change and endangering the planet. Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496, 66,610–12 (Dec. 15, 2009). The IPCC appears to be a “duly constituted international agency” for the purposes of Section 115. See Burger et al., *supra* note 212, at 373.

228. See Burger et al., *supra* note 212, at 375–92 (considering whether Section 115(c)'s reciprocity requirement is procedural or substantive and concluding that the United States' treaties and nonbinding commitments satisfy either standard).

Section 115. Citizens or states could petition the EPA to regulate²²⁹ and then compel compliance using the citizen-suit provision of the Clean Air Act.²³⁰

On the other hand, if a court hearing a federal nuisance case were to find that neither Section 111(d) nor Section 115 addresses a given source's greenhouse gas emissions, then federal nuisance claims against that source would be viable. Litigants could seek either injunctive relief, forcing greenhouse gas emitters to reduce or eliminate their greenhouse gases, or damages for the harms caused to them by climate change. Because of the regulatory uncertainty and litigation risks the federal common law entails, federal nuisance suits can be extremely costly.²³¹ For instance, in *Kivalina*, the plaintiffs, a small village and tribe, asked for compensation for the damages to the town caused by climate change-induced erosion, which the plaintiffs valued in the millions of dollars.²³² If instead, the litigants were a group of coastal states or island nations asking for compensation for their lost

229. All citizens may petition agencies to undertake rulemaking under the Administrative Procedure Act. 5 U.S.C. § 553(e) (2018).

230. 42 U.S.C. § 7604. The Supreme Court has clarified that an agency's denial of a petition to regulate—as opposed to its decision not to bring an enforcement action—is subject to judicial review. *Massachusetts v. EPA*, 549 U.S. 497, 527–28 (2007). Moreover, a finding that Section 115 does address greenhouse gases might open the door for foreign countries or their citizens to bring federal nuisance claims against domestic polluters. On the other hand, it might be argued that the United States' international climate agreements or simply the President's interest in diplomacy would displace a foreign country's nuisance claim. This presents interesting issues that are beyond the scope of this Note. For a discussion of international transboundary pollution cases, see generally *TRANSBOUNDARY HARM IN INTERNATIONAL LAW: LESSONS FROM THE TRAIL SMELTER ARBITRATION* (Rebecca M. Bratspies & Russell A. Miller eds., 2006).

231. The cost and regulatory uncertainty of the federal common law have led many to criticize the doctrine, especially the judges who are fashioning it. Judges worry that they are ill-equipped to fashion remedies in complex areas like environmental pollution, and they are hesitant to step on the toes of the legislature or interfere with principles of federalism. See, e.g., *Milwaukee II*, 451 U.S. 304, 312–14 (1981). But *AEP* itself reaffirmed that there has been a robust lineage of cases that have “approved federal common-law suits brought by one State to abate pollution emanating from another State.” 564 U.S. 410, 421 (2011). It stressed that environmental protection is “undoubtedly an area . . . in which federal courts may fill in ‘statutory interstices,’ and, if necessary, even ‘fashion federal law.’” *Id.* (quoting *Friendly*, *supra* note 36, at 421–22). Therefore, the mere fact that federal nuisance claims are costly and engender regulatory uncertainty does not mean that they cannot or should not be leveraged. See Louise Weinberg, *Federal Common Law*, 83 NW. U. L. REV. 805, 809 (1989) (finding that despite their distaste with the doctrine, judges do in fact make federal common law and arguing that they should do so “overtly, rather than through gratuitous rulings on the supposed infirmities of judicial federal lawmaking power”).

232. *Native Vill. of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849, 853 (9th Cir. 2012).

shorelines,²³³ the damages could run into the tens or hundreds of billions of dollars.²³⁴

In addition to being forced to compensate states injured by climate change, industry actors might be persuaded by the extreme costs of federal nuisance litigation to prefer a federal statute that displaces the federal common law. Under this theory, the “imposition of variable, potentially inconsistent and more costly litigation outcomes induces industry to seek preemptive federal legislation to reign [sic] in such costs.”²³⁵ For instance, the wave of federal environmental laws in the late 1960s and 1970s has been attributed to industry’s efforts to preempt the patchwork of state regulations that made regulatory compliance much more expensive.²³⁶ In a more modern example, the chemical industry’s surprising support for the recent Toxic Substance Control Act amendments, which place significant burdens on the industry, has been attributed to the industry’s preference to “operate in a market that has regulatory certainty” by preempting state laws.²³⁷ Indeed, *AEP* itself was praised by industry because it was seen as enhancing regulatory certainty. As one commentator put it: “At a time when regulated entities decry regulatory uncertainty, the Court has provided a clear progression for GHG regulation: expect agency action first and then, if States or environmental groups are unhappy with these standards, redress can be sought in the federal courts.”²³⁸

This suggests that industry would likely prefer a federal statute addressing greenhouse gases to the litigation risk posed by the federal common law.

233. *Cf. Massachusetts*, 549 U.S. at 522 (holding that Massachusetts’ loss of coastline was sufficient to confer standing).

234. See FRANK ACKERMAN & ELIZABETH A. STANTON, NAT. RES. DEF. COUNCIL, *THE COST OF CLIMATE CHANGE* 7 (2008), <https://www.nrdc.org/sites/default/files/cost.pdf> [<https://perma.cc/W8FC-7CQR>] (projecting sea-rise related real estate loss to cost the United States \$360 billion per year annually by 2100 if global warming continues unchecked).

235. Colares & Ristovski, *supra* note 9, at 332.

236. *Id.*; see also E. Donald Elliott, Bruce A. Ackerman & John C. Millian, *Toward a Theory of Statutory Evolution: The Federalization of Environmental Law*, 1 J.L. ECON. & ORG. 313, 326–29 (1985).

237. Christina Valimaki, *New TSCA Regulation: Benefit and Burden for the Chemical Industry*, ELSEVIER (July 7, 2016), <https://chemical-materials.elsevier.com/chemical-rd/new-tscaregulation-benefit-and-burden-for-the-chemical-industry> [<https://perma.cc/4EQP-KGH9>].

238. JENNIFER SMITH LENTO, SUPREME COURT RULES AGAINST FEDERAL COMMON LAW NUISANCE CLAIMS BECAUSE EPA, NOT THE JUDICIARY, IS AUTHORIZED TO REGULATE UTILITY EMISSIONS OF GREENHOUSE GASES (2011), https://www.nixonpeabody.com/-/media/Files/Alerts/Environmental_Alert_06_22_2011.ashx [<https://perma.cc/HRL7-DU9A>].

CONCLUSION

In sum, *URG* demonstrates that the Clean Air Act does not comprehensively address greenhouse gases, and therefore the conclusion drawn from *AEP*—that federal nuisance claims concerning greenhouse gases are dead and buried—is premature. Instead, a federal nuisance claim against a given source can only be said to be displaced if the Clean Air Act is found to provide a sufficient framework to regulate that source’s greenhouse gas emissions. Applying *URG*’s context-specific test to the potentially applicable sections of the Clean Air Act, it appears that only two sections of the Clean Air Act, Sections 111(d) and 115, might address existing stationary sources’ greenhouse gas emissions, but their coverage is uncertain, especially because the D.C. Circuit seems increasingly unlikely to rule on the Clean Power Plan.

In light of this uncertainty, we should toss away the obituary and leverage federal nuisance suits against the same types of sources that were sued in *AEP*. On the one hand, a nuisance suit in this context could compel a court to clarify that either Section 111(d) or Section 115 addresses greenhouse gases, which could in turn be used to force the EPA to develop effective and comprehensive regulations. On the other hand, if a court were to find that no section of the Clean Air Act addresses these sources’ greenhouse gas emissions, then the massive litigation risk caused by federal nuisance suits could induce those industries to ask Congress to pass legislation that comprehensively addresses climate change and displaces the federal common law in the process. Win or lose, reviving the federal common law of nuisance presents a compelling opportunity to force comprehensive, federal action to address the pressing issue of climate change.