

MEMORANDUM

TO: Interested Persons

FROM: Rachel Rothschild, Assistant Professor, University of Michigan Law School¹

DATE: 04/09/2025

RE: State Polluter Pays Climate Superfund Program

I. Introduction

This memorandum examines the legality of a State Polluter Pays Climate Superfund Program. The Program would require companies that profited from greenhouse gas pollution to pay a portion of the state's climate change driven spending, specifically infrastructure projects designed to avoid, moderate, or repair damage caused by climate change. It is based on the longstanding legal doctrine known as the "polluter-pays" principle, which stipulates that the entities responsible for pollution should be financially liable for the resulting harms.² Companies that emitted greenhouse gases above a specified threshold would be deemed "responsible parties" and required to pay compensation to the state. The amount of each company's financial contribution would be determined proportionally to their share of worldwide greenhouse gas emissions during a covered period.

The Program should be designed and implemented in accordance with the U.S. Constitution and federal law. There are several potential legal challenges that a Climate Superfund Program could face. Fossil fuel companies may argue that the law 1) is preempted by the Clean Air Act (CAA); 2) violates the Constitution's Due Process Clause; or 3) violates the Constitution's Commerce Clause. The most applicable precedent concerns federal and state laws that hold companies liable for damages from improper hazardous waste disposal, notably the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Recent state tort litigation against fossil fuel companies is also relevant to the issues of preemption and due process. Based on case law in these areas, the memorandum assesses the persuasiveness of arguments that the Program is preempted and/or unconstitutional and suggests ways to minimize litigation risk.

¹ University affiliation is provided for identification purposes only.

² Boris N. Mamlyuk, *Analyzing the Polluter Pays Principle through Law and Economics*, 18 SOUTHEASTERN ENV'T L.J. 39, 41–42 (2009) ("In domestic law, the polluter pays principle states that polluting entities are legally and financially responsible for the harmful consequences of their pollution.").

II. Questions Presented and Brief Answers

1) Would the CAA preempt a State Climate Superfund Program?

Short Answer: It is very unlikely that a court would find that the CAA preempts a State Climate Superfund Program. The text and legislative history of the CAA as well as judicial precedent support state authority to control air pollution more stringently than the federal government, so long as state actions do not interfere with the federal regulatory scheme. Furthermore, the Climate Superfund Program involves retroactive liability for greenhouse gas emissions and only imposes liability for in-state damages. It would thus pose no obstacle to an EPA permitting process for greenhouse gas emissions nor improperly seek to control emissions from out-of-state sources.

2) Would a State Climate Superfund Program violate the Constitution's Due Process Clause, either because of its extension of jurisdiction over out-of-state parties or because of its retroactivity?

Short Answer: While it is highly improbable that a court would find the program is unconstitutional because of its retroactivity, it is possible that a court would be skeptical of a state extending jurisdiction over out-of-state companies. If a responsible party has sufficient minimum contacts with the state, such as engaging in the marketing, sale, or distribution of fossil fuels to in-state purchasers, it is likely that a court would find jurisdiction proper given the relationship between fossil fuels and climate change harms. A responsible party who has not engaged in such activities will have a stronger due process claim. However, there is legal precedent suggesting that the discharge of harmful pollutants into a state is sufficient to satisfy due process requirements.

3) Would a State Climate Superfund Program violate the Constitution's Commerce Clause?

Short Answer: There is no relevant precedent suggesting that the program would violate the Commerce Clause. It does not discriminate between in-state and out-of-state activities, nor does it appear to be overly burdensome on interstate economic activity as compared to the local benefits. The Program should ensure, however, that the cost recovery demands are proportional to the specific harms experienced within the state.

III. Discussion

a. **Federal Preemption**

Under the Constitution’s Supremacy Clause, federal law will override state statutes when Congress intends to preempt state authority to regulate.³ Preemption may be explicit, when Congress clearly stipulates that federal legislation will supersede state law, or implicit, when a court finds that state law is preempted even though there is no statutory language directly on point.⁴ Cases of express preemption typically involve statutes that prohibit states from establishing standards different from those at the federal level, such as safety requirements for motor vehicles.⁵ Implied preemption can occur: 1) when the federal regulatory apparatus is so pervasive that a court concludes Congress intended to “occupy the field” in that area; 2) when there is a direct conflict between state and federal laws; or 3) when a state law would prove an obstacle to implementing a federal law, known as “obstacle preemption.”⁶

There are no federal laws that would expressly preempt a state from creating a State Climate Superfund Program. However, responsible parties could seek to challenge the law on the grounds that the CAA *implicitly* preempts such state action. In the 2011 case *American Electric Power v. EPA*, the Supreme Court held that the CAA displaced federal common law tort claims over climate change harms.⁷ However, the opinion left open the question of whether the CAA preempted state regulations and state tort claims seeking to limit greenhouse gas emissions or secure compensation from polluters.⁸ In recent state tort suits against fossil fuel companies over their contributions to climate change, defendants have repeatedly argued that the CAA preempts states from acting to address the problem.⁹

While the CAA’s preemptive effect on state climate change regulations is still unsettled, current precedent suggests that the CAA would not prevent the establishment of a State Climate Superfund Program. The Act takes what is known as a “cooperative federalist” approach to air pollution problems, preserving state authority to regulate more stringently than the federal

³ See *United States v. Bass*, 404 U.S. 336, 349 (1971). See also *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947); *Jones v. Rath Packing Co.*, 430 U.S. 519, 525 (1977).

⁴ See Catherine M. Sharkey, *Products Liability Preemption: An Institutional Approach*, 76 GEO. WASH. L. REV. 449, 455–56 (2008).

⁵ See, e.g., *Geier v. Am. Honda Motor Co.*, 529 U.S. 861, 867 (2000).

⁶ Samuel Issacharoff & Catherine M. Sharkey, *Backdoor Federalization*, 53 UCLA L. REV. 1353, 1366 n.40 (2006). The Supreme Court has noted that these categories are not “rigidly distinct.” See *Crosby v. Nat’l Foreign Trade Council*, 530 U.S. 363, 372 n.6 (2000).

⁷ *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 411 (2011).

⁸ See *id.* at 429 (“In light of our holding that the Clean Air Act displaces federal common law, the availability vel non of a state lawsuit depends, inter alia, on the preemptive effect of the federal Act . . . None of the parties have briefed preemption or otherwise addressed the availability of a claim under state nuisance law. We therefore leave the matter open for consideration on remand.”).

⁹ See, e.g., Notice of Removal by Defendants Chevron Corporation and Chevron U.S.A., Inc. at 4, County of San Mateo v. Chevron Corp., No. 17-cv-04929-MEJ (N.D. Cal. July 17, 2017), http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2017/20170824_docket-317-cv-04929-MEJ_notice-1.pdf. On why the Clean Air Act does not preempt these lawsuits, see Rachel Rothschild, *State Nuisance Law and the Climate Change Challenge to Federalism*, 27 NYU ENV’T L. J. 412 (2019); Jonathan Adler, *Displacement and Preemption of Climate Nuisance Claims*, 17 J. L., ECON. & POL’Y 217 (2022).

government through a savings clause,¹⁰ with a few specific exceptions that do not apply here like the setting of new motor vehicle emission standards.¹¹ The CAA's savings clause would apply to a State Climate Superfund in the same way it does to state laws concerning other types of pollution.¹²

Furthermore, in any analysis of preemption, courts follow a doctrine known as the “presumption against preemption” of state laws, which has been consistently applied in cases of federal statutes dealing with environmental pollution.¹³ Courts that have examined the preemptive effect of the CAA have thus typically found that it does not implicitly preempt state environmental laws. No court has found that EPA has so extensively occupied the area of air pollution regulations that further state actions are preempted.¹⁴ Nor is it likely a court would find that there is a direct conflict between the CAA and a State Climate Superfund Program.¹⁵

The only potentially problematic case law concerns state actions that seek to control pollution emissions in other states. The Supreme Court has held that allowing states such authority would pose an obstacle to implementing the CAA by subjecting emitters to a multitude of permitting restrictions, creating a “chaotic regulatory structure” of numerous state laws.¹⁶ For this reason, state lawsuits over pollution discharges from neighboring states must be brought under the law of the “source” state; claims brought under the common law of states receiving

¹⁰ See 42 U.S.C. § 7416 (2022) (“Except as otherwise provided . . . nothing in this chapter shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce (1) any standard or limitation respecting emissions of air pollutants or (2) any requirement respecting control or abatement of air pollution.”); see also Holly Doremus & W. Michael Hanemann, *Of Babies and Bathwater: Why the Clean Air Act's Cooperative Federalism Framework Is Useful for Addressing Global Warming*, 50 ARIZ. L. REV. 799, 817 (2008) (“The Clean Air Act was the first modern federal environmental statute to employ a ‘cooperative federalism framework,’ assigning responsibilities for air pollution control to both federal and state authorities.”); J.J. England, *Saving Preemption in the Clean Air Act: Climate Change, State Common Law, and Plaintiffs Without a Remedy*, 43 ENV'T. L. 701, 733 (2013).

¹¹ See 42 U.S.C.S. § 7543(a) (2022) (“No State or any political subdivision thereof shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines . . .”). Another exception concerns the Acid Rain trading provisions. See also *Bell v. Cheswick Generating Station*, 734 F.3d 188, 197–98 (3d Cir. 2013); *Clean Air Mkts. Group v. Pataki*, 338 F.3d 82 (2d Cir. 2003).

¹² Indeed, many states have programs to address greenhouse gas emissions; though different in form than a State Climate Superfund, the same principles of federalism and preemption analysis apply. See, e.g., William Funk, *Constitutional Implications of Regional CO₂ Cap-and-Trade Programs: The Northeast Regional Greenhouse Gas Initiative as a Case in Point*, 27 J. ENV'T L. 353, 357 (2009) (explaining that the regional greenhouse gas initiative should not be preempted by federal law, at least until a federal cap-and-trade program passes Congress).

¹³ See, e.g., *Env't Encapsulating Corp. v. New York*, 855 F.2d 48, 58, 60 (2d Cir. 1988) (noting that “[i]nference and implication will only rarely lead to the conclusion that it was the clear and manifest purpose of the federal government to supersede the states’ historic power to regulate health and safety”). See also Jason J. Czarnezki & Mark L. Thomsen, *Advancing the Rebirth of Environmental Common Law*, 34 B.C. ENV'T AFF. L. REV. 1, 8–11 (2007) (finding that there are very narrow situations where courts have held federal environmental statutes, such as the CAA and CERCLA, preempt state environmental law).

¹⁴ See Holly Doremus & W. Michael Hanemann, *Of Babies and Bathwater: Why the Clean Air Act's Cooperative Federalism Framework Is Useful for Addressing Global Warming*, 50 ARIZ. L. REV. 799, 817 (2008) (“The Clean Air Act was the first modern federal environmental statute to employ a ‘cooperative federalism framework,’ assigning responsibilities for air pollution control to both federal and state authorities.”).

¹⁵ See *Wyeth v. Levine*, 555 U.S. 555, 589–90 (2008) (Thomas, J., concurring) (noting the Supreme Court has “articulated a very narrow ‘impossibility standard’”).

¹⁶ *Int'l Paper Co. v. Ouellette*, 479 U.S. 481, 496 (1987).

pollution are preempted by federal law.¹⁷ Similarly, in 2003 the U.S. Court of Appeals for the Second Circuit found that the CAA preempted New York’s Air Pollution Mitigation law because the state legislation restricted the sale of sulfur dioxide pollution allowances to upwind states,¹⁸ directly violating the 1990 CAA amendments.¹⁹ In finding preemption, the Second Circuit extensively relied on legislative history from the 1990 amendments that detailed Congress’s intent to create a nationwide trading scheme without geographic restrictions as well as EPA regulations stipulating that states were not to “restrict or interfere” with allowance trading.²⁰ The court also noted that New York’s law was not preserved under the CAA because it tried to control emissions from other states, which the CAA and Supreme Court precedent do not allow.²¹

These decisions, however, do not suggest that the CAA preempts a State Climate Superfund or other state efforts to address climate change harms.²² The program would not interfere with any current federal regulatory program, nor seek to control greenhouse gas emissions from other states.²³ It would simply impose liability for damages within a single state in an effort to ensure polluters pay for the harms they caused from historic contributions to climate change.²⁴ Under their general police powers, states have authority to legislate to protect the health and safety of their citizens.²⁵ The state therefore has a strong basis for seeking financial compensation from polluters to mitigate these effects.

In addition, it is not clear how extensively EPA will be able to regulate greenhouse gases given the Supreme Court’s scrutiny of the agency’s legal authority under the CAA. Recent Supreme Court rulings have found portions of the CAA do not apply to greenhouse gas pollutants.²⁶ And in June 2022, the Supreme Court narrowed EPA’s ability to regulate greenhouse gas emissions using section 111(d) in *West Virginia v. EPA*.²⁷

While the Biden EPA had proposed a new permitting scheme for these pollutants under section 111(d), it was more limited in scope than prior approaches taken during the Obama

¹⁷ *Id.* at 492.

¹⁸ *Clean Air Mkts. Grp. v. Pataki*, 338 F.3d 82, 85 (2d Cir. 2003) (finding New York’s law “actually conflicts” with the CAA by creating “an obstacle to the accomplishment and execution of the full purposes and objectives of Congress”).

¹⁹ *See* 42 U.S.C. § 7651(b) (specifying that allowances “may be transferred . . . [to] any other person who holds such allowances”).

²⁰ *Clean Air Mkts. Grp.*, 388 F.3d at 88 (“These regulations were adopted over the objection of New York State, which argued vigorously in favor of a scheme that permitted allowance trading to be geographically restricted.”).

²¹ *See id.* at 89.

²² *See* Adler, *supra* note 9, at 221 (“Whether state law nuisance actions are to be preempted is a choice for Congress to make, and is a choice Congress has not yet made”).

²³ While imposing liability on a party for conduct in one state may have an indirect effect on its activities in other states, this is consistent with the normal operation of tort law and liability regimes like CERCLA. *See, e.g.*, Kyle Logue, *Coordinating Sanctions in Tort*, 31 CARDOZO L. REV. 2313, 2314 (2010) (noting that the view of tort law as “a system of deterrence or regulation is now standard within the legal literature”).

²⁴ *See id.* at 2315 (explaining that greenhouse gas emissions are a “quintessential example of a negative externality”).

²⁵ *See, e.g.*, *Env’t Encapsulating Corp. v. New York*, 855 F.2d 48, 53 (2d Cir. 1988) (finding that federal law did not preempt New York restrictions on asbestos use that were intended to safeguard public health).

²⁶ *Util. Air Regulatory Grp. v. EPA*, 573 U.S. 302 (2014).

²⁷ *West Virginia v. EPA*, 142 S. Ct. 2587, 2610 (2022).

Administration.²⁸ A State Climate Superfund Program would not have posed an obstacle to its implementation. The responsible parties are defined as companies that have extracted or refined fossil fuels over a set period, rather than power plants themselves.²⁹ Therefore, the state legislation is targeting different entities than a potential federal permitting scheme. It is also seeking to address harms from past emissions rather than regulate future activities. Given these distinctions, it would have been quite difficult for responsible parties to successfully argue that a State Climate Superfund Program would pose an obstacle to complying with an EPA permitting scheme for greenhouse gas emissions.³⁰ Furthermore, the Trump administration has now indicated that they intend to repeal the Biden EPA’s regulations concerning greenhouse gas emissions.³¹ Arguments that State Climate Superfunds would pose a conflict for federal regulations are thus likely to be even weaker.

b. Due Process

i. Jurisdiction

A company that falls within a State Climate Superfund Program’s definition of a “responsible party” may try to claim that the exercise of this jurisdiction violates the Due Process Clause of the Fourteenth Amendment to the U.S. Constitution because the company is located out-of-state and the fossil fuel extraction also occurred out-of-state or outside the country.³² It is uncontroversial that states have jurisdiction over all companies that are considered “at home” in the state because of “continuous and systematic” operations within the forum.³³ For example, a company would be considered “at home” where it is headquartered or incorporated.³⁴

In the absence of general jurisdiction, a state can also exert jurisdiction over parties whose conduct “produces consequences within the state,”³⁵ often referred to as “specific”

²⁸ See New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed

Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule, 89 Fed. Reg. 39,798 (May 9, 2024).

²⁹ See Rothschild, *supra* note 9, at 451–52.

³⁰ In fact, more conservative justices on the Supreme Court have found similar arguments over CERCLA’s preemptive effects on state remedies for hazardous waste unconvincing. See *Atl. Richfield Co. v. Christian*, 140 S. Ct. 1335, 1367 (2020) (Gorsuch, J., concurring) (“CERCLA sought to add to, not detract from, state law remedial efforts. It endorsed a federalized, not a centralized, approach to environmental protection.”).

³¹ EPA, Trump EPA Kicks Off Formal Reconsideration of Endangerment Finding with Agency Partners (Mar. 12, 2025), <https://www.epa.gov/newsreleases/trump-epa-kicks-formal-reconsideration-endangerment-finding-agency-partners>.

³² RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 2 (1988) (“The due process clause of the Fourteenth Amendment imposes limits beyond which a State of the United States may not extend the jurisdiction of its courts or the range of application of its law.”).

³³ *Goodyear Dunlop Tires Operations, S.A. v. Brown*, 564 U.S. 915, 919 (2011) (explaining that general jurisdiction is likely to be found when a corporation has its principal place of business within the state or is incorporated in the state).

³⁴ *Daimler AG v. Bauman*, 571 U.S. 117, 137 (2014) (stating that a company’s place of incorporation and principal place of business are paradigmatic bases for general jurisdiction).

³⁵ RESTATEMENT (FIRST) OF CONFLICT OF LAWS § 65 cmt. a (1934) (“A state may impose a liability upon any person whose conduct produces consequences within the state. Thus, one who does an act in one state which causes

jurisdiction in the context of litigation.³⁶ However, courts must ensure that the exercise of specific jurisdiction does not violate the Due Process Clause. Supreme Court precedent requires that parties have “certain minimum contacts” with a forum state that wishes to exert specific jurisdiction over them,³⁷ and that the exercise of jurisdiction does not offend traditional notions of “fair play and substantial justice.”³⁸ Recent case law has affirmed that these standards mean a court must find that a party has engaged in some act by which it “purposefully avails itself of the privilege of conducting activities within the forum State.”³⁹ Furthermore, the harm at issue must be connected to these activities and contacts within the state.⁴⁰

There are only a limited number of cases that have required courts to grapple with the Supreme Court’s due process precedents in the context of specific jurisdiction over out-of-state polluters.⁴¹ The disputes in these cases can be roughly divided into two general categories: 1) challenges to specific jurisdiction where a party claims the environmental harm at issue is insufficiently connected to the party’s activities and contacts within the state, and 2) challenges to specific jurisdiction where a party’s only contact with the state was the transport of harmful pollution.

Fossil fuel producers have advanced the first type of argument in recent climate tort suits against fossil fuel companies.⁴² In several of these cases, the defendants have tried to argue that they are not subject to a state’s specific jurisdiction because the harms from greenhouse gases are unrelated to their activities within forum states.⁴³ Similar claims could be brought by responsible parties under a Climate Superfund Program.⁴⁴

injury to a person in another state is subject to the legislative jurisdiction of the second state for harm so caused to the person in that state.”).

³⁶ *Nielsen v. Sioux Tools, Inc.*, 870 F. Supp. 435, 438 (D. Conn. 1994) (noting that the first issue in determining whether an out-of-state company could be liable under CERCLA is whether “the defendant’s alleged contamination of property soil and groundwater may be construed as ‘tortious conduct’” under the state’s longarm statute).

³⁷ *See, e.g., Phillips Petroleum Co. v. Shutts*, 472 U.S. 797, 806 (1985) (explaining that the Due Process Clause does not “permit a State to make a binding judgment against a person with whom the State had no contacts”).

³⁸ *International Shoe Co. v. State of Washington*, 326 U.S. 310, 316–17 (1945).

³⁹ *J. McIntyre Mach., Ltd. v. Nicastro*, 564 U.S. 873, 877 (2011).

⁴⁰ *Bristol-Myers Squibb Co. v. Superior Court*, 137 S. Ct. 1773, 1780 (2017) (finding that jurisdiction must “arise out of or relate to the defendant’s contacts” with the forum state).

⁴¹ *See, e.g., Branch Metal Processing v. Bos. Edison Co.*, 952 F. Supp. 893, 908 (D.R.I. 1996) (“While a substantial body of law has developed to assist courts in deciding personal jurisdiction issues, this court has discovered few cases that address the doctrine of personal jurisdiction in the context of CERCLA. Indeed, no circuit court has heretofore addressed the issue, and the few district courts that have addressed it have reached different conclusions.”). Most cases involving out-of-state generators appear to find personal jurisdiction through transactions over the waste at issue. *See, e.g., Va. St. Fidelco, L.L.C. v. Orbis Prods. Corp.*, No. 11-2057 (KM), 2016 U.S. Dist. LEXIS 102641, at *39 (D.N.J. Aug. 3, 2016) (finding personal jurisdiction where the defendant loaned money to clean up the property).

⁴² *See, e.g., Decision, State of Rhode Island v. Chevron Corp., et al.*, No. PC-2018-4716 (R.I. Super. Ct., filed Aug. 13, 2020), http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200813_docket-PC-2018-4716_decision.pdf.

⁴³ *See, e.g., Memorandum of Law in Support of Defendants’ Joint Motion to Dismiss for Lack of Personal Jurisdiction at 15–16, State of Rhode Island v. Chevron Corp., et al.*, No. PC-2018-4716 (R.I. Super. Ct., Jan. 13, 2020), http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200113_docket-PC-2018-4716_memorandum-of-law.pdf.

⁴⁴ Similar claims have been brought by out-of-state companies held liable under CERCLA. *See, e.g., Chatham Steel Corp. v. Brown*, 858 F. Supp. 1130, 1144 (N.D. Fla. 1994).

However, a recent Supreme Court decision makes it unlikely that responsible parties who sold or marketed their products in a state could avoid liability on these grounds.⁴⁵ In *Ford Motor Co. v. Montana Eighth Judicial District Court*, the Supreme Court held that a party's in-state activities must merely "relate to" the alleged harm in order for state jurisdiction to comply with the Due Process Clause.⁴⁶ As Justice Kagan explained in the majority opinion, specific jurisdiction attaches "when a company cultivates a market for a product in the forum State and the product malfunctions there."⁴⁷ A court need not find that the claim arose "because of the defendant's in-state conduct" in a *causal* manner.⁴⁸ Nor did it matter that the products at issue were manufactured and initially sold outside the state, since "[b]y every means imaginable—among them, billboards, TV and radio spots, print ads, and direct mail" the defendant had urged state citizens to buy its products.⁴⁹ And since the defendant company conducted so much business within the relevant states, it clearly "enjoy[ed] the benefits and protection of [their] laws—the enforcement of contracts, the defense of property, the resulting formation of effective markets."⁵⁰ The *Ford Motor Co.* opinion has thus provided a pathway for a state to exercise specific jurisdiction over fossil fuel producers who engage in advertising, sales, or distribution of their products within the state.⁵¹

Fossil fuel producers who have not cultivated a market within the state and have few contacts there could bring a more plausible due process challenge.⁵² For example, while it is likely that American companies such as Exxon Mobil or Chevron have marketed or sold fossil fuel products into most states, foreign entities such as Saudi Aramco or the National Iranian Oil Company may not have engaged in such practices in every forum.⁵³ The Supreme Court has not directly examined the constitutionality of a state exerting jurisdiction over an out-of-state polluter that has no other contacts with the forum. And while there is a long history of state courts hearing transboundary pollution claims, the defendant polluters subject to specific jurisdiction in

⁴⁵ See *Ford Motor Co. v. Mont. Eighth Judicial Dist. Court*, 141 S. Ct. 1017, 1021 (2021). While the decision was unanimous, Justices Alito, Gorsuch, and Thomas concurred in the judgment only. Justice Barrett did not participate in the case. See *id.* at 1022, 1032, 1034.

⁴⁶ *Id.* at 1021.

⁴⁷ *Id.*

⁴⁸ *Id.* at 1026.

⁴⁹ *Id.* at 1028.

⁵⁰ *Id.* at 1029.

⁵¹ See Ellen M. Gilmer, *High Court Ruling on Jurisdiction Thaws Some Climate Cases (1)*, BLOOMBERG L. (Mar. 25, 2021), <https://news.bloomberglaw.com/environment-and-energy/supreme-court-ruling-on-jurisdiction-thaws-some-climate-cases>.

⁵² *Ikeda v. J Sisters 57, Inc.*, No. 14-cv-3570 (ER), 2015 U.S. Dist. LEXIS 87783, at *23 (S.D.N.Y. July 6, 2015) (finding that plaintiffs had not made a prima facie showing of specific jurisdiction under the Due Process Clause because they had not presented sufficient evidence demonstrating that the defendants had made a specific effort to sell products in New York); *but see Suez Water N.Y., Inc. v. E.I. du Pont de Nemours & Co.*, No. 20-cv-10731 (LJL), 2022 U.S. Dist. LEXIS 1483, at *32–37 (S.D.N.Y. Jan. 4, 2022) (finding that the defendant chemical companies had sufficient "minimum contacts" with New York in light of evidence that they sold their products to industrial manufacturers, downstream distributors, and individual customers in New York, and the court's exercise of this jurisdiction would not offend traditional notions of fair play and substantial justice).

⁵³ For a historical analysis of the top greenhouse gas producers, see Brenda Ekwurzel et al., *The Rise in Global Atmospheric CO₂, Surface Temperature, and Sea Level from Emissions Traced to Major Carbon Producers*, 144 CLIMATIC CHANGE 579 (2017).

these cases typically reside in neighboring states rather than in a different part of the country or outside the U.S.⁵⁴

There is some case law, however, suggesting that a state can exercise jurisdiction over a polluter simply because it discharged harmful substances into the forum state. The most recent, relevant litigation on this issue involved a Canadian lead and zinc smelter that illegally dumped millions of tons of industrial waste into the Columbia River, damaging an Indian reservation in Washington State.⁵⁵ The Canadian facility sought to avoid liability by claiming that it was improper for the state to exercise jurisdiction since it had not “expressly aimed” its waste at Washington State.⁵⁶ In *Pakootas v. Teck Cominco Metals*, the U.S. Court of Appeals for the Ninth Circuit found that the facility could be said to have “expressly aimed” its waste at Washington, satisfying the relevant test for specific jurisdiction, given decades of internal documents showing that the company knew river currents were carrying its waste to Washington State.⁵⁷

A similar, though distinct, approach adopted by a few courts applies a different jurisdictional standard to hazardous pollution since it is not “an ordinary product.”⁵⁸ Under this reasoning, the inherent dangerousness of toxic substances as well as the fact that polluters operate “in a nationally regulated industry” is enough to show purposeful availment of the forum state.⁵⁹ These opinions also emphasize that states have a special stake in overseeing remediation of its land and natural resources, further weighing in favor of jurisdiction.⁶⁰ Should the courts adopt a comparable approach to greenhouse gases, it may be possible to extend jurisdiction over responsible parties whose only connection to a state involves extraction and production of fossil fuels that subsequently warm the planet and cause damages in the state. But it is more legally tenuous than for parties who have sold, marketed, or advertised fossil fuel products in the state.

Given the risk that a party may be able to bring a successful as-applied due process challenge, a state could opt to specify that an entity qualifies as a responsible party only if it sold,

⁵⁴ See Rothschild, *supra* note 9, at 425–26.

⁵⁵ *Pakootas v. Teck Cominco Metals, Ltd.*, 905 F.3d 565, 571 (9th Cir. 2018).

⁵⁶ *Id.* at 577.

⁵⁷ *Id.* at 578 (“It is no defense that Teck’s wastewater outfalls were aimed only at the Columbia River, which in turn was aimed at Washington. Rivers are nature’s conveyor belts.”). It’s important to note that the Ninth Circuit has a higher bar for finding personal jurisdiction in tort suits, known as the “Calder effects” test. See Jonathan Remy Nash, *Special Edition Response, Personal Jurisdiction in Climate Change Common Law Litigation Post-Ford*, GEO. WASH. L. REV. ON THE DOCKET (Oct. 6, 2021), <https://www.gwlr.org/personal-jurisdiction-in-climate-change-common-law-litigation-post-ford>.

⁵⁸ *O’Neil v. Picillo*, 682 F. Supp. 706, 718 (D.R.I. 1988); see also *Metro Container Grp. v. AC&T Co.*, No. 18-3623, 2021 U.S. Dist. LEXIS 234447, at *79 (E.D. Pa. Dec. 6, 2021) (stating that the personal jurisdiction analysis in the *O’Neil* case is “is useful for assessing the unique specific personal jurisdiction issues that arise in CERCLA cases,” and subsequently allowing discovery to determine whether out-of-state generators could be potentially responsible parties).

⁵⁹ *O’Neil*, 682 F. Supp. at 718, citing *Asahi Metal Ind. v. Superior Court of Cal.*, 107 S. Ct. 1026, 1038 (1987) (Stevens, J., White, J., and Blackmun, J., concurring) (“Whether or not . . . conduct rises to the level of purposeful availment requires a constitutional determination that is affected by the volume, the value, and the *hazardous* character of the components.”) (emphasis added).

⁶⁰ See *Members of the Beede Site Grp. v. Fed. Home Loan Mortg. Corp.*, No. 09-370 S, 2010 U.S. Dist. LEXIS 131038, at *21 (D.N.H. Dec. 7, 2010) (“New Hampshire’s strong sovereign interest in protecting its lands and its citizenry provides it with an indisputable stake in overseeing litigation that will result in the clean-up of a toxic superfund pollution site within its boundaries.”).

advertised, or otherwise cultivated a market in the state. The law could still apportion liability based on contributions to global greenhouse gas emissions. Alternatively, the legislature could make specific findings regarding the ways in which potentially responsible parties urged state citizens to use their products, such as through advertising, or conducted other business activities within its borders. This would help demonstrate that the responsible parties purposely availed themselves of the privilege of conducting activities in the state.

If responsible parties are defined solely in reference to worldwide emissions, a state could defend this approach by analogizing to cases like *Pakootas v. Teck Cominco Metals*.⁶¹ Similarly to that case, fossil fuel companies had clear knowledge that pollution from their products would accumulate in the atmosphere, raise global temperatures, and subsequently harm state natural resources. As noted above, some courts have also relied on the distinctly harmful nature of pollution and knowledge about its hazards in employing a more lenient jurisdictional test. While it may be more challenging to advance such arguments in the climate change context, the overwhelming scientific consensus about the effects of greenhouse gas emissions could persuade the judiciary that a comparable standard is warranted for jurisdiction over fossil fuel companies.

ii. Retroactivity

Occasionally, laws that impose economic liability retroactively have not survived judicial scrutiny.⁶² However, there are numerous examples of retroactive liability laws that have withstood constitutional challenges under the Due Process Clause,⁶³ including CERCLA. Though the Supreme Court has never directly reviewed CERCLA's constitutionality, no courts that have addressed the question have found that the law violated the Due Process Clause.⁶⁴

One key difference between retroactive liability laws that violate the Due Process Clause and those that do not is whether the government has shown that such application has a

⁶¹ 905 F.3d 565, 571 (9th Cir. 2018) (finding that the district court properly exercised personal jurisdiction over the defendant, a Canadian company, because it purposefully directed its activities towards Washington State by dumping waste into the Columbia River with the knowledge that river currents would carry it to Washington State).

⁶² See *General Motors Corp. v. Romein*, 503 U.S. 181, 191 (1992) (finding that “[r]etroactive legislation . . . presents problems of unfairness that are more serious than those posed by prospective legislation, because it can deprive citizens of legitimate expectations and upset settled transactions”); see also *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 208 (1988) (noting that retroactivity is generally disfavored in the law).

⁶³ See e.g., *Usery v. Turner Elkhorn Mining Co.*, 428 U.S. 1 (1976).

⁶⁴ *United States v. Monsanto Co.*, 858 F.2d 160, 174 (4th Cir. 1988) (“Many courts have concluded that Congress intended CERCLA's liability provisions to apply retroactively to pre-enactment disposal activities of off-site waste generators. They have held uniformly that retroactive operation survives the Supreme Court's tests for due process validity.”); *United States v. Hooker Chemicals & Plastics Corp.*, 680 F. Supp. 546, 556 (W.D.N.Y. 1988); *Kelley v. Thomas Solvent Co.*, 714 F. Supp. 1439, 1444–45 (W.D. Mich. 1989); *United States v. Kramer*, 757 F. Supp. 397, 429 (D.N.J. 1991); *United States v. Shell Oil Co.*, 841 F. Supp. 962, 974 (C.D. Cal. 1993); *United States v. Olin Corp.*, 927 F. Supp. 1502, 1507 (S.D. Ala. 1996) (noting that “of those federal decisions which have directly addressed the issue of CERCLA's retroactivity, none have declined to apply CERCLA on retroactivity grounds”), *rev'd*, 107 F.3d 1506 (11th Cir. 1997) (reversing the lower court's decision not to apply CERCLA retroactively as well as its conclusion that the law violated the Commerce Clause); *United States v. Monsanto Co.*, 182 F. Supp. 2d 385, 408 (D.N.J. 2000) (“This Court follows the weight of case law and concludes that CERCLA applies retroactively and does not violate the Constitution through this application.”); *Asarco LLC v. Goodwin*, 756 F.3d 191, 200 (2d Cir. 2014) (“Such retroactive application does not violate the due process clause, and does not convert CERCLA into a bill of attainder or an ex post facto law.”).

“legitimate legislative purpose furthered by rational means.”⁶⁵ In the case of CERCLA liability, courts have unanimously found that pollution remediation is a legitimate government purpose, and that it is rational to impose liability for these costs upon parties who “created and profited” from activities that caused the pollution.⁶⁶ In addition, some courts have assessed whether the liability imposed is “severely disproportionate” to the parties contributions to the problem or the harm incurred.⁶⁷ Finally, several opinions have analyzed whether the regulated party “could have reasonably expected that it would be subject to regulation” by examining 1) whether the company was operating in a highly regulated industry, 2) whether the company knew of the problem when it engaged in the activity, and 3) the regulatory environment at the time of the activity.⁶⁸

A State Climate Superfund Program would almost certainly survive judicial scrutiny under any of these tests. Like CERCLA, the program is intended to address the effects of environmental pollution, and it imposes costs on those that profited from the activities that caused the problem. Nor would liability be “severely disproportionate” to the harm caused so long as the state imposes a financial penalty commensurate with the expected damages from climate change. A *de minimis* threshold in the bill would also ensure that small entities will not be deemed “responsible parties” under the Program. Furthermore, liability could be limited to greenhouse gas emissions after a date when the reality of climate change was already well-

⁶⁵ Compare *E. Enters. v. Apfel*, 524 U.S. 498, 549 (1998) (“The remedy created by the Coal Act bears no legitimate relation to the interest which the Government asserts in support of the statute.”) with *Pension Benefit Guar. Corp. v. R. A. Gray & Co.*, 467 U.S. 717, 729 (1984) (“Provided that the retroactive application of a statute is supported by a legitimate legislative purpose furthered by rational means, judgments about the wisdom of such legislation remain within the exclusive province of the legislative and executive branches.”); see also *United States v. Alcan Aluminum Corp.*, 315 F.3d 179, 190 (2d Cir. 2003) (“We are in accord with this consistent authority that both pre- and post-dates *Eastern Enterprises*. As a consequence, holding Alcan jointly and severally liable under CERCLA for the cleanup costs incurred at PAS and Fulton does not result in an unconstitutional taking adverse to Alcan, or a deprivation of its right to due process.”); *United States v. Alcan Aluminum Corp.*, 49 F. Supp. 2d 96, 100 (N.D.N.Y. 1999) (distinguishing *Eastern Enterprises v. Apfel* from environmental liability in the context of a hazardous waste superfund because in the latter case the liability was connected to an environmental harm, rather than imposed for “no reason”); *United States v. Dico, Inc.*, 189 F.R.D. 536, 543 (S.D. Iowa 1999) (“[T]he only rationale embraced by at least five judges in *Eastern Enterprises* is that retroactive application of the Coal Act to *Eastern* did not violate the Takings Clause. It therefore remains settled in this circuit that retroactive application of CERCLA does not violate either the Due Process or Takings Clauses.”); *United States v. Newmont USA Ltd.*, No. CV-05-020-JLQ, 2007 U.S. Dist. LEXIS 63726, at *14 (E.D. Wash. Aug. 28, 2007) (“[C]ourts that have been asked to reconsider whether CERCLA’s retroactive liability scheme is constitutional in light of *Eastern Enterprises* have ‘uniformly held that CERCLA continues to pass constitutional muster.’”).

⁶⁶ See, e.g., *United States v. Ne. Pharm. & Chem. Co.*, 810 F.2d 726, 734 (8th Cir. 1986); *O’Neil v. Picillo*, 883 F.2d 176, 183 n.12 (1st Cir. 1989); *Franklin Cnty. Convention Facilities Auth. v. Am. Premier Underwriters, Inc.*, 240 F.3d 534, 550 (6th Cir. 2001) (“Cleaning abandoned and inactive hazardous waste disposal sites is a legitimate legislative purpose which is furthered by imposing liability for response costs upon those parties who created and profited from those sites.”).

⁶⁷ See, e.g., *Commonwealth Edison Co. v. United States*, 271 F.3d 1327, 1347 (Fed. Cir. 2001) (rejecting a due process challenge to the 1992 Energy Policy Act and noting that the responsible parties were only liable for a portion of the cleanup costs from uranium processing).

⁶⁸ *Id.* at 1347; see also *Monsanto Co.*, 858 F.2d at 174 (“While the generator defendants profited from inexpensive waste disposal methods that may have been technically ‘legal’ prior to CERCLA’s enactment, it was certainly foreseeable at the time that improper disposal could cause enormous damage to the environment.”). Such retroactive application does not violate the due process clause, and does not convert CERCLA into a bill of attainder or an ex post facto law.

accepted within the scientific community.⁶⁹ For these reasons, it is unlikely that a State Climate Superfund Program could be successfully challenged as a violation of due process because of its retroactive application to past activities.

c. Commerce Clause

Though the Constitution's Commerce Clause only refers to the regulatory power of Congress, the Supreme Court has held that it also bars states from overly burdening interstate economic activity.⁷⁰ States can violate the Commerce Clause in two ways: 1) by explicitly discriminating against out-of-state economic interests, or 2) by regulating interstate commerce so excessively that "the burden imposed on such commerce is clearly excessive in relation to the putative local benefits."⁷¹ The latter situation requires a court to engage in what's known as "*Pike* balancing" after the case that introduced the doctrine.⁷²

Environmental statutes that treat in-state and out-of-state activities differently, whether explicitly or in their practical effects, are likely to violate the Commerce Clause.⁷³ These include taxes and fees that are discriminatorily imposed on out-of-state entities for pollution and waste.⁷⁴ However, a State Climate Superfund would not distinguish between in-state and out-of-state responsible parties, and thus would not run afoul of the Commerce Clause on these grounds. And while the law would impose economic costs on entities beyond state borders, it has considerable local benefits. To date, it appears that no court has invalidated a state environmental law that treats in-state and out-of-state parties the same, on the grounds that its effects are overly burdensome on interstate economic activity as compared to the local benefits under *Pike* balancing.⁷⁵

⁶⁹ See *Commonwealth Edison Co.*, 271 F.3d at 1357 ("The critical question is whether extension of existing law could be foreseen as reasonably possible.").

⁷⁰ See, e.g., *Or. Waste Sys. v. Dep't of Env't Quality*, 511 U.S. 93, 98 (1994) (holding that the Commerce Clause prohibits a state surcharge on the disposal of solid waste generated out of state).

⁷¹ *Id.* at 99 (quoting from *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970)).

⁷² *Pike v. Bruce Church*, 397 U.S. 137 (1970).

⁷³ See, e.g., *C & A Carbone v. Town of Clarkstown*, 511 U.S. 383, 392 (1994) ("Discrimination against interstate commerce in favor of local business or investment is per se invalid, save in a narrow class of cases in which the municipality can demonstrate, under rigorous scrutiny, that it has no other means to advance a legitimate local interest"); *Alliance for Clean Coal v. Miller*, 7th Cir. 1995 (finding that an Illinois Statute that discriminated against out-of-state coal violated the Commerce Clause).

⁷⁴ See *Chemical Waste Management, Inc. v. Hunt*, 504 U.S. 334 (1992) (invalidating an Alabama statute that imposed an additional fee on hazardous waste generated outside the state that was subsequently disposed of within Alabama).

⁷⁵ Indeed, most laws survive scrutiny under the second test. See *Dep't of Revenue v. Davis*, 553 U.S. 328, 339 (2008). See also Alexandra B. Klaas & Elizabeth Henley, *Energy Policy, Extraterritoriality, and the Dormant Commerce Clause*, 5 SAN DIEGO J. CLIMATE & ENERGY L. 127, 129 (2014) (arguing that the Dormant Commerce Clause should not prevent state regulation of the energy sector to address climate change given the constitutional validity of "the hundreds of other health, safety, and environmental protection laws that influence companies selling light bulbs, appliances, and other products in interstate markets"); Tanner Hendershot, *The United States of California: Ninth Circuit Tips the Dormant Commerce Clause Scales in Favor of the Golden State's Animal Welfare Legislation*, 49 PEPP. L. REV. 469, 482 (2022) (examining the failure of dormant commerce clause challenges to California's environmental and animal welfare laws).

The Supreme Court’s recent, highly fractured decision in *National Pork Producers Council v. Ross* underscores the importance of demonstrating the local benefits of state environmental laws. The case concerned a California law that banned the sale of pork products within the state unless out-of-state farmers complied with certain space requirements for the animals.⁷⁶ While four members of the court held that the plaintiffs did not demonstrate that the state law would substantially burden interstate commerce,⁷⁷ five Justices found that the plaintiffs provided sufficient evidence of a substantial burden; four of the five would have allowed the U.S. Court of Appeals for the Ninth Circuit to engage in traditional pike balancing.⁷⁸ In a short, narrow concurrence agreeing to dismiss the claims, Justice Barrett wrote that such balancing was not warranted in the case despite the interstate economic burdens because “the benefits and burdens of Proposition 12 are incommensurable. California’s interest in eliminating allegedly inhumane products from its markets cannot be weighed on a scale opposite dollars and cents—at least not without second-guessing the moral judgments of California voters or making the kind of policy decisions reserved for politicians.”⁷⁹ A majority of the court thus agreed that California’s law did not violate the Dormant Commerce Clause,⁸⁰ though for different reasons.⁸¹

Despite the split nature of the opinions in *National Pork Producers*, the decision is a positive one for state environmental regulations. A majority of the Justices agreed that courts should use extreme caution before even applying the *Pike* balancing test to state regulations, and the opinions suggest that plaintiffs will have an exceedingly tough time showing that nondiscriminatory state laws fail such a test when it is applied.⁸² A State Climate Superfund Program would therefore not pose problems under current Commerce Clause precedents so long as the state ensures that the program’s financial burdens are proportionate to the expected local harms from climate change.⁸³ The greater the upstream effects on commerce and cost increases

⁷⁶ See *Nat’l Pork Producers Council v. Ross*, 215 L.Ed.2d 336, 344 (U.S. 2023).

⁷⁷ See *id.* at 357. Justice Gorsuch, Justice Thomas, Justice Kagan and Justice Sotomayor agreed that the law did not impose a substantial burden on interstate commerce.

⁷⁸ Justice Barrett, Chief Justice Roberts, Justice Alito, Justice Kavanaugh and Justice Jackson concluded that the law did impose a substantial burden on interstate commerce. For Chief Justice Roberts’ dissent, which Justices Alito, Kavanaugh, and Jackson joined, see *id.* at 364 (“I would find that petitioners’ have plausibly alleged a substantial burden against interstate commerce, and would therefore vacate the judgment and remand the case for the court below to decide whether petitioners have stated a claim under *Pike*.”). Justice Barrett joined only parts of the majority opinion and filed a separate concurrence explaining her reasoning in the case.

⁷⁹ *Id.* at 363 (Barrett, J., concurring).

⁸⁰ *Id.* at 353.

⁸¹ Compare *id.* at 356–57 (“*Pike* requires a plaintiff to plead facts plausibly showing that a challenged law imposes “substantial burdens” on interstate commerce before a court may assess the law’s competing benefits or weigh the two sides against each other . . . And, tellingly, the complaint before us fails to clear even that bar.”) (Gorsuch, J.) with *id.* at 363–64 (“I disagree with my colleagues who would hold that petitioners have failed to allege a substantial burden on interstate commerce . . . The complaint plausibly alleges that Proposition 12’s costs are pervasive, burdensome, and will be felt primarily (but not exclusively) outside California . . . For this reason, I do not join Part IV-C of Justice Gorsuch’s opinion. If the burdens and benefits were capable of judicial balancing, I would permit petitioners to proceed with their *Pike* claim.”) (Barrett, J., concurring).

⁸² See Daniel Farber, *Has the Supreme Court Declared Open Season on Interstate Commerce? How to Read a Baffling Supreme Court Ruling*, LEGAL PLANET (May 24, 2023), <https://legal-planet.org/2023/05/24/has-the-supreme-court-declared-open-season-on-interstate-commerce/>.

⁸³ See *Pike v. Bruce Church, Inc.*, 397 U.S. 137 (1970) (holding that an Arizona law regulating food packaging violated the Dormant Commerce Clause because the local benefits did not outweigh the burden on interstate commerce).

to market participants in other states, the larger the local benefits need to be.⁸⁴ The legislature should fully elaborate the need for a climate superfund, monetizing damages to the state wherever possible and explaining how adaptation and mitigation projects will offset these harms.

In addition, it would be prudent for the state legislature to discuss any incommensurable environmental devastation that will occur from rising temperatures. Justice Barrett's concurrence suggests that a state's moral judgments should not be weighed against even substantial burdens on interstate commerce. And to the degree that a state and its residents believe that there are ethical reasons to hold polluters accountable for climate change harms, those should also be noted in the legislation.

IV. Conclusion

There is considerable precedent indicating that a State Climate Superfund Program can be designed in accordance with federal law and the U.S. Constitution. The CAA should not preempt states from imposing financial liability on fossil fuel companies for climate change harms, as the law gives states the authority to control pollution more stringently than the federal government and the Program would not interfere with a federal permitting scheme for greenhouse gases. The Program also would not appear to violate the Commerce Clause, so long as its effects are not overly burdensome on interstate economic activity as compared to the local benefits. Nor would the Program's retroactive liability pose a problem under the Due Process Clause, particularly given that fossil fuel companies are operating in a highly regulated industry and have known for decades that greenhouse gas pollution could harm the environment and public health. Finally, judicial precedents on the Due Process Clause suggest that a state could constitutionally exercise jurisdiction over responsible parties who have cultivated a market for fossil fuels in the state. It will be more challenging to extend jurisdiction over responsible parties whose only connection to the state is through their emission of greenhouse gases, but it may be possible to defend the inclusion of these companies by analogizing to prior case law on hazardous pollution.

⁸⁴ *See id.* at 142 ("If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the local interest involved, and on whether it could be promoted as well with a lesser impact on interstate activities.").