MEMORANDUM

TO: Interested parties
FROM: Rachel Rothschild, Legal Fellow, Institute for Policy Integrity
DATE: 4/16/2022
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.1 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, such as January 1, 2000 through December 31, 2018.

The Program could be designed and implemented in accordance with the U.S. Constitution and federal law, notably the Clean Air Act (CAA). Nevertheless, 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 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), which a Climate Superfund Program would be modeled after. Recent state tort litigation against fossil fuel companies is also relevant to the issues of preemption and due process. Based on caselaw 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 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 significant 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 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, particularly if responsible parties are defined solely based on their contributions to worldwide greenhouse gas emissions. 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, though there is some 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. Preemption may be explicit, when Congress clearly states 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. 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. 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.”

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. 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. 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. No court has ruled to date on the question of preemption, with much of the current litigation mired in disputes over whether the cases should proceed in federal or state courts.

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. In any analysis of preemption, courts follow a doctrine known as the

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7 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 Rachel Rothschild, State Nuisance Law and the Climate Change Challenge to Federalism, 27 NYU ENV’T L. J. 412 (2019); see also Jonathan Adler, Displacement and Preemption Of Climate Nuisance Claims (working draft, 2021), available at https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?article=3123&context=faculty_publications.
“presumption against preemption” of state laws, which has been consistently applied in cases of federal statutes dealing with environmental pollution. 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. Nor is it likely a court would find that there is a direct conflict between the CAA and a State Climate Superfund Program. The CAA is designed to have a “cooperative federalism” approach to environmental protection, and Congress expressly preserved state authority to set more stringent in-state pollution controls than the federal government in Section 116 of the CAA.

The only potentially problematic caselaw 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. 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 pollution are preempted by federal law. 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, directly violating the 1990 CAA amendments. 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. The court also noted that New York’s law was not preserved under the CAA because it tried to

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10 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).

11 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.”).

12 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’”).


14 See 42 U.S.C.S. § 7416 (stating that, aside from exceptions regarding motor vehicle emission limits, nothing in the CAA “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”).


16 Id. at 492.

17 See 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”).

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

19 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.”).
control emissions from other states, which the CAA and Supreme Court precedent do not allow.

These decisions, however, do not suggest that the CAA preempts a State Climate Superfund. The program would not interfere with any current federal regulatory program, nor seek to control greenhouse gas emissions from other states. 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. Under their general police powers, states have authority to legislate to protect the health and safety of their citizens, and New York is expected to incur significant harms from climate change. As detailed in the most recent report from the New York State Department of Environmental Conservation (DEC) on climate change vulnerabilities, the DEC notes that average temperatures have increased about 0.6°F per decade since 1970, with winter warming exceeding 1.1°F. As a consequence, New Yorkers have experienced more frequent episodes of severe precipitation, poorer air quality, and greater risk of insect-borne diseases. By 2080, annual average temperatures are projected to rise 4.1°F to 6.1°F, with dire consequences throughout New York. Experts anticipate that these temperature increases will lead to more extreme weather events, sea level rise, coastal erosion and floods. The state therefore has an incredibly 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. And during this term, the Supreme Court seems poised to further limit EPA’s ability to regulate greenhouse gas emissions using section 111(d) in *West Virginia v. EPA*. While the petitioners have not challenged EPA’s authority to regulate greenhouse gases per se under section 111(d), they have sought to restrict the agency from imposing a far-reaching regulation without direct authorization from Congress. Previously, the Supreme Court found that section 111(d) indicated that Congress sought to confer EPA with the authority to regulate greenhouse gases

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20 See id. at 89.

21 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”).

22 See id. at 2315 (explaining that greenhouse gas emissions are a “quintessential example of a negative externality” and arguing that liability should not be imposed multiple times for the same emissions).

23 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).


25 See id.

26 See id. at 6–10.


29 See, e.g., Brief for Petitioners at 12–14, West Virginia v. EPA, No. 20-1530 (S. Ct. Dec. 13, 2021) (arguing that EPA should not be allowed to exercise “transformative power” over the power industry by enacting regulations that would “force plants to shut down” and “decide major questions implicating hundreds of billions of dollars”).
from power plants.\textsuperscript{30} Any limitations on EPA’s regulatory powers would therefore bolster arguments that EPA has not sufficiently occupied the field of greenhouse gas regulations.

Even if the Supreme Court preserves EPA’s ability to meaningfully regulate greenhouse gas emissions from power plants under section 111(d), and the agency subsequently adopts a permitting scheme for these pollutants, a State Climate Superfund Program would still not appear to pose an obstacle to its implementation. The responsible parties are defined as major fossil fuel companies that have contributed to the buildup of greenhouse gas emissions over a set period, rather than power plants themselves.\textsuperscript{31} Therefore, the state legislation is targeting different entities than a potential federal permitting scheme. It is also seeking to address past emissions rather than regulating future activities. Given these distinctions, it will be quite difficult for responsible parties to successfully argue that a State Climate Superfund Program would pose an obstacle to complying with a potential future EPA permitting scheme for greenhouse gas emissions.\textsuperscript{32}

\section*{b. Due Process}

\textit{i. Jurisdiction}

A company that falls within a State Climate Superfund Program’s definition of a “responsible party” may try to claim that the state does not have proper jurisdiction over it, or in the alternative, that the exercise of this jurisdiction violates the Due Process Clause of the Fourteenth Amendment to the U.S. Constitution. A state will have general jurisdiction over all companies that are considered “at home” in the state because of “continuous and systematic” operations within the forum.\textsuperscript{33} For example, a company would be considered “at home” where it is headquartered or incorporated.\textsuperscript{34} In the absence of general jurisdiction, a state can exert specific jurisdiction over parties whose conduct falls under the state’s “long arm” statute.\textsuperscript{35} This requires a court to first find that the responsible parties have committed a tort, meaning that they 1) had a duty, 2) breached that duty, and 3) the breach proximately caused an injury.\textsuperscript{36}

\textsuperscript{30} See Am. Elec. Power Co. v. Connecticut, 564 U.S. 410, 411–12 (2011) (“Once EPA lists a category, it must establish performance standards for emission of pollutants from new or modified sources within that category, § 7411(b)(I)(B), and, most relevant here, must regulate existing sources within the same category, § 7411(d) . . . [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. There is no room for a parallel track.”).

\textsuperscript{31} See Rothschild, supra note 9, at 451–52.

\textsuperscript{32} 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.”).

\textsuperscript{33} Goodyear Dunlop Tires Operations, S.A. v. Brown, 564 U.S. 915, 919 (2014) (stating 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).

\textsuperscript{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).

\textsuperscript{35} 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).

release of pollutants and hazardous substances that harm the environment is indisputably a tort under state common law, but whether and how liability can attach to non-resident parties over their extraction and distribution of fossil fuels is a separate inquiry.

The relevant provisions of New York State’s long-arm statute for jurisdiction over responsible parties would be either § 302(a)(1) or (a)(3). The first prong allows jurisdiction over an entity who “transacts any business within the state or contracts anywhere to supply goods or services in the state.” The second prong allows jurisdiction over tortious acts committed outside the state by a non-resident entity, when the entity either 1) regularly does or solicits business, or engages in any other persistent course of conduct, or derives substantial revenue from goods used or consumed or services rendered, in the state, or 2) expects or should reasonably expect the act to have consequences in the state and derives substantial revenue from interstate or international commerce.

Depending on the responsible party, jurisdiction under the first prong may be sufficient. For example, if a responsible party sold fossil fuel products in the state, a court would likely find jurisdiction appropriate under § 302(a)(1). The state could also exert jurisdiction over responsible parties who did not directly sell fossil fuels to New York consumers under the second prong. In that case, it would be necessary to either demonstrate that the companies earned substantial revenue from fossil fuel consumption in New York or, alternatively, establish that the companies should have reasonably expected their sale of fossil fuel products to cause harm in the state and derived substantial revenue from interstate or international commerce. In the latter case, the requisite knowledge of potential harm could be proven through historical documentation of a responsible party’s knowledge about the risks of climate change. It is therefore likely that New York’s long arm statute will encompass most, if not all, potentially responsible parties.

Once a court determines that the long-arm statute has properly conferred jurisdiction over an entity, it must then ensure that the exercise of that jurisdiction does not violate the Due Process Clause. Supreme Court precedent requires that parties have “certain minimum

37 See Nielsen, 870 F. Supp. at 439 (finding that “the defendant's alleged contamination of soil and groundwater may be construed as ‘tortious conduct’ within the meaning of the Connecticut long arm statute”).
39 Id. at § 302(a)(1).
41 See id. at *26 (finding New York has jurisdiction over out-of-state chemical manufacturers for alleged harms from PFAS contamination, since they engaged in “repeated direct sales into New York to New York customers, over a lengthy and continuous period of time”).
44 See McCrory, supra note 36, at 485.
contacts” with a forum state that wishes to exert specific jurisdiction over them, and that the exercise of jurisdiction does not offend traditional notions of “fair play and substantial justice.”

Recent caselaw 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.” Furthermore, the harm at issue must be connected to these activities and contacts within the state.

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. 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. 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. Similar claims could be brought by responsible parties under a Climate Superfund Program.

Yet 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. 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

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47 See 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).
48 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).
51 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).
52 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.
the Due Process Clause. 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.” A court need not find that the claim arose “because of the defendant’s in-state conduct” in a causal manner. 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. 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.” 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.

Fossil fuel producers who have not cultivated a market in New York and have few contacts with the state could bring a more plausible due process challenge. For example, while it is likely that American companies such as Exxon Mobil or Chevron have marketed or sold fossil fuel products into New York, foreign entities such as Saudi Aramco or the National Iranian Oil Company may not have engaged in such practices. 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 these cases typically reside in neighboring states rather than in a different part of the country or outside the U.S.

There is some caselaw, 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. The Canadian facility sought to avoid liability by claiming that it was

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53 Id. at 1021.
54 Id.
55 Id. at 1026.
56 Id. at 1028.
57 Id. at 1029.
59 See 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 the 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).
60 For a historical analysis of the top greenhouse gas producers, see B. 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).
61 See Rothschild, supra note 9, at 425–26.
improper for the state to exercise jurisdiction since it had not “expressly aimed” its waste at Washington State. 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 personal jurisdiction, given decades of internal documents showing that the company knew river currents were carrying its waste to Washington State.

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.” 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. 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. 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, 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 law 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.

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63 *Id.* at 577.
64 *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.
66 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).
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*. 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. However, there are numerous examples of retroactive liability laws that have withstood constitutional challenges under the Due Process Clause, 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.

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 “legitimate legislative purpose furthered by rational means.” 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. In addition, some courts have assessed whether the liability imposed is “severely disproportionate” to the parties contributions to the problem or the

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68 905 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).


71 See 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. 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).

72 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. 313, 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., 49 F. Supp. 2d 96, 101 (N.D.N.Y. 1999) (explaining that “economic legislation enjoys a ‘presumption of constitutionality’ that can be overcome only if the challenger establishes that the legislature acted in an arbitrary and irrational way”).

harm incurred. 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.

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 is liability “severely disproportionate” to the harm caused or to the parties’ contributions to climate change, as the cost recovery provision apportions payments according to a responsible party’s relative share of greenhouse gas emissions. A de minimis threshold would also establish a lower limit below which emitters will not be deemed “responsible parties” under the Program, which alleviates the potential issue of small producers falling under its purview. Furthermore, liability could be limited to greenhouse gas emissions after a specified year, such as 2000, when the reality of climate change was already well-accepted within the scientific community. Fossil fuel companies certainly knew of the problem and had been operating in a highly regulated industry at that time. It was also evident that federal or state governments could impose costs on fossil fuel companies for greenhouse gas pollution given the extensive past regulation of air pollution. For these reasons, it is extremely unlikely that a State Climate Superfund Program could be successfully challenged as a violation of due process because of its retroactive application to past polluting 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. States can violate the Commerce Clause in two general 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.”

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. These include

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74 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).
75 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.”).
76 See Commonwealth Edison Co., 271 F.3d at 1357 (“The critical question is whether extension of existing law could be foreseen as reasonably possible.”).
77 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).
78 Id. at 99 (quoting from Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970)).
79 See, e.g., C & A Carbene 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
taxes and fees that are discriminatorily imposed on out-of-state entities for pollution and waste.\textsuperscript{80} However, 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.\textsuperscript{81} The Supreme Court has recently granted certiorari in a case involving a California law banning the sale of pork products within the state unless out-of-state farmers comply with certain space requirements for the animals.\textsuperscript{82} But while the decision could lead the Justices to revisit the “dead letter” state of the Dormant Commerce Clause,\textsuperscript{83} it is doubtful that the case will have any impact on the legality of a State Climate Superfund Program given differences between the two laws and skepticism towards Dormant Commerce claims among the court’s more conservative Justices.\textsuperscript{84}

A State Climate Superfund Program would therefore not pose problems under current Commerce Clause precedents. It would not differentiate between responsible parties that reside in-state or out-of-state, but instead would impose liability proportionally to an entity’s greenhouse gas emissions. Nor does the legislation’s burden on energy commerce appear excessive in relation to the local state benefits from a Climate Superfund Program.\textsuperscript{85} The state will be able to make a persuasive case that the costs of climate adaptation are likely to be extensive, and the program could greatly assist the state with these financial demands.

Prior to passing the bill, however, it would be prudent for the state legislature to assess the liability costs to companies that are likely to be deemed “responsible parties” under the law in order to ensure that the program does not impose financial burdens that are disproportionate to

\textsuperscript{80} 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).

\textsuperscript{81} 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).


\textsuperscript{83} Nat'l Pork Producers Council v. Ross, No. 20-55631, 2021 U.S. App. LEXIS 22337, at *26 (9th Cir. July 28, 2021) (“While the dormant Commerce Clause is not yet a dead letter, it is moving in that direction.”).

\textsuperscript{84} Some of the court’s more conservative Justices, notably Neil Gorsuch and Clarence Thomas, have expressed skepticism that the Dormant Commerce Clause has a basis in the constitution. See, e.g., United Haulers Ass’n v. Oneida-Herkimer, 550 U.S. 330, 349 (2007) (Thomas, J., concurring in judgment) (“The negative Commerce Clause has no basis in the Constitution and has proved unworkable in practice.”); Energy & Envt’l Legal Inst. v. Epel, 793 F.3d 1169, 1171 (10th Cir. 2015) (While on the U.S. Court of Appeals for the Tenth Circuit, Justice Gorsuch noted that “[d]etractors find dormant commerce clause doctrine absent from the Constitution’s text and incompatible with its structure,” but stated that, as an inferior court, they must “take Supreme Court precedent as we find it”).

\textsuperscript{85} 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).
the expected harms from climate change. The greater the upstream effects on commerce and cost increases to market participants in other states, the larger the local benefits need to be. ⁸⁶

IV. Conclusion

A State Climate Superfund Program can be designed in accordance with federal law and the U.S. Constitution. The CAA would 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 violate the Dormant Commerce Clause, 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 had knowledge of how 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 caselaw on hazardous pollution.

⁸⁶ 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.”).