18-2188-cv

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

CITY OF NEW YORK,
Plaintiff-Appellant,
v.
CHEVRON CORPORATION, CONOCOPHILLIPS, EXXON MOBIL CORPORATION, ROYAL DUTCH SHELL PLC, BP P.L.C,
Defendants-Appellees.

On appeal from the United States District Court
for the Southern District of New York

BRIEF OF PROFESSOR CATHERINE M. SHARKEY AS *AMICUS CURIAE* IN SUPPORT OF PLAINTIFF-APPELLANT

Catherine M. Sharkey
Crystal Eastman Professor of Law
New York University School of Law
40 Washington Sq. South
New York, NY 10012
(212) 998-6729
catherine.sharkey@nyu.edu
Amicus Curiae

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases **Page(s)**

TABLE OF AUTHORITIES (cont'd)

Cases (cont'd) **Page(s)**

Other Authorities

TABLE OF AUTHORITIES (cont'd)

Other Authorities (cont'd) **Page(s)**

INTEREST OF AMICUS CURIAE

Professor Catherine M. Sharkey, the Crystal Eastman Professor of Law at New York University School of Law, submits this brief as *amicus curiae* in support of Plaintiff-Appellant the City of New York.[1] All parties have consented to the filing of this brief.

Professor Sharkey has published dozens of articles in the fields of torts, products liability, and administrative law.[2] She is co-author with Richard Epstein of *Cases and Materials on Torts* (11th ed. 2016) and co-editor with Saul Levmore of *Foundations of Tort Law* (2d ed. 2012). She is a founding member of the World Tort Law Society and an elected member of the American Law Institute (ALI). Professor Sharkey is an appointed Public Member of the Administrative Conference of the United States and an Adviser to the ALI *Restatement (Third) of Torts: Liability for Economic Harm*. She was a 2011-12 Guggenheim Fellow.

---

[1] Under Federal Rule of Appellate Procedure 29(a)(4)(E), Professor Catherine Sharkey states that no party's counsel authored this brief in whole or in part, and no party or party's counsel contributed money intended to fund the preparation or submission of this brief. No person—other than the amicus curiae—contributed money intended to fund the preparation or submission of this brief. This brief does not purport to represent the views of New York University School of Law, if any.

[2] *See* Publications of Catherine M. Sharkey, *available at* http://its.law.nyu.edu/facultyprofiles/index.cfm?fuseaction=profile.publications&personid=26965.

As a tort law scholar, Professor Sharkey has extensively studied the legal issues relevant to this case and can provide unique assistance to the Court by explaining the application of tort law to the City's claims. In addition, Professor Sharkey has a keen interest in the development of the law within her areas of teaching and scholarship.

SUMMARY OF ARGUMENT

With this lawsuit, the City seeks to force the fossil fuel defendants to pay for the damages caused by their production and sale of fossil fuels and thus to internalize the external cost associated with the consumption of fossil fuels through regular tort principles. By externalizing that cost, the fossil fuel companies enjoy a subsidy that induces inefficient overconsumption and leaves injured parties without a remedy. Tort liability would reasonably have them internalize this cost, while also enabling the City to take cost-justified preventive efforts to mitigate the impact of climate change going forward.

Nuisance law is "of vast significance in both ordinary private disputes and in connection with larger social harms." Richard A. Epstein & Catherine M. Sharkey, *Cases and Materials on Torts* 590 (11th ed. 2016). "[N]uisances come in many shapes and sizes" and not "all nuisances should be treated alike," but the law of nuisance has long covered both private and public disputes that cause injuries, including claims where environmental pollution caused the injuries. Richard A.

Epstein, *Federal Preemption, and Federal Common Law, in Nuisance Cases*, 102 NW. U. L. REV. 551, 555, 559 (2008). In these types of cases, courts and scholars overwhelmingly agree that nuisance liability plays a potentially positive and economically justified role in forcing actors to internalize the harms that their activities cause. A tort claim seeking compensation for climate change-related harms is a special species of that kind of environmental pollution case. But applying nuisance law here is nothing extraordinary. It represents a natural extension of longstanding theoretical and doctrinal principles of tort law.

ARGUMENT

I. WELL-ESTABLISHED PRINCIPLES OF LAW AND ECONOMICS EMBODIED IN NEW YORK CASE LAW SUPPORT THE VIABILITY OF COMMON LAW NUISANCE CLAIMS AGAINST THE FOSSIL FUEL DEFENDANTS

The City's state-law nuisance and trespass claims allege that defendants' production and sale of fossil fuels has caused harm that requires compensation. *See* Br. for Appellant at 8. The District Court dismissed the case partly out of concern that "the immense and complicated problem of global warming requires a comprehensive solution that weighs the global benefits of fossil fuel use with the gravity of the impending harms." *City of New York v. BP P.L.C.*, 325 F. Supp. 3d 466, 475–76 (S.D.N.Y. 2018). But New York common law nuisance provides a mechanism whereby the court can require the fossil fuel defendants to internalize

the costs of their harm-producing activities without engaging in an assessment of whether the gravity of the harms outweighs the social utility of fossil fuel use.

A. The Economic Justification for Tort Liability

"Although a general activity may have great utility it may still be unreasonable to inflict the harm without compensating for it." *Restatement (Second) of Torts* § 821B cmt. i (1979). Thus, the widely recognized economic justification for private and public nuisance theories is that those types of claims properly induce actors to internalize the societal costs of their activities, while recognizing that even activities with great utility may externalize harms onto others. And "[i]n determining whether to award damages [for a nuisance], the court's task is to decide whether it is unreasonable to engage in the conduct without paying for the harm done." *Id.*; *see also Little Joseph Realty v. Town of Babylon*, 363 N.E.2d 1163, 1168 (N.Y. 1977) ("Nuisance is based upon the maxim that a man shall not use his property so as to harm another." (internal quotation marks omitted) (citation omitted)); *William Aldred's Case*, 9 Coke Rep. 57b, 77 Eng. Rep. 816 (1610) (articulating the maxim *sic utere tuo ut alienum non laedas* ["one should use his own property in such a manner as not to injure that of another"] and rejecting defendant's invitation to consider the utility of his hog sty in finding nuisance).

Tort liability forces actors to internalize the societal costs of their actions, thus creating incentives for the actors to minimize the risks and external costs of harm-

producing activities. Especially in the "stranger" context—in which parties have no pre-existing relationship and thus no ability to bargain *ex ante* regarding the allocation of risks and responsibilities for their actions—"the real risk is that without liability a defendant will ignore a plaintiff's losses and thus externalize the costs of conduct from which he draws the exclusive benefit." Epstein, *supra*, at 561. In other words, "the preservation of a tort remedy [in a nuisance case] would limit the danger of externalities." *Id*. at 573.

The New York Court of Appeals has embraced the principle that tort law can be used for economic deterrence and to allocate the cost of damages to the party that is the "cheapest cost avoider." New York's canonical nuisance cases—*532 Madison Avenue Gourmet* and *Boomer*—embrace the premise of economic deterrence theory, which holds that tort law imposes liability for the societal costs of harm-producing activities to ensure that actors take optimal care. *See 532 Madison Ave. Gourmet Foods, Inc. v. Finlandia Ctr., Inc.*, 750 N.E.2d 1097 (N.Y. 2001); *Boomer v. Atl. Cement Co.*, 257 N.E.2d 870 (N.Y. 1970).

As the court explained in *532 Madison Avenue Gourmet*, a public nuisance case involving the unlawful obstruction of a public street, "[a]t its foundation, the common law of torts is a means of apportioning risks and allocating the burden of loss." 750 N.E.2d at 1101. In *Boomer*, a private nuisance case where the court addressed damages caused by "dirt, smoke and vibration" emanating from a cement

plant, the court found that it was appropriate to award permanent damages to plaintiffs for the ongoing harms of the cement plant—rather than an injunction—in order to "compensate them for the total economic loss to their property." 257 N.E.2d at 871, 873. In *Boomer*, "the court granted a damage remedy, at least in part on an efficiency rationale that damages would provide 'a reasonable effective spur to research for improved techniques to minimize' the cement plant's adverse effects on its neighbors." William E. Nelson, *From Fairness to Efficiency: The Transformation of Tort Law in New York, 1920-1980*, 47 BUFF. L. REV. 117, 223–24 (1999) (quoting *Boomer*, 257 N.E.2d at 873); *see also Little Joseph Realty*, 363 N.E.2d at 1168 (stating that *Boomer* applied a risk-utility logic to conclude that "where the adverse economic effects of a permanent injunction far outweighed the loss plaintiffs there would suffer" it was more appropriate "to limit the relief to monetary damages as compensation"). In this way, private nuisance can be used to provide a remedy to a person whose right to "use or enjoyment of land" has been disturbed. *Copart Indus., Inc. v. Consol. Edison Co. of New York*, 362 N.E.2d 968, 971 (N.Y. 1977).

The use of tort law for these purposes finds strong support in the academic literature. The Honorable Guido Calabresi's scholarship provides the "theoretical scaffolding" for the economic deterrence justification for tort liability generally and nuisance liability in particular. Frank I. Michelman, *Pollution as a Tort: A Non-Accidental Perspective on Calabresi's* Costs, 80 Yale L.J. 647, 667 (1971). In his

seminal book, *The Costs of Accidents: A Legal and Economic Analysis*, Judge Calabresi transformed the field of tort law by defining its goal as reducing the total costs of "accidents," which are deemed to include costs of the harms inflicted, as well as costs of precautionary measures to avoid harms, and administrative costs. Guido Calabresi, *The Costs of Accidents: A Legal and Economic Analysis* at 23, 30 (1970). This economic focus for tort law "seeks to minimize the total costs of accidents, which include the costs of harms, the costs of preventing harms, and administrative costs," and "considers costs and benefits on both sides of the 'v'—not just risks and harms to the plaintiff victim, but also risks to the defendant, as well as risks to third parties who may depend upon the plaintiff or defendant." Catherine M. Sharkey, *In Search of the Cheapest Cost Avoider: Another View of the Economic Loss Rule*, 85 U. Cin. L. Rev. 1017, 1025 (2017).

Two pillars of this approach are the cost-internalization principle and the cheapest cost avoider principle. According to the former, an actor will internalize the future expected costs of her activities, which will lead her to take cost-justified safety precautions. In other words, the actor will be induced to take a safety precaution so long as the marginal cost of taking the precaution is less than the expected marginal benefit of averted harms. Thus, this first goal of tort liability is to force actors to internalize the costs of their activities that would otherwise be externalized onto others.

Under New York law, a defendant "is liable for maintenance of a public *nuisance* irrespective of negligence or fault." *New York v. Shore Realty Corp.*, 759 F.2d 1032, 1051 (2d Cir. 1985); *see also City of New York ex. rel. People v. Taliaferrow*, 544 N.Y.S.2d 273, 277 (Sup. Ct. 1989) ("In regard to the question of compensatory and punitive damages, such an award may be made without fault where a public nuisance has been found."), *aff'd sub nom. City of New York v. Taliaferrow*, 551 N.Y.S.2d 253 (N.Y. App. Div. 1990); *State v. Schenectady Chemicals, Inc.*, 459 N.Y.S.2d 971, 976 (Sup. Ct. 1983) ("[With] reference to a public nuisance, it is not necessary to show acts of negligence . . . ." (quotation marks omitted)), *aff'd as modified*, 479 N.Y.S.2d 1010 (N.Y. App. Div. 1984); *City of New York v. A-1 Jewelry & Pawn, Inc.*, 247 F.R.D. 296, 343 (E.D.N.Y. 2007) ("In public nuisance cases, *in particular those brought by a public authority*, allegations of fault have generally been found to be irrelevant under New York law." (emphasis added) (collecting cases)).

The purpose of imposing nuisance liability in these circumstances, is to align a defendant's incentives in a way that would better take into account the harm being caused, even if the utility of the harm-producing activity outweighs the costs it externalizes or inflicts onto others. *See Boomer*, 257 N.E.2d at 872–75 (imposing damages for a nuisance notwithstanding the fact that the utility of the defendant's polluting cement factory outweighed the costs to the plaintiff landowners);

Restatement (Second) of Torts § 826(b) (1979) (recognizing nuisance liability for an "intentional invasion of another's interest in the use and enjoyment of land" where "the harm caused by the conduct is serious and the financial burden of compensating for this and similar harm to others would not make the continuation of the conduct not feasible"); *see also* Robert C. Ellickson, *Alternatives to Zoning: Covenants, Nuisance Rules, and Fines as Land Use Controls*, 40 U. Chi. L. Rev. 681, 720–21 & n.148 (1973) (praising the court's decision in *Boomer* as reversing a line of cases which relied on the impropriety of injunctive relief to "incorrectly limit[] the availability of damage awards that would internalize the harmful externalities").

According to the second principle of the "cheapest cost avoider," costs should be allocated to the party or parties in the best position to avoid the harms at the lowest cost. In other words, given that "optimal avoidance requires both the injurer and victim to take steps to avoid damage, an efficient liability approach will require a comparison of the avoidance costs of both parties." William M. Landes & Richard A. Posner, *The Economic Structure of Tort Law* 41 (1987). Under this principle, in the "absence of certainty as to whether a benefit is worth its costs to society," costs "should be put on the party or activity best located to make such a cost-benefit analysis." Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 Harv. L. Rev. 1089, 1096 (1972). Such an approach "direct[s] courts to consider which party is the cheapest cost

avoider, taking into consideration the availability of relevant insurance markets, the feasibility of precautionary measures, as well as the likelihood that the potential tortfeasor would be sufficiently deterred." Sharkey, *supra*, at 1042.

B. The Fossil Fuel Defendants Are the Cheapest Cost Avoiders

Applying the relevant factors to the case at hand, as numerous scholars have recognized, the fossil fuel defendants emerge as the likely cheapest cost avoiders. As Eduardo Peñalver has explained, "fossil fuel companies are better positioned to internalize the accident costs produced as a result of fossil fuel use, by incorporating the costs of expected accidents into the price of fossil fuels." Eduardo M. Peñalver, *Acts of God or Toxic Torts—Applying Tort Principles to the Problem of Climate Change*, 38 Nat. Resources J. 563, 573 (1998). The fossil fuel defendants have the relevant expertise and resources to conduct cost-benefit analyses comparing increased consumption with increased costs produced by that consumption. *See id.* at 572–73 ("[F]ossil fuel companies have an enormous amount of resources with which they can purchase the expertise needed to assess the often conflicting information about climate change and its expected costs."). Moreover, given that the fossil fuel industry is so concentrated, with "100 fossil fuel producers" who "are responsible for 62% of all GHG emissions from industrial sources since the dawn of the Industrial Revolution," Am. Compl. ¶ 3, the cost for these major industry players to take action is substantially lower than it would be for potential victims to do so.

In contrast, victims cannot reasonably take increased care to "avoid climate change." Jonathan Zasloff, *The Judicial Carbon Tax: Reconstructing Public Nuisance and Climate Change*, 55 UCLA L. Rev. 1827, 1838 (2008). As a typical "victim" of climate change, the City of New York has imperfect and incomplete information regarding the risks posed by the fossil fuel defendants' operations, an asymmetry the fossil fuel companies encourage. *See* Am. Compl. ¶¶ 93–116 (detailing defendants' myriad efforts to promote consumption of fossil fuels). Moreover, plaintiffs like the City of New York likely face organizational impediments in attempting to bargain or induce the fossil fuel defendants to reduce production and consumption of fossil fuels. *See, e.g.*, David A. Grossman, *Warming Up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation*, 28 Colum. J. Envtl. L. 1, 4 (2003) ("[T]he transaction costs involved in organizing the vast numbers of potential victims [of climate change] are immense."). Absent a tort damages remedy such as the one demanded in this case, municipalities like New York City are likely to invest in socially suboptimal levels of preventive measures because of significant resource constraints.[3]

[3] The investment in adaptation projects is cost-justified. *See* Fran Sussman, et al., *Ctr. for Am. Progress, Climate Change: An Unfunded Mandate* at 3 (2013), https://www.americanprogress.org/issues/green/reports/2013/10/28/78158/climate-change/ (finding for every dollar invested in community resilience efforts now "[a]s much as $4 in response costs are saved" in the future); Hamilton Project & Energy Policy Institute at the University of Chicago, *Twelve Economic Facts on*

Finally, fossil fuel producers are "in a good position to spread costs to shareholders or consumers, thus serving the loss-spreading function" of tort law. Daniel A. Farber, *Adapting to Climate Change: Who Should Pay*, 23 J. Land Use & Envtl. L. 1, 30 (2007). In this context, intertemporal cost spreading through present mitigation efforts further reduces the magnitude of the costs of climate change. Moreover, fairness considerations may point to the fossil fuel producers as superior loss spreaders as compared to the general public (namely taxpayers). *See id.* at 29 (concluding that while putting the burden on taxpayers may help spread the loss, it nonetheless "allows emitters to escape any responsibility, which might be troubling in terms of *just deserts*" and has "a strong element of unjust enrichment") (emphasis added).

Energy and Climate Change at 13 (2017), http://www.hamiltonproject.org/papers/twelve_economic_facts_on_energy_and_climate_change (suggesting "[a]daptation investments would prevent trillions of dollars of cumulative costs related to sea-level rise"). But local governments lack adequate resources necessary to undertake such projects. *See* Sussman et al., *supra*, at 12–18 (suggesting local governments currently lack the funds to undertake many adaptation projects); U.S. Global Change Research Program, *Climate Change Impacts in the United States: The Third National Climate Assessment* at 682–86 (2014), https://www.globalchange.gov/browse/reports/climate-change-impacts-united-states-third-national-climate-assessment-0 (identifying inadequate funding as a potential obstacle to climate change adaptation by local governments).

II. COMMON LAW TORT TOOLS CAN HANDLE THE PARTICULAR LEGAL CHALLENGES POSED BY GLOBAL CLIMATE CHANGE LITIGATION

Modern environmental problems are "typified . . . by continuing and multiple causes, widespread effects and multiple victims, and scientifically complex issues as to cause, effect, and remedy." J.B. Ruhl & James Salzman, *Climate Change Meets the Law of Horse*, 62 Duke L.J. 975, 998 (2013) (alteration in original) (quotation marks omitted). For this reason, it is sometimes said that the common law of nuisance—which "worked well so long as pollution conflicts were local, the causes and effects straightforward, and remedies simple to design and administer," *id.* at 997—is obsolete and cannot be applied to climate change harms.

But this view rests on a stultified conception of the common law, one that is blind to modern developments fashioning creative remedies and addressing tort liability under causal uncertainty.

A. Nuisance Damages Remedy Gives the Fossil Fuel Defendants Flexibility in Deciding How to Respond

Though the choice of remedy is not at issue at this stage of the case, concerns over the choice of remedy should not lead to dismissal of the City's case because tort law offers several reasonable choices for addressing the City's alleged damages. According to Judge Calabresi and Melamed, the resolution of a nuisance dispute involves two steps: (1) an entitlement must be allocated to one of the parties; and (2) a decision must be made about how to protect that entitlement—namely by

injunctive relief (property rule protection) or damages (liability rule protection). Calabresi & Melamed, *supra*, at 1115–24.

Prior to the decision in *Boomer*, the rule in New York had been that a nuisance would be "enjoined although marked disparity be shown in economic consequence between the effect of the injunction and the effect of the nuisance." *Boomer*, 257 N.E.2d at 872. But in *Boomer*, the court denied an injunction that was otherwise warranted because of "the large disparity in economic consequences" that would be caused by the injunction. *Id.* The injunction would have deprived defendants of significant investments (on the order of $45 million) and caused three hundred workers to be laid off, whereas the aggregate injuries to plaintiffs were much smaller ($185,000). *Id.* at 873.

As compared with injunctive relief, damages "are less likely to be inefficient remedies" because they "internalize[] the nuisance and permit[] the defendant to make his own cost-benefit analysis of preventive measures." Ellickson, *supra*, at 739. "A party compelled to bear a nuisance cost can be expected to adopt all preventive measures he perceives as efficient." *Id.* at 724. Providing a damages remedy does not require the kind of macro cost-benefit analysis, that, for example, setting regulatory limits or caps on emissions does. *See* Michelman, *supra*, at 672–75. But it does allow a party to decide to take a measure if the "prevention cost and the administrative cost of carrying it out are less than the reduction in nuisance costs

achieved," Ellickson, *supra*, at 724, thus allowing the court "to make implicit use of injurers' information." Louis Kaplow & Steven Shavell, *Property Rules Versus Liability Rules: An Economic Analysis*, 109 Harv. L. Rev. 713, 725–30 (1996) (discussing the capacity of liability rules to harness private information to achieve efficient allocation decisions).

With damages, a court can therefore focus in the first instance on imposing liability to force the fossil fuel defendants to internalize the harmful externality, while leaving it to the fossil fuel companies to figure out how this is best done. Fossil fuel producers are able to pass the costs along to induce efficient behavior; they are also better situated to induce intermediate emitters, such as energy producers, to take steps to reduce emissions.

Moreover, with this structure, it is not likely that nuisance damages would lead to a shutdown of the fossil fuel companies, as defendants have claimed. Mem. of Law of Chevron Corp., ConocoPhillips, and Exxon Mobil Corp. Addressing Common Grounds in Supp. of Their Mots. to Dismiss Pl.'s Am. Compl. ("Defs. Mem.") at 21, No. 18-00182 (S.D.N.Y. May 4, 2018), ECF No. 100 (arguing that imposing nuisance liability would lead to "perpetual liability, until the business model terminates"). Epstein has recognized that while "[t]he claim that . . . broad private injunctions would be a death knell to industrial development surely is credible, . . . it is a complete nonsequitur to assume that a strict liability rule that

awards damages for past harms will have the same effect." Epstein, *supra*, at 557. As he has further observed, defendants "would rarely choose to shut down altogether, no matter what rule of liability is in effect." *Id.*

B. The Common Law Recognizes Variants on the "But-For" Causation Requirement

Contrary to defendants' claim, nuisance liability in this case will not threaten the "'bedrock principle of tort law'" that the plaintiff must show "'defendant's act was a cause-in-fact of [the] injury.'" Defs. Mem. at 29 n.23 (quoting *Aegis Ins. Servs., Inc. v. 7 World Trade Co.*, 737 F.3d 166, 179 (2d Cir. 2013)). Such an alarmist view is premised on an overly rigid view of factual or "but-for" causation.[4]

New York courts have embraced a relaxed causal approach in public nuisance cases: "'Every one who creates a nuisance or participates in the creation or maintenance thereof is liable for it.'" *In re Methyl Tertiary Butyl Ether (MTBE) Prod. Liab. Litig.*, 725 F.3d 65, 121 (2d Cir. 2013) (alteration omitted) (quoting *Penn Cent. Transp. Co. v. Singer Warehouse & Trucking Corp.*, 447 N.Y.S.2d 265, 267 (N.Y. App. Div. 1982)) (rejecting Exxon's argument that its role as supplier of gasoline was "too remote" from the ultimate MTBE contamination to support public

[4] While "[t]he trend in New York cases is to focus analysis more on 'substantial factor' or proximate cause analysis and less on cause-in-fact analysis[,] . . . it remains 'the general rule that in common-law negligence actions, [that] a plaintiff must prove that the defendant's conduct was a cause-in-fact of the injury.'" *Aegis*, 737 F.3d at 178 (quoting *Hamilton v. Beretta U.S.A. Corp.*, 750 N.E.2d 1055, 1066 (N.Y. 2001) (alteration in original)).

nuisance claim); *see also N.A.A.C.P. v. AcuSport, Inc.*, 271 F. Supp. 2d 435, 493 (E.D.N.Y. 2003) ("Where multiple actors contribute to a public nuisance, equity can reach actors whose conduct standing alone might not be actionable."). New York's approach draws support from the *Restatement (Second) of Torts*: "One is subject to liability for a nuisance caused by an activity, not only when he carries on the activity but also when he participates to a substantial extent in carrying it on." *Restatement (Second) of Torts* § 834 (1979). And "the fact that other persons contribute to a nuisance is not a bar to the defendant's liability for his own contribution." *Id.* § 840E.

The flexibility of the causal inquiry is of long-standing historical origin. In 1832, in *Mills v. Halls & Richards*, the New York Supreme Court upheld a jury verdict of public nuisance against a defendant who had built a dam across the mouth of a lake, "corrupting the atmosphere and affecting the health of the plaintiff and his family." *Mills v. Hall & Richards*, 9 Wend. 315, 315 (N.Y. Sup. Ct. 1832); *see Restatement (Second) of Torts* § 821B, reporter's note (1979) (citing *Mills* as an example of a public nuisance which interferes with public health). In that case, the defendants had rebuilt a dam and "after the rebuilding of the dam, the fever and ague was more common in that section of the country than it had been before." *Mills*, 9 Wend. at 315-16. The court put the question to the jury whether the public health harms were "attributable to the erection of the dam in question" or to upriver dams and to pollutants, such as sawdust, that were being introduced upriver. *Id.* at 316. In

upholding the jury instruction—which asked whether defendant's continuance of the dam caused plaintiff's sickness "in *whole* or in *part*"—Justice Sutherland stated that, notwithstanding his "opinion [based] upon the evidence detailed in the case" that it was "very questionable" whether Defendant's dam was the "principal cause," the question was "fairly and properly left to the jury as a question of fact." *Id*.

Modern tort cases, moreover, have repeatedly recognized that the insistence on strict "but-for" causation to substantiate cause-in-fact, buttressed by rigid preponderance of the evidence standards, threatens to undermine the deterrence function of tort law. Courts have developed many tools that could be useful for addressing any causation concerns that may or may not arise as this case proceeds. Perhaps the most salient illustration is the emergence in the 1980s of market share liability, a doctrine designed to improve societal welfare by inducing firms that generate harms to internalize such costs of tortious conduct in contexts in which identification of the specific injurer is impossible. *Sindell v. Abbott Labs.*, 607 P.2d 924, 936 (Cal. 1980) ("In our contemporary complex industrialized society, advances in science and technology create fungible goods which may harm consumers and which cannot be traced to any specific producer. The response of the courts can be either to adhere rigidly to prior doctrine and denying recovery to those

injured by such products, or to fashion remedies to meet these changing needs.");[5] *Hymowitz v. Eli Lilly & Co.*, 539 N.E.2d 1069, 1078 (N.Y. 1989) (adopting an especially strong variant of the doctrine, concluding that since liability was "based on the over-all risk produced," no exculpation evidence could be allowed in individual cases).[6]

Bringing these developments full circle, Keith Hylton has argued that modern theories of market share liability and similar statistical causal inferences could be effectively deployed within nuisance law in situations where direct causation cannot be proven by traditional "but-for" causation. *See* Keith N. Hylton, *The Economics of Public Nuisance Law and the New Enforcement Actions*, 18 SUP. CT. ECON. REV. 43, 69–71 (2010). Invoking *Mills*, but changing the factual scenario slightly to a plaintiff bitten by a disease-carrying mosquito near two adjacent malarial ponds owned by different defendants, Hylton argued that, notwithstanding that it is impossible to trace the mosquito to the offending pond, both ponds should be deemed nuisances insofar as they "throw[] off external costs." *Id.* at 45, 70 (citing

[5] Like the fossil fuel defendants in this case, the dissent in *Sindell* complained that, by adopting market share liability, "the majority rejects over 100 years of tort law which required that before tort liability was imposed a 'matching' of defendant's conduct and plaintiff's injury was absolutely essential." 607 P.2d at 939 (Richardson, J. dissenting).

[6] The New York Court of Appeals' "no exculpation" version of market share liability is defensible on law-and-economics deterrence grounds, but moves even further away from the traditional "but-for" causation requirement.

Mills, 9 Wend. at 315). According to Hylton, liability should be allocated "based on relative risk externalization by the two defendants," in this case, for example, by considering "the relative size of the ponds." *Id*. at 70. Hylton concluded that "[a]s long as the relative risk measure achieves an acceptable degree of statistical accuracy, the damage judgments will be allocated among the defendants in a manner that provides optimal deterrence incentives." *Id.*

In sum, although the City's nuisance claim has not yet proceeded to factual development, existing common law doctrines, including the historical flexibility of the causal inquiry in public nuisance as well as more modern developments recognizing variants on the "but-for" causation requirement, seem up to the task of addressing causation.

C. Damages for Preventive Measures Further Mitigate Causation and Damages Complexities in Climate Change-Based Nuisance Claims

Moreover, tort law is well-suited to handling claims by plaintiffs who incur expenses in order to avoid future harms, such as the City's climate change adaptation expenses. *See Restatement (Second) of Torts*, § 919(1) (1979) ("One whose legally protected interests have been endangered by the tortious conduct of another is entitled to recover for expenditures reasonably made or harm suffered in a reasonable effort to avert the harm threatened."); *id.* § 930(3)(b) (allowing as recovery for "prospective invasions of land . . . the reasonable cost to the plaintiff of

avoiding future invasions").[7] The right to such damages stems from the plaintiff's duty to mitigate damages. *See Den Norske Ameriekalinje Actiesselskabet v. Sun Printing & Publ'g Ass'n*, 122 N.E. 463, 465 (N.Y. 1919) (describing the right "to recover the expenses necessarily incurred" in mitigation efforts "as a natural corollary" to the affirmative obligation that a plaintiff must take reasonable steps to mitigate damages); *accord Restatement (Second) of Torts* § 919 cmt. a (1979). This right "to recover the expenses of a proper effort to mitigate damages" exists even if those efforts are ultimately unsuccessful. *See Baker v. Dorfman*, 239 F.3d 415, 427 (2d Cir. 2000) (alteration removed) (quoting *Den Norske*, 122 N.E. at 465).

As Daniel Farber has argued in the context of climate change, "tying damages to adaptation projects," not only resolves many difficulties with proving causation, but also "restrict[s] the set of compensable harms," thus "keep[ing] liability within manageable limits." Daniel A. Farber, *Basic Compensation for Victims of Climate Change*, 155 U. PA. L. Rev. 1605, 1629, 1645–48 (2007); *see also* Grossman, *supra*, at 17–18 & n.81 (suggesting *Restatement (Second) of Torts* § 930(3)(b) justifies recovery of the cost of adapting to the future effects of climate change). The mitigation of damages doctrine thus provides a sensible and effective remedial measure of present, realized harm of climate change-based nuisance claims.

---

[7] *See, e.g.*, *Barrick v. Schifferdecker*, 25 N.E. 365, 365–66 (N.Y. 1890) (recognizing propriety of awarding cost of repair to "prevent future injury from the same cause" where defendant's icehouse continued to leak and cause damage).

CONCLUSION

For the foregoing reasons, the Court should reverse.

DATED: November 15, 2018

Respectfully submitted,

/s/ Catherine M. Sharkey
Catherine M. Sharkey
Crystal Eastman Professor of Law
New York University School of Law
40 Washington Sq. South
New York, NY 10012
(212) 998-6729
catherine.sharkey@nyu.edu
Amicus Curiae

CERTIFICATE OF COMPLIANCE WITH RULE 32(a)(7)

Counsel hereby certifies that, in accordance with Federal Rule of Appellate Procedure 32(a)(7), the foregoing Brief contains 5243 words, as counted by counsel's word processing system, and this complies with the applicable word limit established by the Court.

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because this document has been prepared in a proportionally spaced typeface using Microsoft Word 2013 in 14-point Times New Roman font.

DATED: November 15, 2018

Respectfully submitted,

/s/ Catherine M. Sharkey
Catherine M. Sharkey
Crystal Eastman Professor of Law
New York University School of Law
40 Washington Sq. South
New York, NY 10012
(212) 998-6729
catherine.sharkey@nyu.edu
Amicus Curiae

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on November 15, 2018, I caused the foregoing to be filed electronically with the Clerk of the Court using the CM/ECF system, which will send a Notice of Electronic Filing to all counsel of record.

DATED: November 15, 2018

Respectfully submitted,

/s/ Catherine M. Sharkey
Catherine M. Sharkey
Crystal Eastman Professor of Law
New York University School of Law
40 Washington Sq. South
New York, NY 10012
(212) 998-6729
catherine.sharkey@nyu.edu
Amicus Curiae