

19-2395(L)

19-2508(CON)

United States Court of Appeals for the Second Circuit

STATE OF NEW YORK, STATE OF CALIFORNIA, STATE OF CONNECTICUT, STATE OF DELAWARE,
DISTRICT OF COLUMBIA, STATE OF ILLINOIS, STATE OF MARYLAND, COMMONWEALTH OF
MASSACHUSETTS, STATE OF NEW JERSEY, STATE OF OREGON, STATE OF RHODE ISLAND,
STATE OF VERMONT, STATE OF WASHINGTON, STATE OF MAINE, NATIONAL RESOURCES
DEFENSE COUNCIL, INC., SIERRA CLUB,

Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, JAMES C. OWENS, in his capacity as
Acting Administrator of the National Highway Traffic Safety Administration, ELAINE CHAO,
in her capacity as Secretary of the United States Department of Transportation,

Respondents,

ASSOCIATION OF GLOBAL AUTOMAKERS, ALLIANCE OF AUTOMOBILE MANUFACTURERS, INC.,

Intervenors.

On Petition for Review of a Rule of the
National Highway Traffic Safety Administration

FINAL BRIEF FOR STATE PETITIONERS

XAVIER BECERRA
Attorney General
State of California

300 S. Spring St., Suite 1702
Los Angeles, California 90013
(213) 897-2607

LETITIA JAMES
Attorney General
State of New York

28 Liberty Street
New York, New York 10005
(212) 416-6197

(Counsel listing continues on signature page.)

Dated: March 6, 2020

TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES	v
PRELIMINARY STATEMENT	1
JURISDICTIONAL STATEMENT	4
ISSUES PRESENTED	5
STATEMENT OF THE CASE	6
A. Congress Establishes Corporate Average Fuel Economy (CAFE) Standards to Improve Fuel Efficiency	6
B. The National Highway Traffic Safety Administration (NHTSA) Complies with the Inflation Adjustment Act	9
1. Congress enacts and amends the Inflation Adjustment Act to restore the deterrent effect of outdated civil monetary penalties	9
2. Government reports discussing shortcomings in the Inflation Adjustment Act identify the CAFE penalty as a covered civil monetary penalty	11
3. Congress passes the 2015 Improvements Act to better allow the CAFE penalty and other civil monetary penalties to keep pace with inflation	15
4. NHTSA complies with the Improvements Act by updating the CAFE penalty to \$14 and declining to invoke its discretion to impose a lower increase based on “negative economic impact”	17
C. NHTSA Suspends the \$14 Penalty, and This Court Vacates the Suspension for Violating the Improvements Act	19

	Page
D. Notwithstanding This Court’s Ruling, NHTSA Issues a Final Rule Repealing the \$14 Penalty	21
E. State Petitioners and Environmental Groups File Timely Challenges	22
SUMMARY OF ARGUMENT	23
ARGUMENT	26
POINT I	
THE CAFE PENALTY IS A CIVIL MONETARY PENALTY THAT CONGRESS REQUIRED TO BE INCREASED UNDER THE IMPROVEMENTS ACT	26
A. This Court Has Already Held That the Improvements Act Applies to the CAFE Penalty.....	26
B. The Improvements Act Unambiguously Applies to the CAFE Penalty.	31
1. Congress’s reforms were intended to address those penalties that, like the CAFE penalty, are based on specific dollar figures and thus vulnerable to the erosive effects of inflation.....	33
2. The CAFE penalty “is for a specific monetary amount.”	36
a. Virtually all “civil monetary penalties” are expressed as a rate.....	36
b. Manufacturers’ ability to use credits does not undermine the CAFE penalty’s imposition of “a specific monetary amount.”	40

Page

c. NHTSA’s separate authority to increase the penalty under the Energy Policy and Conservation Act (EPCA) does not override the Improvement Act’s mandatory adjustment.	44
3. The CAFE penalty “has a maximum amount.”	46
4. History confirms that the CAFE penalty is a “civil monetary penalty” whose value Congress intended to restore.	47
C. NHTSA Improperly Reduced the Cap on Its Separate Authority to Adjust the Penalty Under EPCA.	52

POINT II

NHTSA MAY NOT REDUCE THE \$14 PENALTY AMOUNT BASED ON A FINDING OF “NEGATIVE ECONOMIC IMPACT”	54
A. The Improvements Act Bars NHTSA from Reversing a Catch-Up Adjustment Based on the Discretionary Exception Three Years After the Agency Complied with the Act’s “Clear and Mandatory” Deadline.....	54
B. NHTSA’s Determination to Reduce the Penalty Based on a Negative Economic Impact Was Unlawful and Arbitrary and Capricious.....	59
1. NHTSA employed the wrong standard in evaluating negative economic impact.	59
2. NHTSA failed to consider relevant factors concerning the effect of the catch-up adjustment.	63
3. NHTSA failed to consider making a smaller catch-up adjustment that would partly satisfy Congress’s goals.....	67

Page

POINT III

NHTSA FAILED TO TAKE THE REQUIRED “HARD LOOK” AT THE ENVIRONMENTAL IMPACTS OF REPEALING THE \$14 PENALTY.....	70
--	----

CONCLUSION	73
------------------	----

TABLE OF AUTHORITIES

Cases	Page(s)
<i>Adams Fruit Co. v. Barrett</i> , 494 U.S. 638 (1990)	29
<i>Bowsher v. Merck & Co.</i> , 460 U.S. 824 (1983)	49
<i>California v. EPA</i> , 940 F.3d 1342 (D.C. Cir. 2019)	66
<i>Center for Auto Safety v. NHTSA</i> , 793 F.2d 1322 (D.C. Cir. 1996)	42
<i>Center for Biological Diversity v. NHTSA</i> , 538 F.3d 1172 (9th Cir. 2008)	72
<i>Chevron, U.S.A. Inc. v. NRDC</i> , 467 U.S. 837 (1984)	29
<i>Cooling Water Intake Structure Coal. v. EPA</i> , 905 F.3d 49 (2d Cir. 2018)	66
<i>Exelon Wind 1, L.L.C. v. Nelson</i> , 766 F.3d 380 (5th Cir. 2014)	28
<i>FCC v. Fox Television Stations, Inc.</i> , 556 U.S. 502 (2009)	43, 65
<i>Garcia v. Teitler</i> , 443 F.3d 202 (2d Cir. 2006)	48
<i>General Motors Corp. v. NHTSA</i> , 898 F.2d 165 (D.C. Cir. 1990)	6
<i>Gross v. FBL Fin. Servs., Inc.</i> , 557 U.S. 167 (2009)	60

Cases	Page(s)
<i>John Wiley & Sons, Inc. v. DRK Photo</i> , 882 F.3d 394 (2d Cir. 2018)	45
<i>Mercedes-Benz of N. Am., Inc. v. NHTSA</i> , 938 F.2d 294 (D.C. Cir. 1991)	38
<i>Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.</i> , 463 U.S. 29 (1983)	68
<i>National Cable & Telecomms. Ass’n v. Brand X Internet Servs.</i> , 545 U.S. 967 (2005)	29
<i>NRDC v. Abraham</i> , 355 F.3d 179 (2d Cir. 2004)	56
<i>NRDC v. NHTSA</i> , 894 F.3d 95 (2d Cir. 2018)	passim
<i>Port Washington Teachers’ Ass’n v. Board of Educ. of Port Washington Union Free Sch. Dist.</i> , 478 F.3d 494 (2d Cir. 2007)	28
<i>Presault v. United States</i> , 100 F.3d 1525 (Fed. Cir. 1996)	64
<i>Public Citizen, Inc. v. Mineta</i> , 340 F.3d 39 (2d Cir. 2003)	67
<i>San Juan Citizens All. v. Bureau of Land Mgmt.</i> , 326 F. Supp. 3d 1227 (D.N.M. 2018)	70, 72
<i>Sierra Club v. EPA</i> , 479 F.3d 875 (D.C. Cir. 2007)	28
<i>Sierra Club v. FERC</i> , 867 F.3d 1357 (D.C. Cir. 2017)	70, 71
<i>Sierra Club v. U.S. Army Corps of Eng’rs</i> , 701 F.2d 1011 (2d Cir. 1983)	70

Cases	Page(s)
<i>Texas Dep't of Hous. & Cmty. Affairs v. Inclusive Cmty. Project, Inc.</i> , 135 S. Ct. 2507 (2015)	48
<i>Tokyo Kikai Seisakusho, Ltd. v. United States</i> , 529 F.3d 1352 (Fed. Cir. 2008)	56
<i>Woods v. Interstate Realty Co.</i> , 337 U.S. 535 (1949)	29
<i>WorldCom, Inc. v. FCC</i> , 238 F.3d 449 (D.C. Cir. 2001)	68
Statutes	
Pub. L. No. 95–619, 92 Stat. 3255 (1978)	8
Inflation Adjustment Act, Pub. L. No. 101-410, 104 Stat. 890 (1990)	9, 12
Pub. L. No. 103-272, 108 Stat. 745 (1994)	6
Debt Collection Improvement Act, Pub. L. No. 104-134, 110 Stat. 1321 (1996)	10, 11
Energy Independence and Security Act, Pub. L. No. 110-410, 121 Stat. 1492 (2007)	8
Federal Civil Penalties Inflation Adjustment Act Improvements Act, Pub. L. No. 114-7, 129 Stat. 584 (2015)	15
5 U.S.C. § 706	59
28 U.S.C. § 2461 note	passim
29 U.S.C. § 1132	35
33 U.S.C. § 1321	37
46 U.S.C. § 55111	37

Statutes	Page(s)
-----------------	----------------

49 U.S.C.	
§§ 32901–32919.....	6
§ 32903.....	8, 42
§ 32909.....	4
§ 32911.....	43
§ 32912.....	passim

Regulations

10 C.F.R. § 501.181.....	37
11 C.F.R. § 111.43.....	37
49 C.F.R.	
§ 1.95.....	6
§ 536.3.....	42, 43
§ 578.4.....	49
§ 578.5.....	49
Civil Penalties, 62 Fed. Reg. 5,167 (Feb. 4, 1997).....	11, 12, 48, 49
2017 and Later M.Y. CAFE Standards, 77 Fed. Reg. 62,624 (Oct. 15, 2012)	7, 43, 71
Notice of Adoption of Recommendations, 78 Fed. Reg. 2,939 (Jan. 15, 2013).....	14
SAFE Vehicles Rule, 83 Fed. Reg. 42,986 (Aug. 24, 2018)	7

Miscellaneous Authorities

Curtis W. Copeland, Cong. Research Serv., RL34368, <i>Adjustment of Civil Monetary Penalties for Inflation</i> (2008), https://www.everycrsreport.com/files/20080211_RL34368_702e35ad8722d53159055717f3d18471810be77a.pdf	13, 14, 49
--	------------

Miscellaneous Authorities	Page(s)
Government Accountability Office, GAO-10-336, <i>Vehicle Fuel Economy: NHTSA and EPA's Partnership for Setting Fuel Economy and Greenhouse Gas Emissions Standards Improved Analysis and Should Be Maintained</i> (2010), https://www.gao.gov/assets/310/301194.pdf	14, 49
Government Accountability Office, GAO-17-634, <i>Civil Penalties: Certain Federal Agencies Need to Improve Efforts to Comply with Inflation Adjustment Requirements</i> (2017), https://www.gao.gov/assets/690/686872.pdf	60
James Ming Chen, <i>Inflation Based Adjustments in Federal Monetary Penalties</i> (2012), https://www.acus.gov/sites/default/files/documents/Inflation-Adjustment-Federal-Civil-Penalties-Final-Report1.pdf	11
National Highway Traffic Safety Admin., <i>CAFE Public Information Center</i> (Oct. 15, 2019), https://one.nhtsa.gov/cafe_pic/CAFE_PIC_fleet_LIVE.html	7
National Highway Traffic Safety Admin., <i>Summary of Fuel Economy Performance</i> (2014), https://www.nhtsa.gov/staticfiles/rulemaking/pdf/	7

PRELIMINARY STATEMENT

Statutory civil penalties expressed in dollar figures become less effective over time as inflation erodes their real value and deterrent effect. In 2015, Congress enacted the Federal Civil Penalties Inflation Adjustment Act Improvements Act (Improvements Act) to address this problem. That Act required federal agencies to make initial, one-time catch-up adjustments to civil monetary penalties to account for inflation by a specific deadline—August 1, 2016—with additional, annual inflation adjustments thereafter. 28 U.S.C. § 2461 note sec. 4(b)(1)(A)-(B).

This proceeding involves the civil monetary penalty imposed on automakers that violate the Corporate Average Fuel Economy (CAFE) standards. In 2016, the National Highway Traffic Safety Administration (NHTSA) complied with the Improvements Act and increased the CAFE penalty for inflation. The penalty had been \$5.50—assessed on automakers for each tenth of a mile per gallon (mpg) that a fleet’s average fuel economy falls below the CAFE standard, multiplied by the number of vehicles in the fleet. The increase raised the penalty to \$14. But shortly after the current presidential administration took office, NHTSA suspended the penalty increase. This Court vacated that suspension as

contrary to the Improvements Act's mandate that inflation adjustments take effect by August 2016. *See NRDC v. NHTSA*, 894 F.3d 95, 111-13 (2d Cir. 2018).

Undeterred, NHTSA promulgated the final rule at issue here, permanently eliminating the entire inflation adjustment on the ground that the Improvements Act does not apply to the CAFE penalty at all. That reasoning is flatly at odds with the Act and simply defies this Court's prior ruling. This Court should vacate NHTSA's unlawful rule.

As this Court squarely held, the Improvements Act applies to the CAFE penalty and forbids NHTSA from doing exactly what it is trying to do again here—avoid the Act's mandatory inflation adjustments. The Court properly recognized that Congress's driving purpose in the Improvements Act was to compel increases in civil penalties that, like the CAFE penalty, were based on specific dollar values whose deterrent effect had diminished over time due to inflation. And that interpretation is confirmed by the uniform view of Congress, NHTSA, and numerous other federal agencies for nearly three decades that the CAFE penalty is subject to the Improvements Act and its predecessors, going back to the

Federal Civil Penalties Inflation Adjustment Act of 1990 (Inflation Adjustment Act).

NHTSA alternatively argues that, even if the CAFE penalty is subject to the Improvements Act, NHTSA could invoke that statute's discretionary exception to impose an adjustment smaller than the otherwise required amount based on a "negative economic impact" finding. This Court's prior holding forecloses that argument as well. Although the Improvements Act contains "a narrow window of discretion for agencies regarding the amount of the initial catch-up adjustment," this Court held that the statute grants "no such discretion regarding the *timing* of the adjustments." *NRDC*, 894 F.3d at 109 (emphasis in original). Here, NHTSA is three years too late to invoke the discretionary exception after it already made the Improvements Act's mandatory adjustment to the CAFE penalty and declined to impose a lower increase. Nothing in the Improvements Act authorizes NHTSA to reopen this completed adjustment. Even if NHTSA had such authority, the manner in which it applied the exception is arbitrary and capricious: NHTSA applied the wrong statutory framework, considered irrelevant factors

while arbitrarily ignoring the inflation adjustment's positive impacts, and failed to consider alternatives other than an all-or-nothing approach.

Finally, NHTSA violated the National Environmental Policy Act (NEPA) by failing to do a basic accounting of the environmental impacts of its choice. As this Court previously recognized, the CAFE penalty is essential to enforcing automaker compliance with the CAFE standards. Reducing the penalty will lead to increased emissions and serious environmental and public health harms, yet NHTSA unlawfully failed to even quantify those impacts.

JURISDICTIONAL STATEMENT

This Court has jurisdiction pursuant to 49 U.S.C. § 32909(a). *See NRDC*, 894 F.3d at 105 (exercising jurisdiction over challenge to NHTSA's suspension of same inflation adjustment). The petition was timely filed on August 2, 2019, seven days after the challenged rule was published.

For the same reasons that the state petitioners had standing in *NRDC*, *see* 894 F.3d at 103-04, the States have standing here. *See also* Dvarskas Decl. ¶¶ 11-36; Chamberlin Decl. ¶¶ 4-13; Engler Decl. ¶¶ 6-26;

Mote Decl. ¶¶ 3-12.¹ As this Court has recognized, “the required nexus between inappropriately low penalties and harm to Petitioners is established by the agency’s own pronouncements and a robust body of caselaw recognizes the connection.” *NRDC*, 894 F.3d at 104.

ISSUES PRESENTED

1. Whether the CAFE penalty is a “civil monetary penalty” subject to mandatory inflation adjustments under the Improvements Act.

2. Whether NHTSA acted unlawfully, or arbitrarily and capriciously, in reversing the inflation adjustment under the Improvements Act due to “negative economic impact” (a) because the Improvements Act bars NHTSA from undoing a mandatory inflation increase three years after the Act’s deadline; and (b) because NHTSA’s reasons for fully eliminating the penalty increase are arbitrary and capricious in any event.

3. Whether NHTSA violated NEPA by failing to take the required “hard look” at the negative environmental impacts of replacing the \$14 penalty with a \$5.50 penalty.

¹ The declarations in support of standing are included in the addendum.

STATEMENT OF THE CASE

A. Congress Establishes Corporate Average Fuel Economy (CAFE) Standards to Improve Fuel Efficiency

In 1975, Congress enacted the Energy Policy and Conservation Act (EPCA) as a comprehensive response to the energy crisis caused by the oil embargoes of the early 1970s. Among other reforms, EPCA established “a major program to bring about improved motor vehicle fuel efficiency” by implementing “a system of mandatory corporate average fuel economy (‘CAFE’) standards” for vehicles. *General Motors Corp. v. NHTSA*, 898 F.2d 165, 167 (D.C. Cir. 1990). The CAFE standards consist of average, fleet-wide fuel economy targets, measured in mpg, which different classes of new cars and light trucks must meet. *See generally* 49 U.S.C. §§ 32901–32919.² NHTSA prescribes CAFE standards and administers the program. 49 C.F.R. § 1.95(a).

The CAFE standards for passenger cars were initially set at 18 mpg in 1978 and have increased intermittently over the years. *See* NHTSA,

² EPCA’s CAFE provisions were initially codified under Title 15 of the United States Code. In 1994, Congress collected and recodified transportation laws, including the CAFE provisions, in Title 49. Pub. L. No. 103-272, 108 Stat. 745 (1994).

Summary of Fuel Economy Performance 2 (2014) (internet).³ Pursuant to the 2007 Energy Independence and Security Act (EISA), which amended EPCA, the CAFE standards for passenger cars increased to over 38 mpg for model year 2017 and are set to increase further through model year 2021.⁴ The standards for light trucks follow a similar history.

To enforce compliance, EPCA imposes “a civil penalty” on manufacturers that violate the CAFE standards. 49 U.S.C. § 32912(b). In 1975, Congress initially set the penalty at \$5, multiplied by “each tenth of a mpg that a manufacturer’s average fuel economy falls short of the standard for a given model year multiplied by the total volume of those vehicles in the affected fleet.” *See* 2017 and Later M.Y. CAFE Standards, 77 Fed. Reg. 62,624, 63,126 (Oct. 15, 2012). Manufacturers may earn compliance

³ For sources available on the internet, full URLs appear in the Table of Authorities.

⁴ *See* NHTSA, *CAFE Public Information Center* (Oct. 15, 2019) (providing recent CAFE standards under “Fleet Performance” tab) (internet). NHTSA has proposed to weaken CAFE standards for certain upcoming model years. *SAFE Vehicles Rule*, 83 Fed. Reg. 42,986, 42,989-90 (Aug. 24, 2018) (Joint Appendix 916-917).

credits by exceeding the CAFE standards in certain years.⁵ 49 U.S.C. § 32903(a). Manufacturers may then allocate such credits towards compliance obligations in other years, and thereby reduce their liability in those years. *Id.* § 32912(b)(3).

In 1978, Congress authorized NHTSA to prescribe by regulation a higher penalty amount, contingent on NHTSA making certain findings and complying with detailed procedures. Pub. L. No. 95–619, sec. 402, § 508, 92 Stat. 3255 (1978) (now codified at 49 U.S.C. § 32912(c)). A penalty prescribed pursuant to this discretionary process “may not be more than \$10 for each .1 of a mile a gallon.” 49 U.S.C. § 32912(c)(1)(B). NHTSA has never exercised its authority under this provision.

⁵ In 2007, as part of EISA, Congress authorized manufacturers to trade credits. *See* Energy Independence and Security Act, Pub. L. No. 110-410, sec. 104(a), § 32903(f), 121 Stat. 1492, 1501-02 (2007).

B. The National Highway Traffic Safety Administration (NHTSA) Complies with the Inflation Adjustment Act

1. Congress enacts and amends the Inflation Adjustment Act to restore the deterrent effect of outdated civil monetary penalties

Over time, inflation will diminish the impact of statutory civil penalties expressed as specific dollar figures, like the CAFE penalty here. For the past three decades, Congress has made several attempts to address this problem.

In 1990, Congress passed the Inflation Adjustment Act, recognizing that “the power of Federal agencies to impose civil monetary penalties . . . plays an important role in deterring violations.” Pub. L. No. 101-410, § 2(a), 104 Stat. 890 (1990) (current version at 28 U.S.C. § 2461 note sec. 2). Congress determined that “the impact of many civil monetary penalties has been and is diminished due to the effect of inflation,” and that “inflation has weakened the deterrent effect of such penalties.” 28 U.S.C. § 2461 note sec. 2. Accordingly, the Act sought to establish “a mechanism that shall (1) allow for regular adjustment for inflation of civil monetary penalties; (2) maintain the deterrent effect of civil monetary penalties and promote compliance with the law; and (3) improve the collection by the Federal Government of civil monetary penalties.” *Id.* sec. 2(b). While

Congress did not then require mandatory inflation increases, it did require the Executive Branch to submit reports identifying existing civil monetary penalties and suggesting statutory changes to implement inflation adjustments. *Id.* sec. 4.

In its initial 1991 report, the Office of Management and Budget (OMB), with NHTSA's input, identified the CAFE penalty as one of the civil monetary penalties covered by the Act. (Joint Appendix (J.A.) 82, 114.) Owing largely to the CAFE penalty, OMB reported that NHTSA collected more money from civil monetary penalties than any other agency in 1990: more than \$64 million of the \$254 million reported for all agencies. (J.A. 48-54.) OMB calculated that the \$5 CAFE penalty had lost over half its value in real terms, and would require an increase to \$12 to maintain the same value—and thus the same deterrent effect—that it had when enacted in 1975. (J.A. 149.)

In 1996, Congress enacted the Debt Collection Improvement Act. Pub. L. No. 104-134, § 31001, 110 Stat. 1321, 1321-358 (1996). Among other things, this legislation amended section 4 of the Inflation Adjustment Act to require agencies to “adjust each civil monetary penalty” for inflation—though this adjustment was capped at 10% of the penalty's amount—and

to make subsequent inflation adjustments at least once every four years. § 31001, 110 Stat. at 1321, 1321-373. Congress expressly exempted penalties under four statutes, but did not exempt EPCA (which contains the CAFE civil penalty). *Id.*

Acknowledging that this 1996 amendment to the Inflation Adjustment Act applied to the CAFE penalty, NHTSA in 1997 issued a rule increasing the CAFE penalty to \$5.50, the maximum adjustment permitted. Civil Penalties, 62 Fed. Reg. 5,167, 5,168 (Feb. 4, 1997). That \$5.50 amount remained the applicable penalty base for the next two decades, until 2016.

2. Government reports discussing shortcomings in the Inflation Adjustment Act identify the CAFE penalty as a covered civil monetary penalty

The 1996 amendment to the Inflation Adjustment Act failed to effectively address inflation's impact on civil penalties.⁶ For example, although NHTSA found in 1997 that an increase to \$15 was necessary to maintain the CAFE penalty's original deterrent effect, the 1996 amend-

⁶ See generally, e.g., James Ming Chen, *Inflation Based Adjustments in Federal Monetary Penalties* (2012) (internet) (report to Administrative Conference of the United States identifying flaws and recommending solutions).

ment's 10% cap limited NHTSA to increasing the penalty to only \$5.50.⁷ 62 Fed. Reg. at 5,168.

Several government reports concluded that the 1996 amendment was not meeting the Act's goals of protecting civil penalties from the effect of inflation. These reports repeatedly cited the CAFE penalty as one of the civil monetary penalties that had been diminished by inflation, requiring further congressional action.

In 2003, the U.S. General Accounting Office (GAO) issued a report to Congress on stagnant civil penalties that identified, with NHTSA's input and guidance, the CAFE penalty as one of the penalties that would not maintain its deterrent effect against inflation without further legislative intervention. (*See* J.A. 169, 188-189.) Among other suggestions, GAO recommended that Congress require agencies to

⁷ In addition, the Act employed a rounding methodology that effectively precluded NHTSA from making the future periodic adjustments mandated by the 1996 Act. For dollar figures of \$100 or less, like the CAFE penalty, the Inflation Adjustment Act rounded inflation-based *increases* to the nearest \$10—meaning that an incremental increase to account for inflation would not count until the increase itself (not the underlying penalty) exceeded \$5. *See* § 5(1), 104 Stat. at 891. Increases to the \$5.50 penalty would not reach that threshold for decades. (*See* J.A. 189-190.)

“adjust their penalties for the full amount of inflation that has occurred since they were last set or adjusted.” (J.A. 198.)

In 2007, GAO identified the CAFE penalty’s diminished real value as a potential impediment to the CAFE program’s goal of reducing oil consumption. (See J.A. 216-217.) GAO noted that “[s]everal experts” believed the \$5.50 penalty was “not enough of a monetary incentive for manufacturers to comply with CAFE,” and that because of “increases in inflation, noncompliance now costs less, in real terms, for manufacturers than it did before 1997.” (J.A. 238, 244.) The report noted NHTSA’s continuing view that the Inflation Adjustment Act applied to CAFE penalties (J.A. 238), and recommended that Congress “[r]aise CAFE penalties with inflation” (J.A. 244).

In 2008, the Congressional Research Service (CRS) again identified the CAFE penalty as a civil monetary penalty that “NHTSA has been unable to adjust” due to the Inflation Adjustment Act’s shortcomings. Curtis W. Copeland, Cong. Research Serv., RL34368, *Adjustment of Civil Monetary Penalties for Inflation* at CRS-9 (2008) (“CRS Report”) (internet). CRS advised that amending the Act would be the most efficient

way to “maintain the penalties’ original punitive and deterrent power.”
Id. at CRS-12–13.

In 2010, GAO again remarked on the diminished value and effect of the CAFE penalty. GAO noted that the CAFE penalty had been stagnant since being adjusted to \$5.50 thirteen years prior, and that “NHTSA recognizes that some manufacturers regularly pay fines instead of complying with CAFE standards.” GAO, GAO-10-336, *Vehicle Fuel Economy: NHTSA and EPA’s Partnership for Setting Fuel Economy and Greenhouse Gas Emissions Standards Improved Analysis and Should Be Maintained* 17 (2010) (“2010 GAO Report”) (internet).⁸

⁸ In 2013, the Administrative Conference of the United States (ACUS) joined the chorus urging Congress to fix the Inflation Adjustment Act, recommending, inter alia, that Congress address the Act’s 10% cap and rounding rules. Notice of Adoption of Recommendations, 78 Fed. Reg. 2,939, 2,944 (Jan. 15, 2013).

3. Congress passes the 2015 Improvements Act to better allow the CAFE penalty and other civil monetary penalties to keep pace with inflation

In 2015, Congress responded to GAO's and CRS's recommendations by enacting the Improvements Act, which addressed many of the Inflation Adjustment Act's flaws. Pub. L. No. 114-7, § 701, 129 Stat. 584 (2015) (current version codified at 28 U.S.C. § 2461 note). Most significantly, the Improvements Act required agencies across the federal government to make a new one-time "catch-up" adjustment to immediately restore much of the real value of civil penalties expressed as specified dollar figures. 28 U.S.C. § 2461 note sec. 5(b)(2). The cap on this initial adjustment was set at 150% of the existing penalty amount—a fifteen-fold increase from the 1996 amendment's 10% cap. *Id.* sec. 5(b)(2)(C). Congress gave agencies a specific deadline for making their catch-up adjustments, directing the promulgation of interim final rules "[n]ot later than July 1, 2016," to "take effect not later than August 1, 2016." *Id.* sec. 4(b)(1)(A)-(B).

The Improvements Act gave agencies one narrow avenue to impose an initial catch-up adjustment of "less than the otherwise required amount." *Id.* sec. 4(c)(1)-(2). If, "after publishing a notice of proposed rulemaking and providing an opportunity for comment," an agency determined either

that “increasing the civil monetary penalty by the otherwise required amount will have a negative economic impact” or that the “social costs of the penalty increase outweigh the benefits,” then the agency, with the concurrence of OMB, could impose a lower catch-up adjustment. *Id.* This limited exception to the Improvements Act’s otherwise mandatory increase was time-limited. Consistent with the directive that agencies make catch-up adjustments “not later than August 1, 2016,” *id.* sec. 4(b)(1)(A)-(B), OMB instructed “[a]gencies seeking a reduced catch-up adjustment determination” to submit notices of proposed rulemaking to OMB “as soon as possible, and no later than May 2, 2016” (J.A. 516). OMB cautioned that it expected approval of reduced catch-up determinations “to be rare.” (J.A. 516.)

After the initial, mandatory catch-up adjustment, the Improvements Act requires agencies to update penalties for inflation “not later than January 15 of every year thereafter”—an improvement over the prior regime’s requirement of updates every four years. 28 U.S.C. § 2461 note sec. 4(a). The Improvements Act also made several other legislative fixes, *see, e.g., id.* sec. 5(a) (changing rounding rule), and broadened the scope

of the Act by eliminating certain exemptions from the 1996 amendment, *see id.* sec. 4(a).

4. NHTSA complies with the Improvements Act by updating the CAFE penalty to \$14 and declining to invoke its discretion to impose a lower increase based on “negative economic impact”

On July 5, 2016, NHTSA issued an interim final rule updating various civil penalties that it administered, including the CAFE penalty. 81 Fed. Reg. 43,524 (July 5, 2016) (“Interim Final Rule”) (J.A. 660). Although an adjustment to account for the full effect of inflation since 1975 (when the penalty was first established) would have resulted in a penalty of \$22, NHTSA only increased the penalty to \$14 to comply with the Improvements Act’s 150% statutory cap. 81 Fed. Reg. at 43,526 (J.A. 662). The new penalty became effective on August 4, 2016, within days of the statutory deadline. NHTSA did not request concurrence from OMB to implement a reduced catch-up adjustment.⁹

⁹ The Interim Final Rule also adjusted the ceiling on discretionary increases under the separate EPCA authority (see *supra* at 8) from \$10 to \$25. 81 Fed. Reg. at 43,526 (J.A. 662).

On August 1, 2016, two vehicle manufacturer associations, the Alliance of Automobile Manufacturers and the Association of Global Automakers, submitted a petition for partial reconsideration to NHTSA. The industry petitioners acknowledged that “NHTSA is not empowered to exempt the CAFE program” from the Improvement Act’s directive to increase penalties for inflation. (J.A. 666.) They nonetheless sought relief from the newly increased CAFE penalty by arguing that: (1) NHTSA should have imposed a smaller increase by finding that the full penalty increase mandated by the Improvements Act would have a “negative economic impact”; and (2) NHTSA should not apply the updated penalty amount to any vehicles prior to model year 2019, because manufacturers needed lead time to incorporate the higher penalty into their design decisions. (J.A. 667.)

On December 28, 2016, NHTSA issued a rule (“Civil Penalties Rule”) finalizing the catch-up increase in the CAFE penalty. 81 Fed. Reg. 95,489 (Dec. 28, 2016) (J.A. 684). NHTSA declined to impose a lower catch-up increase due to “negative economic impact” but agreed to apply the new penalty only to model year 2019 and later fleets. 81 Fed. Reg. at

95,490-91 (J.A. 685-686). The effective date of this change was January 27, 2017. 81 Fed. Reg. at 95,489 (J.A. 684).

C. NHTSA Suspends the \$14 Penalty, and This Court Vacates the Suspension for Violating the Improvements Act

Immediately after the change in presidential administration, NHTSA reversed course and took a series of actions to delay and, ultimately, to repeal the Civil Penalties Rule. On January 30, 2017, NHTSA published a notice stating that it was temporarily delaying the Rule's effective date for sixty days in accordance with a general "regulatory freeze" issued by the incoming administration. 82 Fed. Reg. 8,694 (Jan. 30, 2017) (J.A. 688). Two subsequent delays purported to change the effective date to July 10, 2017.

On July 12, 2017, NHTSA announced that the Civil Penalties Rule's effective date was immediately "delayed indefinitely pending reconsideration." 82 Fed. Reg. 32,139, 32,139 (July 12, 2017) ("Suspension Rule") (J.A. 689). In a companion notice, NHTSA announced that it had decided on its own initiative to reconsider the Civil Penalties Rule and requested comment on "the appropriate inflationary adjustment for CAFE civil penalties." 82 Fed. Reg. 32,140, 32,140 (July 12, 2017) (J.A. 690).

In September 2017, the States of New York, California, Maryland, Pennsylvania, and Vermont filed a petition in this Court challenging the Suspension Rule, which this Court consolidated with a petition filed by several environmental organizations. This Court granted expedited consideration. Order, *NRDC*, 894 F.3d 95 (No. 17-2780), ECF No. 128 (expediting briefing and argument).

On April 23, 2018, only eleven days after oral argument, this Court issued an order vacating the Suspension Rule, Order, *NRDC*, 894 F.3d 95 (No. 17-2780), ECF No. 194, holding in a subsequent opinion that NHTSA had “exceeded its statutory authority in indefinitely delaying the Civil Penalties Rule,” 894 F.3d at 107-08. This Court observed that “the Improvements Act is an unusually precise and directive statute” that “mandates that all agencies increase penalties by a date certain [namely, August 1, 2016] with no suggestion of delay.” *Id.* at 113 n.12. By suspending the penalty increase, NHTSA had violated the Act’s “mandatory” deadlines, which allow “no discretion to the agencies regarding the timing of the adjustments.” *Id.* at 109, 113 n.12. After “nearly 30 years” of “congressional attempts to ensure that civil penalties keep pace with inflation,” allowing further delay in the form of the Suspension Rule

would “flout the core objects” of the Improvements Act. *Id.* at 110-11 (quotation marks and alterations omitted). The Court accordingly vacated the Suspension Rule as “unlawful,” *id.* at 100, and affirmed that “[t]he Civil Penalties Rule . . . is now in force,” *id.* at 116.¹⁰

D. Notwithstanding This Court’s Ruling, NHTSA Issues a Final Rule Repealing the \$14 Penalty

On July 26, 2019, NHTSA published the rule challenged here. 84 Fed. Reg. 36,007 (July 26, 2019) (“Repeal Rule”) (Special Appendix (S.A.) 1). NHTSA found in the Repeal Rule that the “decision by the Second Circuit” vacating the Suspension Rule “does not affect NHTSA’s authority to reconsider the applicability of the 2015 [Improvements] Act to the EPCA CAFE civil penalty provision.” 84 Fed. Reg. at 36,012 (S.A. 6). The Repeal Rule then concluded that the Improvements Act did *not* apply to the CAFE penalty at all, based on NHTSA’s “legal determination . . . that the CAFE civil penalty rate is not a ‘civil monetary penalty’ as contemplated by the 2015 [Improvements] Act.” 84 Fed. Reg. at 36,012

¹⁰ The Court also concluded that NHTSA had illegally issued the Suspension Rule without notice and comment. *NRDC*, 894 F.3d at 115.

(S.A. 6). The Repeal Rule thus reinstated the \$5.50 CAFE civil penalty. 84 Fed. Reg. at 36,009 (S.A. 3).

In the alternative, NHTSA claimed that it could reinstate the \$5.50 penalty based on the discretionary exception in the Improvements Act to implement a lower catch-up adjustment based on a finding of a “negative economic impact.” 84 Fed. Reg. at 36,013 (S.A. 7).

Finally, NHTSA reverted the increased cap on discretionary adjustments under EPCA from \$25 to \$10. *See* 84 Fed. Reg. at 36,029-30 (S.A. 23-24).

E. State Petitioners and Environmental Groups File Timely Challenges

State Petitioners timely filed a petition on August 2, 2019. Natural Resources Defense Council and Sierra Club also petitioned for review, and the Court consolidated the cases. ECF No. 71.

SUMMARY OF ARGUMENT

I. The CAFE penalty is a “civil monetary penalty” subject to inflation adjustment under the Improvements Act. NHTSA’s argument that the Improvements Act does not cover the CAFE penalty defies this Court’s recent holding to the contrary. Nor can NHTSA dismiss this Court’s ruling as dicta: the holding that the Improvements Act applies to the CAFE penalty was plainly necessary to the Court’s conclusion that NHTSA’s suspension of the penalty increase violated the Improvements Act. Moreover, the CAFE penalty unambiguously satisfies the straight-forward language of the “civil monetary penalty” definition, because, *inter alia*, it is “for a specific monetary amount” that is assessed for each increment of noncompliance with the CAFE standards.

There is no doubt that Congress intended to cover the CAFE penalty when it enacted the Improvements Act in 2015. Congress was legislating against the background of a universal twenty-five year understanding that the CAFE penalty is a “civil monetary penalty” covered by the Inflation Adjustment Act and its amendments. And Congress passed the Improvements Act as a direct response to multiple reports identifying the stagnant CAFE penalty, in particular, as proof

that a legislative fix was needed to ensure civil monetary penalties kept pace with inflation.

II. Because the CAFE penalty is a “civil monetary penalty,” the Improvements Act prescribes how NHTSA was required to adjust that penalty. That Act’s strict timetable precludes NHTSA from belatedly invoking discretion to make a smaller penalty increase. As this Court held, NHTSA lacks authority to undo the \$14 penalty because “although Congress preserved in the statute a narrow window of discretion for agencies regarding the amount of the initial catch-up adjustment, it afforded no such discretion regarding the *timing* of the adjustments.” *NRDC*, 894 F.3d at 109 (emphasis in original).

Even if NHTSA had discretion at this late date to reduce the CAFE penalty based on a “negative economic impact” finding, this Court should set aside NHTSA’s decision to reinstate the decades-old \$5.50 penalty because it was unlawful and arbitrary and capricious. NHTSA impermissibly applied factors from another statute, thereby unlawfully reversing its burden to establish the exception and improperly concluding that an absence of evidence to rebut a negative economic impact was sufficient to demonstrate such impact. NHTSA also erroneously considered increased

penalty payments in finding a negative economic impact and refused to weigh evidence of the countervailing economic benefits of a \$14 penalty. In addition, NHTSA's determination to make no adjustment at all, rather than a reduced adjustment, is both inconsistent with the Improvements Act and an arbitrary failure to consider options other than an all-or-nothing approach.

III. NHTSA also violated NEPA. Even though vast amounts of additional fuel will be burned as a result of the repeal of the \$14 penalty, NHTSA failed to conduct the most basic environmental review, neglecting even to quantify the amount of emissions that its action will cause, and failing to analyze the resulting impacts.

ARGUMENT

POINT I

THE CAFE PENALTY IS A CIVIL MONETARY PENALTY THAT CONGRESS REQUIRED TO BE INCREASED UNDER THE IMPROVEMENTS ACT

A. This Court Has Already Held That the Improvements Act Applies to the CAFE Penalty.

NHTSA's position that the Improvements Act does not apply to the CAFE penalty at all is foreclosed by this Court's holding just last year in *NRDC*. In that case, the Court held that the Improvements Act prohibited NHTSA from suspending the Act's mandatory increase to the CAFE penalty beyond the statutory deadline of August 2016. *NRDC*, 894 F.3d at 109. "[B]ecause the text, purpose, and history of the Improvements Act are all unambiguous regarding the mandatory nature of the penalty deadlines, NHTSA's indefinite delay was issued 'in excess of statutory . . . authority.'" *Id.* at 113 (ellipsis in original) (quoting 5 U.S.C. § 706(2)(C)).

If the Improvements Act bars NHTSA from delaying a mandatory increase to the CAFE penalty, then it necessarily bars NHTSA from canceling that increase altogether. The Repeal Rule's *permanent* suspension of an increase to the CAFE penalty suffers from the same fatal defect as the *temporary* suspension that this Court vacated: it

disregards the Act’s “inflexible” “mandate[] that all agencies increase penalties by a date certain with no suggestion of delay.” *Id.* at 113 n.12. Because the Act’s “unusually precise and directive” schedule “provides no discretion to [federal] agencies regarding the timing of adjustments,” NHTSA had to implement the penalty increase mandated by the Act. *Id.*; *see also id.* at 111 (“We cannot read the Improvements Act to permit the very kind of indefinite delay that it was enacted to end.”); *id.* at 112 (“The penalty increase is mandated by the Improvements Act, and [n]othing in EPCA contradicts or undermines that mandate.”).

In nonetheless concluding that the Improvements Act does not apply to CAFE penalties at all, NHTSA’s Repeal Rule simply defies this Court’s decision. Notwithstanding the Court’s explicit recognition of the Improvements Act’s “unambiguous” application to the CAFE penalty, *id.* at 112 n.10, the Repeal Rule baldly states that the “decision by the Second Circuit does not affect NHTSA’s authority to reconsider the applicability of the 2015 Act to the EPCA CAFE civil penalty provision,” 84 Fed. Reg. at 36,012 (S.A. 6). To support that reasoning, NHTSA relies on a July 2019 letter from OMB opining that this Court’s interpretation of the Improvements Act “was incorrect and dicta.” (J.A. 932.) But a federal agency may

not blithely disregard a circuit court’s binding interpretation of a federal statute because it continues to believe that interpretation is “incorrect.” *See, e.g., Exelon Wind 1, L.L.C. v. Nelson*, 766 F.3d 380, 396-399 (5th Cir. 2014) (rejecting new agency interpretation because court had already rejected interpretation as contradicting statute’s “plain text”); *Sierra Club v. EPA*, 479 F.3d 875, 880-83 (D.C. Cir. 2007) (per curiam) (rejecting EPA rule as contrary to prior judicial interpretation of statute’s “plain language”).

The assertion that this Court’s interpretation of the Act was merely “dicta” is also wrong. Reasoning from this Court is dictum only if it was “unnecessary to its decision.” *Port Washington Teachers’ Ass’n v. Board of Educ. of Port Washington Union Free Sch. Dist.*, 478 F.3d 494, 502 (2d Cir. 2007). But this Court’s recognition that the Improvements Act applies to the CAFE penalty was plainly necessary to its holding that the Act unambiguously prohibited NHTSA from delaying a statutorily mandated increase to that penalty.¹¹

¹¹ It does not diminish the precedential value of this Court’s statutory interpretation that the decision separately invalidated the Suspension Rule for violating the APA’s notice-and-comment procedures. *See NRDC*, 894 F.3d at 115. “[W]here a decision rests on two or more grounds, none

NHTSA's only remaining argument is that it did not present in the prior litigation the specific statutory argument it is making here—that the CAFE penalty is not a “civil monetary penalty” to which the Improvements Act applies. But an agency cannot reconsider a statute's application after a Court has found the statute unambiguous. *National Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 982-83 (2005). NHTSA's disregard of this Court's holding is particularly inappropriate given that it has no interpretive authority under the statute, and thus no discretion under *Chevron*¹² or any other doctrine to adopt a different view of its statutory obligations. *See NRDC*, 894 F.3d at 112 n.10; *see also Adams Fruit Co. v. Barrett*, 494 U.S. 638, 649-650 (1990) (agency is empowered to fill gaps in a statute only where there is “a congressional delegation of administrative authority” to that agency).

Moreover, nothing prevented NHTSA from squarely raising its new (and incorrect) view of the Improvements Act in time to defend its Suspension Rule. NHTSA could have relied on the argument in issuing

can be relegated to the category of obiter dictum.” *Woods v. Interstate Realty Co.*, 337 U.S. 535, 537 (1949).

¹² *Chevron, U.S.A. Inc. v. NRDC*, 467 U.S. 837 (1984).

the Suspension Rule itself. Indeed, NHTSA had already given the interpretation it now presses in a March 2018 Notice of Proposed Rulemaking (for the Repeal Rule at issue here), and it referred to that argument in its response brief before this Court by noting that it had doubts about “[w]hether CAFE civil penalties are within the scope of the 2015 Act[].” *See* Br. for Resp’ts at 28, *NRDC*, 894 F.3d 95 (No. 17-2780), ECF No. 168. Moreover, State Petitioners had expressly argued that the Act applied to the CAFE penalty, responding to the very arguments that NHTSA attempts to make here, *see* Br. for State Pet’rs at 33-34, *NRDC*, 894 F.3d 95 (No. 17-2780), ECF No. 139, but NHTSA declined to elaborate any contrary view.

This Court should therefore affirm its prior holding in *NRDC v. NHTSA* that the Improvements Act unambiguously forbids NHTSA from avoiding the Act’s mandatory increase to the CAFE penalty, and it should accordingly vacate the Repeal Rule. NHTSA has offered no valid basis for this Court, only a year removed from that decision, to discard directly applicable precedent in a case involving the same parties, the same statutes, and the same civil monetary penalty.

B. The Improvements Act Unambiguously Applies to the CAFE Penalty.

Even if this Court were to consider the question anew, it should adhere to its prior holding that the CAFE penalty is a “civil monetary penalty” subject to mandatory adjustments for inflation under the Improvements Act.

Congress enacted the Inflation Adjustment Act and amended it with the Improvements Act to resolve a specific problem: the eroding effect of inflation on civil penalties based on specific dollar figures. There is no question here that the CAFE penalty relies on a specific dollar figure (\$5 as originally enacted, later increased to \$5.50, then \$14)¹³ whose real value has declined over time. The CAFE penalty is thus precisely the type of penalty that Congress sought to address.

The CAFE penalty is also covered under the plain language of the Improvements Act. In adopting the criteria set forth in the 1990 Inflation Adjustment Act, the Improvements Act requires inflation adjustments for all “civil monetary penalties.” The CAFE penalty is a “penalty”

¹³ As OMB admits in its Non-Applicability Letter, this dollar figure “is ‘a specific monetary amount.’” (J.A. 929.)

imposing “monetary” sanctions for “civil” violations; EPCA denotes the penalty as a “civil penalty”; and EPCA locates it in a provision titled “Civil Penalties.” 49 U.S.C. § 32912(b). The CAFE penalty also satisfies the Inflation Adjustment Act’s definition of a “civil monetary penalty” as encompassing “any penalty, fine, or other sanction that . . . is for a specific monetary amount provided for by Federal law” or “has a maximum amount provided by Federal law.” 28 U.S.C. § 2461 note sec. 3(2).¹⁴ Here, the CAFE penalty “is for a specific monetary amount” because it sets a fine at a specific number of dollars per increment of noncompliance. *See* 28 U.S.C. § 2461 note sec. 3. (*See also* J.A. 515.) At minimum, the CAFE penalty “has a maximum amount,” as no manufacturer can pay more than that specific dollar figure, and because EPCA caps NHTSA’s separate authority to adjust the penalty. Either way, the CAFE penalty falls within the statute’s plain language.

¹⁴ The definition further requires that any such penalty be “assessed or enforced by an agency” and “assessed or enforced pursuant to an administrative proceeding or a civil action.” 28 U.S.C. § 2461 note sec. 3(2)(B)-(C). NHTSA does not dispute that these additional criteria are satisfied.

This plain meaning and Congress's underlying purpose are confirmed by a nearly three-decades-long understanding by Congress, NHTSA, and other federal agencies that the CAFE penalty is subject to the Inflation Adjustment Act and its amendments, including the Improvements Act. Indeed, the \$5.50 penalty that the Repeal Rule seeks to reinstate was itself the result of a prior increase mandated by the 1996 amendments. NHTSA has provided no basis to disrupt the uniform and well established understanding.

- 1. Congress's reforms were intended to address those penalties that, like the CAFE penalty, are based on specific dollar figures and thus vulnerable to the erosive effects of inflation.**

NHTSA's contention that the CAFE penalty falls outside of the Inflation Adjustment Act and its amendments disregards the purpose behind Congress's repeated reforms of civil monetary penalties. In capturing penalties with a "specific monetary amount" or "maximum amount," Congress intended to cover all penalties that were based on specific dollar figures (other than those it expressly exempted)—because it is those nominal dollar amounts whose real value and deterrent effect are diminished by inflation. *See* 28 U.S.C. § 2461 note sec. 5 (further

requiring adjustments of “minimum and maximum” amounts of “range[s]”). The types of civil penalties excluded from Congress’s reforms are penalties *not* affected by inflation because they are not set by reference to specific, nominal dollar amounts fixed by statute—for example, penalties based upon actual damages or incurred costs.

In its general guidance issued pursuant to the Improvements Act, OMB has repeatedly made this very distinction, explaining that the Improvements Act applies broadly “to penalties with a dollar amount,”¹⁵ and that the definition is designed to exclude only penalties “written as functions of violations.”¹⁶ (J.A. 515; *accord* J.A. 680, 714.) For example, a penalty set not as a numerical dollar figure, but by reference to “the full cost of restoration and repair of archaeological resources damaged,” would not come within the ambit of the Improvements Act. (J.A. 515; *accord* J.A.

¹⁵ Shortly after the definition provision was enacted in 1990, OMB similarly equated a penalty with a “specific monetary amount” to a penalty with a “given dollar amount” or “specific dollar amount.” (J.A. 46.)

¹⁶ In the documents created specifically to support this rule, OMB newly asserts that the CAFE penalty is not a civil monetary penalty, but it has not abandoned the broader inter-agency guidance that it has reaffirmed each year between 2016 and 2018.

920.)¹⁷ By contrast, even when a penalty is only partially reliant on “some dollar amounts,” like a penalty set at “either twice the value of the transaction or \$250,000,” OMB advises that the portion framed as a “dollar figure, in this case \$250,000, will be subject to adjustment” under the Improvements Act. (J.A. 515; *accord* J.A. 920.)¹⁸

This common-sense differentiation between penalties based on nominal dollar amounts, and penalties expressed in other forms, aligns with the purposes of the Improvements Act. Penalties set as dollar amounts will lose value over time unless they are adjusted. In the language of the statute, “the effect of inflation” will “weaken[] the deterrent effect of such penalties” and thereby reduce “compliance with the law.” 28 U.S.C. § 2461 note sec. 2(a)(2)-(3), (b)(2). By contrast, inflation will not diminish the real value of penalties framed as functions of violations because the underlying bases of those penalties—damages, costs, and so on—will necessarily be their present-day values. Because

¹⁷ See also 29 U.S.C. § 1132(i) (examples of penalties that are not “civil monetary penalties” because they are set according to a “percent of the amount involved in each [offending] transaction”).

¹⁸ See also 29 U.S.C. § 1132(m) (example of penalty set partially in dollar amounts, with penalty “equal to the value of the distribution” but not to “exceed \$10,000 for each such distribution”).

the CAFE penalty is indisputably based on nominal dollar figures whose real value will be diminished by inflation, the CAFE penalty is precisely the type of “civil monetary penalty” whose deterrent effect Congress sought to protect.

2. The CAFE penalty “is for a specific monetary amount.”

NHTSA’s position is also contrary to the plain meaning of the Improvements Act’s definition of “civil monetary penalty.” The CAFE penalty “is for a specific monetary amount”—one definition of a “civil monetary penalty” covered by the Act, 28 U.S.C. § 2461 note sec. 3(2)(A)(i)—because it sets fines for manufacturers at a nominally expressed number of dollars per increment of noncompliance. (*See* J.A. 515.) In arguing that the CAFE penalty is not “for a specific monetary amount,” NHTSA relies on several immaterial characteristics of the penalty. None of the attributes that NHTSA identifies undermine the Improvements Act’s application to the CAFE penalty.

a. Virtually all “civil monetary penalties” are expressed as a rate.

NHTSA contends that the CAFE penalty is not “for a specific monetary amount” because the nominal dollar figure provided by law is

a “rate” that is “used to calculate” the ultimate penalty, and not the penalty itself. *See* 84 Fed. Reg. at 36,012, 36,015-16 (S.A. 6, 9-10). But nearly every “civil monetary penalty” subject to the Inflation Adjustment Act and its amendments is set forth as a dollar figure that must be multiplied by increments of noncompliance to determine the total amount owed. (*See* J.A. 57-88 (charting how each civil monetary penalty is applied to calculate total owed).) For example, many civil monetary penalties are imposed for each discrete violation or each day of noncompliance, thus requiring an agency to multiply a “specific monetary amount” expressed in the statute by the number of violations or days to determine a violator’s overall liability. (*See* J.A. 57-88.) Other civil penalty laws define the increment of noncompliance in a wide variety of other ways.¹⁹

¹⁹ *See, e.g.*, 11 C.F.R. § 111.43 (penalty calculated based on the “level of activity in the report,” the “[n]umber of days late,” and the “[n]umber of previous violations”) (adjusted for inflation at 81 Fed. Reg. 41,196, 41,199 (June 24, 2016)); 46 U.S.C. § 55111(c) (“penalty of at least \$350 but not more than \$1,100” for violation in addition to “penalty of \$60 per ton based on the tonnage of each vessel towed”) (adjusted for inflation at 84 Fed. Reg. 13,499, 13,510 (Apr. 5, 2019)); 33 U.S.C. § 1321(b)(7)(A) (penalty of “up to \$25,000 per day of violation or an amount up to \$1,000 per barrel [of oil or hazardous waste] discharged”) (adjusted for inflation at 82 Fed. Reg. 8,571, 8,581 (Jan. 27, 2017)); 10 C.F.R. § 501.181(c)(1)

NHTSA attempts to distinguish these counter-examples by describing them as “penalties involving a simple multiplier.” 84 Fed. Reg. at 36,019 (S.A. 13). But NHTSA fails to rationally explain why the simplicity of a mathematical operation should affect the application of the Improvements Act. The target of that Act (and the Inflation Adjustment Act before it) is the underlying nominal dollar figure whose real value had been diminished by inflation—not any multiplication or addition done to that figure to yield the total amount owed. In any event, the CAFE penalty is not even uniquely complex in requiring multiple operations. *See Mercedes-Benz of N. Am., Inc. v. NHTSA*, 938 F.2d 294, 295 (D.C. Cir. 1991) (“the methodology for calculating [CAFE] fines is quite straightforward”). For example, many penalties apply “per day per violation” (*see* J.A. 57-88), meaning that determining the total amount owed requires multiplying the penalty amount by two figures—both the number of days and the number of violations. The CAFE penalty is calculated similarly in multiplying the base dollar figure by both the

(penalty of “up to \$8 for each MCF of natural gas or up to \$38 for each barrel of oil used in excess of that authorized”) (adjusted for inflation at 83 Fed. Reg. 66,080, 66,081 (Dec. 26, 2018)).

number of tenths of an mpg that a fleet's fuel economy falls below the standard, and the number of vehicles in the fleet. And myriad other civil monetary penalties are expressed in various ways more "complex" than a simple multiplier. See *supra* at 37-38 & n.19.

Nor is NHTSA correct that EPCA's text distinguishes between the CAFE penalty "rate" and the ultimate "amount" of the penalty. See 84 Fed. Reg. at 36,016 (S.A. 10). While EPCA refers to the total amount owed by a manufacturer as the "civil penalty," the statute also—in language NHTSA fails to acknowledge—refers to the \$5 figure as both the "penalty" and the "penalty amount." See 49 U.S.C. § 32912(c)(1)(A) (increasing the penalty from \$5 to a higher sum is mandating a "[h]igher penalty amount[]" and constitutes "an increase in the penalty"). Indeed, it is entirely consistent with common usage for "penalty" to denote both (1) the total sum a violator owes, and (2) the specific dollar amount to be assessed per unit of noncompliance. Illustrating this point are abundant

recent usages of “penalty” and “civil penalty” by this Court²⁰ and by NHTSA²¹ referring interchangeably to both concepts.

b. Manufacturers’ ability to use credits does not undermine the CAFE penalty’s imposition of “a specific monetary amount.”

NHTSA also asserts that automakers’ ability to reduce their CAFE liability by using credits (earned when a manufacturer exceeds the CAFE standards) supports NHTSA’s position that the CAFE penalty and its nominal dollar figure do not impose a “specific monetary amount.” *See* 84 Fed. Reg. at 36,016-19 (S.A. 10-13). That argument is again nonresponsive to the point that Congress sought to counteract the effect of inflation on statutory penalties expressed as specific dollar figures. The CAFE program’s credit scheme is irrelevant to the concern that the real value

²⁰ *See, e.g., NRDC*, 894 F.3d at 100 (describing \$14 as “the new civil penalty”); *id.* at 101 (noting that “in 1975, the CAFE penalty was set at \$5.00 per tenth of an mpg” and that “the penalty was never increased from \$5” until 1997, when NHTSA “raised the penalty to \$5.50, and the penalty remained at that amount until 2016, when NHTSA published an interim final rule raising the penalty to \$14”); *id.* at 112 (holding that “[t]he penalty increase is mandated by the Improvements Act”).

²¹ *See, e.g.,* 81 Fed. Reg. at 43,524, 43,526 (J.A. 662) (“the adjusted civil penalty is \$14” and applying the inflation multiplier without any cap would “result[] in an adjusted civil penalty of \$22”).

and thus deterrent effect of the underlying \$5 (or \$5.50) figure had radically diminished over time.

Nor does the credit scheme alter the fact that the CAFE penalty requires multiplying a specific dollar figure—i.e., a “specific monetary amount”—by the number of increments of noncompliance to determine the sum a manufacturer owes. Although this sum may then be “reduced by the credits available to the manufacturer,” 49 U.S.C. § 32912(b)(3), an automaker’s total liability is still indisputably dictated by the amount of the underlying \$5 (or \$5.50) nominal dollar figure.

NHTSA’s argument about credits is not only irrelevant on those grounds, but also based on a fundamental mischaracterization of how CAFE credits function. According to NHTSA, the use of credits is “unrelated to the manufacturer’s actions to meet the [CAFE] standard,” thus undermining the notion that the CAFE penalty is based on “how much the entity violated the law.” 84 Fed. Reg. at 36,019 (S.A. 13); *see also id.* (asserting that because of credit usage, “CAFE penalty is not a fixed penalty based on the number of violations”). But that attempt to decouple credits from compliance fails. Credits are earned only when an automaker *exceeds* its compliance obligations under the CAFE program.

An automaker's use of credits to cover a shortfall in one model year or vehicle category thus satisfies the automaker's CAFE obligation by drawing on equivalent fuel savings elsewhere.²² *See* 49 U.S.C. § 32903; *see also* 49 C.F.R. § 536.3 (credits are "adjusted for total oil savings" when transferred between categories); *Center for Auto Safety v. NHTSA*, 793 F.2d 1322, 1333 (D.C. Cir. 1996) (explaining how carrying forward credits promotes fuel efficiency).

Indeed, EPCA is crystal clear that an automaker applying credits is not merely finding an alternate way to pay for its violations, as NHTSA presumes, but utilizing an alternative and equally acceptable method of compliance. In the language of the statute, while "[a]n automaker

²² It is irrelevant that automakers have the ability to obtain credits in a variety of ways—including through purchases from other manufacturers—because all credits represent real-world fuel savings in excess of the standards. Congress rationally determined that automakers may comply with the CAFE program by achieving those fuel savings at least cost, wherever they may be available. In any event, to the extent that NHTSA's argument turns on the purported "additional level of complexity to the calculation process" arising from credit trading, *see* 84 Fed. Reg. at 36,016 (S.A. 10), Congress only gave manufacturers the ability to trade credits with each other in 2007, *see id.* (S.A. 10). NHTSA's apparent suggestion that the CAFE penalty was transformed into something other than a "civil monetary penalty" in 2007 due to the expansion of this flexibility is implausible.

commits a violation if the automaker fails to comply with an applicable average fuel economy standard *[c]ompliance is determined after considering credits available to the manufacturer.*” 49 U.S.C. § 32911(b) (emphasis added). Like EPCA’s text, NHTSA’s regulations are unequivocal that a “manufacturer *achieves compliance*” when it uses “a sufficient number of valid credits . . . to cover the gap between the average fuel economy” and the standard. 49 C.F.R. § 536.3(b) (emphasis added). And NHTSA has repeatedly asserted that view to industry and the public.²³ NHTSA’s current attempt to characterize the credit scheme as representing *noncompliance* with the CAFE standards is thus an unrecognized, unexplained, and unsupported departure from the agency’s prior position, which NHTSA fails even to acknowledge. *See FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (agencies may not “depart from a prior policy *sub silentio*”).

²³ For example, NHTSA has explained that “[a] manufacturer complies with NHTSA’s fuel economy standard if its fleet average performance is greater than or equal to its required standard, or if it is able to use available compliance flexibilities [i.e., credits] to resolve its non-compliance difference.” 77 Fed. Reg. at 63,126, *see also id.* at 63,019 (automakers use “credits to achieve compliance”).

c. NHTSA’s separate authority to increase the penalty under the Energy Policy and Conservation Act (EPCA) does not override the Improvement Act’s mandatory adjustment.

NHTSA is equally misguided in arguing that, because EPCA vests NHTSA with a separate power to increase the amount of the CAFE penalty in certain circumstances, *see* 49 U.S.C. § 32912(c), Congress did not intend the Improvements Act’s mandatory inflation adjustment to apply. *See* 84 Fed. Reg. at 36,017 (S.A. 11). To the contrary, Congress expressly recognized in the Improvements Act that many agencies (like NHTSA) had preexisting authority to adjust penalties, but it decided to exempt only some penalties adjusted under such separate authority—specifically, those penalties that, “during the 12 months preceding” had *already* been “increased by an amount greater than the amount of the [cost-of-living] adjustment.” 28 U.S.C. § 2461 note sec. 4(d). There is no dispute that the specific exemption language does not apply to the CAFE penalty, which had *not* been increased pursuant to NHTSA’s separate EPCA authority ever, let alone within the prior twelve months. Congress’s express exclusion of one class of penalties subject to separate adjustments forecloses any inference that it implicitly intended to exclude other penalties, including the CAFE penalty, that can be

adjusted under separate authority but were not. *See John Wiley & Sons, Inc. v. DRK Photo*, 882 F.3d 394, 405 (2d Cir.) (“Congress’s expression of one or several items . . . typically reflects an intent to exclude another left unmentioned.” (quotation and alteration marks omitted)), *cert. denied*, 139 S.Ct. 237 (2018).

NHTSA acknowledges “the general notion” that Congress “intended the inflation adjustments required under the 2015 Act to coexist with discretionary adjustments provided for under other statutes,” but claims that it does not apply here because the CAFE penalty is “unique.” 84 Fed. Reg. at 36,017 (S.A. 11). But NHTSA identifies nothing in the text of either the Improvements Act or EPCA’s CAFE provisions to support such an exception. Moreover, Congress enacted the Improvements Act and made its inflation adjustments “unusually precise and directive,” *NRDC*, 894 F.3d at 113 n.12, because existing authorities had proven insufficient to address the harmful effects of inflation. It would subvert Congress’s intent to allow NHTSA to rely on its unexercised, separate authority under EPCA as a basis to prevent mandatory inflation adjustments that Congress designed to overcome agency inertia.

3. The CAFE penalty “has a maximum amount.”

The CAFE penalty also qualifies as a “civil monetary penalty” because it “has a maximum amount”—the second definition under the Inflation Adjustment Act. *See* 28 U.S.C. § 2461, note § 3(2). Initially, even if NHTSA were correct that the CAFE penalty is somehow not for a “specific monetary amount” because the \$5.50 (or \$14) figure can be reduced by credits, it would still be the case that this figure is the most an automaker can pay (i.e., the “maximum amount”) per increment of noncompliance. In addition, the penalty also “has a maximum amount” in the form of the cap on NHTSA’s discretionary authority to increase the penalty under EPCA; a penalty increased under that separate authority is limited to an amount “no . . . more than \$10 [increased to \$25 in 2016] for each .1 of a mile per gallon.” *See* 49 U.S.C. § 32912(c)(1)(A)-(B). The phrase “not . . . more than” is the same operative language NHTSA identifies elsewhere as indicating “civil monetary penalty” status. 84 Fed. Reg. at 36,016 (S.A. 10) (CAFE “general penalty” meets definition because “‘not more than’ plainly denotes that the \$10,000 civil penalty is a maximum amount for each violation”).

NHTSA asserts that the EPCA cap cannot be the required “maximum amount” to qualify as a “civil monetary penalty” because the cap is not “‘assessed or enforced’ at the time of the violation.” 84 Fed. Reg. at 36,016 (S.A. 10) (quotation marks omitted). But that argument conflates two distinct parts of the “civil monetary penalty” definition. A penalty qualifies as a “civil monetary penalty” if, under the definition’s first prong, it “*has* a maximum amount,” 28 U.S.C. § 2461 note sec. 3(2)(A) (emphasis added), and also, under the second prong, “*is* assessed or enforced by an agency,” *id.* sec. 3(2)(B). In other words, what needs to be “assessed or enforced” is the penalty itself, not the cap. Here, there is no dispute that NHTSA assesses and enforces the CAFE penalty.

4. History confirms that the CAFE penalty is a “civil monetary penalty” whose value Congress intended to restore.

The historical evidence confirms the result dictated by the plain language and purpose of the relevant statutes. For nearly three decades after the enactment of the Inflation Adjustment Act, Congress, NHTSA, and OMB consistently treated the CAFE penalty as a “civil monetary penalty” subject to the Act and its subsequent amendments—including the Improvements Act. That uniform and repeatedly expressed

understanding eliminates any doubt that Congress sought to include the CAFE penalty in its many attempts to protect civil monetary penalties from the effects of inflation. *See Garcia v. Teitler*, 443 F.3d 202, 207 (2d Cir. 2006) (courts should presume Congress has “legislated against a background of law” understood to be in place at the time (quotation marks omitted)); *see also Texas Dep’t of Hous. & Cmty. Affairs v. Inclusive Cmty. Project, Inc.*, 135 S. Ct. 2507, 2520 (2015) (noting importance of the “background understanding in the legal and regulatory system” of language that Congress retains when amending statute).

As explained in the detailed history above (*supra* at 10-14), NHTSA and OMB identified the CAFE penalty as a “civil monetary penalty” immediately after Congress defined the term in 1990, in the first report issued pursuant to the Inflation Adjustment Act. (J.A. 41, 82, 114.) In 1997, NHTSA adjusted the penalty from \$5 to \$5.50 pursuant to the direction in the Debt Collection Improvement Act to increase “civil monetary penalties.” 62 Fed. Reg. at 5,168. Concurrently, NHTSA promulgated its own regulatory definition of “civil penalty”—borrowing the statute’s language of “specific monetary amount” and “maximum amount”—and denoted the CAFE penalty a “civil penalty” under that

definition. 62 Fed. Reg. at 5,169-70. *Id.* NHTSA's regulations *still* label the CAFE penalty a "civil penalty." *See* 49 C.F.R. §§ 578.4, 578.5.

In later reports, CRS and GAO—legislative agencies "that exist[] in large part to serve the needs of Congress," *see Bowsher v. Merck & Co.*, 460 U.S. 824, 844 (1983)—repeatedly identified the CAFE penalty as one of the "civil monetary penalties" that had failed to keep up with inflation because of the Inflation Adjustment Act's shortcomings. *See supra* at 12-14. GAO issued reports in 2003 and 2007 that advised Congress of the problem of stagnant civil penalties, both in the CAFE context and more broadly.²⁴ (J.A. 189, 238, 244.) *See also* 2010 GAO Report at 17 (noting stagnant CAFE penalty). In 2008, CRS likewise identified the CAFE penalty as a civil monetary penalty that remained stagnant because of the Inflation Adjustment Act's flaws. CRS Report at CRS-9.

Thus, NHTSA, OMB, GAO, and CRS repeatedly informed Congress that (1) prior enactments had proven insufficient to restore the deterrent effect of many civil monetary penalties; (2) the CAFE penalty was one of the affected civil monetary penalties; and (3) a legislative fix was

²⁴ NHTSA participated in the preparation of both GAO reports. *See supra* at 12-13.

warranted. Congress enacted the Improvements Act in 2015 to respond to these specific concerns. *See NRDC*, 894 F.3d at 111 (noting history of “increasing intervention on the part of Congress regarding civil penalties”). And while the Act exempted some penalties from its coverage, Congress did not exempt EPCA’s CAFE penalty. *See supra* at 11, 16-17. Consistent with this clear expression of Congress’s intent, NHTSA appropriately implemented the Improvements Act’s mandatory inflation adjustment and increased the CAFE penalty to \$14 in 2016. 81 Fed. Reg. at 95,489 (J.A. 684).

This uniform understanding was shared not just by Congress and every relevant government agency but also by automobile manufacturers themselves. Even the industry petitioners who in 2016 opposed and sought reconsideration of the \$14 penalty acknowledged that it was a “civil monetary penalty” subject to the Improvements Act, and that “NHTSA is not empowered to exempt the CAFE program.” (J.A. 666.)

NHTSA ignores the historical evidence, claiming that “Congress was not necessarily ‘on notice’ that NHTSA would apply the 2015 Act to the CAFE civil penalty . . . merely because it had done so in 1997.” 84 Fed. Reg. at 36,017 (S.A. 11). But NHTSA here simply ignores the post-

1997 reports repeatedly advising Congress of the uniform view of every relevant federal agency, including NHTSA, regarding the CAFE penalty's status.²⁵ Moreover, the lack of any "subsequent adjustments to the \$5.50" penalty after 1997 was not the result of any confusion about whether the CAFE penalty was a "civil monetary penalty," *see id.* (S.A. 11), but the result of a rounding threshold in the 1996 amendments that prevented NHTSA from making further adjustments. *See supra* at 12 n.7.

Finally, NHTSA relies on an OMB letter stating that the historical evidence is "inconsistent." (*See* J.A. 931-932.) But that letter inexplicably neglects to mention the numerous reports directed to Congress confirming the universal understanding that the CAFE penalty is a "civil monetary penalty." And OMB's reliance on a 1988 survey that did not identify the CAFE penalty as a civil monetary penalty—the only purported evidence of inconsistency—is misplaced for several reasons. (*See* J.A. 1-37.) *First*, the 1988 report predated by two years the

²⁵ The historical evidence also refutes NHTSA's unsupported claim that Congress made a considered decision to exclude the CAFE penalty from inflation adjustments in order to keep the total penalty cost imposed per gallon of fuel use constant. *See* 84 Fed. Reg. at 36,018 (S.A. 12).

enactment of the Inflation Adjustment Act in 1990, which defined “civil monetary penalty” for purposes of inflation adjustment for the first time.²⁶ *Second*, NHTSA did not identify *any* EPCA penalties for the 1988 study, including penalties (like the \$10,000 CAFE “general penalty,” 49 U.S.C. § 32912(a)) that NHTSA concedes are civil monetary penalties subject to mandatory inflation adjustments.²⁷ *Third*, the 1988 survey cannot rebut the subsequent three decades of consensus that the CAFE penalty is a “civil monetary penalty” that requires adjustments to keep pace with inflation.

C. NHTSA Improperly Reduced the Cap on Its Separate Authority to Adjust the Penalty Under EPCA.

NHTSA also improperly reverted the cap (from \$25 back to \$10) that circumscribes NHTSA’s separate authority to adjust the CAFE penalty

²⁶ While a Senate bill introduced after the start of the study introduced those terms, that definition was not provided to the agencies OMB had tasked with identifying penalties. (J.A. 5, 20-21.)

²⁷ In the Repeal Rule, NHTSA confirmed that it was increasing this “general penalty,” and repeatedly distinguished the CAFE penalty “from ordinary civil penalty provisions, such as the general penalty for CAFE violations” that are plainly “civil monetary penalties.” 84 Fed. Reg. at 36,008, 36,009, 36,015-17, 36,031 (S.A. 2-3, 9-11, 25).

upwards under 49 U.S.C. § 32912(c)(1)(A) of EPCA. As a threshold matter, whether this figure is adjusted has no bearing on the increase of the CAFE penalty to \$14.²⁸ Nonetheless, because (for all the reasons above) the CAFE penalty is a “civil monetary penalty, NHTSA was required to adjust the \$10 maximum along with the \$5.50 penalty because the Improvements Act requires agencies to adjust any portion of a civil monetary penalty expressed as a “dollar figure.” (J.A. 515, 920.) This mandate applies to “minimum and maximum” dollar amounts. 28 U.S.C. § 2461 note sec. 5(a).²⁹ And at least in this context, NHTSA “does not[] dispute that the \$10 cap is a ‘maximum amount.’” 84 Fed. Reg. at 36,029 (S.A. 23).

²⁸ The cap is a ceiling only on NHTSA’s separate authority to “prescribe [a higher penalty] under subparagraph (A)” of 49 U.S.C. § 32912(c)(1), not a ceiling on increases made pursuant to other statutory directives, including the Improvements Act.

²⁹ A dollar amount that is part of a penalty need not, in isolation, qualify as a “civil monetary penalty” to be subject to adjustment. Notably, “minimum” amounts must be increased, 28 U.S.C. § 2461 note sec. 5(a), even though a minimum cannot itself be the basis for qualifying as a “civil monetary penalty,” *id.* sec. 3(2)(A) (definition requires “specific” or “maximum” amount).

POINT II

NHTSA MAY NOT REDUCE THE \$14 PENALTY AMOUNT BASED ON A FINDING OF “NEGATIVE ECONOMIC IMPACT”

In the alternative, NHTSA seeks to revert the CAFE penalty to \$5.50 by availing itself of the discretionary “negative economic impact” exception in section 4(c)(1)(A) of the Improvements Act. But the plain terms of the Act forbid NHTSA from invoking that exception now, three years after NHTSA already increased the CAFE penalty in accordance with the Act’s mandatory deadline and declined to invoke the exception. And even setting aside the statutory deadline, NHTSA acted arbitrarily and capriciously in finding a negative economic impact here.

A. The Improvements Act Bars NHTSA from Reversing a Catch-Up Adjustment Based on the Discretionary Exception Three Years After the Agency Complied with the Act’s “Clear and Mandatory” Deadline.

As this Court previously held, the Improvements Act’s “deadlines for adjustments are clear and mandatory,” *NRDC*, 894 F.3d at 109, and require that an agency’s initial catch-up adjustment “shall take effect not later than August 1, 2016,” 28 U.S.C. § 2461 note sec. 4(b)(1)(B). That deadline applies as well to any discretionary change to the initial catch-up adjustment based on negative economic impact. As this Court stated,

“[a]lthough Congress preserved in the statute a narrow window of discretion for agencies regarding the amount of the initial catch-up adjustment”—a reference to the “negative economic impact” exception—“it afforded no such discretion regarding the *timing* of the adjustments.” *NRDC*, 894 F.3d at 109. In other words, NHTSA could have increased the penalty by “less than the otherwise required amount” only had it followed the statute’s procedures—including obtaining OMB concurrence—consistent with the Act’s August 2016 deadline. *See* 28 U.S.C. § 2461 note sec. 4(c). (*See also* J.A. 516 (directing agencies to submit reduced catch-up adjustment requests “as soon as possible, and no later than May 2, 2016,” in order to comply with that deadline).) Nothing in the Act allows NHTSA to invoke the discretionary exception now, years after it timely finalized the full catch-up adjustment, to eliminate the entire increase. *See* 84 Fed. Reg. at 36,021 (S.A. 15) (acknowledging exception “is part of making the initial catch-up adjustment”).

NHTSA concedes that it has “no specific statutory or codified regulatory authority” to implement a reduced adjustment now. 84 Fed. Reg. at 36,014-15 (S.A. 8-9). Instead, it attempts to rely on its “inherent authority” to implement the adjustment based on a purported “inherent

power to reconsider” past decisions. *Id.* (S.A. 8-9). But this Court has now twice rejected that argument, holding that agencies lack “inherent power to reconsider final rules” promulgated to comply with mandatory deadlines—including the very deadline at issue here. *NRDC*, 894 F.3d at 112 (quotation marks omitted); *NRDC v. Abraham*, 355 F.3d 179, 202 (2d Cir. 2004) (same). Unlike other schemes that vest agencies with ongoing authority to reassess policy choices “on a continuing basis,” 84 Fed. Reg. at 36,015 (S.A. 9) (citing *Chevron*, 467 U.S. at 863-64), the Improvements Act is “an unusually precise and directive statute,” requiring that “all agencies increase penalties by a date certain” and “provid[ing] no discretion to the agencies regarding the timing of adjustments,”³⁰ *NRDC*, 894 F.3d at 113 n.12. *See Tokyo Kikai Seisakusho, Ltd. v. United States*, 529 F.3d 1352, 1361 (Fed. Cir. 2008) (“[A]n agency obviously lacks power to reconsider where a statute forbids the exercise of such power.”).

In *NRDC*, NHTSA could point to nothing in the Improvements Act that authorized its disregard of the statute’s mandatory deadlines for

³⁰ This is confirmed by the Act’s subsequent deadlines. Only by timely making the catch-up adjustment can agencies meet their further obligations to update penalties for inflation “not later than January 15 of every year thereafter.” 28 U.S.C. § 2461 note sec. 4(a).

making inflation adjustments. *See NRDC*, 894 F.3d at 112-13. There is similarly nothing in the Act that would allow NHTSA to invoke “negative economic impact” years later to eliminate the initial inflation adjustment required by the Act.

NHTSA’s reliance on OMB’s July 2019 Negative Economic Impact Letter (*see* J.A. 934-941) does not change the analysis. OMB’s letter does not address the effect of the Improvements Act’s “strict timeline” of “mandated changes” to penalties. *See NRDC*, 894 F.3d at 111. And while the Improvements Act directed OMB to “issue guidance to agencies on implementing the inflation adjustments required under this Act,” 28 U.S.C. § 2461 note sec. 7(a), it did not authorize OMB or NHTSA to disregard the Act’s statutory deadlines.

Nor is it relevant that “[a]n agency would not be prohibited from making an otherwise required initial catch-up adjustment simply because it did not meet the statutory deadline.” *See* 84 Fed. Reg. at 36,021 (S.A. 15). Here, NHTSA *did* make the catch-up adjustment consistent with the statutory deadlines: it increased the penalty to \$14 in July 2016, effective August 2016, 81 Fed. Reg. at 43,526 (J.A. 662), and it finalized that adjustment in the Civil Penalties Rule, after rejecting a petition by

automakers to adopt a smaller penalty increase due to “negative economic impact,” 81 Fed. Reg. at 95,490 (J.A. 685).³¹ This case is thus not one where the agency seeks to exercise discretion late because it never had the opportunity to exercise that discretion earlier. Instead, NHTSA is seeking to reverse—well after the “narrow window of discretion” under the statute has expired, *NRDC*, 894 F.3d at 109—a considered and timely decision *not* to exercise its discretion to reduce the adjustment amount.

NHTSA also seeks to minimize the consequences of reinstating the outdated \$5.50 penalty by wrongly asserting that the \$14 penalty, undisputedly in force after this Court’s decision in *NRDC*, was having no “practical effect.” *See* 84 Fed. Reg. at 36,022 (S.A. 16). That argument provides no reason to disregard Congress’s “clear and mandatory” deadlines. *NRDC*, 894 F.3d at 109. It is also wrong. Automakers claimed the \$14 penalty had a serious enough effect that they implored NHTSA to make the new amount effective only for vehicles of model year 2019 and later, and NHTSA agreed to do so. 81 Fed. Reg. at 95,491 (J.A. 686)

³¹ That the July 2016 interim final rule was issued a few days late is immaterial.

(explaining that change would “provide a reasonable amount of lead time for manufacturers to adjust their plans and products”). And the \$14 penalty was important enough to automakers’ immediate manufacturing decisions that this Court expedited its consideration and resolution of the petitions in *NRDC*. Orders, *NRDC*, 894 F.3d 95 (No. 17-2780), ECF Nos. 128, 194 (expediting briefing and argument, and vacating Suspension Rule eleven days after argument, before opinion).

B. NHTSA’s Determination to Reduce the Penalty Based on a Negative Economic Impact Was Unlawful and Arbitrary and Capricious.

Even if NHTSA had authority to apply the “negative economic impact” exception to reduce the size of the catch-up adjustment years after the deadline, the manner in which it did so was manifestly arbitrary and capricious, *see* 5 U.S.C. § 706, and independently requires vacatur.

1. NHTSA employed the wrong standard in evaluating negative economic impact.

In purporting to find a “negative economic impact” sufficient to avoid the mandatory inflation adjustment compelled by the Improvements Act, NHTSA improperly looked to inapposite criteria located in EPCA’s separate authority permitting NHTSA to increase the CAFE penalty. *See*

84 Fed. Reg. at 36,022-26 (S.A. 16-20). Agencies “must be careful not to apply rules applicable under one statute to a different statute without careful and critical examination.” *Gross v. FBL Fin. Servs., Inc.*, 557 U.S. 167, 174 (2009) (quotation marks omitted). NHTSA failed to adhere to that basic principle here.

The inflation adjustment commanded by the Improvements Act and the separate penalty increase mechanism within EPCA reflect fundamentally distinct statutory regimes that NHTSA unreasonably conflated. The Improvements Act begins with the strong presumption that NHTSA “shall” make the required catch-up adjustment, with only a limited and discretionary exception to increase the penalty “by less than the otherwise required amount” if there is affirmative evidence of “negative economic impact.” 28 U.S.C. § 2461 note sec. 4(a), (c). As OMB cautioned at the time, such exceptions would “be rare.” (J.A. 516.) Indeed, no agency sought OMB’s concurrence to make a reduced inflation adjustment before the August 2016 adjustment deadline. *See* GAO, GAO-17-634, *Civil Penalties: Certain Federal Agencies Need to Improve Efforts to Comply with Inflation Adjustment Requirements* 5 (2017) (internet).

The relevant provisions of EPCA operate quite differently. EPCA allows NHTSA to invoke a separate, freestanding authority to increase the CAFE penalty independent of any consideration of inflation. But, in contrast to the Improvements Act, the presumption in EPCA is *against* such an increase, and NHTSA can overcome that presumption only with affirmative evidence that the penalty increase “(i) will result in, or substantially further, substantial energy conservation for automobiles . . . and (ii) will not have a substantial deleterious impact on the economy.” 49 U.S.C. § 32912(c)(1)(A). NHTSA also must affirmatively determine that the penalty increase likely would not “(i) cause a significant increase in unemployment in a State or a region of a State; (ii) adversely affect competition; or (iii) cause a significant increase in automobile imports.” *Id.* § 32912(c)(1)(C).

NHTSA improperly conflates these distinct regimes, concluding that an absence of evidence necessary for a penalty increase under EPCA justifies ignoring the mandatory penalty increase under the Improvements Act. There is no indication whatsoever that Congress intended the EPCA factors to be used to block the Improvements Act’s inflation adjustments. If anything, the Improvements Act’s strict deadlines

and mandatory adjustments are an indication that Congress wanted to overcome agency inertia that was preventing sorely needed civil penalty increases. See *supra* at 11-14. Allowing NHTSA to invoke EPCA's decades-old (and never utilized) scheme to avoid the Improvements Act's requirements would flout Congress's intent.

Because NHTSA employs the wrong standard, it erroneously relies on the *absence* of evidence of EPCA's factors to waive compliance with the Improvements Act's mandatory inflation adjustments. For example, NHTSA states that "[w]ithout a clearer picture" about the effect of the catch-up adjustment on employment, "NHTSA does not have the evidence needed to make the determination required under EPCA to raise the CAFE civil penalty rate." 84 Fed. Reg. at 36,024 (S.A. 18). NHTSA also raises inchoate concerns that "the CAFE civil penalty rate *could* . . . adversely affect competition" by "limiting consumer choice," but it nowhere cited any supporting facts or analysis. 84 Fed. Reg. at 36,025 (S.A. 19) (emphasis added and quotation marks omitted). This reasoning is backwards. The Improvements Act did not require any affirmative evidence to implement its mandatory inflation adjustments. Instead, those adjustments were presumptively required—unless an agency chose

to identify affirmative evidence that a penalty increase would cause serious economic harm. NHTSA's reliance on the absence of evidence was unlawful and arbitrary.

2. NHTSA failed to consider relevant factors concerning the effect of the catch-up adjustment.

NHTSA asserts that “[e]ven if the EPCA factors do not apply,” it still may invoke the negative economic impact exception based “on the estimate provided by industry showing annual costs of at least one billion dollars.” 84 Fed. Reg. at 36,026 (S.A. 20) (citing 83 Fed. Reg. at 13,916 (S.A. 41)). NHTSA states that this estimate consists of increased penalty payments and compliance costs. 84 Fed. Reg. at 36,028 (S.A. 22); *see* 83 Fed. Reg. at 13,911 (S.A. 36). NHTSA's determination is arbitrary and capricious because it improperly relied on an irrelevant factor while ignoring relevant factors, including the benefits of an increased penalty.

First, given the Improvement Act's express purpose of restoring the deterrent effect of civil monetary penalties and increasing compliance with underlying substantive rules (such as the CAFE standards), Congress could not have intended for NHTSA to base its negative economic impact determination on precisely those effects. Congress's explicit goals included

increasing the monetary burden associated with non-compliance as well as “improv[ing] the collection by the Federal Government of civil monetary penalties.” 28 U.S.C. § 2461 note, sec. 2(b)(3). Yet if the increase in the collection of penalties justified the exception, it would be automatically triggered by the adjustment of almost every penalty—an absurd result that conflicts with Congress’s aims. Likewise, the compliance costs cited by NHTSA come from automakers’ increased compliance with the statutorily mandated CAFE standards, another outcome that Congress intended and thus could not have contemplated as a “negative economic impact” sufficient to prevent an inflation adjustment in and of itself.³² In creating the “negative economic impact” exception, Congress provided agencies the ability to determine whether increased penalties and compliance costs would cause widespread or unanticipated “negative economic impact” *beyond* what Congress had already contemplated. But NHTSA identified no evidence of any further impact. The cost estimates on which NHTSA relies are thus based on

³² Compliance with the law is not a cognizable injury. *See Presault v. United States*, 100 F.3d 1525, 1539 (Fed. Cir. 1996) (no entity possesses a “right to violate otherwise valid laws”).

factors NHTSA should not have considered, rendering such reliance arbitrary and capricious.

Second, for NHTSA to reverse the 2016 decision not to invoke the negative economic impact exception, it would have to provide a “detailed justification” in light of the factual findings “which underlay [the] prior policy.” *Fox Television*, 556 U.S. at 515. Yet NHTSA does not give any consideration to its own prior findings, which contradict the industry estimates on which it here relied. In 2016, as part of a comprehensive technical review of the CAFE standards for model year 2022–2025 vehicles that NHTSA conducted jointly with EPA and the California Air Resources Board, NHTSA used the inflation-adjusted \$14 penalty as an input when finding that manufacturers could meet the CAFE standards at a reasonable cost. (J.A. 527, 611-612.) NHTSA further concluded that the economic benefits from consumer fuel savings would outweigh industry compliance costs, and that the “employment impact” from the standards was “expected to be positive.” (J.A. 552, 656-657.)

In the Repeal Rule, NHTSA contends that its earlier findings are “no longer operative” because *EPA* made a separate determination in 2018 to reconsider *its* emission standards for model year 2022–2025

vehicles. 84 Fed. Reg. at 36,027 (S.A. 21). But EPA’s determination could not—and did not—nullify NHTSA’s independent, specific determinations about costs and benefits. (J.A. 527, 537.) Moreover, as the D.C. Circuit held, EPA’s subsequent determination was not final agency action and “has not erased” the various documents, findings, and analysis on which EPA earlier relied. *California v. EPA*, 940 F.3d 1342, 1351 (D.C. Cir. 2019). Should EPA issue a final rule confirming its proposed changes to the emission standards, “it will need to provide a ‘reasoned explanation’ for why it is ‘disregarding facts and circumstances that underlay’ those standards. *Id.* (quotation marks omitted). NHTSA cannot escape that same obligation here, particularly at a time when no agency—neither NHTSA nor EPA—has explained in a final action why it is appropriate to disavow earlier views of the underlying data and analysis.

Third, in applying the negative economic impact exception, NHTSA erroneously interpreted the Improvements Act as precluding consideration of the inflation adjustment’s economic benefits. 84 Fed. Reg. at 36,023 (S.A. 17). But “agencies are ordinarily required to consider the relative costs and benefits of a regulation as part of reasoned decisionmaking.” *Cooling Water Intake Structure Coal. v. EPA*, 905 F.3d 49, 67 (2d Cir.

2018) (citing *Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015)); *see also Public Citizen, Inc. v. Mineta*, 340 F.3d 39, 58 (2d Cir. 2003) (holding NHTSA acted arbitrarily and capriciously where it considered lower costs to industry while ignoring forgone benefits). Consistent with that principle, the most natural reading of the “negative economic impact” exception is to allow less than a full catch-up adjustment where the *overall* economic impact is a net negative. Reading it as NHTSA does—to require consideration of only costs and not economic benefits—would lead to the implausible outcome that Congress intended to empower agencies to forgo even unambiguously beneficial adjustments. And here, a \$14 CAFE penalty will result in positive economic benefits, including substantial consumer fuel savings, that NHTSA has arbitrarily ignored. *See Environmental Pet’rs Br.* at 43-47.

3. NHTSA failed to consider making a smaller catch-up adjustment that would partly satisfy Congress’s goals.

Finally, NHTSA arbitrarily failed to consider a smaller adjustment other than a complete reversion to the decades-old \$5.50 penalty amount. The Improvements Act’s language allows a discretionary exception to its mandatory inflation adjustments “by less than the otherwise required

amount” upon a finding of “negative economic impact,” 28 U.S.C. § 2461 note sec. 4(c)(1), but it does not permit an agency to make *no change whatsoever* to a decades-old civil monetary penalty. NHTSA’s failure to consider making *some* adjustment to the CAFE penalty undermines the Improvements Act’s purpose to effectuate long-overdue inflation adjustments and restore penalties’ deterrent force. *See NRDC*, 894 F.3d at 111.

Even if this “narrow” exception, *id.* at 109, permitted an agency to eliminate the entire catch-up adjustment, NHTSA failed to “examine the relevant data and articulate a satisfactory explanation for its action,” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). Even when agencies enjoy reasonable discretion in making policy judgments, they nevertheless must “identify the standard [used] and explain its relationship to the underlying regulatory concerns.” *WorldCom, Inc. v. FCC*, 238 F.3d 449, 462 (D.C. Cir. 2001). Here, NHTSA only addressed the impact of a \$14 penalty. 84 Fed. Reg. at 36,026, 36,033 (S.A. 20, 27). It failed to undertake any analysis or offer facts showing that penalties between \$5.50 and \$14 would create a

negative economic impact.³³ Instead, NHTSA baldly asserts in a footnote that “any increase in the CAFE civil penalty rate” would have such an impact. 84 Fed. Reg. at 36,023 n.160 (S.A. 17). That conclusory and unsupported assertion is inadequate.

³³ This failure is even more egregious given NHTSA’s claim that it *did* consider other penalty amounts (including \$6 and \$10) as part of its NEPA review. 84 Fed. Reg. at 36,031 (S.A. 25).

POINT III

NHTSA FAILED TO TAKE THE REQUIRED “HARD LOOK” AT THE ENVIRONMENTAL IMPACTS OF REPEALING THE \$14 PENALTY

NHTSA’s repeal of the \$14 penalty is also procedurally deficient because NHTSA failed to account for the additional greenhouse gases (GHGs) that will result from the Repeal Rule. NHTSA thus violated NEPA’s requirement to take a “‘hard look’ at [the] environmental consequences” of its action. *Sierra Club v. U.S. Army Corps of Eng’rs*, 701 F.2d 1011, 1029 (2d Cir. 1983) (quotation marks omitted). NHTSA’s bare conclusion that reinstating the \$5.50 penalty “will not have a significant effect on the human environment,” *see* 84 Fed. Reg. at 36,033 (S.A. 27), lacks any foundation and falls well short of its obligation.

The Final Environmental Assessment (EA) does not even quantify the increased GHG emissions that will result from the reduced CAFE penalty. As courts have held, NEPA requires such quantification as a basic prerequisite to understanding an action’s environmental impacts. *See, e.g., Sierra Club v. FERC*, 867 F.3d 1357, 1375 (D.C. Cir. 2017) (faulting agency for failure to “quantify and consider the project’s downstream carbon emissions”); *San Juan Citizens All. v. Bureau of*

Land Mgmt., 326 F. Supp. 3d 1227, 1244 (D.N.M. 2018) (finding agency acted arbitrarily in “fail[ing] to estimate the amount of greenhouse gas emissions which will result” from its action).

NHTSA has no excuse for failing to quantify the environmental impacts here. The agency’s own prior findings confirm that replacing a \$14 penalty with a \$5.50 penalty will result in increased emissions of GHGs.³⁴ And quantifying those emissions would have been feasible, *cf.* *Sierra Club*, 867 F.3d at 1374 (discussing infeasibility defense to quantification), as NHTSA has elsewhere modeled the effect that CAFE program changes will have on fuel consumption and GHG emissions.³⁵

In an attempt to excuse its failure, NHTSA points to a Final Environmental Impact Statement (EIS) that it prepared in 2012 when it announced upcoming CAFE standards. 84 Fed. Reg. at 36,032 (S.A. 26).

³⁴ See 81 Fed. Reg. at 95,491 (J.A. 686) (\$14 penalty will “encourag[e] manufacturers to apply more fuel-saving technologies to their vehicles”); 77 Fed. Reg. at 63,060 (strong CAFE standards will reduce greenhouse gas emissions and result in “small but significant reductions in projected changes in the future global climate”).

³⁵ See 77 Fed. Reg. at 63,060, 63,062 (NHTSA’s projection of reductions in GHGs due to CAFE model year 2017–2025 standards); (J.A. 536 (NHTSA’s projection of reduction in GHGs due to CAFE model year 2022–2025 standards)).

But that document analyzed the impacts of an entirely different action, and NHTSA did not consider the \$14 penalty or analyze the effects of reducing the penalty from \$14 to \$5.50.

NHTSA's failure to quantify the resulting additional emissions leaves the agency in violation of its further obligation to analyze the impact that those emissions will have on climate change and public health. That failure constitutes yet another NEPA violation. *Center for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1223 (9th Cir. 2008) (faulting NHTSA because even though "the EA discusses the amount of CO₂ emissions expected from the Rule, [it] does not discuss the potential impact of such emissions on climate change"); *San Juan Citizens All.*, 326 F. Supp. 3d at 1244 (requiring agency to "reanalyze the potential impact of such greenhouse gases on climate change in light of the recalculated amount of emissions in order to comply with NEPA").

CONCLUSION

For the reasons above, this Court should vacate NHTSA's reversal of the 2016 CAFE penalty inflation adjustments.

Dated: New York, New York
March 6, 2020

LETITIA JAMES
Attorney General of the
State of New York
BARBARA D. UNDERWOOD
Solicitor General
YUEH-RU CHU
Affirmative Litigation Section Chief
Environmental Protection Bureau

By: /s/ Steven C. Wu
STEVEN C. WU
Deputy Solicitor General
28 Liberty St.
New York, New York 10005
Tel: (212) 416-6312
Email: Steven.Wu@ag.ny.gov

*Attorneys for Petitioner State of
New York*

XAVIER BECERRA
Attorney General of
the State of
California
DAVID A. ZONANA
Supervising Deputy Attorney
General
LAURA J. ZUCKERMAN
Deputy Attorney General

By: /s/ David Zaft
DAVID ZAFI
Deputy Attorney General
Office of the Attorney General
300 S. Spring St., Suite 1702
Los Angeles, California 90013
Tel: (213) 897-2607
Email: David.Zaft@doj.ca.gov

*Attorneys for Petitioner State of
California*

WILLIAM TONG
Attorney General of the
State of Connecticut

By: /s/ Matthew I. Levine
MATTHEW I. LEVINE
Assistant Attorney General
Office of the Attorney General
P.O. Box 120
55 Elm Street
Hartford, CT 06141-0120
(860) 808-5250

*Attorneys for Petitioner State of
Connecticut*

KARL A. RACINE
Attorney General for the
District of Columbia

By: /s/ Jacqueline R. Bechara
JACQUELINE R. BECHARA
Assistant Attorney General
Office of the Attorney General
for the District of Columbia
441 4th Street, NW
Suite 600 South
Washington, D.C. 20001
Tel: (202) 788-2076
jacqueline.bechara@dc.gov

*Attorneys for Petitioner District of
Columbia*

KATHLEEN JENNINGS
Attorney General of the
State of Delaware

By: /s/ Kayli H. Spialter
KAYLI H. SPIALTE
Deputy Attorney General,
Environmental Unit
Delaware Department of Justice
Carvel State Building, 6th Floor
820 North French Street
Wilmington, DE 19801
(302) 577-8400
kayli.spialter@delaware.gov

*Attorneys for Petitioner State of
Delaware*

KWAME RAOUL
Attorney General of the
State of Illinois
MATTHEW J. DUNN
Chief, Environmental
Enforcement/Asbestos Litigation
Division
JASON E. JAMES
DANIEL I. ROTTENBERG
Assistant Attorneys General

By: /s/ Bridget DiBattista
BRIDGET DiBATTISTA
Assistant Attorney General
Office of the Attorney General
100 West Randolph St.
12th Floor
Chicago, Illinois 60601
(312) 814-2129
bdibattista@atg.state.il.us

*Attorneys for Petitioner State of
Illinois*

AARON M. FREY
Attorney General of the
State of Maine

By: /s/ Laura Jensen
LAURA JENSEN
6 State House Station
Augusta, ME 04333-0006
(207) 626-8868
Laura.Jensen@maine.gov

*Attorneys for petitioner State of
Maine*

BRIAN E. FROSH
Attorney General of the
State of Maryland

By: /s/ Joshua M. Segal
JOSHUA M. SEGAL
Special Assistant Attorney General
Office of the Attorney General
200 St. Paul Place
Baltimore, MD 21202
(410) 576-6446
jsegal@oag.state.md.us

ROBERTA R. JAMES
Deputy Counsel
Office of the Attorney General
Maryland Department of the
Environment
1800 Washington Blvd.
Baltimore, MD 21230
(410) 537-3748
roberta.james@maryland.gov

*Attorneys for Petitioner State of
Maryland*

MAURA HEALEY
Attorney General of the
Commonwealth of
Massachusetts

By: /s/ Christophe Courchesne
CHRISTOPHE COURCHESNE
Assistant Attorney General
Chief, Environmental Protection
Division
CAROL IANCU
MATTHEW IRELAND
Assistant Attorneys General
DAVID S. FRANKEL
MEGAN M. HERZOG
Special Assistant Attorneys
General
Office of the Attorney General
Environmental Protection
Division
One Ashburton Place, 18th Floor
Boston, Massachusetts 02108
Tel: (617) 727-2200
christophe.courchesne@mass.gov

*Attorneys for Petitioner
Commonwealth of
Massachusetts*

GURBIR S. GREWAL
Attorney General of the
State of New Jersey

By: /s/ Jeremy M. Feigenbaum
JEREMY M. FEIGENBAUM
Assistant Attorney General
Office of the Attorney General
R.J. Hughes Justice Complex
25 Market Street
Trenton, New Jersey 08625
Tel: (609) 376-2690
Jeremy.Feigenbaum@njoag.gov

*Attorneys for Petitioner State of
New Jersey*

ELLEN F. ROSENBLUM
Attorney General of the
State of Oregon

By: /s/ Paul Garrahan
PAUL GARRAHAN
Attorney-in-Charge
Natural Resources Section
Oregon Department of Justice
1162 Court Street NE
Salem, OR 97301-4096
(503) 947-4593
Paul.Garrahan@doj.state.or.us

*Attorneys for Petitioner State of
Oregon*

THOMAS J. DONOVAN, JR.
Attorney General of the
State of Vermont

By: /s/ Laura B. Murphy
LAURA B. MURPHY
Assistant Attorney General
Environmental Protection
Division
109 State Street
Montpelier, Vermont 05609
(802) 828-3171
laura.murphy@vermont.gov

*Attorneys for Petitioner State of
Vermont*

PETER F. NERONHA
Attorney General of the
State of Rhode Island

By: /s/ Tricia K. Jedele
TRICIA K. JEDELE
Unit Chief, Environmental
Advocacy
Special Assistant Attorney General
Office of the Attorney General
150 South Main Street
Providence, RI 02903
401 274 4400, Ext. 2039
tjedele@riag.ri.gov

*Attorneys for Petitioner State of
Rhode Island*

ROBERT W. FERGUSON
Attorney General of the
State of Washington

By: /s/ Emily C. Nelson
EMILY C. NELSON
Assistant Attorney General
Office of the Attorney General
P.O. Box 40117
Olympia, Washington 98504
Tel: (360) 586-4607
emily.nelson@atg.wa.gov

*Attorneys for Petitioner State of
Washington*

CERTIFICATE OF COMPLIANCE

Pursuant to Rule 32(a) of the Federal Rules of Appellate Procedure, William P. Ford, an employee in the Office of the Attorney General of the State of New York, hereby certifies that according to the word count feature of the word processing program used to prepare this brief, the brief contains 13,924 words and complies with the typeface requirements and length limits of Rule 32(a)(5)-(7) and Local Rule 32.1.

/s/ William P. Ford

Addendum

TABLE OF CONTENTS

	PAGE
28 U.S.C. § 2461 note.....	ADD1
Declaration of Anthony Dvarskas, dated Dec. 9, 2019	ADD4
Declaration of Jay Chamberlin, dated Dec. 3, 2019	ADD22
Declaration of Lisa Berry Engler, dated Dec. 9, 2019	ADD27
Declaration of Philip Mote, dated Dec. 5, 2019.....	ADD45

wrongful seizure” in item 2465 and added items 2466 and 2467.

§ 2461. Mode of recovery

(a) Whenever a civil fine, penalty or pecuniary forfeiture is prescribed for the violation of an Act of Congress without specifying the mode of recovery or enforcement thereof, it may be recovered in a civil action.

(b) Unless otherwise provided by Act of Congress, whenever a forfeiture of property is prescribed as a penalty for violation of an Act of Congress and the seizure takes place on the high seas or on navigable waters within the admiralty and maritime jurisdiction of the United States, such forfeiture may be enforced by libel in admiralty but in cases of seizures on land the forfeiture may be enforced by a proceeding by libel which shall conform as near as may be to proceedings in admiralty.

(c) If a person is charged in a criminal case with a violation of an Act of Congress for which the civil or criminal forfeiture of property is authorized, the Government may include notice of the forfeiture in the indictment or information pursuant to the Federal Rules of Criminal Procedure. If the defendant is convicted of the offense giving rise to the forfeiture, the court shall order the forfeiture of the property as part of the sentence in the criminal case pursuant to to¹ the Federal Rules of Criminal Procedure and section 3554 of title 18, United States Code. The procedures in section 413 of the Controlled Substances Act (21 U.S.C. 853) apply to all stages of a criminal forfeiture proceeding, except that subsection (d) of such section applies only in cases in which the defendant is convicted of a violation of such Act.

(June 25, 1948, ch. 646, 62 Stat. 974; Pub. L. 106-185, §16, Apr. 25, 2000, 114 Stat. 221; Pub. L. 109-177, title IV, §410, Mar. 9, 2006, 120 Stat. 246.)

HISTORICAL AND REVISION NOTES

Subsection (a) was drafted to clarify a serious ambiguity in existing law and is based upon rulings of the Supreme Court. Numerous sections in the United States Code prescribe civil fines, penalties, and pecuniary forfeitures for violation of certain sections without specifying the mode of recovery or enforcement thereof. See, for example, section 567 of title 12, U.S.C., 1940 ed., Banks and Banking, section 64 of title 14, U.S.C., 1940 ed., Coast Guard, and section 180 of title 25, U.S.C., 1940 ed., Indians. Compare section 1 (21) of title 49, U.S.C., 1940 ed., Transportation.

A civil fine, penalty, or pecuniary forfeiture is recoverable in a civil action. *United States ex rel. Marcus v. Hess et al.*, 1943, 63 S.Ct. 379, 317 U.S. 537, 87 L.Ed. 433, rehearing denied 63 S.Ct. 756, 318 U.S. 799, 87 L.Ed. 1163; *Hepner v. United States*, 1909, 29 S.Ct. 474, 213 U.S. 103, 53 L.Ed. 720, and cases cited therein.

Forfeiture of bail bonds in criminal cases are enforceable by procedure set out in Rule 46 of the Federal Rules of Criminal Procedure.

If the statute contemplates a criminal fine, it can only be recovered in a criminal proceeding under the Federal Rules of Criminal Procedure, after a conviction. The collection of civil fines and penalties, however, may not be had under the Federal Rules of Criminal Procedure, Rule 54(b)(5), but enforcement of a criminal fine imposed in a criminal case may be had by execution on the judgment rendered in such case, as in

civil actions. (See section 569 of title 18, U.S.C., 1940 ed., Crimes and Criminal Procedure, incorporated in section 3565 of H.R. 1600, 80th Congress, for revision of the Criminal Code. See also Rule 69 of Federal Rules of Civil Procedure and Advisory Committee Note thereunder, as to execution in civil actions.)

Subsection (b) was drafted to cover the subject of forfeiture of property generally. Sections in the United States Code specifically providing a mode of enforcement of forfeiture of property for their violation and other procedural matters will, of course, govern and subsection (b) will not affect them. It will only cover cases where no mode of recovery is prescribed.

Words “Unless otherwise provided by enactment of Congress” were inserted at the beginning of subsection (b) to exclude from its application instances where a libel in admiralty is not required. For example, under sections 1607, 1609, and 1610 of title 19, U.S.C., 1940 ed., Customs Duties, the collector of customs may, by summary procedure, sell at public auction, without previous declaration of forfeiture or libel proceedings, any vessel, etc., under \$1,000 in value in cases where no claim for the same is filed or bond given as required by customs laws.

Rule 81 of the Federal Rules of Civil Procedure makes such rules applicable to the appeals in cases of seizures on land. (See also *443 Cans of Frozen Egg Product v. United States*, 1912, 33 S.Ct. 50, 226 U.S. 172, 57 L.Ed. 174, and *Eureka Productions v. Mulligan*, C.C.A. 1940, 108 F.2d 760.) The proceeding, which resembles a suit in admiralty in that it is begun by a libel, is, strictly speaking, an “action at law” (*The Sarah*, 1823, 8 Wheat. 391, 21 U.S. 391, 5 L.Ed. 644; *Morris’s Cotton*, 1869, 8 Wall. 507, 75 U.S. 507, 19 L.Ed. 481; Confiscation cases, 1873, 20 Wall. 92, 87 U.S. 92, 22 L.Ed. 320; *Eureka Productions v. Mulligan*, supra), even though the statute may direct that the proceedings conform to admiralty as near as may be. *In re Graham*, 1870, 10 Wall. 541, 19 L.Ed. 981, and *443 Cans of Frozen Egg Product v. United States*, supra.

Subsection (b) is in conformity with Rule 21 of the Supreme Court Admiralty Rules, which recognizes that a libel may be filed upon seizure for any breach of any enactment of Congress, whether on land or on the high seas or on navigable waters within the admiralty and maritime jurisdiction of the United States. Such rule also permits an information to be filed, but is rarely, if ever, used at present. Consequently, “information” has been omitted from the text and only “libel” is incorporated.

REFERENCES IN TEXT

The Federal Rules of Criminal Procedure, referred to in subsec. (c), are set out in the Appendix to Title 18, Crimes and Criminal Procedure.

The Controlled Substances Act, referred to in subsec. (c), is title II of Pub. L. 91-513, Oct. 27, 1970, 84 Stat. 1242, as amended, which is classified principally to subchapter I (§801 et seq.) of chapter 13 of Title 21, Food and Drugs. For complete classification of this Act to the Code, see Short Title note set out under section 801 of Title 21 and Tables.

AMENDMENTS

2006—Subsec. (c). Pub. L. 109-177 amended subsec. (c) generally. Prior to amendment, subsec. (c) read as follows: “If a forfeiture of property is authorized in connection with a violation of an Act of Congress, and any person is charged in an indictment or information with such violation but no specific statutory provision is made for criminal forfeiture upon conviction, the Government may include the forfeiture in the indictment or information in accordance with the Federal Rules of Criminal Procedure, and upon conviction, the court shall order the forfeiture of the property in accordance with the procedures set forth in section 413 of the Controlled Substances Act (21 U.S.C. 853), other than subsection (d) of that section.”

2000—Subsec. (c). Pub. L. 106-185 added subsec. (c).

¹ So in original.

EFFECTIVE DATE OF 2000 AMENDMENT

Amendment by Pub. L. 106–185 applicable to any forfeiture proceeding commenced on or after the date that is 120 days after Apr. 25, 2000, see section 21 of Pub. L. 106–185, set out as a note under section 1324 of Title 8, Aliens and Nationality.

FEDERAL CIVIL PENALTIES INFLATION ADJUSTMENT

Pub. L. 101–410, Oct. 5, 1990, 104 Stat. 890, as amended by Pub. L. 104–134, title III, §31001(s)(1), Apr. 26, 1996, 110 Stat. 1321–373; Pub. L. 105–362, title XIII, §1301(a), Nov. 10, 1998, 112 Stat. 3293; Pub. L. 114–74, title VII, §701(b), Nov. 2, 2015, 129 Stat. 599, provided that:

“SHORT TITLE

“SECTION 1. This Act may be cited as the ‘Federal Civil Penalties Inflation Adjustment Act of 1990’.

“FINDINGS AND PURPOSE

“SEC. 2. (a) FINDINGS.—The Congress finds that—

“(1) the power of Federal agencies to impose civil monetary penalties for violations of Federal law and regulations plays an important role in deterring violations and furthering the policy goals embodied in such laws and regulations;

“(2) the impact of many civil monetary penalties has been and is diminished due to the effect of inflation;

“(3) by reducing the impact of civil monetary penalties, inflation has weakened the deterrent effect of such penalties; and

“(4) the Federal Government does not maintain comprehensive, detailed accounting of the efforts of Federal agencies to assess and collect civil monetary penalties.

“(b) PURPOSE.—The purpose of this Act is to establish a mechanism that shall—

“(1) allow for regular adjustment for inflation of civil monetary penalties;

“(2) maintain the deterrent effect of civil monetary penalties and promote compliance with the law; and

“(3) improve the collection by the Federal Government of civil monetary penalties.

“DEFINITIONS

“SEC. 3. For purposes of this Act, the term—

“(1) ‘agency’ means an Executive agency as defined under section 105 of title 5, United States Code, and includes the United States Postal Service;

“(2) ‘civil monetary penalty’ means any penalty, fine, or other sanction that—

“(A)(i) is for a specific monetary amount as provided by Federal law; or

“(ii) has a maximum amount provided for by Federal law; and

“(B) is assessed or enforced by an agency pursuant to Federal law; and

“(C) is assessed or enforced pursuant to an administrative proceeding or a civil action in the Federal courts; and

“(3) ‘Consumer Price Index’ means the Consumer Price Index for all-urban consumers published by the Department of Labor.

“CIVIL MONETARY PENALTY INFLATION ADJUSTMENT REPORTS

“SEC. 4. (a) IN GENERAL.—Not later than July 1, 2016, and not later than January 15 of every year thereafter, and subject to subsections (c) and (d), the head of each agency shall—

“(1) in accordance with subsection (b), adjust each civil monetary penalty provided by law within the jurisdiction of the Federal agency, except for any penalty (including any addition to tax and additional amount) under the Internal Revenue Code of 1986 [26 U.S.C. 1 et seq.] or the Tariff Act of 1930 [19 U.S.C. 1202 et seq.], by the inflation adjustment described under section 5 of this Act; and

“(2) publish each such adjustment in the Federal Register.

“(b) PROCEDURES FOR ADJUSTMENTS.—

“(1) CATCH UP ADJUSTMENT.—For the first adjustment made under subsection (a) after the date of enactment of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 [Nov. 2, 2015]—

“(A) the head of an agency shall adjust civil monetary penalties through an interim final rulemaking; and

“(B) the adjustment shall take effect not later than August 1, 2016.

“(2) SUBSEQUENT ADJUSTMENTS.—For the second adjustment made under subsection (a) after the date of enactment of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, and each adjustment thereafter, the head of an agency shall adjust civil monetary penalties and shall make the adjustment notwithstanding section 553 of title 5, United States Code.

“(c) EXCEPTION.—For the first adjustment made under subsection (a) after the date of enactment of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, the head of an agency may adjust the amount of a civil monetary penalty by less than the otherwise required amount if—

“(1) the head of the agency, after publishing a notice of proposed rulemaking and providing an opportunity for comment, determines in a final rule that—

“(A) increasing the civil monetary penalty by the otherwise required amount will have a negative economic impact; or

“(B) the social costs of increasing the civil monetary penalty by the otherwise required amount outweigh the benefits; and

“(2) the Director of the Office of Management and Budget concurs with the determination of the head of the agency under paragraph (1).

“(d) OTHER ADJUSTMENTS MADE.—If a civil monetary penalty subject to a cost-of-living adjustment under this Act is, during the 12 months preceding a required cost-of-living adjustment, increased by an amount greater than the amount of the adjustment required under subsection (a), the head of the agency is not required to make the cost-of-living adjustment for that civil monetary penalty in that year.

“COST-OF-LIVING ADJUSTMENTS OF CIVIL MONETARY PENALTIES

“SEC. 5. (a) ADJUSTMENT.—The inflation adjustment under section 4 shall be determined by increasing the maximum civil monetary penalty or the range of minimum and maximum civil monetary penalties, as applicable, for each civil monetary penalty by the cost-of-living adjustment. Any increase determined under this subsection shall be rounded to the nearest multiple of \$1.

“(b) DEFINITION.—

“(1) IN GENERAL.—Except as provided in paragraph (2), for purposes of subsection (a), the term ‘cost-of-living adjustment’ means the percentage (if any) for each civil monetary penalty by which—

“(A) the Consumer Price Index for the month of October preceding the date of the adjustment, exceeds

“(B) the Consumer Price Index for the month of October 1 year before the month of October referred to in subparagraph (A).

“(2) INITIAL ADJUSTMENT.—

“(A) IN GENERAL.—Subject to subparagraph (C), for the first inflation adjustment under section 4 made by an agency after the date of enactment of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 [Nov. 2, 2015], the term ‘cost-of-living adjustment’ means the percentage (if any) for each civil monetary penalty by which the Consumer Price Index for the month of October, 2015 exceeds the Consumer Price Index for the month of October of the calendar year during

which the amount of such civil monetary penalty was established or adjusted under a provision of law other than this Act.

“(B) APPLICATION OF ADJUSTMENT.—The cost-of-living adjustment described in subparagraph (A) shall be applied to the amount of the civil monetary penalty as it was most recently established or adjusted under a provision of law other than this Act.

“(C) MAXIMUM ADJUSTMENT.—The amount of the increase in a civil monetary penalty under subparagraph (A) shall not exceed 150 percent of the amount of that civil monetary penalty on the date of enactment of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015.

“SEC. 6. Any increase under this Act in a civil monetary penalty shall apply only to civil monetary penalties, including those whose associated violation predated such increase, which are assessed after the date the increase takes effect.

“SEC. 7. IMPLEMENTATION AND OVERSIGHT ENHANCEMENTS

“(a) OMB GUIDANCE.—Not later than February 29, 2016, not later than December 15, 2016, and December 15 of every year thereafter, the Director of the Office of Management and Budget shall issue guidance to agencies on implementing the inflation adjustments required under this Act.

“(b) AGENCY FINANCIAL REPORTS.—The head of each agency shall include in the Agency Financial Report submitted under OMB Circular A–136, or any successor thereto, information about the civil monetary penalties within the jurisdiction of the agency, including the adjustment of the civil monetary penalties by the head of the agency under this Act.

“(c) GAO REVIEW.—The Comptroller General of the United States shall annually submit to Congress a report assessing the compliance of agencies with the inflation adjustments required under this Act, which may be included as part of another report submitted to Congress.”

[Pub. L. 104–134, title III, §31001(s)(2), Apr. 26, 1996, 110 Stat. 1321–373, which provided that the first adjustment of a civil monetary penalty made pursuant to the amendment by §31001(s)(1) of Pub. L. 104–134 (amending Pub. L. 101–410, set out above) could not exceed 10 percent of the penalty, was repealed by Pub. L. 114–74, title VII, §701(c), Nov. 2, 2015, 129 Stat. 601.]

[For authority of the Director of the Office of Management and Budget to consolidate reports required under the Federal Civil Penalties Inflation Adjustment Act of 1990, Pub. L. 101–410, set out above, to be submitted between Jan. 1, 1995, and Sept. 30, 1997, or to adjust their frequency and due dates, see section 404 of Pub. L. 103–356, set out as a note under section 501 of Title 31, Money and Finance.]

§ 2462. Time for commencing proceedings

Except as otherwise provided by Act of Congress, an action, suit or proceeding for the enforcement of any civil fine, penalty, or forfeiture, pecuniary or otherwise, shall not be entertained unless commenced within five years from the date when the claim first accrued if, within the same period, the offender or the property is found within the United States in order that proper service may be made thereon.

(June 25, 1948, ch. 646, 62 Stat. 974.)

HISTORICAL AND REVISION NOTES

Based on title 28, U.S.C., 1940 ed., §791 (R.S. §1047).
Changes were made in phraseology.

§ 2463. Property taken under revenue law not repleviable

All property taken or detained under any revenue law of the United States shall not be re-

pleviable, but shall be deemed to be in the custody of the law and subject only to the orders and decrees of the courts of the United States having jurisdiction thereof.

(June 25, 1948, ch. 646, 62 Stat. 974.)

HISTORICAL AND REVISION NOTES

Based on title 28, U.S.C., 1940 ed., §747 (R.S. §934).
Changes were made in phraseology.

§ 2464. Security; special bond

(a) Except in cases of seizures for forfeiture under any law of the United States, whenever a warrant of arrest or other process in rem is issued in any admiralty case, the United States marshal shall stay the execution of such process, or discharge the property arrested if the process has been levied, on receiving from the respondent or claimant of the property a bond or stipulation in double the amount claimed by the libellant, with sufficient surety, to be approved by the judge of the district court where the case is pending, or, in his absence, by the collector of the port, conditioned to answer the decree of the court in such case. Such bond or stipulation shall be returned to the court, and judgment or decree thereon, against both the principal and sureties, may be secured at the time of rendering the decree in the original case. The owner of any vessel may deliver to the marshal a bond or stipulation, with sufficient surety, to be approved by the judge of the district court, conditioned to answer the decree of such court in all or any cases that are brought thereafter in such court against the vessel. Thereupon the execution of all such process against such vessel shall be stayed so long as the amount secured by such bond or stipulation is at least double the aggregate amount claimed by libellants in such suits which are begun and pending against such vessel. Similar judgments or decrees and remedies may be had on such bond or stipulation as if a special bond or stipulation had been filed in each of such suits.

(b) The court may make necessary orders to carry this section into effect, particularly in giving proper notice of any such suit. Such bond or stipulation shall be indorsed by the clerk with a minute of the suits wherein process is so stayed. Further security may be required by the court at any time.

(c) If a special bond or stipulation in the particular case is given under this section, the liability as to said case on the general bond or stipulation shall cease. The parties may stipulate the amount of the bond or stipulation for the release of a vessel or other property to be not more than the amount claimed in the libel, with interest, plus an allowance for libellant's costs. In the event of the inability or refusal of the parties to so stipulate, the court shall fix the amount, but if not so fixed then a bond shall be required in the amount prescribed in this section.

(June 25, 1948, ch. 646, 62 Stat. 974.)

HISTORICAL AND REVISION NOTES

Based on title 28, U.S.C., 1940 ed., §754 (R.S. §941; Mar. 3, 1899, ch. 441, 30 Stat. 1354; Aug. 3, 1935, ch. 431, §3, 49 Stat. 513).

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

STATE OF NEW YORK, *et al.*, NATURAL
RESOURCES DEFENSE COUNCIL, *et al.*,

Petitioners,

v.

Nos. 19-2395, 19-2508

NATIONAL HIGHWAY TRAFFIC SAFETY
ADMINISTRATION, *et al.*,

Respondents,

ASSOCIATION OF GLOBAL AUTOMAKERS,
et al.

Respondents-Intervenors.

DECLARATION OF ANTHONY DVARSKAS

I, ANTHONY DVARSKAS, pursuant to 28 U.S.C. § 1746, declare as follows:

Overview

1. I am the Chief Scientist in the Office of the New York State Attorney General's Albany Environmental Protection Bureau.

2. I submit this declaration in support of the brief filed in this action by the States of New York, California, Connecticut, Delaware, Illinois, Maine, Maryland, Massachusetts, New Jersey, Oregon, Rhode Island, Vermont, and Washington, and the District of Columbia, challenging the National Highway

Traffic Safety Administration's ("NHTSA") reduction from \$14 to \$5.50 of the penalty charged to vehicle manufacturers for violations of the corporate average fuel economy ("CAFE") standards.

3. Unless otherwise noted, the statements made in this declaration are based on my review of various publicly available records, reports, statements, and data compilations prepared by public agencies of the federal government, the State of New York, or the City of New York, including statements made by NHTSA. I have also reviewed the papers filed in this matter by the State of New York and its co-plaintiffs. In addition, I have reviewed the federal regulation at issue in this litigation.

4. Based on my review and analysis, the State of New York and its residents will be harmed by NHTSA's reduction of the civil penalty from \$14 to \$5.50 per tenth of a mpg.

5. In the Final Rule, NHTSA acknowledges that decreasing the civil penalty will result in negative impacts on global mean surface temperature and increased toxic and criteria pollutant emissions.¹ This finding accords with NHTSA's previous findings in this area: NHTSA has previously found that

¹ CAFE Penalty Rollback Rule, 84 Fed. Reg. 36,007 at 36,032 (July 26, 2019). The Clean Air Act requires EPA to set National Ambient Air Quality Standards (NAAQS) for six common air pollutants referred to as "criteria air pollutants": ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide.

increasing the amount of the civil penalty that is imposed on manufacturers whose vehicle fleets do not comply with the CAFE standards is an effective deterrent that induces greater levels of compliance with those standards. Reducing the updated \$14 penalty to the outdated \$5.50 level will thus lead to decreased compliance with the CAFE standards.

6. The States, including New York State, will be harmed by the climate and health effects of NHTSA's indefinite suspension. Climate change will erode state-owned coastal property; cause increased flood damage to critical infrastructure owned, funded, and/or maintained by New York; and harm the ecological resources of the State.² And increased levels of criteria pollutants will injure the health of New York residents, cause the State to incur increased medical costs, and hamper the State's ability to comply with federal air pollution standards.

Biography

7. In 2019, I became the Chief Scientist in the Office of the New York State Attorney General's ("OAG") Albany Environmental Protection Bureau. My current responsibilities include performing research to provide scientific analysis in

² See generally New York State Energy Research and Dev. Auth., *Responding to Climate Change in New York State: The ClimAID Integrated Assessment for Effective Climate Change Adaptation* (C. Rosenzweig, et al., eds., 2011); New York State Energy Research and Dev. Auth., *Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information* (R. Horton, et al., eds. 2014).

criminal, civil, and administrative enforcement actions, legislative initiatives, and formulation of policy positions; reviewing and analyzing legal and scientific documents prepared by others; and preparing scientific reports.

8. From 2014-2019, I worked as an Assistant Professor in the School of Marine and Atmospheric Sciences at Stony Brook University, focusing on the interactions of coastal communities with environmental change. My responsibilities in that role included review of scientific literature related to climate change and community climate resilience plans, conduct of original research, supervision of student research, and teaching of undergraduate and graduate classes. The research required development of collaborations with various local, county, state, federal, and international organizations.

9. Prior to joining Stony Brook, I served as an environmental economist with the National Oceanic and Atmospheric Administration's Damage Assessment, Remediation, and Restoration Program. Duties of the position included review of the scientific and economic literature, collection of field data, development of project reports, and technical presentations on Program activities.

10. I received a Bachelor of Science degree in Biology from Washington and Lee University and a PhD in Marine-Estuarine-Environmental Sciences from the University of Maryland.

NHTSA's Reduction of the CAFE Penalty Will Result in Increased Greenhouse Gas and Criteria Air Pollutant Emissions

11. When it published the 2016 Civil Penalty Rule, NHTSA found that automakers consider the CAFE penalty amount when they establish their product and compliance plans, that planning is done well before the commencement of a model year, and that the planning is difficult to alter once complete.³

12. Similarly, when it announced its initial reconsideration, NHTSA acknowledged that it “expect[ed] that increasing the level of the CAFE penalty will lead to ... increased compliance with CAFE standards, which would result in greater fuel savings and other benefits.”⁴

13. For manufacturers that base their design and production plans on the \$5.50 penalty that NHTSA now proposes to reinstate—rather than the properly inflation-adjusted \$14 penalty—some are likely to choose, as they have in the past, to pay penalties instead of complying with the CAFE standards.⁵

14. Reduced compliance with CAFE standards would, according to NHTSA's findings, lead to adverse consequences for the environment and public health. When NHTSA established the CAFE standards for model years 2017 and later (including model year 2019), it “estimate[d] that total annual CO₂ emissions

³ Civil Penalties Rule, 81 Fed. Reg. 95,489 at 95,491-92.

⁴ 82 Fed. Reg. 32,140 at 32,142.

⁵ See Alliance of Automobile Manufacturers, Joint Petition for Partial Reconsideration at 2, 5 (Aug. 1, 2016).

associated with passenger car and light truck use in the U.S. would decline by between 36 million metric tons (MMT) and 38 MMT in 2020 and a cumulative reduction of between 11,641 and 12,832 MMT from 2017 to 2060,” leading to “small but significant reductions in projected changes in the future global climate.”⁶

15. Reduced compliance with CAFE standards will also result in increased emissions of criteria air pollutants. When it established the CAFE standards for model years 2017 and later, NHTSA projected that the standards would result in significant reductions in particulate matter (PM_{2.5}), nitrogen oxides, sulfur oxides, and volatile organic compounds.⁷ NHTSA stated that these “reductions in emissions. . . are projected to result in significant declines in the adverse health effects that result from population exposure to these pollutants.”⁸ As one example, NHTSA predicted that reductions in one class of pollutants—PM_{2.5}, or particulate matter 2.5 microns in diameter and smaller—would result in 360 to 1,100 fewer premature deaths per year in the United States by 2040.⁹

16. NHTSA’s previous conclusions on these issues were correct, as it has acknowledged in the final rule here. In discussing environmental impacts in the

⁶ 77 Fed. Reg. at 63,060.

⁷ 77 Fed. Reg. at 63,061-62.

⁸ 77 Fed. Reg. at 63,062.

⁹ *Id.*

rule, NHTSA acknowledges that the reduction of the CAFE civil penalty will have a negative climate impact and result in increased criteria and toxic pollutants.¹⁰

17. If NHTSA's conclusions regarding the incentive value of penalties for CAFE compliance are correct, increases in criteria pollutant emissions resulting from a reinstated \$5.50 penalty would cause significant public health harms.

Increased Greenhouse Gas Emissions Will Harm New York

18. NHTSA found that the 2017-2025 CAFE standards would result in "small but significant reductions in projected changes in the future global climate."¹¹ Projected future impacts of climate change are extensive and widespread, and as NHTSA has recognized, they are expected to include serious negative impacts to New York State and the other petitioners in this action.

19. Among other impacts, NHTSA found that climate change is likely to decrease dairy production in New York and Vermont, halve the snow season, and increase heat-related illnesses and deaths in the Northeast.¹² Heat-related mortality in New York City has been projected to increase under a range of future climate

¹⁰ 84 Fed. Reg. 36,007, 36,032 (July 26, 2019).

¹¹ 77 Fed. Reg. at 63,060.

¹² NHTSA, Final Environmental Impact Statement: CAFE Standards, Passenger Cars and Light Trucks Model Years 2017-2025, § 5.5.2 available at https://one.nhtsa.gov/staticfiles/rulemaking/pdf/cale/FINAL_EIS.pdf (last checked November 21, 2019) ("CAFE 2017-2025 EIS").

warming scenarios.¹³ The Fourth National Climate Assessment provides the most recent update of the climate impacts noted by NHTSA, including the sea temperature increases and ocean heat waves that threaten to shift important recreational and commercial fisheries (e.g., lobster and black sea bass) away from New York waters.¹⁴

20. NHTSA earlier recognized that climate change increases flooding in densely-populated New York City, that flooding would affect critical transportation infrastructure in lower Manhattan, and that the City has already begun to implement adaptation measures:

New York City is one of two U.S. cities projected to be among the top 20 cities worldwide in terms of population exposed to coastal flooding (Hanson et al. 2011). New York State has over \$2.3 trillion of insured coastal property that is exceptionally vulnerable to sea-level rise and its related impacts. With rising sea levels, the 100-year flood is projected to inundate far larger areas of New York City than today, particularly under higher emissions scenarios. Flooding would affect critical transportation infrastructure in the Battery area of lower Manhattan.¹⁵

¹³ Petkova, E.P., et al., *Towards more comprehensive projections of urban heat-related mortality: Estimates for New York City under multiple population, adaptation, and climate scenarios*, Environmental Health Perspectives 125, available at <https://ehp.niehs.nih.gov/doi/10.1289/EHP166>.

¹⁴ U.S. Global Change Research Program, *Fourth National Climate Assessment*, Chapter 18: Northeast, at <https://nca2018.globalchange.gov/chapter/18/>.

¹⁵ NHTSA, Final Environmental Impact Statement: CAFE Standards, Passenger Cars and Light Trucks Model Years 2017-2025, § 5.5.2 available at https://one.nhtsa.gov/staticfiles/rulemaking/pdf/cafe/FINAL_EIS.pdf (last checked November 21, 2019) (“CAFE 2017-2025 EIS”).

21. Estimates from the New York City Panel on Climate Change indicate that, by 2100, sea level rise will result in daily tidal inundation that affects 20 percent of streets in Lower Manhattan and more than 10% of the properties in the area (an estimated \$4 billion in value).¹⁶ This has led the City to plan for \$500 million in investments related to climate resilience¹⁷ for Lower Manhattan, investments that would be imperiled by higher GHG emissions and additional sea level rise.

22. Apart from Lower Manhattan, many other New York City neighborhoods inundated and heavily damaged by Superstorm Sandy, such as West Chelsea in Manhattan, Canarsie in Brooklyn, the East Shore communities on Staten Island, and the Rockaway Peninsula in Queens remain vulnerable to sea level rise and coastal storms.¹⁸ Outside of New York City, upstate communities face risks from increased temperatures, precipitation and associated flooding events. Upstate regions, such as Saratoga, may see increases of up to 17% in

¹⁶ Mayor's Office of Recovery and Resiliency, *Lower Manhattan Climate Resilience Study*, available at <https://www1.nyc.gov/site/lmcr/background/lower-manhattan-climate-resilience-study.page> and also Patrick et al., "New York City Panel on Climate Change 2019 Report Chapter 5: Mapping Climate Risk", available at <https://nyaspubs.onlinelibrary.wiley.com/doi/epdf/10.1111/nyas.14015>.

¹⁷ Mayor's Office of Recovery and Resiliency, *Lower Manhattan Climate Resilience Study*, available at <https://www1.nyc.gov/site/lmcr/background/lower-manhattan-climate-resilience-study.page> at 8.

¹⁸ See generally NYC Planning, *Resilient Neighborhoods* at <https://www1.nyc.gov/site/planning/plans/resilient-neighborhoods.page>.

precipitation by the 2080s (compared to the 1971-2000 baseline).¹⁹ Rochester, Saratoga, and Watertown may experience average annual temperatures up to 12 degrees Fahrenheit warmer than the 1971-2000 baseline by that time. Resilience planning efforts for climate change are underway across upstate New York, including the Resiliency and Economic Development Initiative along the Great Lakes²⁰ and the Hudson River Comprehensive Restoration Plan²¹ in the Hudson River region.

23. New York State and entities it funds maintain or own critical transportation infrastructure in lower Manhattan, including the Hugh L. Carey

¹⁹ New York State Energy Research and Dev. Auth., *Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information* (R. Horton, et al., eds. 2014), at 8-9. Available at:

<https://www.nyserda.ny.gov/About/Publications/Research-and-Development-Technical-Reports/Environmental-Research-and-Development-Technical-Reports/Response-to-Climate-Change-in-New-York>.

²⁰ N.Y. Governor's Press Off., "Governor Cuomo Announces \$60 Million for 38 Projects in St. Lawrence and Jefferson Counties to Advance Lake Ontario Resiliency and Economic Development Initiative," (Oct. 31, 2019) <https://www.governor.ny.gov/news/governor-cuomo-announces-60-million-38-projects-st-lawrence-and-jefferson-counties-advance-lake>.

²¹ Partners Restoring the Hudson, *Hudson River Comprehensive Restoration Plan* (2018), http://thehudsonweshare.org/wp-content/uploads/2018/07/Hudson_River_Report_Final_August-2018_s.pdf.

Tunnel (formerly the Brooklyn-Battery Tunnel),²² the South Ferry Terminal,²³ and the West Side Highway.²⁴

24. New York’s Metropolitan Transit Authority (the “MTA”) has, especially in the wake of Hurricane Sandy, taken extensive measures to prepare its infrastructure for climate change impacts such as increases in sea-level rise, coastal storm surges, extreme winds, average air temperature and heat waves, and heavy precipitation.²⁵ In 2016, the MTA identified 46 resiliency projects across its transit system, requiring a total expenditure of just over \$750 million, which included federal funding.²⁶ These projects included:

- a. Resiliency measures (e.g., hardening of pump systems, watertight doors, and portal-sealing) designed to improve underground and underwater subway tunnels from flooding from future Category 2 storms, with an additional three-foot safety factor;

²² See Metropolitan Transit Authority, *2017 Adopted Budget: February Financial Plan, 2017-2020*, available at <http://web.mta.info/mta/budget/pdf/MTA%202017%20Adopted%20Budget%20February%20Financial%20Plan%202017-2020.pdf>

²³ *Id.* at 106.

²⁴ New York State Department of Transportation, Real Estate Division, Notice of Appropriation, “Route 9A Reconstruction Project,” available at http://a836-acris.nyc.gov/DS/DocumentSearch/DocumentImageView?doc_id=FT_1840006500484.

²⁵ MTA, *MTA Climate Adaptation Task Force Resiliency Report* at 8, available at <https://new.mta.info/document/10456>

²⁶ *Id.* at 12

- b. Redesign of bus depots with interior and exterior flood protections;
- c. Elevation of electric substations on the MTA Metro-North Railroad's Hudson Line four feet above projected flood levels; and
- d. The installation of flood barriers on each side of the Hugh L. Carey Tunnel.²⁷

As of 2019, the MTA reported progress or completion of many of climate resiliency projects, including elevation and replacement of substations across the system, installation of flood and debris protection walls, replacement of critical power and signaling components, flood gates at the Hugh L. Carey Tunnel, and seawall and shoreline repair at the Rockaway bridges.²⁸

25. As NHTSA earlier recognized, “The Northeast includes densely populated coastal areas that are extremely vulnerable to projected increases in the extent and frequency of storm surge, coastal flooding, erosion, property damage, and loss of wetlands.”²⁹ Indeed, “[e]xtensive erosion has already been documented across the mid-Atlantic region, New England, and New York.”³⁰ Over 15.5 million people live within coastal counties in New York, the second highest population

²⁷ *Id.* at 16-27.

²⁸ MTA, *MTA Climate Adaptation Task Force 2019 Resiliency Report: Update on agency-wide climate resiliency projects*, available at <https://new.mta.info/document/10461>.

²⁹ CAFE 2017-2025 EIS § 5.5.2.1.3.

³⁰ *Id.*

within the United States.³¹ According to NOAA's Office of Coastal Management, New York has the most insured coastal properties in the country that are vulnerable to hurricanes (\$2.92 trillion in value).³²

26. New York State has over 2,000 miles of tidal coastline,³³ and the State owns dozens of state parks within New York State's coastal boundary. New York State tidal shoreline property is thus at risk given any amount of sea level rise, and tidal shoreline property in the State held by private landowners is similarly at risk. New York's marshes, particularly on Long Island, in New York City, and in the Lower Hudson Valley, are at risk of being further submerged by sea level rise, leading to the loss of critical fish and bird habitat as well as the loss of buffering protection for coastal communities from storms.³⁴

27. New York State has also demonstrated its commitment to both climate resilience planning and mitigation of carbon-based greenhouse gas emissions with

³¹ Nat'l Oceanic and Atmospheric Admin., *National Coastal Population Report: Population Trends from 1970 to 2010* (Mar. 2013) available at: <https://aamboceanservice.blob.core.windows.net/oceanservice-prod/facts/coastal-population-report.pdf>.

³² <https://coast.noaa.gov/states/fast-facts/hurricane-costs.html>

³³ <https://coast.noaa.gov/states/new-york.html>.

³⁴ New York State Energy Research and Dev. Auth., *Responding to Climate Change in New York State: The ClimAID Integrated Assessment for Effective Climate Change Adaptation in New York State* (Rosenzweig C., et al., eds. 2011), Chapter 5: Coastal Zones at 135-137. Available at: <https://www.nyserda.ny.gov/About/Publications/Research-and-Development-Technical-Reports/Environmental-Research-and-Development-Technical-Reports/Response-to-Climate-Change-in-New-York>.

passage of the Climate Resiliency and Recovery Act and Climate Leadership and Community Protection Act, respectively. New York aims for carbon-free electricity by 2040, reflecting its understanding of the grave harms resulting from continuing “business-as-usual” GHG emissions.

28. NHTSA’s reversal of the inflation-adjusted \$14 penalty and reinstatement of the outdated \$5.50 penalty will exacerbate these harms, as it will reduce compliance with the CAFE standards that NHTSA has found will decrease emissions of greenhouse gases from vehicles.

Increased Criteria Air Pollutants Will Harm New York

29. As NHTSA acknowledges, the proposed rule will result in increased emissions of criteria air pollutant emissions from projected levels.³⁵ Criteria air pollutants have serious impacts on New Yorkers’ health—and thus on New York’s budget.

Fine Particulate Matter

30. One such criteria pollutant is particulate matter. NHTSA previously estimated that the CAFE standards would result in meaningful reductions in PM_{2.5}, or fine particulate matter 2.5 microns in diameter and smaller. Those reductions are projected to result in 360 to 1,100 fewer premature deaths per year by 2040.³⁶

³⁵ 84 Fed. Reg. 36,007, 36,032 (July 26, 2019).

³⁶ 77 Fed. Reg. at 63,062.

31. As NHTSA noted, the health effects of ambient particulate matter are discussed in detail in EPA's Integrated Science Assessment (ISA) for Particulate Matter. As NHTSA summarizes the ISA's findings,

The ISA concludes that health effects associated with short-term exposures (hours to days) to ambient PM_{2.5} include mortality, cardiovascular effects, such as altered vasomotor function and hospital admissions and emergency department visits for ischemic heart disease and congestive heart failure, and respiratory effects, such as exacerbation of asthma symptoms in children and hospital admissions and emergency department visits for chronic obstructive pulmonary disease and respiratory infections. The ISA notes that long-term exposure (months to years) to PM_{2.5} is associated with the development/progression of cardiovascular disease, premature mortality, and respiratory effects, including reduced lung function growth, increased respiratory symptoms, and asthma development.³⁷

32. In 2011, the New York City Department of Health and Mental Hygiene provided estimates of the impacts of PM_{2.5} pollution on the health of New York City residents. Its report estimates that PM_{2.5} causes over 3,000 premature deaths every year in the State. The report also attributes to PM_{2.5} exposure more than 1,200 hospital admissions, and 5,000 asthma-related emergency department visits for children and adults. The report further indicates that a 10% reduction in PM_{2.5} concentrations could avoid over 300 premature deaths and 600 emergency department visits.³⁸

³⁷ 77 Fed. Reg. at 62,902.

³⁸ New York City Department of Health and Mental Hygiene, *Air Pollution and the Health of New Yorkers: The Impact of Fine Particles and Ozone* at 16 (2011),

33. More specifically, vehicle-related emissions in New York City are linked to an estimated 260 deaths and 720 emergency room visits and hospital admissions annually.³⁹ These impacts related to PM_{2.5} exposure were higher in neighborhoods with higher poverty rates, raising environmental justice concerns. While progress has been made in New York as a whole in decreasing PM_{2.5} levels, this demonstrates the ongoing challenge of achieving localized reductions in areas that suffer disproportionate impacts from PM_{2.5} exposure.

34. New York State bears a significant portion of the cost of New Yorkers' asthma-related health issues. As of 2014, New York's \$55 billion Medicaid program, which enrolled approximately one in four New Yorkers, was responsible for a major portion of the State's annual asthma costs. An analysis by the Office of the State Comptroller of Medicaid expenditure data found that asthma-related Medicaid costs for recipients diagnosed with the disease exceeded

available at <https://www1.nyc.gov/assets/doh/downloads/pdf/eode/eode-air-quality-impact.pdf>

³⁹ Khierbek I., *The contribution of motor vehicle emissions to ambient fine particulate matter public health impacts in New York City: a health burden assessment* (Aug. 26, 2016), available at <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-016-0172-6>.

\$532 million in State Fiscal Year (SFY) 2012-13, an increase of more than 26 percent from five years earlier.⁴⁰

35. The Clean Air Act requires EPA to set National Ambient Air Quality Standards (“NAAQS”) for particulate matter, including PM_{2.5}, and New York is currently subject to several standards requiring controlling PM_{2.5}. For example, the State is obligated to implement a plan to maintain a PM_{2.5} NAAQS at an average three-year level at or below 12 micrograms per cubic meter of air.⁴¹ Additional emissions of PM_{2.5} in New York would make it more difficult for New York to continue to meet these standards.

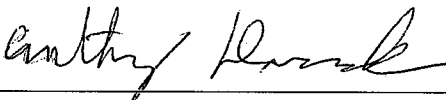
36. In sum, NTHSA’s suspension of the inflation-adjusted penalty amount will injure New York and its residents by increasing air pollution, leading to reductions in air quality that will harm the health of New Yorkers and increase the medical costs that are borne, in substantial part, by the State.

⁴⁰ New York State Comptroller, *The Prevalence and Cost of Asthma in New York State* at 1 (April 2014), available at https://www.osc.state.ny.us/reports/economic/asthma_2014.pdf

⁴¹ 78 Fed. Reg. 3086 (Jan. 15, 2013).

I declare under penalty of perjury that I believe the foregoing to be true and correct.

Executed on December 9, 2019.



Anthony Dvarkas, Ph.D.

**UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT**

STATE OF NEW YORK, *et al.*, NATURAL
RESOURCES DEFENSE COUNCIL, *et al.*,

Petitioners,

v.

Docket Nos. 19-2395, 19-2508

NATIONAL HIGHWAY TRAFFIC
SAFETY ADMINISTRATION, *et al.*,

Respondents,

ASSOCIATION OF GLOBAL
AUTOMAKERS, *et al.*

Respondents-Intervenors.

DECLARATION OF JAY CHAMBERLIN

I, Jay Chamberlin, state and declare as follows:

1. I make this declaration of my own personal knowledge, unless otherwise indicated, and could and would testify as set forth herein if called to do so.
2. I am the Chief of the Natural Resources Division of the California Department of Parks and Recreation (“DPR”), a position I have held since 2010. I have worked in the conservation field for more than twenty years. I received a Masters of Science in Natural Resources and Environment from the University of Michigan in 1998. Prior to my current position, I served as Environmental Program Manager at the California Department of Water Resources from 2008 to 2010, and Deputy Assistant Secretary at the California Natural Resources Agency from 2005 to 2008. I have also worked as a consultant to the Ecosystem

Restoration Program for the California Bay-Delta Authority, and as Policy Manager for the Pacific Forest Trust, where my work focused on climate projects and policies.

3. I regularly give presentations on climate change and its impacts to the California State Park System, and on plans, management practices, and policies for addressing those impacts. I have given such presentations to professionals, students and other audiences, including, for example, the California State Assembly's Select Committee on Sea Level Rise and the California Economy. I have also given a series of climate change presentations (in January 2018, September 2018, and May 2019) to the California State Parks and Recreation Commission, the body with authority for guiding policy for the State Park System.

4. DPR manages the California State Park System, which consists of 280 park units and approximately 1.6 million acres of land. Parks are located in every bioregion of California, and the State Park System protects some of the most important natural resources in California, including old growth forests, lakes and reservoirs, rare wildlife, and roughly one-quarter of the California coastline. The State Park System also protects the largest assemblage of cultural resources in California, including historic buildings and archaeological sites. The State Park System receives in excess of 80,000,000 visitors per year, and it is the primary destination for shoreline recreation in California.

5. I am familiar with scientific models related to global climate change and with evidence of the influence that climate change is having on resources in the State Park System. My knowledge is based on my ongoing review of the current scientific literature, attendance and participation at professional conferences and workshops, and my work for DPR. For years, DPR staff have been engaged in active management, documentation, and monitoring of resource conditions throughout the State Park System. Many of specific threats to biological diversity and

native species that have emerged in recent years are attributable to, or compounded by, the influence of climate change. Climate-influenced impacts on State Park System resources include accelerated coastal erosion, the spread of pests and pathogens (such as bark beetles), changes in phenology (the timing of natural phenomena such as blooms), wildlife health and behavior, and changes to the frequency and severity of wildfires. In the course of my work, I have reviewed information and reports by DPR and other agency staff concerning these phenomena.

6. Scientific models of global climate change predict that by the year 2100 the average temperature in California will increase by 2.8 and 8.6 degrees Fahrenheit. These models also predict that by 2100, mean sea levels along the coast will rise between 1 and 7 feet, greatly exacerbating the effects of wave run up and storm surges. Due to uncertainty in the model, actual Mean Sea Level Rise could well exceed the predicted levels by considerable margins. Also, Sea Level Rise will vary by location, and certain areas could experience sea levels that exceed the predicted mean levels.

7. Based upon my professional experience and knowledge of California's State Park System, if the predicted changes in annual precipitation and sea level occur, they would have significant adverse and costly impacts on the State Park System.

8. Rising sea levels will drastically reduce the amount of beach available for park visitors and shorebirds, including threatened and endangered species. In fact, many of California's beaches, including some in the State Park System such as Crystal Cove in Orange County, are narrow bands of sand backed by steep cliffs. If the sea level rises even a few inches, the beaches will not simply move inland, but will completely disappear. Also, even a small rise in sea level will affect the salinity, temperature, and hydrology in California's many estuaries and lagoons, thereby harming the aquatic life – including rare, threatened and endangered fish –

that rely on estuaries for breeding or rearing. In addition, Sea Level Rise threatens much infrastructure in the State Park System, including numerous campgrounds, trails and roads, and other facilities, including water and waste systems that exist along the ocean's edge.

9. In addition, the California State Park System includes many important cultural resources, including archeological and historic sites, such as Native American sites, 18th century missions, historic lighthouses and piers, and buildings, including sites constructed by the Civilian Conservation Corps. These kinds of resources are irreplaceable, and the salvage and/or protection of cultural resources that would be inundated by Sea Level Rise would be very expensive. For instance, even a small rise in sea level will affect the Park System's ancient shell middens, which contain remnants from California's earliest human residents, dating back thousands of years.

10. Global climate change and other models also predict that wildfires will increase in frequency and severity. The state's recent experiences concerning wildfires are generally consistent with these predictions. In 2017, California had the highest average summer temperatures in recorded history. Over the last 40 years, California's fire season has increased 78 days—and in some places in the state the fire season is nearly year-round. Fifteen of the 20 most destructive wildfires in the state's history have occurred since 2000, with 10 of the most destructive occurring since 2015.

11. Increases in the frequency and severity of wildfires will have a significant impact on the State Park System. DPR currently expends significant resources to protect park infrastructure and natural and cultural resources from wildfires and to fight these fires. Growing wildfire activity also increases the risk that irreplaceable resources will be lost, including historic structures. Over the last fifteen years, several state parks have been impacted by wildfires, and


the increasing frequency of wildfires has become a more important problem for the State Park System. For example, the October 2017 Wine Country fires in Napa and Sonoma Counties burned through several state parks including Trione-Annadel State Park, Sugarloaf Ridge State Park and Robert Louis Stevenson State Historic Park, and threatened Jack London State Historic Park.

12. Observed changes, along with global climate change models, also suggest that coastal fog declines in recent decades could accelerate. Diminished fog would have a severe and damaging impact on natural forest types that are dependent upon fog, including Torrey pine, Monterey pine, and Coast redwood. In addition to the ecological impacts, these forest types draw many visitors to the State Park System, and a decline in these forests would result in fewer visitors and a significant loss of revenue to DPR.

13. DPR also manages several parks in winter snow areas, as well as the Sno-Park Program for California. Global climate change models predict reductions in winter-spring snowpack, which would result in loss of recreational opportunities and associated revenues in the mountains, and increased flooding downstream, along with operational challenges and associated costs at reservoir parks.

I state under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

Executed on December 3, 2019 in SACRAMENTO, California.


JAY CHAMBERLIN

**UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT**

STATE OF NEW YORK, *et al.*,

Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC
SAFETY ADMIN., *et al.*,

Respondents,

ASSOCIATION OF GLOBAL
AUTOMAKERS, *et al.*,

Intervenors.

Case Nos. 19-2395 (L), 19-2508 (Con)

DECLARATION OF LISA BERRY ENGLER

I, Lisa Berry Engler, declare as follows:

1. I am currently employed by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) as Director of the Office of Coastal Zone Management (CZM). CZM is the lead policy and planning agency on coastal and ocean issues in Massachusetts. I have held this position for nine months. I have been employed by CZM since 2011, having held positions with increasing responsibility. I previously held the position of Assistant Director, Boston Harbor Regional Coordinator, Acting Director for the Massachusetts Bays National

Estuary Program (MassBays), and MetroBoston Regional Coordinator for MassBays. Prior to joining CZM, I held positions with the Massachusetts Department of Transportation and the Massachusetts Department of Conservation and Recreation.

2. I have extensive professional knowledge and experience regarding the impacts of climate change on coastal resources and communities in Massachusetts, as well as Massachusetts' efforts to plan and prepare for such impacts. My job duties include providing oversight and administration for CZM and directing policy development, planning efforts, and technical approaches for CZM program areas. I supervise a team of 35 multidisciplinary professionals working in a range of program areas, including climate change adaptation and coastal resilience administered as CZM's StormSmart Coasts Program. Many of the staff I oversee have significant professional experience in coastal and environmental management, planning, science, policy, and other related fields. I routinely engage and partner with scientific and technical subject matter experts in federal agencies and academia. As part of my management responsibilities, I oversee CZM's work to provide information, strategies, tools, and financial resources to support communities and people working and living on the Massachusetts coast to address the challenges of erosion, flooding, storms, sea level rise, and other climate-change-related impacts. For instance, I oversee the development of sea level rise

decision-support tools and services including inundation maps and guidance documents. I also direct CZM's work to provide policy and planning support and technical assistance to other state agencies, local communities, and private entities regarding adapting and increasing resilience to current and future impacts of climate change on our coast. For example, I oversee CZM's StormSmart Coasts Program that offers competitive grants, hands-on technical and planning assistance, and decision-support tools to Massachusetts cities and towns for the purposes of planning for and adapting to sea level rise and other climate-change-related coastal hazards.

3. In my role with CZM, I chair and participate in various legislative and executive branch official groups, including the Massachusetts Ocean Advisory Commission and Science Advisory Council and associated work groups as well as the Ocean Acidification Commission. I also represent the Commonwealth of Massachusetts (Commonwealth) on several multi-state organizations, including the Coastal States Organization, Northeast Regional Ocean Council, and the Gulf of Maine Council on the Marine Environment.

4. I have a Bachelor's degree in Biology from Colby College and a Master's degree in Environmental Management from Duke University.

5. I am aware of and familiar with the science related to global climate change. My knowledge comes from my review of scientific peer-reviewed

literature and consensus assessment reports, attendance at professional conferences and workshops, and professional exposure to other research and material. As a result of my professional experience and my knowledge of the peer-reviewed literature and reports, as well as my knowledge of the Massachusetts coastal resources and policies and planning related thereto, I can attest to the following.

6. The purposes of this declaration are to: (i) briefly describe the serious harms that climate change, caused in part by motor vehicle emissions, is causing and will continue to cause to Massachusetts' coastal resources, infrastructure, and communities; and (ii) briefly summarize extensive state and local initiatives, programs, and plans to respond to and prepare for such impacts. I am submitting this declaration in support of the brief filed in this action by the States of New York, California, Connecticut, Delaware, Illinois, Maine, Maryland, New Jersey, Oregon, Rhode Island, Vermont, and Washington, the Commonwealth of Massachusetts, and the District of Columbia, challenging the National Highway Traffic Safety Administration's reversal of a Congressionally mandated inflation adjustment to the penalty for violations of the Corporate Average Fuel Economy (CAFE) standards.

Climate Change Threatens Massachusetts' Coastal Resources and Communities

7. The accelerated rate of global sea level rise and the severity and timing of coastal impacts due to this rise in sea level are largely dependent on

current and future global greenhouse gas (GHG) emissions and reduction measures. Continued emissions of GHGs, including emissions from motor vehicles, will result in increases in global temperature, yielding additional contributions to global sea level rise (*i.e.*, increased contributions from thermal expansion of warmer waters and melting of land-based ice sheets).¹

8. Human-caused climate change has led to a rise in global mean sea levels of 7 to 8 inches since 1900, and a rate of rise greater than that in any preceding century in the last 2,800 years.² Global average sea levels will continue to rise by 1 to 4 feet by 2100, and emerging science regarding Antarctic ice sheet instability indicates sea level rise of as much as 8 feet by 2100 cannot be ruled out.³ Due to the relationship of the East Coast to the Gulf Stream and melting Antarctic ice sheets, sea level rise will be higher than the global average on the East and Gulf Coasts of the United States.⁴

9. A March 2018 report entitled *Massachusetts Climate Change Projections* (2018 Projections Report), developed by a team of scientists from the U.S. Department of the Interior's Northeast Climate Adaptation Science Center at the University of Massachusetts Amherst, presents the best available, peer-

¹ See generally U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME I (D.J. Wuebbles et al. eds., 2017), <https://science2017.globalchange.gov/>.

² *Id.* at 10.

³ *Id.*

⁴ *Id.*

reviewed science on climate change downscaled, or localized, for Massachusetts through the end of this century.⁵ The 2018 Projections Report identifies substantial increases in air temperatures, precipitation, and sea levels across Massachusetts as a result of human-caused GHG emissions.

10. A key component of the 2018 Projections Report is sea level rise projections for the state's coastline. The analysis for Massachusetts consisted of a probabilistic assessment of future relative sea level rise at tide gauge stations with long-term records at Boston Harbor, MA, Nantucket, MA, Woods Hole, MA, and Newport, RI.⁶ The sea level projections are based on a methodology that provides complete probability distributions for different GHG emissions scenarios.⁷ Working with the principal investigators (Robert DeConto and Robert Kopp) and a team of external peer reviewers, CZM reviewed and synthesized the downscaled projections, which are made available by the Commonwealth, to set forth a standard set of sea level rise projections to be used by municipalities, state government, industry, the private sector, and others to assess vulnerability and

⁵ MASSACHUSETTS CLIMATE CHANGE PROJECTIONS (2018), https://nescaum-dataservices-assets.s3.amazonaws.com/resources/production/MA%20Statewide%20and%20MajorBasins%20Climate%20Projections_Guidebook%20Supplement_March2018.pdf.

⁶ See *id.* at 11 (citing Robert M. DeConto & Robert E. Kopp, *Massachusetts Sea Level Assessment and Projections*, Technical Memorandum (2017)).

⁷ See *id.* (citing Robert E. Kopp et al., *Probabilistic 21st and 22nd century sea level projections at a global network of tide gauge sites*, 2 EARTH'S FUTURE 383–406 (2014)).

identify and prioritize actions to reduce risk. Given a high emissions pathway, Massachusetts is projected to experience approximately 4.0 to 7.6 feet of sea level rise over the twenty-first century, with 10.2 feet possible when accounting for higher ice sheet contributions.

11. Massachusetts has 2,819 miles of tidal coastline, and a coastal zone (defined as areas landward to 100 feet inland of major roads or railways from New Hampshire to Rhode Island) that encompasses 59 square miles. Approximately 4.9 million people or 75% of the Commonwealth's population (as of the 2010 U.S. census) reside in coastal counties. In 2014, the total output of the Massachusetts coastal economy was \$249.2 billion, representing over 54% of the state's annual gross domestic product, and coastal counties accounted for 53% of the state's employment and wages.⁸ Approximately 170,000 year-round residents are currently (as of the 2010 U.S. census) located within coastal flood hazard areas, as defined by the Federal Emergency Management Agency (FEMA), and are susceptible to 1% annual chance coastal storm flooding under current sea level conditions.⁹ Accelerated sea level rise will lead to more regular flooding of

⁸ NAT'L OCEAN ECONOMICS PROGRAM, STATE OF THE U.S. OCEAN AND COASTAL ECONOMIES: COASTAL STATES SUMMARIES – 2016 UPDATE 29 (2016), http://midatlanticocean.org/wp-content/uploads/2016/03/CoastalStatesSummaryReports_2016.pdf.

⁹ See Mark Crowell et al., *Estimating the United States Population at Risk from Coastal Flood-Related Hazards*, in COASTAL HAZARDS, 151, 167 (Charles W. Finkl ed., 2013), <https://tinyurl.com/yaolf6bk>.

developed and natural coastal areas due to an increase in the extent of tidal inundation, and will also exacerbate erosion along beaches, dunes, and coastal banks.

12. In addition, there is very high confidence that sea level rise will increase the frequency and extent of extreme flooding associated with coastal storms, such as hurricanes and nor'easters.¹⁰ Coastal storm events will cause inundation of larger areas, and will occur more frequently, damaging or destroying coastal engineering structures such as seawalls, critical infrastructure such as wastewater treatment plants and transportation systems, and private property.

13. More frequent and severe storm surge and inundation will create serious risks for public safety and health, especially where sewer mains and pump stations are impacted. Frequent tidal flooding from sea level rise may also lead to increases in respiratory diseases due to mold from dampness in homes.¹¹ Saltwater intrusion—or the increased penetration of salt water into sources of fresh water—from sea level rise will impact water resources (such as drinking water) by contaminating freshwater sources with salt water and also through the corrosion of water supply infrastructure.

¹⁰ See U.S GLOBAL CHANCE RESEARCH PROGRAM, *supra*, at 27.

¹¹ See generally CENTERS FOR DISEASE CONTROL & PREVENTION, U.S. DEP'T OF HEALTH & HUMAN SERVS., COASTAL FLOODING, CLIMATE CHANGE, AND YOUR HEALTH: WHAT YOU CAN DO TO PREPARE (2017), www.cdc.gov/climateandhealth/pubs/CoastalFloodingClimateChangeandYourHealth-508.pdf.

14. The Massachusetts coastline includes a diverse array of ecosystems including, among others, sandy beaches, rocky shores, barrier beaches, islands, estuaries, and salt marshes. These ecosystems offer immense recreational, cultural, and aesthetic value to the residents of and visitors to the Commonwealth, while also serving important ecological functions. For instance, some natural coastal resources, including barrier beaches, salt marshes, and estuaries, provide valuable resilience services to the Commonwealth by buffering inland coastal communities and the built environment from storm surges and flooding. Salt water will also impact these coastal resources, as saltwater intrusion into estuarine habitats such as salt marshes and freshwater wetlands will alter the composition of the plant species and affect wildlife that depend on these ecosystems.

Massachusetts is Experiencing Economic Impacts from Climate Change and Will Expend Significant Resources to Prepare for the Impacts of Climate Change on Our Coastal Areas

15. The Commonwealth is already experiencing the impacts of climate change. The relative sea level trend at the Boston tide station is 2.83 millimeters per year based on monthly mean sea level data from 1921 to 2018, which is equivalent to a change of 0.93 feet over 100 years.¹²

¹² See Nat'l Oceanic & Atmospheric Admin., *Relative Sea Level Trend 8443970 Boston, Massachusetts*, TIDES & CURRENTS, https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?id=8443970.

16. These impacts are directly harming the welfare of Massachusetts residents and causing significant economic losses. Coastal storms currently result in severe coastal flooding with extensive damage to public infrastructure, private homes and businesses, and a significant demand for emergency services. For example, a coastal storm on March 2–3, 2018, which reached the third-highest water level recorded at the Boston Harbor tide gauge, resulted in major flooding, damages, and expenditures for response and recovery. The Massachusetts Emergency Management Agency determined that response and repair costs exceeded \$24 million across six coastal counties. On April 30, 2018, Massachusetts Governor Charles Baker requested a federal disaster declaration, which the Trump Administration approved on June 25, 2018. The disaster declaration authorized FEMA Public Assistance funding for eligible applicants. As of June 2019, FEMA has obligated over \$4 million for public storm-related costs.

17. Rising sea levels increase the frequency, depth, and duration of coastal flooding events; and the associated magnitude of damage costs, including costs associated with the increased demand on first responders, will escalate accordingly.

18. Sea level rise and other impacts of a changing climate pose major risks to communities in Massachusetts' coastal zone. Looking out to the end of the century, a 2018 study analyzed the number of coastal homes and commercial

properties throughout the United States that will be at risk from frequent tidal flooding (meaning at least 26 higher tides per year) as a result of projected sea level conditions without any storm events.¹³ In Massachusetts, over 89,000 existing homes and 8,000 commercial properties may be disrupted by chronic tidal flooding or inundation by 2100 under a high-emissions scenario. The 2018 market value of residential buildings at risk of higher tides in 2100 was estimated at \$63 billion, and these homeowners currently contribute over \$400 million to the local property tax base.¹⁴

19. Development along the Massachusetts coast is afforded protection from coastal buffers such as beaches and dunes, and from engineered coastal infrastructure such as revetments and seawalls. These coastal engineered structures will experience greater impacts from flooding and wave energy from the anticipated increase in frequency and intensity of coastal storm events associated with accelerated sea level rise and climate change. With these greater impacts will come more frequent need for maintenance and replacement of coastal engineered structures as well as beaches in the form of sediment nourishment at significant costs. For example, the Town of Winthrop needed additional protection from storm

¹³ See UNION OF CONCERNED SCIENTISTS, UNDERWATER: RISING SEAS, CHRONIC FLOODS, AND THE IMPLICATIONS FOR US COASTAL REAL ESTATE (2018), www.ucsusa.org/resources/underwater.

¹⁴ See Massachusetts-specific data available at: www.ucsusa.org/sites/default/files/attach/2018/06/underwater-data-by-state.xlsx.

surge and flooding impacts for a suburban neighborhood with existing engineered shoreline structures and an eroding beach. At a cost of approximately \$25 million in state funding, 460,000 cubic yards of sand, gravel and cobble were placed along 4,200 linear feet of shoreline in 2013–2014. The community gained approximately 150 feet of beach width at high tide and increased protection against wave energy and coastal storms. Other communities across Massachusetts (*e.g.*, New Bedford, Rockport, Duxbury, and Scituate) have worked to design beach nourishment projects and address erosion and failing coastal engineered structures that will be exacerbated by sea level rise and increased flooding from coastal storms.

20. Coastal engineered structures, such as seawalls and revetments, have been constructed on over a quarter of the Commonwealth's ocean-facing shoreline to protect public and private infrastructure and assets from flooding and erosion. The Commonwealth and its municipalities own approximately 92 miles of such structures along the coastline. As a result of wave forces on the coastal structures and lowered beach elevations, the Commonwealth and local governments routinely invest millions of dollars to repair and reinforce these structures so they can adequately protect coastal communities. For example, a seawall reconstruction project was recently completed in the Town of Marshfield to address coastal flooding and public safety issues. In 2018, the Commonwealth provided a \$1.85 million grant and loan award to the town, which was matched with roughly

\$620,000 in local funds. The approximately 600-foot section of seawall sustained damages during a coastal storm in January 2015, and the state-funded project increased the height of the seawall by two to three feet to better protect a public road, utilities, and homes. The Town of Marshfield has 32 coastal engineered structures along 12 miles of exposed shoreline, totaling over 20,000 feet (3.9 miles) that have been identified as needing repairs and retrofits to address the current and future threats of coastal storms. With higher flood levels and greater storm surges, significantly more investments will be required to achieve the current flood-design protections afforded by these engineered structures across the coast.

21. The Commonwealth owns a substantial portion of the state's coastal property. The Commonwealth owns, operates, and maintains approximately 177 coastal state parks, beaches, reservations, and wildlife refuges located within the Massachusetts coastal zone. The Commonwealth also owns, operates, and maintains numerous properties, facilities, and infrastructure in the coastal zone, including roads, parkways, piers, and dams. Rising sea levels along the Massachusetts coast will result in either the permanent or temporary loss of the Commonwealth's coastal property through inundation, storm surge, flooding, and erosion events. These projected losses of coastal property will likely destroy or damage many of the state-owned facilities and infrastructure described above. The Commonwealth likely will be required to expend significant resources to protect,

repair, rebuild, or possibly relocate the affected properties, facilities, and infrastructure. According to the Commonwealth's 2018 *State Hazard Mitigation and Climate Adaptation Plan*,¹⁵ the replacement cost of state-owned facilities exposed to FEMA's 1% annual chance flood event in coastal counties exceeds \$500 million.

22. The Massachusetts coastal zone is home to several major ports including the Port of Boston and New Bedford/Fairhaven Harbor. Recent economic studies indicate the income generated from the Massachusetts maritime economy supports 2.6% of the state's direct employment and 1.3% of gross domestic product.¹⁶ In 2018, New Bedford/Fairhaven Harbor alone generated \$3.7 billion in direct business revenue from seafood processing and fleet operation businesses.¹⁷ By nature of their purpose, the state's ports and harbors are generally low-lying, coastal-dependent areas of high density-built environment and are susceptible to service interruption and associated revenue loss when flooded or otherwise impacted by coastal events. Additionally, coastal dependent businesses,

¹⁵ Available at: www.mass.gov/service-details/massachusetts-integrated-state-hazard-mitigation-and-climate-adaptation-plan.

¹⁶ See DAVID R. BORGES ET AL., UMASS DARTMOUTH PUBLIC POLICY CTR., NAVIGATING THE GLOBAL ECONOMY: A COMPREHENSIVE ANALYSIS OF THE MASSACHUSETTS MARITIME ECONOMY 11 (2018), www.mass.gov/files/documents/2018/01/24/Maritime_Economy.pdf.

¹⁷ MARTIN ASSOCIATES & FOTH-CLE ENG'G GROUP, ECONOMIC IMPACT STUDY OF THE NEW BEDFORD/FAIRHAVEN HARBOR 5 (2019), www.newbedford-ma.gov/mayor/wp-content/uploads/sites/3/Martin-Report-Exec-Summary-2019.pdf.

maritime schools, and public facilities and departments will face disruptions in service in post-storm conditions.

23. The Commonwealth is committed to protecting public safety, human health, the environment, and public resources through programs and policies that address sea level rise and other climate-change-related coastal hazards. EEA and CZM provide information, strategies, and tools to help other state agencies and communities plan for and address the challenges of erosion, flooding, storms, sea level rise, and other climate change impacts.

24. Of more than \$32 million requested over the past 5 years alone, CZM has awarded approximately \$17 million in state-funded grants to local communities to support sea level rise adaptation planning and implementation through the Coastal Resilience Grant Program. Local governments have matched these state funds with roughly \$8.3 million in local funds and in-kind services for coastal resilience. In 2017–2019, EEA also awarded roughly \$22 million in municipal grants for climate vulnerability planning and implementation statewide through the Municipal Vulnerability Preparedness (MVP) Program. Over the past two years, local governments have matched MVP implementation grants with over \$9 million in local funds and staff time. Between both CZM and EEA programs, the total amount of funding requested in 2018 was \$8.3 million, and in 2019

increased to \$29.3 million for these programs. There is a growing need at the local level for support.

25. Municipalities, private entities, and other partners have begun to support planning to address the impacts of sea level rise and other climate change impacts in Massachusetts and fund implementation of adaptation measures. Adaptation planning efforts include vulnerability assessments to determine areas and infrastructure susceptible to coastal impacts, prioritization of vulnerable assets and areas, and development of adaptation alternatives to mitigate climate risks in the near and long term. One example is the City of Boston's "Climate Ready Boston" initiative, which is developing district-level adaptation plans to address near-term coastal flooding and establish a framework for the funding and implementation of long-term, broader scale solutions. For the East Boston and Charlestown neighborhoods, the City of Boston identified near-term (2030–2050) and long-term (2050–2070) actions for addressing future flood risks created by sea level rise. The City of Boston's report estimates the costs for these actions range from \$202 million to \$342 million for East Boston and Charlestown alone.¹⁸ The city recently completed a coastal resilience plan for the South Boston neighborhood and has started planning for the Downtown area. Another example

¹⁸ See COASTAL RESILIENCE SOLUTIONS FOR EAST BOSTON AND CHARLESTOWN: FINAL REPORT (2017), www.boston.gov/sites/default/files/climatereadyeastbostoncharlestown_finalreport_web.pdf.

of planning for the impacts of coastal climate change is the *Great Marsh Coastal Adaptation Plan* led by the National Wildlife Federation in partnership with the Ipswich River Watershed Association.¹⁹ The plan assesses climate impacts and vulnerability for the Great Marsh region and each of its six communities (Salisbury, Newburyport, Newbury, Rowley, Ipswich, and Essex), examining the risk and exposure of critical infrastructure and natural resources, and identifies areas of special concern. The plan states that in Newburyport, estimated one-time damages to buildings and structures (not contents) from a 1% annual exceedance probability storm (also known as the 100-year storm) under 1.09 feet of sea level rise would be \$18.3 million and under 3.45 feet of sea level rise the damages would increase to \$32.4 million.²⁰

26. In conclusion, any increase in the rate of sea level rise and the frequency, magnitude, and severity of coastal flooding, erosion, and storms related to GHG emissions, including emissions from motor vehicles, will impact the Commonwealth and its residents and will require the Commonwealth to expend additional resources and incur additional costs.

¹⁹ See TAJ SCHOTTLAND ET AL., GREAT MARSH COASTAL ADAPTATION PLAN (2017), www.nwf.org/-/media/Documents/PDFs/NWF-Reports/NWF-Report_Great-Marsh-Coastal-Adaptation-Plan_2017.ashx.

²⁰ *Id.* at 49, tbl.3.3-3.

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Boston, Massachusetts on December 9, 2019.



Lisa Berry Engler

Director

Massachusetts Office of Coastal Zone Management

**UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT**

STATE OF NEW YORK, *et al.*, NATURAL
RESOURCES DEFENSE COUNCIL, *et al.*,

Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC
SAFETY ADMINISTRATION, *et al.*,

Respondents,

ASSOCIATION OF GLOBAL
AUTOMAKERS, *et al.*

Respondents-Intervenors.

Docket Nos. 19-2395, 19-2508

DECLARATION OF PHILIP MOTE

I, Philip Mote, state and declare as follows:

1. I am an employee of Oregon State University but am writing in my capacity as a trained climate scientist with over 20 years' experience and with expertise in Northwest climate and climate change. I was the founding Director of the Oregon Climate Change Research Institute (OCCRI), a position I held from 2009 to 2019. OCCRI is a network of over 150 researchers at Oregon State University (OSU), the University of Oregon, Portland State University, Southern Oregon University, and affiliated federal and state labs. OCCRI is administered by OSU and resides in the College of Earth, Ocean, and Atmospheric Sciences, where I am a professor. I am also the co-leader of the NOAA-funded Climate Impacts Research Consortium for the Northwest. I have served as a lead author for the Fourth and Fifth

Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC), on three US National Climate Assessments, and seven reports of the National Academy of Sciences. I am President of the Global Environmental Change Section of the American Geophysical Union. I earned a BA in Physics from Harvard University and a PhD in Atmospheric Sciences from the University of Washington.

2. OCCRI was created by the Oregon state legislature under HB3543. Among other things, it is tasked with “assess[ing]... the state of climate change science, including biological, physical and social science, as it relates to Oregon and the likely effects of climate change on the state.” The *Third Oregon Climate Assessment Report* (<http://www.occri.net/publications-and-reports/third-oregon-climate-assessment-report-2017/>) was released in January 2017. OCCRI scientists helped write the Northwest chapter of the Fourth National Climate Assessment (<https://nca2018.globalchange.gov/chapter/24/>). These reports form the basis for this declaration. I am making this declaration in my personal capacity as an expert based on my experience and training, and not on behalf of OSU.

3. The key climate risks facing Oregon have been known for years. At the top of the list are the effects of declining snowpack induced by warming, which include lower summer streamflow and soil moisture. As snowfall gives way to rainfall, fall and winter flood risk is also expected to increase in most basins, particularly in mixed rain-snow basins with near-freezing winter temperatures. Future changes in water supply and demand are expected to strain the ability of existing infrastructure and operations to meet all the varied water needs of Oregonians.

4. A second major climate risk are forest disturbances (wildfires, drought, and insect outbreaks), all of which are linked to warming and all of which can transform forests. Changing climate will shift ideal growing zones for many important tree species and vegetation types, with

conifer forests shifting to mixed- forests west of the Cascade Range and subalpine forests shrinking. The observed increase in wildfire activity is partially due to human-caused climate change; increasing wildfire activity is expected under future warming. Mountain pine beetle, western spruce budworm, and Swiss needle cast remain major disturbance agents in Oregon's forests that are expected to expand. Smoke from wildfires has caused significant economic disruption and respiratory problems. Forests owned by the State of Oregon are among those adversely affected by these factors, and the State has had to increase its expenditures on fighting forest fires, and will continue to do so.

5. A third major climate risk is the various changes in the coastal zone. Rising sea levels, coastal erosion, and changing ocean acidity are already damaging private property, public and private infrastructure, shellfish production, some fisheries, and through these and other effects, impacting coastal communities in Oregon. Future coastal inundation from a moderate sea level rise scenario could place thousands of homes and over 100 miles of roads, some of them state-owned, at high risk of annual flooding by the year 2100.

6. For agriculture, beneficial longer growing seasons may be offset, for some places and crops, by insufficient water and by insect and disease stress. Over the next few decades, warming winters, expanding growing seasons, and carbon dioxide enrichment may boost yields for some Oregon crops and create opportunities to grow new crops and varieties, but such benefits hinge on having adequate water supply, which is projected to dwindle, especially in areas that rely on snowpack. For other crops such as tree fruits, warming winters may prevent adequate chilling needed for a healthy crop yield. In the long-term, increased heat and drought stress, water shortage, and pressure from pests and diseases may supersede the positive benefits

of increased crop yield. Improved irrigation water management strategies will be necessary to handle heat and drought stress and longer growing seasons.

7. Scientists have quantitatively linked climate trends and events to human activity. Human emissions of greenhouse gases dominated the warming trend of average annual temperature in the Pacific Northwest since 1900, contributed an additional 16,000 square miles of wildfire burned area in the western United States since 1984, contributed to the 2014–2015 snow drought in Oregon through warmer temperatures, and made Oregon’s coastal waters more acidic in 2013.

8. The 2015 snow drought was caused by record-high winter temperatures and occurred in spite of normal precipitation. It therefore foreshadows conditions that could become common by 2050 unless global greenhouse gas emissions are significantly reduced. Impacts included insufficient water supply in reservoirs, a fire season in which more than double the average acreage burned (almost as much as 2017), warm streams that reduced salmon returns, and agricultural crop losses. With continued warming, this type of drought is expected to occur more often in the future.

9. Under continued increasing greenhouse gas emissions, Oregon’s climate is projected to warm on average 3–7°F by the 2050s and 5– 11°F by the 2080s. If greenhouse gas emissions level off by mid-century, warming would be limited to 2–5°F by the 2050s and 2–7°F by the 2080s. Summers are expected to warm more than the annual average and are likely to become drier. Extreme heat and precipitation events are expected to become more frequent.

10. The warming observed to date, which has been linked (paragraph #7) to human activity, has already affected the region. Spring snowpack has declined, summer low flows have decreased, and streamflow timing has shifted earlier at many sites in Oregon and the rest of the

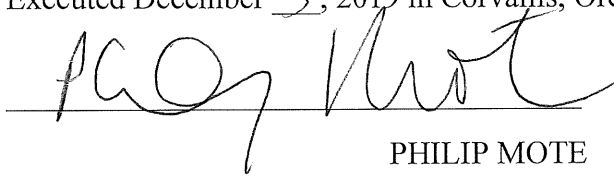
Pacific Northwest. Wildfire risk has increased. Coastal erosion has accelerated, driven by a combination of bigger waves and higher mean sea levels.

11. Climate change affects the health of Oregonians. More frequent heat waves are expected to increase heat-related illness and death. More frequent wildfires and poor air quality are expected to increase respiratory illnesses. Unusually warm water has caused algal blooms in both freshwater and coastal waters, notably in 2015. Warmth and extreme precipitation are expected to increase the risk of exposure to some vector- and water-borne diseases. Access to sufficient, safe, and nutritious food may be jeopardized by climate change. Extreme climate or weather events can diminish mental health. Certain populations will be disproportionately affected by such climate-related health impacts. However, adaptation strategies may reduce the projected adverse health outcomes.

12. Climate change uniquely affects the culture, sovereignty, health, economies, and ways of life of American Indian tribes. Changes in terrestrial and aquatic ecosystems will affect resources and habitats that are important for the sovereignty, culture, economy, and community health of many Native American tribes. Tribes that depend upon these ecosystems, both on and off reservation, are among the first to experience the impacts of climate change. Of particular concern are changes in the availability and timing of traditional and ceremonially important foods such as salmon, shellfish, and berries, and other plant and animal species important to tribes' traditional way of life.

I state under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

Executed December 5, 2019 in Corvallis, Oregon.

A handwritten signature in black ink, appearing to read "Philip Mote", written over a horizontal line.

PHILIP MOTE

Vice Provost and Dean of the Graduate School
Oregon State University