ORAL ARGUMENT NOT YET SCHEDULED

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

MURRAY ENERGY CORPORATION,)
Petitioner,)
v.) No. 16-1127
UNITED STATES ENVIRONMENTAL)
PROTECTION AGENCY, et al.,)
Respondents.)))

MOTION OF CONSERVATION LAW FOUNDATION, ENVIRONMENTAL DEFENSE FUND, NATURAL RESOURCES COUNCIL OF MAINE, THE OHIO ENVIRONMENTAL COUNCIL, AND SIERRA CLUB TO INTERVENE ON BEHALF OF RESPONDENTS

Pursuant to Federal Rule of Appellate Procedure 15(d) and D.C. Circuit Rule 15(b), Conservation Law Foundation, Environmental Defense Fund, Natural Resources Council of Maine, The Ohio Environmental Council, and Sierra Club ("Movants") respectfully move for leave to intervene in support of Respondent U.S. Environmental Protection Agency ("EPA" or "the Agency"), in the above-captioned matter and any later-filed challenges to the "Supplemental Finding That It Is Appropriate and Necessary To Regulate Hazardous Air Pollutants From Coaland Oil-Fired Electric Utility Steam Generating Units," 81 Fed. Reg. 24,420 (Apr. 25, 2016) ("Supplemental Finding"). Counsel for Respondents has stated that the

Respondents do not oppose this motion. Counsel for Petitioner Murray Energy Corporation ("Murray Energy") has indicated that Murray Energy takes no position on this motion.

BACKGROUND

EPA promulgated the Supplemental Finding in response to the U.S. Supreme Court's ruling in *Michigan v. EPA*, 135 S. Ct. 2699 (2015), which involved a challenge to the Agency's "National Emission Standards for Hazardous Air Pollutants from Coal- and Oil- Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units," 77 Fed. Reg. 9304 (Feb. 16, 2012) ("Mercury and Air Toxics Standards" or "the Air Toxics Rule").

Section 112 of the Clean Air Act ("the Act"), 42 U.S.C. § 7412, establishes a detailed statutory framework intended to reduce emissions of hazardous air pollutants. These pollutants: are "carcinogenic, mutagenic, teratogenic, [or] neurotoxic"; cause "reproductive dysfunction"; are otherwise "acutely or chronically toxic"; or may present or threaten "adverse environmental consequences" due to "bioaccumulation, deposition, or otherwise," 42 U.S.C. § 7412(b)(2), even where they are present in small amounts. In the Clean Air Act Amendments of 1990, Congress mandated that EPA regulate emissions of hazardous air pollutants from power plants if the Agency found such regulation "appropriate and necessary" after performing a study of the public health hazards

those emissions cause. *See id.* § 7412(n)(1)(A). EPA completed the required study, and others, by 1998 and thereafter sought comment, and then in 2000 published its finding that regulation of coal- and oil-fired power plants was "appropriate and necessary," and listed the industry for regulation. This Court dismissed a challenge to that decision on ripeness grounds, *see* Order, *Util. Air Regulatory Grp. v. EPA*, Case No. 01-1074, 2001 U.S. App. LEXIS 18436 (D.C. Cir. July 26, 2001). The Agency faced a statutory deadline of December 20, 2002, to promulgate emission standards. *See* 42 U.S.C. § 7412(c)(5).

When EPA missed its deadline, several public health and environmental groups, including Movant Natural Resources Council of Maine, filed suit to compel the Agency to perform its nondiscretionary duty to issue technology-based air toxics standards for coal- and oil-fired power plants. *Izaak Walton League v. Leavitt*, 400 F. Supp. 2d 38 (D.D.C. 2005). While a decision on preliminary motions was pending, EPA issued a final rule purporting to delist coal- and oil-fired power plants from the list of source categories requiring section 112(d) technology-based regulation, thereby mooting the petitioners' challenge until such time as the delisting decision was overturned. *Id.* at 40–42, 44.

EPA's 2005 final rule purportedly reversed its finding that regulation under section 112 was "appropriate and necessary." *See* "Revision of December 2000 Regulatory Finding on the Emissions of Hazardous Air Pollutants From Electric Utility Steam Generating Units and the Removal of Coal- and Oil-Fired Electric Utility Steam Generating Units From the Section 112(c) List," 70 Fed. Reg. 15,994 (Mar. 29, 2005) ("Delisting Rule").

In response to consolidated challenges to both the Delisting Rule and an accompanying regulation known as the Clean Air Mercury Rule—which established performance standards for mercury, only, from coal-fired power plants—brought by several states, tribes, and non-governmental organizations, including a number of the Movants here, this Court vacated both rules and confirmed EPA's ongoing obligation to finalize emission standards for hazardous air pollutants from power plants under section 112 of the Clean Air Act. *See New Jersey v. EPA*, 517 F.3d 574, 578 (D.C. Cir. 2008). Public health and environmental groups, including several Movants, again filed suit in December 2008 seeking enforceable deadlines for EPA to fulfill its obligation. *Am. Nurses Ass'n v. EPA*, D.D.C. No. 1-cv-08-02198 (RMC). Pursuant to the consent decree in that case, EPA proposed emissions standards for hazardous air pollutants from coal- and oil-fired power plants for comment in early 2011, and signed and finalized the Air Toxics Rule on December 16, 2011. *See* 77 Fed. Reg. at 9446.

The Air Toxics Rule promulgates section 112(d) emission standards for the listed hazardous air pollutants emitted by coal- and oil-fired power plants. Although not required to do so, as the source category "remain[ed] listed," *New Jersey*, 517 F.3d at 583, EPA affirmed its prior finding that regulating hazardous air pollutants emitted by coal- and oil-fired power plants under section 112 "remains appropriate and necessary." *See* 81 Fed. Reg. 9363–64.

A coalition of industry and state petitioners sought review of the Air Toxics Rule in this Court, which denied the petitions. *See White Stallion Energy Ctr. v. EPA*, 748 F.3d 1222, 1229 (D.C. Cir. 2014) ("White Stallion"). The U.S. Supreme

Court granted review on the narrow question of whether EPA unreasonably refused to consider cost when determining that it was "appropriate" to regulate hazardous air pollution from power plants, and found that EPA erred by not considering cost. *See Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015). Neither the Supreme Court, nor this Court on remand, vacated the Air Toxics Rule, which has been continuously effective since 2012. *See* Order, *White Stallion Energy Ctr. v. EPA*, D.C. Cir. No. 12-1100, 2015 U.S. App. LEXIS 21819, at *56 (Dec. 15, 2015).

EPA issued the Supplemental Finding in response to *Michigan v. EPA*. In it, the Agency determined that, considering cost, it remains appropriate and necessary to regulate emissions of hazardous air pollutants from coal- and oil-fired power plants under Clean Air Act § 112. See 81 Fed. Reg. at 24,420, 24,427. In accord with *Michigan*, the Agency included cost as a factor in the "appropriate" prong of its analysis. See id. at 24,426. Specifically, EPA evaluated the cost of compliance with the Air Toxics Rule as a percentage of the power sector's revenue, in comparison to the power sector's annual capital expenditures, and by its impact on the retail price of electricity. See id. at 24,424. The Agency determined that costs were reasonable under any of those metrics. See id. at 24,427. EPA also determined that compliance costs would not adversely impact the reliability of the electricity supply. See id. at 24,424–25. In addition, EPA explained that the benefit-cost analysis that it conducted as part of the Regulatory Impact Analysis of the Air Toxics Rule, although "not . . . required to support the appropriate finding," demonstrates that the Air Toxics Rule's benefits "are substantial and far outweigh the costs." *Id.* at 24,427.

Petitioner Murray Energy Corporation filed a petition seeking review of the Supplemental Finding on April 25, 2016.

STATEMENT OF INTERESTS, GROUNDS FOR INTERVENTION, AND ARTICLE III STANDING

Federal Rule of Appellate Procedure 15(d) "requires the intervenor to file a motion setting forth its interest and the grounds on which intervention is sought." *Synovus Fin. Corp. v. Bd. of Governors of Fed. Reserve Sys.*, 952 F.2d 426, 433 (D.C. Cir. 1991). Additionally, Circuit Rule 15(b) states that "a motion to intervene in one case before this court concerning direct review of an agency action will be deemed a motion to intervene in all cases before this court involving the same agency action or order, including later filed cases." D.C. Cir. Rule 15(b). "[A]n order granting such motion has the effect of granting intervention in all such cases." *Id*.

A. Statement of Interests

Movants are committed to protecting their members and others from dangerous air pollution, including air toxics emissions from coal- and oil-fired power plants, as evidenced by their long history seeking regulation as described above. Many of the Movants have participated for over fifteen years on behalf of their members in the proceedings leading up to this case. Most recently this Court granted all of the current Movants leave to intervene in *White Stallion*, and Movants also were respondents before the Supreme Court in *Michigan v. EPA. See* Brief of Respondents American Academy of Pediatrics, *et al.*, *Michigan v. EPA*,

135 S. Ct. 2699 (2015). Following the Supreme Court's decision, upon remand to this Court, Movants continued to participate as intervenors. *See*, *e.g.*, Joint Motion of the State, Local Government, and Public Health Respondent-Intervenors for Remand Without Vacatur, *White Stallion Energy Ctr. v. EPA*, No. 12-1100 (D.C. Cir. 2015). This Court's prior grants of leave to intervene in *White Stallion* properly recognize that organizations like Movants offer a distinct perspective in defending government actions that protect their members' concrete interests in their health and the environment where they live and recreate—the history of this regulatory program shows that these interests are not always fully represented by Respondent EPA.

Movants similarly have a compelling interest in defending the Supplemental Finding, to ensure that the Air Toxics Rule continues to provide significant public health and environmental protection valued by their members. Petitioners here have previously used challenges to the "appropriate and necessary" finding to attack the underlying protections of the Air Toxics Rule. For example, Petitioner Murray Energy's Supreme Court filing in *Michigan* urged, "EPA's determination that power plants could be appropriately regulated under Section 112—together with the rule itself—should be vacated." Amicus Curiae Brief of Murray Energy Corporation in Support of Petitioners at 27, *Michigan v. EPA*, 135 S. Ct. 2699 (2015).

Movants have a strong interest in protecting the Air Toxics Rule's farreaching health and environmental benefits. The rule's standards reduce coal-fired power plants' annual mercury emissions by 75 percent, hydrogen chloride

emissions by 88 percent, fine particulate emissions by 19 percent, and sulfur dioxide emissions—which cause respiratory and other harm—by 41 percent. 77 Fed. Reg. at 9424. These reductions will massively benefit public health and the environment. According to EPA, a significant percentage of the mercury emitted from coal-fired power plants is deposited onto land or water bodies, where it transforms into methylmercury—a highly toxic form of mercury that accumulates in fish. See Mercury and Air Toxics Standards (Proposed Rule), 76 Fed. Reg. 24,976, 25,007–09 (May 3, 2011). By eating contaminated fish, humans and wildlife are exposed to methylmercury. See id. at 25,007. Women of childbearing age and young children are particularly endangered by the consumption of methylmercury. See id. The adverse health effects for fetuses, babies, and children exposed to methylmercury include neurological and developmental problems such as poor attention span and delayed language development, impaired memory and vision, problems processing information, and impaired fine motor coordination. See id. at 25,018. All fifty states and one U.S. territory have advised against consuming freshwater and saltwater fish caught in some or all of the water bodies within their boundaries because of mercury pollution in those waters. See EPA, Fish and Shellfish Advisories and Safe Eating Guidelines, available at https://www.epa.gov/choose-fish-and-shellfish-wisely/fish-and-shellfishadvisories-and-safe-eating-guidelines (last accessed May 25, 2016). The Air Toxics Rule will vastly reduce mercury poisoning suffered by children, especially poor and minority children who are disproportionately harmed by mercury pollution. See 76 Fed. Reg. at 25,018.

Movants have a direct interest in the public health and environmental benefits of the Air Toxics Rule. Movants' members live, work and recreate in places where they are exposed to the range of air toxics emissions from power plants, including releases of particulate matter that contains toxic metals, and organic hazardous air pollutants that are known carcinogenic agents. See Brooks Decl. ¶ 2; Dougherty Decl. ¶ 7; Kinney Decl. ¶¶ 2, 17; Mahoney Decl. ¶ 9; Barnum Decl. ¶¶ 5–6, 12; Hitt Decl. ¶ 6; Schuba Decl. ¶¶ 3–6; Stith Decl. ¶ 7; Theberge Decl. ¶¶ 3, 7. Movants' members and their families also are exposed to mercury pollution by eating fish that they catch in waters that are contaminated by mercury, and have reduced their consumption of fish as a result. See Dougherty Decl. ¶ 5; Schuba Decl. ¶ 4–5; Hitt Decl. ¶ 5; Stith Decl. ¶ 7; Theberge ¶ 6. Movants' members are also exposed to inhaled air toxics—for example, acid gases such as hydrogen chloride—and small particulates that form in the vicinity of power plants after acid gases are emitted. See Dougherty Decl. ¶ 13; Schuba Decl. ¶ 5; Hitt Decl. ¶ 6; Stith Decl. ¶ 7. Such exposure harms their health by introducing small particulates and acid gases into their bodies and the bodies of their families. Such substances have been shown to cause serious respiratory and cardiovascular disorders, even premature death. See 76 Fed. Reg. at 25,003–04 (health impacts of organic HAP), 25,050 (health impacts of acid gases), 25,085 (health impacts of reducing fine particulate matter).

In addition, the enjoyment of recreational activities by Movants' members—including fishing, paddling, boating, hiking, and observing fish and wildlife in their native habitats—is diminished by power plant air toxics emissions, including by

the contamination of water bodies by power plant emissions. *See* Brooks Decl. ¶¶ 12–13; Barnum Decl. ¶ 7; Schuba Decl. ¶ 9. Metal toxics and mercury can bioaccumulate in fish, which causes neurological and reproductive harms in the water fowl and other animals that eat the fish—damaging Movants' members' enjoyment of those animals. *See* Brooks Decl. ¶¶ 12–13; Kinney Decl. ¶¶ 13–14. In some instances, Movants' members are forced to curtail or refrain from activities in which they would like to engage, such as fishing, eating fish, teaching others to fish, and sharing the fish they catch with others; and their opportunity to observe fish and wildlife can be similarly compromised. *See* Brooks Decl. ¶¶ 10, 13–15; Dougherty Decl. ¶¶ 12–13; Kinney Decl. ¶¶ 12, 15–16; Schuba Decl. ¶ 4; Stith Decl. ¶ 7; Vogel Decl. ¶ 12.

Movants' members currently are benefiting from the Air Toxics Rule because it is now effectively reducing coal- and oil-fired power plant air toxics emissions, thereby reducing the risk to Movants' members' health and improving their ability to enjoy the areas where they live, work, and recreate. Movants therefore seek intervention to defend and preserve the Supplemental Finding and indeed, any and all aspects of the Air Toxics Rule as may be threatened by this proceeding in order to avoid harm to their and their members' interests.

Through their challenge to the Supplemental Finding, Petitioners seek to weaken or vacate the Air Toxics Rule. Because such results would increase Movants' members' exposure to toxic air pollution from power plants and also increase the threat to the environment in which they live and recreate, Movants

have an interest in intervening on behalf of Respondents in the present case. See Fed. R. App. P. 15(d).

B. Grounds for Intervention

The "grounds" for the Movants' intervention, Fed. R. App. P. 15(d), are to oppose Petitioners' attempts to eliminate or weaken the Air Toxics Rule. Movants' interests in preventing the elimination or weakening of the Air Toxics Rule—and thus protecting their members' health and ability to continue enjoying recreational and aesthetic activities, and protecting their own and their members' interests in receiving access to information about emissions from the source category—will be prejudiced if they are not allowed to intervene.

As nonprofit environmental citizens' groups with members living, working, and recreating near power plants regulated under the Air Toxics Rule, the Movants have a palpable interest in the subject matter of this case. See Dougherty Decl. ¶ 2; Hitt Decl. ¶¶ 5–6, 8–9; Kinney Decl. ¶ 6; Mahoney Decl. ¶ 5; Stith Decl. ¶ 5; Theberge Decl. ¶¶ 2, 10–11; Vogel Decl. ¶ 4. This Court has regularly allowed intervention by medical, health, and environmental organizations to support EPA in Clean Air Act rulemakings—including the Air Toxics Rule—challenged by industry groups.¹

¹ See, e.g., West Virginia v. EPA, No. 15-1363 (D.C. Cir.) (Conservation Law Foundation, Environmental Defense Fund, The Ohio Environmental Council, Sierra Club, and others intervened in support of EPA); White Stallion Energy Ctr. v. EPA, 748 F.3d 1222, 1229 (D.C. Cir. 2014) (same for Conservation Law Foundation, Environmental Defense Fund, Natural Resources Council of Maine, The Ohio Environmental Council, Sierra Club, and others); Med. Waste Inst. v. EPA, 645 F.3d 420 (D.C. Cir. 2011) (same for Sierra Club); Portland Cement Ass'n v. EPA, 665 F.3d 177 (D.C. Cir. 2011) (same for Sierra Club and others);

This motion to intervene is timely filed. *See* Fed. R. App. P. 15(d); Order, ECF. No. 1613741 (May 18, 2016) (ordering that procedural motions in this case are due July 25, 2016).

C. Article III Standing

Movants have Article III standing. Any weakening or vacatur of the Air Toxics Rule would harm Movants' members by threatening their and their families' health, and diminishing their use and enjoyment of their property and natural resources. *See* Brooks Decl. ¶¶ 20–21; Dougherty Decl. ¶¶ 10, 14; Hitt Decl. ¶¶ 11; Kinney Decl. ¶¶ 21; Mahoney Decl. ¶¶ 12; Schuba Decl. ¶¶ 6–9, 11; Theberge Decl. ¶¶ 9, 11; Vogel Decl. ¶¶ 12. This is sufficient to establish injury for standing purposes. *See*, *e.g.*, *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 181–85 (2000) (disrupted enjoyment of natural resources and decreased property values due to pollution concerns are injuries in fact); *Sierra Club v. EPA*, 129 F.3d 137, 138–39 (D.C. Cir. 1997) (organization had standing to challenge delay in implementation of pollution-control measures that would benefit its members).² Petitioners plainly seek the weakening or vacatur of the Air Toxics Rule as the ultimate goal of this proceeding. *See* Amicus Curiae

Cement Kiln Recycling Coal. v. EPA, 255 F.3d 855 (D.C. Cir. 2001) (same for Sierra Club).

² This Court has held repeatedly that organizations such as Movants have standing to sue to protect their members from pollution that threatens and concerns those members. *See*, *e.g.*, *Nat. Res. Def. Council v. EPA*, 755 F.3d 1010, 1016–17 (D.C. Cir. 2014); *Ass'n of Battery Recyclers, Inc. v. EPA*, 716 F.3d 667, 672–73 (D.C. Cir. 2013).

Brief of Murray Energy Corporation in Support of Petitioners at 27, *Michigan v. EPA*, 135 S. Ct. 2699 (2015).

Moreover, a decision dismissing Petitioners' challenge to the Supplemental Finding would extinguish Petitioners' threat to the Air Toxics Rule, thereby preventing harm to Movants' members. Thus, causation and redressability "rationally follow[]." *Crossroads Grassroots Policy Strategies v. FEC*, 788 F.3d 312, 316 (D.C. Cir. 2015) (movant had standing to intervene in order to defend against a challenge to an agency decision favorable to its interests, because invalidation of that decision would expose it to harm). Here, the injuries to Movants' members resulting from any weakening or elimination of the Air Toxics Rule are "directly traceable," *id.*, to the relief sought in this proceeding, and redressable by a decision of this Court.

CONCLUSION

For the foregoing reasons, Movants respectfully request leave to intervene in case No. 16-1127 and any later-filed and consolidated cases.

Dated: May 25, 2016

Respectfully submitted,

Filed: 05/25/2016

/s/ Graham G. McCahan

ANN BREWSTER WEEKS Clean Air Task Force 18 Tremont St., Suite 530 Boston, MA 02108 (617) 624-0234 aweeks@catf.org

Counsel for Conservation Law Foundation, Natural Resources Council of Maine, and The Ohio Environmental Council

Sanjay Narayan Sierra Club Environmental Law Program 2101 Webster St., Suite 1300 Oakland, CA 94612 (415) 977-5769 sanjay.narayan@sierraclub.org

NEIL GORMLEY
JAMES S. PEW
Earthjustice
1625 Massachusetts Ave., NW, Suite 702
Washington, DC 20036
(202) 667-4500
ngormley@earthjustice.org
jpew@earthjustice.org

Counsel for Sierra Club

GRAHAM G. MCCAHAN
VICKIE L. PATTON
BENJAMIN LEVITAN
Environmental Defense Fund
2060 Broadway, Suite 300
Boulder, CO 80302
(303) 447-7228
gmccahan@edf.org
vpatton@edf.org
blevitan@edf.org

SEAN H. DONAHUE Donahue & Goldberg, LLP 2000 L St. NW, Suite 808 Washington, DC 30036 (202) 277-7085 sean@donahuegoldberg.com

Counsel for Environmental Defense Fund

CERTIFICATE OF SERVICE

I certify that on May 25, 2016, the MOTION OF CONSERVATION LAW FOUNDATION, ENVIRONMENTAL DEFENSE FUND, NATURAL RESOURCES COUNCIL OF MAINE, THE OHIO ENVIRONMENTAL COUNCIL, AND SIERRA CLUB TO INTERVENE ON BEHALF OF RESPONDENTS, associated declarations, RULE 26.1 DISCLOSURE STATEMENT, and CERTIFICATE AS TO PARTIES were served on counsel of record for Respondents and Petitioner in Case No. 16-1127 using the Court's ECF system.

/s/ Graham G. McCahan

Dated: May 25, 2016

EXHIBIT A

Declarations of:

Conservation Law Foundation J Jeffrey Barnum

Priscilla M. Brooks Sean Mahoney

Environmental Defense Fund John Stith

Sarah Vogel

Natural Resources Council of Maine Eleanor H. Kinney

Amanda Theberge

The Ohio Environmental Council Trent A. Dougherty

Sierra Club Mary Anne Hitt

Patricia Schuba

DECLARATION OF J JEFFREY BARNUM FOR CONSERVATION LAW FOUNDATION

I, J Jeffrey Barnum, hereby declare and state:

- 1. This declaration is based on my personal and professional knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity. I submit this declaration in support of the Conservation Law Foundation's ("CLF's") appearance in this case to defend the U.S. Environmental Protection Agency's ("EPA's") Mercury and Air Toxics Standards ("MATS") Rule limiting mercury and other hazardous air pollutants emitted by coal- and oil-fired power plants.
- 2. I reside in Durham, New Hampshire during the week while employed by the Conservation Law Foundation. My primary residence in Durham is approximately seven (7) miles from Schiller Station, a power plant that uses coal as a fuel, and is also located downwind from Merrimack Station, another coal-fired power plant.
- 3. I am currently an employee of CLF, where I have worked for almost three years as the Great Bay-Piscataqua Waterkeeper. The position focuses on clean water issues in the Great Bay estuary and its watershed, which includes 52 communities in New Hampshire and Maine. The major issues are nutrient

pollution from point and non-point sources, ecosystem degradation, stormwater pollution, and the policy changes necessary to improve water quality, including the mitigation of toxic pollution that contaminates fish and wildlife in this estuarine system. Additionally, as a current board member and past president of the Coastal Conservation Association of New Hampshire, a group predominately comprised of recreational fishermen and women, I am very familiar with marine environmental issues and regulations.

- 4. I am sixty-six (66) years old.
- 5. As an avid recreational fisherman and with my current work experience, I have long been aware that mercury contamination affects some of the larger species of saltwater fish in the coastal waters of New Hampshire and Maine including Striped Bass, Mackerel, Bluefish, Swordfish, Shark and Bluefin Tuna. Mercury contamination from atmospheric deposition is also a factor used by the New Hampshire Department of Environmental Services to officially impair all of the Great Bay estuary, along with all other state waters. I have also been aware of the high levels of mercury in freshwater fish that live in rivers and lakes in New Hampshire and Maine, having been a fly fisherman from a very young age.
- 6. I am, furthermore, aware that the States of New Hampshire and Maine have issued fish consumption advisories warning that adults and older children consume only very limited amounts of certain fish caught in coastal saltwater in

those states, including Striped Bass, Bluefish, Mackerel, Swordfish, Shark, and Tuna, and that pregnant women, women of childbearing age and young children should never eat such fish. I am also aware that those states have issued advisories warning all women of childbearing age, all pregnant and lactating women, and all younger children not to consume most fish caught in freshwater bodies. Based on these fish consumption advisories, and my educational background, I have long been aware that eating freshwater or saltwater fish contaminated with mercury may have long-term adverse effects on my health or that of a young child. I therefore strictly limit my intake of these fish – particularly saltwater species such as Striped Bass, Bluefish, Mackerel, Shark, Tuna and Swordfish that are known to concentrate mercury, and advise other friends and acquaintances to avoid them as well.

7. I am aware, because of my professional experience and my involvement with CLF that mercury levels in fish in northeastern waters pose a threat to populations of fishes in Maine and New Hampshire and indeed throughout the North Atlantic. I am also concerned and aware that mercury contamination of fish and other parts of the food chain poses a threat to herons, sea gulls, sea ducks, loons, and other birds.

- 8. Most of my recreational saltwater fishing is for striped bass and bluefish along the coast of New Hampshire and north along the Maine coast to Kennebunk. Because of the health advisories, I never keep or consume any fish. It should be noted that many fishermen either are not aware of the advisories, or simply choose to ignore them. Indeed, my belief is that the majority of shore fishermen are not "catch and release" sportsmen, but rather are "meat fishermen" whose sole reason for fishing is to put meat on the table. The health advisories seem to carry little or no weight—as if the threat is not real. It is important for the health of these people to take actions that will ultimately reduce the amount of mercury contamination in coastal fish.
- 9. Additionally, in my spare time I frequently fish in the freshwaters throughout the northeast, including in New Hampshire and Maine. However, I never eat any of the freshwater fish that I catch because of risks associated with mercury and other types of contamination that bioaccumulate in the flesh of predator species such as the fish I enjoy catching.
- 10. I am informed and believe that coal-fired electric power plants, including the plants located near my home, are and long have been among the largest sources of mercury now emitted to the environment in the United States.

- 11. I have become aware through my work with CLF that on February 16, 2012 EPA finalized the MATS Rule, which sets the first-ever national limits on the emissions of mercury, particulate matter (as a surrogate for non-mercury toxic metals like chromium, arsenic, and lead), and hydrogen chloride (as a surrogate for acid gases) and a work-practice standard to reduce emissions of dioxins, formaldehyde, and other organic air toxics generated by coal- and oil-fired power plants. I know that coal-fired power plants, like Schiller and Merrimack Stations, are to be in compliance with these standards from and after April 2015, or at the latest, by April 16, 2016 with an extension.
- 12. I am aware that portions of northern New England have long been considered "hot spots," or geographic areas of greater concentrations of toxic deposition, like the mercury contamination of the waters near where I reside in Durham, as well as the geographical areas in which I recreate in New Hampshire and Maine are located in such "hot spots."
- 13. I also understand that it will take a number years of lower emissions of mercury from the coal and oil-fired plants that are upwind of northern New England, including the Schiller and Merrimack Stations upwind of my home, for these hot spot conditions to be ameliorated that is, even though MATS has been effective, the cleanup is not complete. I am therefore interested to defend against

any threat to the MATS Rule – the first and only national standard of hazardous air pollutants for existing power plants – in order to ensure that Merrimack and Schiller Stations will put on and continue to run controls to comply with the MATS Rule, to limit the amount of mercury and other toxic pollutants they emit, especially since many have failed to do so in the past in the absence of federal air toxics regulation. I am concerned that without the MATS Rule, my eventual opportunity to recreate and confidently and safely consume fish from our public waters will continue to be compromised by the emissions of mercury and other hazardous air pollutants from coal- and oil-fired power plants.

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

Executed on May 23, 2016.

J Jeffrey Barnum

DECLARATION OF DR. PRISCILLA M. BROOKS FOR THE CONSERVATION LAW FOUNDATION

- I, Priscilla M. Brooks, hereby declare and state:
- 1. This declaration is based on my personal and professional knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity. I submit this declaration in support of the Conservation Law Foundation's ("CLF's") appearance in in this case to defend the U.S. Environmental Protection Agency's ("EPA's") Mercury and Air Toxics Standards ("MATS") limiting mercury and other hazardous air pollutants emitted by coal and oil-fired power plants.
- 2. My primary residence is in Ipswich, Massachusetts, and my family's summer residence is located in York Harbor, Maine. Our house in York Harbor is located approximately ten (10) miles directly downwind from the Schiller Station, and also less than fifty (50) miles downwind of the Merrimack Station, two large coal-fired power plants in New Hampshire.
- 3. I am currently the Director of the Ocean Conservation Program for CLF, I am a member of CLF, and I have been a staff member at CLF for approximately twenty-two (22) years.

- 4. I am by training a resource economist, and my work at CLF includes advocacy concerning the conservation of ocean ecosystems and fisheries resources. I hold a Bachelor of Science from Cornell University, and a Master of Science and a Ph.D. in resource economics from the University of Rhode Island.
 - 5. I am fifty-eight (58) years old.
- 6. I am married and have two children: a daughter who is twenty (20) and an eighteen (18) year old son.
- 7. My family and I moved into our current residence in 1995. I also have been a summer resident of York Harbor, Maine for most of my life.
- 8. Because of my professional background, and in the course of my work at CLF, I have long been aware of the high levels of mercury in freshwater fish that live in rivers and lakes in Massachusetts and Maine. I am also aware that mercury contamination affects some of the larger species of saltwater fish in the coastal waters of Massachusetts and Maine including Striped Bass, Mackerel, and Bluefish.
- 9. I am, furthermore, aware that the Commonwealth of Massachusetts and the State of Maine have issued fish consumption advisories warning all women of childbearing age, all pregnant and lactating women, and all younger children not to consume most fish caught in freshwater bodies in Massachusetts and Maine. I am also aware that Massachusetts and Maine each recommend that other adults and

older children consume only limited amounts of certain fish caught in coastal saltwater in those states.

- 10. Based on these fish consumption advisories, and my professional and educational background, I have long been aware that eating freshwater or saltwater fish contaminated with mercury may have long-term adverse effects on my health and the health of my family members, and would pose unacceptable risks to any developing fetus I or now, my daughter might carry and nurse. I therefore strictly limit my intake of these fish, and inform my daughter to limit her intake of fish both local freshwater and saltwater fish, but particularly saltwater species such as Striped Bass, Bluefish, Mackerel, and Swordfish that are known to concentrate mercury.
- 11. I get great satisfaction out of producing healthy food for my family.

 We garden and grow our own organic produce, and enjoy locally produced organic produce from nearby farms. In my view, uncontaminated fish fits into this idea of a healthy lifestyle.
- 12. For my whole life I have enjoyed watching great blue herons, egrets and a variety of sea ducks in Maine and Massachusetts. These magnificent birds frequent the ocean waters and salt marshes near my houses in Maine and Massachusetts.

- 13. I am aware, because of my professional experience, my education, and my reading of scientific studies, that mercury levels in fish in northeastern waters pose a threat to populations of fishes in Maine and Massachusetts and indeed throughout the North Atlantic. I am also concerned and aware that mercury contamination of fish and other parts of the food chain poses a threat to herons, sea gulls, sea ducks, loons, and other birds including those that I take pleasure in seeing frequently in Maine and Massachusetts.
- 14. My husband and I and our children fish in the waters near our home in Ipswich, and in Maine. My son in particular is an avid fisherman. We fish for Bluefish and Striped Bass, both of which are on the state fish consumption advisory list in Maine, which tells women of child-bearing age, like my daughter, never to eat Bluefish or Striped Bass, and everyone else to eat no more than four (4) meals a year that include these fish. In Massachusetts, the Commonwealth advises that women of childbearing age and children under twelve (12) should never eat Bluefish caught in Massachusetts coastal waters, or any freshwater fish caught in the Commonwealth, as they are too contaminated. As a result, we very rarely consume the Striped Bass, Bluefish or other fish we catch because I am concerned that fish caught where we live are too contaminated with mercury to be safe and healthy for consumption.

- 15. When neighbors and friends visit us, and go fishing, I inform them of the risks of eating the fish they have caught, due to the mercury contamination. I would like to be able to offer them the experience of eating freshly-caught fish, and would do so at the point in time when they could safely eat the fish they catch.
- 16. I am informed and believe that coal-fired electric power plants, including the plants located upwind of my home in Maine, have been historically among the largest sources of mercury emitted to the environment in the United States, and among the largest stationary sources of mercury, particulate matter (as a surrogate for non-mercury toxic metals like chromium, arsenic, and lead), and hydrogen chloride (as a surrogate for acid gases).
- 17. I am aware through my study and my work that on February 16, 2012 U.S. EPA promulgated the final MATS Rule. That Rule was subject to challenges in federal court and in the U.S. Supreme Court, but has remained in effect throughout the course of those proceedings and is in effect today. The MATS Rule stablished emission limits with a final effective date of April 2016 for large U.S. coal- and oil-fired power plants -- including the Schiller and Merrimack plants located upwind of my home in Maine.
- 18. I understand that Merrimack station has installed wet flue gas desulfurization technology, commonly referred to as a "scrubber," in response to MATS and to New Hampshire rules, and that reduce the acid gases as well as some

of the other heavy metals emitted from the plant, and that other controls are or are being installed to control mercury emissions. I am also aware that the Schiller station sought an extension for its compliance with MATS.

- 19. I am aware through my study and my work that U.S. EPA recently issued a supplemental finding that regulation of coal-and oil-fired power plants' air toxic emissions is appropriate and necessary ("Supplemental Finding"), in response to the Supreme Court's directive to analyze the cost of these regulations. It is that final rule, I understand, that is now under challenge, and which CLF seeks to defend. I understand that the Supplemental Finding provides further support for the MATS Rule, and that a decision overturning it would jeopardize the MATS Rule itself.
- 20. Should the MATS Rule be overturned in the current round of litigation, I understand that the owners of the Schiller and Merrimack power plants could reduce or eliminate the operation of the controls they install to comply with the MATS Rule, thereby increasing their releases of toxic air emissions including mercury.
- 21. I am aware through my study and work that portions of northern New England are considered "hot spots," or geographic areas of greater concentrations of air toxics like mercury, and that my home in Ipswich and my family's home in Maine are located in such "hot spots." I also understand that it will take a number

years of lower emissions of mercury from the coal and oil-fired plants that are upwind of northern New England, including the Schiller and Merrimack Stations upwind of my home in Maine, for these hot spot conditions to be ameliorated – that is, even though MATS has been effective, the cleanup is not complete. I am therefore interested to defend against any threat to the MATS Rule – the first and only national standard of hazardous air pollutants for existing power plants – in order to ensure that Merrimack and Schiller Stations will continue to run controls to comply with the MATS Rule, and that I and my family will not be denied the benefits of the MATS Rule.

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

Executed May 25, 2016

Priscilla M. Brooks

Prisith M. Books

DECLARATION OF SEAN MAHONEY FOR CONSERVATION LAW FOUNDATION

- I, Sean Mahoney, hereby declare and state:
- 1. This declaration is based on my personal knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity. I submit this declaration in support of the Conservation Law Foundation's ("CLF's") appearance in this case to defend the U.S. Environmental Protection Agency's ("U.S. EPA's") Mercury and Air Toxics Standards ("MATS") Rule limiting mercury and other hazardous air pollutants emitted by coal- and oil-fired power plants.
- 2. I am the Executive Vice President for Programs at CLF, a nonprofit, membership-supported corporation organized and existing under the laws of the Commonwealth of Massachusetts. I have held this position since September 2012. I also serve as the director of CLF's Maine Advocacy Center and have served in that position since April 2007. In that capacity, I am familiar with CLF's mission, which is to work to solve the most significant environmental challenges facing New England. I also understand the nature and scope of CLF's membership, and the manner in which information on members can be retrieved.
- 3. Founded in 1966, CLF is the oldest regional environmental advocacy organization in the nation. CLF has offices in Maine, Massachusetts,

New Hampshire, Rhode Island, and Vermont. CLF's membership consists of approximately 3,500 individuals, residing in twenty-six states and the District of Columbia, though the largest numbers of members reside in Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

- 4. As a result of my work at CLF, I am aware that CLF's membership records include the address of each member. These records are regularly updated to add new members and reflect address changes. The records are maintained on a computer database, and the membership information provided below, specific to this declaration, is from this database.
- 5. As a result of my work at CLF, I am aware that CLF's mission is to protect New England's people, natural resources and communities, by working to promote renewable energy and fight air and water pollution; build healthy fishing communities and protect marine habitat; fight sprawl, promote public transit and public health. Advocacy to limit our members' exposure to toxic air pollution, and to contaminated natural resources, is a core part of CLF's mission.
- 6. As a result of my work at CLF, I am aware that all of the New England states have issued fish advisories for their freshwater lakes and streams. These advisories warn women of childbearing age and young children to significantly limit or avoid eating freshwater fish caught in such waterbodies due to the extent to which fish in those waters are likely to be

contaminated with mercury, and concerns about the linkage between consumption of mercury- contaminated fish and neurological damage in the developing brain.

- 7. As a result of my work at CLF, I am aware that there continue in operation several large coal-fired power plants in southern New Hampshire that when uncontrolled for their air toxics are among the largest emitters in New England of mercury, which deposits in local waterbodies and bioaccumulates in and contaminates fish. These plants also emit large amounts of other hazardous air pollutants when uncontrolled, including metals (like arsenic, cadmium and lead) which are emitted on particulate matter, and acid gases like hydrogen chloride and hydrogen fluoride. I am further aware that those living downwind from these plants even up to fifty miles downwind can experience compromised health, including respiratory and cardiovascular disorders, and even premature death as a result of breathing these pollutants. That is particularly true for the elderly and young people.
- 8. As a result of my work at CLF, I am aware that portions of northern New England, including the Merrimack River Valley areas of southern New Hampshire and northeastern Massachusetts near these coal-fired power plants are currently considered biological "hot spots" for mercury contamination, meaning areas where mercury concentrations in freshwater fish, birds and mammals

exceed established thresholds for human and ecological health, compared with mercury concentrations in the same species found in surrounding regions. In addition I am aware that a large oil-fired power plant, the Wyman Station, continues in operation in the Casco Bay area of Maine, near Portland, and that oil-fired power plants emit nickel, a human carcinogen.

As a result of my work at CLF, I am aware that approximately 735 9. of CLF's members live within fifty (50) miles downwind of the Schiller and Merrimack Stations, the large coal-fired power plants that remain in operation in southern New Hampshire. They are therefore directly impacted by any hazardous air pollution emitted by those plants. I am also aware that approximately 150 of CLF's members live within fifty (50) miles downwind of the Wyman Station on the edge of Casco Bay in Portland. They are directly impacted by the hazardous air pollutants emitted by those plants. Additionally, I am aware that many more CLF members pursue recreational interests along the coast in southern New England, including recreational fishing, and that those CLF members should not eat the coastal fish they catch, including Striper and Bluefish, due to concerns about mercury contamination in those species. I am further aware that these members include women of childbearing age who live, breathe, work, and recreate in such areas.

- 10. I am aware because of my work with CLF that in 2012, U.S. EPA finalized the MATS Rule, the first ever national limits on air toxics emitted by coal- and oil-fired power plants. The MATS Rule was subject to challenges in federal court and in the U.S. Supreme Court, but has remained in effect throughout the course of those proceedings and was for the most part upheld and is in effect today. The MATS Rule established emission limits with a final effective date of April 2016 for large U.S. coal- and oil-fired power plants -- including the Schiller and Merrimack plants located in New Hampshire, and the Wyman Station in Maine.
- 11. I am further aware that U.S. EPA recently issued a supplemental finding that regulation of coal-and oil-fired power plants' air toxic emissions is appropriate and necessary ("Supplemental Finding"), in response to the Supreme Court's directive to analyze the cost of these regulations. It is that final rule, I understand, that is now under challenge, and which CLF seeks to defend. I understand Supplemental Finding provides further support for the MATS Rule, and that a decision overturning it would jeopardize the MATS Rule itself.
- 12. Should the MATS Rule be overturned in the current round of litigation, I understand that the Schiller, Merrimack and Wyman Stations could reduce or eliminate the operation of the controls they install, thereby increasing their releases of toxic air emissions including mercury and nickel in the case of

the Wyman Station – adversely impacting CLF's members living downwind of these sources of air toxics.

13. I therefore make this declaration in support of CLF's intervention of this action, for the benefit of its members and with the goal of upholding the MATS Rule.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 25, 2016.

Sean Mahoney
Executive Vice President
Director, CLF Maine

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DECLARATION OF JOHN STITH

I, John Stith, declare as follows:

- 1. I am Director of Database Marketing and Membership Analytics at Environmental Defense Fund (EDF). I have worked at EDF for ten years.
- 2. My duties include maintaining an accurate list of members. My colleagues and I provide information to members, acknowledge gifts and volunteer actions, and manage the organization's member databases.
- 3. EDF is a membership organization incorporated under the laws of the State of New York. It is recognized as a not-for-profit corporation under section 501(c)(3) of the United States Internal Revenue Code.
- 4. The mission of EDF is to use science, economics, and law to protect and restore the quality of our air, water, and other natural resources. Our logo includes the phrase "Finding the Ways that Work." EDF employs a staff of more than 500 scientists, economists, lawyers, policy experts, and other professionals to help solve challenging environmental problems in a scientifically sound and cost-effective way.
- 5. Through its programs aimed at protecting human health, EDF has long pursued initiatives at the state and national levels designed to reduce emissions of air pollutants from all major sources, including power plants. This

work has addressed air pollutants classified as "hazardous air pollutants" under the Clean Air Act as well as other air pollutants.

- 6. When an individual becomes a member of EDF, his or her current residential address is recorded in our membership database. The database entry reflecting the member's residential address is verified or updated as needed.
- 7. Environmental Defense Fund currently has over 360,000 members in the United States, including members residing in each of the 50 states and the District of Columbia. These members likewise have a strong interest in protecting human health and the environment from air pollution. Many live in areas affected by air pollution, including areas whose local water bodies are subject to fish consumption advisories due in part to mercury pollution from power plants that bioaccumulates in the fish populations and makes the fish unsafe to eat in significant amounts.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed in Washington, D. C. on May 19, 2016.

John Stith

John R. Hill

DECLARATION OF SARAH VOGEL

I, Sarah Vogel, declare:

- 1. I am a Vice President for, and member of, Environmental Defense Fund ("EDF"). I have personal knowledge of the matters set forth herein and, if called to testify, I could and would testify to the truth of these facts. This declaration is submitted in support of EDF's motion to intervene in support of EPA's Supplemental Finding That It Is Appropriate and Necessary To Regulate Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units ("MATS Supplemental Finding"), 80 Fed. Reg. 75,025 (Dec. 1, 2015).
- 2. EDF is a non-profit organization with offices in Austin, TX; New York, NY; Washington, D.C.; Boston, MA; San Francisco and Sacramento, CA; Raleigh, NC; Boulder, CO; and Bentonville, AR. A core mission of EDF is to protect human health and the environment from toxic pollution.
- 3. I received a Ph.D from Columbia University's Center for the History and Ethics of Public Health and Medicine at the Mailman School of Public Health. I also hold a Master of Public Health and Master of Environmental Management from Yale University, and a BA from the University of Virginia. I have worked for EDF for over 4 years and am currently Vice President of EDF's Health Program. In that capacity, I work

with a team of scientists and policy experts to protect health by reducing exposure to toxic chemicals.

- 4. EDF has long sought to promote its members' interests in reducing emissions of hazardous air pollutants ("HAP") in general and from electric generating units in particular. EDF has engaged in significant efforts to obtain a regulation such as the Mercury and Air Toxics Standards ("MATS"). For example, when EPA under the previous administration attempted to "delist" power plants as a HAP source category in order to avoid the statutory requirement to strictly regulate power plant HAP emissions, EDF joined the lawsuits challenging that action. After the court held that the "delisting" had in fact been unlawful, EDF was then among the parties that sued EPA to secure a binding timetable for issuance of regulations. EDF representatives have testified before Congress and in public hearings regarding the need for MATS and submitted extensive written comments during the MATS rulemaking. Supporters of EDF interested in stringent standards for power plant HAP emissions submitted more than 82,000 comments to EPA in the MATS rulemaking.
- 5. Congress demanded action to address the serious health and environmental impacts posed by mercury and other toxic pollutants over twenty years ago in the Clean Air Act Amendments of 1990. In 2000, EPA

found that it was "appropriate and necessary" to regulate hazardous air pollutants from coal- and oil-fired power plants under Section 112 of the Clean Air Act. Progress since that time has been much slower than it should have been, but EPA has now issued the regulations that have been required under the Clean Air Act for more than a decade. MATS is a long overdue but major advance toward the goal of protecting Americans from hazardous air pollutants that Congress enacted into law so long ago.

- 6. Before MATS went into effect, coal-fueled power plants were the largest under-regulated source category of hazardous air pollutants in the United States. Congress specifically identified 188 HAP in the 1990 Clean Air Act Amendments and required that emissions standards be set for listed (stationary) sources of those pollutants. Uncontrolled coal- and oil-fueled power plants emit 84 different HAP and, before MATS, were responsible for nearly half of all manmade mercury emissions, 76 percent of acid gas emissions, and a quarter of all toxic metal emissions.
- 7. The HAP emitted by power plants have many serious adverse impacts on public health and the environment, as described below for the major categories of HAP regulated by MATS: mercury, non-mercury HAP metals, acid gases, and organic HAP.

a. Mercury. Before MATS, coal-fueled power plants were responsible for about half of U.S. anthropogenic mercury emissions. Mercury is a potent neurotoxin that bioaccumulates in the food chain. Mercury in the air settles into surface waters or onto land where it is washed into water. Deposited in soil, lakes, ponds, and oceans, this mercury is converted by certain microorganisms to a highly toxic form of the chemical known as methylmercury ("MeHg"). MeHg accumulates in fish and shellfish, as well as birds and mammals that consume fish. Fish and shellfish consumption are the main sources of human MeHg exposure.

Pregnant women are cautioned against consuming fish known to have high levels of mercury to avoid potentially deleterious impacts on their unborn children. Some studies suggest that MeHg exposure is associated with increased risk of having a low birthweight baby. Further, exposure to MeHg easily crosses the placenta and results in higher circulating levels in the developing fetus as compared to the mother. Exposure in the womb can impact development of the central nervous system, causing children to have lower IQ, memory, verbal and language skills, and to have difficulty thinking and learning later in life. It is estimated that hundreds of thousands of newborns each year have been

exposed to unsafe levels of MeHg in utero. An analysis by Dr. Kathryn Mahaffey in 2006 estimated that approximately 410,000 infants are born annually in the U.S. to mothers with blood mercury concentrations in excess of EPA's Reference Dose. MeHg can also be transferred from breastfeeding mothers to their infants. Childhood exposures to MeHg may continue to produce deficits in memory, attention, hearing and other developmental delays.

While neurological and developmental effects have been documented as the most sensitive endpoints, there is also increasing evidence that adverse cardiovascular effects can occur at very low levels of MeHg exposure. For example, a study examining men in Finland found a double the risk of myocardial infarctions and mortality from heart disease among those with higher mercury exposures. This was seen in another large multicenter study in Europe. Other studies show that mercury exposure is also associated with atherosclerosis, higher blood pressure in children and adults, and has been shown to attenuate the cardiovascular benefits of fish consumption.

b. Non-Mercury HAP Metals. Non-mercury HAP metals that will be reduced by MATS include antimony, arsenic, beryllium, cadmium, chromium, nickel, selenium, and manganese. Some of these metals are

known carcinogens and can cause cancer of the lung, kidney, bladder, and skin. These metals may also harm the immune, cardiovascular, nervous, and respiratory systems.

c. Acid Gases. Before MATS, coal- and oil-fueled power plants were responsible for approximately 76 percent of all acid gas emissions in the United States. Acid gas HAP such as hydrogen chloride and hydrogen fluoride are corrosive and can irritate the nose, throat, and respiratory tract. Acid gas vapors are highly water soluble and can therefore react with moisture and tissues in the upper respiratory system. Further, acids can be delivered to the alveolar regions of the lung through water bound to microscopic particles. It has been demonstrated that people with asthma experience irritation and restriction of airways from exposure to hydrogen chloride. According to EPA, the greatest impact of hydrogen chloride is on the upper respiratory tract, where high concentrations can lead to human health impacts as severe as suffocation.

Children are more vulnerable than adults to air pollution such as acid gases because their airways are less developed, they have faster breathing rates, and they typically spend more time outdoors. Two studies referenced in the Environmental Health and Engineering

Memorandum echo this conclusion. One study of 13,000 children in 1996 found an association between strongly acidic particles and increased cases of bronchitis and reduced lung function. The study also found that acid gases were associated with asthma in children. The second study from 2004 reaffirmed the link between particle pollution and acid gases with reduced lung function in children.

Acid gas emissions can also impact ecosystems. Hydrogen chloride can contribute to acid rain formation, which can harm human health, waters, wildlife, forests, and vegetation. A recent study from the United Kingdom found that almost a third of the reductions achieved there in acid rain contamination are attributable to reductions made in emissions of hydrogen chloride from coal-fueled power plants.

d. Organic Hazardous Air Pollutants. Organic HAP, specifically dioxins and furans that are formed during coal combustion, are probable carcinogens that are linked to a variety of cancers. Dioxins and furans are persistent organic pollutants, and may also cause reproductive and developmental problems, damage the immune system, and interfere with hormones. Once dioxins enter the body, they can stay there for a long time because of their chemical composition and ability to be stored in fat tissue. Dioxins' half-life in humans is estimated to be 7–11 years.

Dioxins emitted to the air can stay there for over 10 days and people can be exposed through direct inhalation. These airborne particle-bound dioxins are deposited on land and in water and can stay there for years. Dioxins bioaccumulate in the food chain and humans can be exposed when consuming contaminated meat or fish. Developing fetuses are the most sensitive group for exposure to dioxin. Dioxins have even been detected in nursing mothers' breast milk. In utero and breastfeeding exposure to environmental contaminants such as dioxins may cause attention deficit disorder or learning disabilities in children.

8. The impacts of HAP emissions from power plants are felt throughout the nation. For example, in 2008 nearly half of all U.S. water bodies were under water contamination advisories (80 percent of which were from mercury contamination). In total, some million lake-acres and 1.3 million river-miles were under mercury-related contamination advisories. Many places around the United States are hotspots for mercury exposure. A recent study of women conducted in Durham, North Carolina, for instance, found that nearly 30 percent of the women participating in the study had at least 1 μ g/L of mercury in their blood and approximately 2 percent had blood mercury levels above 3.5 μ g/L, considered to be the level of concern during pregnancy. It is important to note that exposures to mercury below

- 3.5 µg/L have been linked to neurological development delays and preterm birth. Among study participants of Asian/Pacific Islander descent, 12.5 percent had levels of mercury above the level of concern.
- 9. Communities located next to coal-fired power plants without mercury controls are especially at risk from unregulated HAP emissions. The EPA Mercury Study Report to Congress in 1997 estimated that 66 percent of all mercury deposited in the U.S. comes from national sources, and much of that is oxidized and particle-bound mercury from coal-fueled power plants. State-of-the-art mercury deposition modeling assessments conducted by EPA show that at the worst mercury hot spots across the nation, local sources within a state account for 50 to 80 percent of the mercury deposition. A study conducted in Ohio found that coal combustion accounted for about 70 percent of the mercury present in rainfall at the study site and that local and regional sources were responsible for the majority of the mercury deposition. Another study in Ohio confirmed that mercury emissions from coal-fueled power plants have significant local impacts, finding that 42 percent of the mercury in samples of rain could be traced to a coal-fired power plant less than a mile away.
- 10. Mercury pollution can have a disproportionate impact on lowincome and minority communities, particularly subsistence fishers. An

analysis by the Sierra Club has corroborated the disproportionate impact MeHg can have on the Hispanic community because of cultural, linguistic, and economic factors. The analysis found that, because Hispanics are more likely than other cultural groups in the United States to catch and consume fish from local waterways, they are at greater risk of exposure to toxic mercury.

- 11. The human health protections from regulating HAP emissions from power plants through MATS are momentous. EPA estimates that the rule reduces power plant emissions of mercury by 75%, hydrogen chloride by 88%, sulfur dioxide by 41% and fine particulate matter by 19%. The rule also reduces power plant emissions of cancer-causing HAP such as arsenic, chromium, and nickel. Emission reductions of these magnitudes ameliorate the many serious health impacts from HAP described above. In addition, EPA estimates that the fine particulate matter reductions alone would prevent 4,200 to 11,000 premature deaths, 130,000 cases of aggravated asthma, and 540,000 missed work days each year.
- 12. I strongly support the protections that MATS provides to public health not only because of my professional interest as a health scientist but for personal reasons as well. I am a woman of childbearing age and have a 21-month-old daughter. In order to protect my daughter's health and the

health of any future children I might have, I and my daughter curtail our fish and shellfish consumption due to concerns about mercury contamination. This reduces our ability to choose to eat foods that we would otherwise enjoy, including fish and shellfish from the East Coast and other parts of the United States. Moreover, by limiting our fish consumption to avoid mercury contamination, we forgo the significant health benefits that we would otherwise obtain by consuming more fish.

I declare under penalty of perjury that the foregoing is true and correct. Executed in Washington, D.C. on May 24, 2016.

Sarah Vogel

Surfell

DECLARATION OF ELEANOR H. KINNEY FOR NATURAL RESOURCES COUNCIL OF MAINE

- I, Eleanor H. Kinney, hereby declare and state:
- 1. This declaration is based on my personal knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity. I submit this declaration in support of the Natural Resources Council of Maine's ("NRCM's") appearance in this case to defend the U.S. Environmental Protection Agency's ("U.S. EPA's") Mercury and Air Toxics Standards ("MATS") Rule limiting mercury and other hazardous air pollutants emitted by coal- and oil-fired power plants.
- 2. I live at 333 Fogler Road, Bremen, Lincoln County, Maine 04551.

 My home is located approximately 40 miles downwind from the Wyman Station, an oil-fired power plant located in Yarmouth, Maine. My home is also located downwind from coal-fired power plants in New Hampshire and Massachusetts.
- 3. I have been a member of the Natural Resources Council of Maine ("NRCM"), for nearly twenty years, and I was a member of NRCM's Board of Director for eight years, from 2002 to 2010.
 - 4. I am also a biological oceanographer, with a Bachelor of Arts from

Yale University and a Master of Science from the University of Rhode Island. I am currently an at-home mother.

- 5. I am forty-eight (48) years old.
- 6. I have three children: a twelve year old, a fifteen year old, and an eighteen year old. In 2007, NRCM and other organizations filed suit against the Unites States Environmental Protection Agency ("EPA") for failing to regulate mercury and other toxic air pollutants in accordance with the Clean Air Act. At the time that lawsuit was initiated, I was nursing my youngest child.
- 7. My family and I moved into our current residence in June of 2002. I also have been a summer resident of Maine for my entire life.
- 8. We moved to Maine from Rhode Island, in order to live in a rural area, closer to nature and wildlife. We were particularly interested in the home we purchased on Biscay Pond because we understood that the water quality in the pond was considered to be high. We heard the calls of loons when we looked at the house. We understood that Biscay Pond was known as a good place to fish. These were all factors in the decision my husband and I made to move into our house and raise our children there, and they are why I continue to stay.
- 9. I get great satisfaction out of producing healthy food for my family.

 We garden and grow our own organic produce and raise animals. In my view,

uncontaminated fish fits into this idea of a healthy, and to some degree, self-sufficient lifestyle.

- 10. Biscay Pond is full of brown trout, largemouth and smallmouth bass.My neighbors and friends who have visited us have caught these fish.
- 11. My awareness of the high levels of mercury in freshwater fish that live in rivers and lakes in Maine has been increasing over time including since we moved into our current residence.
- 12. I am aware that the State of Maine, and other governments, have issued fish consumption advisories warning all women of childbearing age, all pregnant and lactating women, and all children age eight and under not to consume most fish caught in freshwater bodies in the State of Maine. I am also aware that the State of Maine recommends that other adults and children over the age of eight consume only limited amounts of fish caught from freshwater bodies in the State of Maine. Based on the fish consumption advisories issued by the State of Maine, and my professional and academic background, I am aware that eating the freshwater fish contaminated with mercury may have long-term adverse effects on my health and would pose unacceptable risks to a developing fetus in my womb or a child nursed by me. I am also aware that it could have and can continue to pose long-term adverse effects on my children. Therefore I don't consume the freshwater fish from Biscay Pond, or other ponds in Maine. I also severely limit

consumption of freshwater fish by all of my family.

- 13. For my whole life I have enjoyed watching loons in Maine. Loons nest on our property, and eat fish from Biscay Pond. In fact, the call of the loons was one of the reasons we purchased our current residence. Eagles also nest near our home.
- 14. I am aware, because of my training, reading and conversations with wildlife biologists, including scientists at the Biodiversity Research Institute based in Falmouth, Maine – of studies indicating that certain areas of the Northeast, including northeast Massachusetts, Southeast New Hampshire and southern Maine, have been as areas of high mercury deposition and associated biological mercury "hotspots" – higher than average concentrations of mercury in waterbodies, and in fish and wildlife. For example, I have reviewed a paper published in the January 2007 issue of the journal BioScience, by David Evers, et al., and entitled "Biological Mercury Hotspots in the Northeast U.S. and Canada," available at http://www.niehs.nih.gov/research/supported/assets/docs/a_c/bioscience_.pdf. I am aware that heightened mercury levels in freshwater fish in northeastern lakes are linked directly with adverse effects on populations of loons in the State of Maine. I am also concerned that mercury contamination of fish and other parts of the food chain poses a threat to eagles, including those that I take pleasure in seeing frequently from our property on Biscay Pond.

- 15. I do not fish here, and I discourage my family, particularly my children, from fishing, because I am concerned that fish caught where we live are too contaminated with mercury to be safe and healthy for consumption. "Catch and release" fishing does not interest me. I would, however, fish and would encourage my children to fish, at the point in time when we could safely eat the fish we catch.
- 16. When neighbors and friends visit us and catch fish in Biscay Pond, I inform them of the contamination of the fish with mercury and make them aware of the risks of eating the fish they have caught. I would like to be able to offer them the experience of eating freshly-caught fish, and would do so at the point in time when they could safely eat the fish they catch.
- 17. I am informed and believe that coal-fired electric power plants, including the plants located upwind of my home, are among the very largest sources of mercury and other hazardous air pollution emitted to the environment in the United States, including Maine. I am also aware that the Wyman Station, located upwind of my home, emits hazardous air pollutants, including nickel, a suspected human carcinogen.
- 18. Based on my participation as a member of NRCM, I am further aware that U.S. EPA recently issued a supplemental finding that regulation of coal-and oil-fired power plants' air toxic emissions is appropriate and necessary

("Supplemental Finding"), in response to the Supreme Court's directive to analyze the cost of these regulations. It is that final rule, I understand, that is now under challenge, and which NRCM seeks to defend. I understand the Supplemental Finding provides further support for the MATS Rule, and that a decision overturning it would jeopardize the MATS Rule itself.

- 19. I understand that the MATS Rule limits emissions for the largest stationary sources of mercury, particulate matter (as a surrogate for non-mercury toxic metals like chromium, arsenic, and lead), and hydrogen chloride (as a surrogate for acid gases) from coal- and oil-fired power plants, as well as sets a work-practice standard to reduce emissions of dioxins, formaldehyde, and other organic air toxics generated by coal- and oil-fired power plants.
- 20. I understand that when these regulations are fully implemented as they are required to be as of April 2016, they will result in significant reductions of mercury and other air pollutants. These include: an expected 75% reduction in annual mercury emissions, an 88% reduction in hydrogen chloride emissions, an expected 41% reduction in sulfur dioxide emissions, and an expected 19% reduction in particulate emissions (containing toxic metals such as nickel) from the electricity generating sector. I understand that EPA estimates that the rule will have the following significant health benefits on a national basis: 1) fewer premature deaths, by approximately 4,200 and 11,000 people, 2) 2,900 fewer cases

of chronic bronchitis, 3) 2,600 fewer hospitalizations related to respiratory and cardiovascular conditions, and 4) 3.2 million fewer days of restricted activity and approximately 540,000 fewer lost work days.

21. I am aware through my study and work that the area where I live already is considered to be a hot spot for mercury contamination and am therefore concerned about the effect of mercury and the emission of other air pollutants on my and my family's health, as well as the environment. I understand that should the MATS Rule be overturned in the current round of litigation, that power plants such as Schiller, Merrimack and Wyman Station could reduce or eliminate the operation of the controls they install, thereby increasing their releases of toxic air emissions including mercury – and nickel in the case of the Wyman Station – adversely impacting my family and others living downwind of these sources of air toxics.

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

Executed on May 25, 2016.

ELHK.

Eleanor H. Kinney 333 Fogler Road

Bremen, Maine 04551

DECLARATION OF AMANDA THEBERGE FOR THE NATURAL RESOURCES COUNCIL OF MAINE

- I, Amanda Theberge, hereby declare and state:
- 1. This declaration is based on my personal knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity. I submit this declaration in support of the Natural Resources Council of Maine's ("NRCM's") appearance in this case to defend the U.S. Environmental Protection Agency's ("U.S. EPA's") Mercury and Air Toxics Standards ("MATS") Rule limiting mercury and other hazardous air pollutants emitted by coal- and oil-fired power plants.
- 2. I am the Climate & Clean Energy Policy Advocate at NRCM, which is located at 3 Wade Street, Augusta, Maine 04330. I have held this position for more than seven years, since 2008. I am also a member of NRCM. Because of my position, responsibilities, and membership with NRCM, I am familiar with NRCM's mission, organization, and activities, and with the environmental interests and concerns of NRCM's members. I am also familiar with the nature and scope of NRCM's membership, its membership records, and the manner in which information on members can be retrieved.

- 2. NRCM is a non-profit membership organization whose mission is protecting, restoring, and conserving Maine's environment, now and for future generations. NRCM works to improve the quality of Maine's rivers, reduce poisonous chemicals threatening human and wildlife health, decrease air and global warming pollution, and conserve Maine lands. NRCM has more than 16,000 supporters statewide and beyond.
- 3. NRCM's membership records include the address of each member. These records are regularly updated to add new members, reflect address changes, and remove the names of persons who are no longer members. The records are maintained on a computer database, and the membership information provided below is from this database. NRCM has more than 9,000 members, including over 3,000 living in the counties (Cumberland, Sagadahoc and York counties) closest to the Wyman Station, an older oil-fired power plant located in Yarmouth, Maine. In addition, most of NRCM's members live downwind from two coal-fired power plants, the Merrimack Station and the Schiller Station in the state of New Hampshire.
- 4. As a result of my work at the NRCM, I am aware that coal-fired power plants are among the largest emitters of mercury, and also emit other air toxics, including arsenic, lead, and dioxins. I am also aware that oil-fired power

plants emit nickel, a known carcinogen. I am further aware that exposure to these chemicals by breathing them can be hazardous to human health.

- 5. As a result of my work at NRCM, I am aware that, when deposited, mercury transforms into methylmercury, which bioaccumulates in fish tissue. I am also aware that the primary pathway for human exposure to methylmercury is the consumption of contaminated fish. Methylmercury can affect human neurological, cardiovascular, and immune systems. The State of Maine warns people, particularly women of childbearing age, pregnant women, nursing mothers, and young children to strictly limit their consumption of certain types of freshwater fish caught within the state because of the likelihood that such fish are contaminated with methylmercury or other toxic chemicals at levels that present human health risks. The U.S. Food and Drug Administration and the U.S. EPA also have issued a joint fish consumption advisory, warning people to check local advisories about the safety of fish caught in local lakes, rivers, and coastal areas, and, if no advisory is available, to eat only up to six ounces (less for children) per week of fish caught in local waters and not to consume any other fish during that week.
- 6. I have been and continue to be personally affected by mercury and other air pollution in the State of Maine. I have lived in Maine all of my life. I am

of childbearing age, being 30 years old. Growing up, I primarily resided at my parents' house (with the exception of my time at college) which is approximately 10 miles from the Wyman Station. I currently reside at 4 Vine Street, Hallowell, Kennebec County, Maine 04347. I am an avid fly fisherman and ice fisherman, and I fish throughout the State of Maine, including in the counties closest to the Wyman Station. However, because of the mercury contamination in fish, I heavily restrict eating the fish that I catch.

- 7. As a result of my work at NRCM, I am further aware that simply by breathing, NRCM's members are adversely affected by the non-mercury hazardous air pollutant emissions from power plants, including nickel (a suspected human carcinogen) from oil-fired power plants like the Wyman Station. NRCM's members also live and in areas with high levels of methylmercury contamination in freshwater fish. As a result, many of NRCM's members, including those like myself who are of childbearing years and who are fisherman or would otherwise eat freshwater fish caught in Maine, are adversely impacted by these high levels of contamination.
- 9. As a result of my work at NRCM and my experience as an NRCM member, I am aware that EPA's MATS Rule establishes the first ever national regulations requiring coal- and oil-fired electricity generating units to use the

"maximum achievable control technology" to control emissions of mercury and other hazardous air pollutants. *See* 77 Fed. Reg. 9,304 (Feb. 16, 2012). I am further aware that U.S. EPA recently issued a supplemental finding that regulation of coal-and oil-fired power plants' air toxic emissions is appropriate and necessary ("Supplemental Finding"), in response to the Supreme Court's directive to analyze the cost of these regulations. It is that final rule, I understand, that is now under challenge, and which NRCM seeks to defend. I understand the Supplemental Finding provides further support for the MATS Rule, and that a decision overturning it would jeopardize the MATS Rule itself.

- 11. I understand that the MATS Rule limits emissions for the largest stationary sources of mercury, particulate matter (as a surrogate for non-mercury toxic metals like chromium, arsenic, and lead), and hydrogen chloride (as a surrogate for acid gases) from coal- and oil-fired power plants, as well as setting a work-practice standard to reduce emissions of dioxins, formaldehyde, and other organic air toxics generated by coal- and oil-fired power plants.
- 8. I also understand that, according to EPA, when these regulations are fully implemented as they are required to be as of April 2016, they are expected to yield a 75% reduction in annual mercury emissions, an 88% reduction in hydrogen chloride emissions, a 41% reduction in sulfur dioxide emissions, and 19%

reduction in particulate emissions (containing toxic metals like nickel) from the electricity generating sector. By reducing these toxics, as well as other air emissions covered by the MATS Rule, I understand that EPA estimates that the rule will have the following significant health benefits on a national basis: 1) fewer premature deaths, by approximately 4,200 and 11,000 people, 2) 2,900 fewer cases of chronic bronchitis, 3) 2,600 fewer hospitalizations related to respiratory and cardiovascular conditions, and 4) 3.2 million fewer days of restricted activity and approximately 540,000 fewer lost work days.

- 9. As a result of my work at NRCM, I understand that should the MATS Rule be overturned in the current round of litigation, that the Schiller, Merrimack and Wyman Stations could reduce or eliminate the operation of the controls they install, thereby increasing their releases of toxic air emissions including mercury and nickel in the case of the Wyman Station adversely impacting NRCM's members living downwind of these sources of air toxics.
- 10. NRCM therefore has a unique interest in defending this important rule given NRCM's mission and the interests of its members. In fact, NRCM was a major contributor to litigation that led to EPA's promulgation of this rule. NRCM, along with other health and environmental organizations, filed suit in the District Court for the District of Columbia in 2004 seeking to enforce the statutory

deadlines for EPA action to promulgate a MACT standard for EGUs. This suit was dismissed in October 2005 because, by the time suit was filed, EPA had taken final action to remove EGUs from the list of industries for which MACT standards must be promulgated under section 112. *Izaak Walton League of America v.* Johnson, 400 F. Supp. 2d 38 (D.D.C 2006). In response, NRCM, along with several other environmental groups, states, and tribes launched a successful challenge to EPA's decision to unlawfully delist this industry under section 112 of the Clean Air Act. The decision by this Court in State of New Jersey v. EPA, 517 F.3d 574 (D.C. Cir. 2008), vacated EPA's decision to delist, and EPA therefore failed to regulate toxic air pollutants pursuant to section 112 of the Clean Air Act. After the *New Jersey* decision, NRCM was also part of the plaintiff coalition that sued EPA for a violation of its mandatory duty under 42 U.S.C. §7412(d) to timely promulgate emissions standards for hazardous air pollutants from coal- and oilfired power plants. American Nurses Ass'n v. Jackson, Case No. 08-2198 (D.D.C. April 15, 2010). As a result of my work with NRCM, I am further aware that the plaintiffs and EPA entered into a Consent Decree under which EPA agreed to perform this duty, the ultimate result of which is the MATS Rule.

11. NRCM is therefore highly interested in defending the MATS Rule, and I personally am concerned that without the MATS Rule, coal- and oil-fired power plants will continue to emit such hazardous air pollutants unabated, and that

NRCM members and their families will continue to be exposed to high levels of such pollutants from coal- and oil-fired power plants.

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

Executed on May 18, 2016.

Amanda Theberge

4 Vine Street

Hallowell, Maine 04347

and The

DECLARATION OF TRENT A. DOUGHERTY FOR THE OHIO ENVIRONMENTAL COUNCIL

- I, Trent A. Dougherty, hereby declare and state:
- 1. This declaration is based on my personal and professional knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity. I submit this declaration in support of The Ohio Environmental Council's ("The OEC's") appearance in in this case to defend the U.S. Environmental Protection Agency's ("EPA's") Mercury and Air Toxics Standards ("MATS") limiting mercury and other hazardous air pollutants emitted by coal and oil-fired power plants.
- 2. I am the General Counsel for The OEC, which is a nonprofit organization, being a corporation organized and existing under the laws of the State of Ohio. In that capacity I am familiar with The OEC's mission, which is to secure healthy air, land, and water for all who call Ohio home. Working to reduce Ohioans' exposure to harmful air pollution, including hazardous air pollution of mercury and other air toxics, is a core part of The OEC's mission.
- 3. As General Counsel, I am responsible for the legal oversight and compliance of the organization, and I am as well the chief legal analyst and advocate for The OEC's Natural Resources, Energy, and Legislative policy

programs. I have held these responsibilities since 2006. In that capacity, I am required to be familiar with The OEC's purpose, organization, and activities, as well as environmental interests and related activities and concerns of The OEC's members.

- 4. The OEC is a statewide, non-partisan, non-profit, charitable organization comprised of a network of nearly 100 affiliated member groups and 2,555 individual members most residing in Ohio, although The OEC has members residing in Alabama, California, Colorado, Connecticut, District of Columbia, Florida, Idaho, Indiana, Illinois, Kentucky, Maryland, Massachusetts, Michigan, New Jersey, New York, Nevada, Oregon, Texas, Virginia and West Virginia.
- 5. As a result of my work at The OEC, I am aware that Ohio has issued a fish advisory for all of the freshwater lakes and streams in Ohio because of the degree to which fish in those waters are likely to be contaminated with mercury, warning all persons to eat no more than one meal a week of fish caught in freshwaters of Ohio unless and until a lesser advisory is issued. Additionally, women of childbearing age and small children are advised not to eat such fish at all from certain water bodies in Ohio due to the degree to which fish in those waters are likely to be contaminated with mercury.

- 6. As a result of my work at The OEC, I am aware that coal-fired electric power plants, including those located in the Ohio River Valley, within 65 miles of my home, and near the homes of many of The OEC's members, have been historically among the largest sources of mercury emitted to the environment in the United States, and among the largest stationary sources of particulate matter containing non-mercury toxic metals like chromium, arsenic, and lead, and of acid gases like hydrogen chloride, hydrogen fluoride, and hydrogen cyanide.
- 7. As a result of my work with The OEC, I am aware that members, who include women of childbearing age and children, live work and recreate in areas of Ohio that are in proximity to large coal-fired power plants. The OEC's members' recreational pursuits include engaging in recreational fishing in freshwater lakes and streams in Ohio, including areas in which there exist advisories against consuming the fish they catch, and that simply living and recreating near such power plants exposes them to other air toxics, like metals attached to particulates and acid gases, which are the product of burning coal to generate electricity.
- 8. As a result of my work at The OEC, I am aware that that on February 16, 2012 U.S. EPA finalized the MATS Rule, which was the first ever national requirement to control air toxic emissions from existing coal- and oil-fired power plants. That Rule was subject to challenges in federal court and in the U.S.

Supreme Court, but has remained in effect throughout the course of those proceedings and is in effect today. The MATS Rule established emission limits with a final effective date of April 2016 for large U.S. coal- and oil-fired power plants -- including the plants which emit mercury that is deposited in Ohio waterways. I understand that the MATS Rule establishes emission limits on mercury, particulate matter (as a surrogate for non-mercury toxic metals like chromium and lead), and hydrogen chloride (as a surrogate for acid gases), and also sets work-practice standards to reduce emissions from dioxins, formaldehyde, and other organic air toxics generated by coal- and oil-fired power plants. As a result of the MATS Rule and other requirements, some older plants have shut down or repowered with cleaner fuels, or they have put on controls in order to comply with the MATS Rule, thereby reducing the mercury, acid gas and heavy metals emissions from the fleet of existing power plants in the Ohio River Valley.

9. As a result of my work at The OEC, I am aware through my study and my work that U.S. EPA recently issued a supplemental finding that regulation of coal-and oil-fired power plants' air toxic emissions is appropriate and necessary ("Supplemental Finding"), in response to the Supreme Court's directive to analyze the cost of these regulations. It is that final rule, I understand, that is now under attack, and which The OEC seeks to defend. I understand the Supplemental

Finding provides further support for the MATS Rule, and that a decision overturning it would jeopardize the MATS Rule itself.

10. Should the MATS Rule be overturned in the current round of litigation, I understand that remaining coal-fired power plants in the Ohio River Valley might reduce or eliminate the operation of the controls they install, thereby increasing their releases of toxic air emissions including mercury. I am aware through my study and work that portions of the Ohio River Valley, including where I live, are considered "hot spots," or geographic areas of greater concentrations of air toxics like mercury. I also understand that it will take a number years of lower emissions of mercury from the coal fired power plants in the Ohio River Valley, for these hot spot conditions to be ameliorated – that is, even though MATS has been effective, the cleanup is not complete. I am therefore interested to defend against any threat to the MATS Rule – the first and only national standard of hazardous air pollutants for existing power plants – in order to ensure that the coal-fired power plants in the Ohio River Valley continue to take any measures, including running the controls they have installed to comply with the MATS Rule, so that The OEC's members, including myself and my family, will not be denied the benefits of the MATS Rule.

- 11. Beyond my capacity as General Counsel for OEC, I am a member of OEC and have been since 2005.
- 12. I am married and have one child, an eight year old daughter. Both have been and are still affected by the fish advisories that limit their consumption of fish impacted from mercury and other pollution.
- 13. It is important to me that my wife and child are safe and healthy. Furthermore, my family and I enjoy many outdoor recreational pursuits such as hiking, canoeing, kayaking, and fishing throughout my native Ohio and around the region. Yet, due to mercury pollution, from coal-fired power plants in our region, my family and I do not consume the fish we catch in the freshwaters of Ohio, for fear that eating such fish will put our health at risk. The coal-fired power plants in our region, when uncontrolled, also emit large amounts of acid gases and particulates containing toxic metals (like arsenic, chromium and lead), which I know from my work at The OEC pose serious health threats to those living and breathing downwind, including myself and my family, and other members of The OEC.
- 14. I file this declaration supporting The OEC's efforts to defend the MATS Rule against further attacks because I understand that without continued effectiveness of the MATS Rule, coal- and oil-fired power plants in the Ohio River

Valley will be able to cease running their emissions controls, and will then again emit large amounts of emit air toxics, and The OEC's members will be denied the health and environmental protections of those controls.

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

Executed on this 25th day of May, 2016.

Trent A. Doughetty

Trent A. Dougherty

DECLARATION OF MARY ANNE HITT

- I, Mary Anne Hitt, declare as follows:
- 1. I am the Director of the Sierra Club's Beyond Coal Campaign, and have held this position since 2010. I joined the Sierra Club staff in 2008, as the Deputy Director of the Beyond Coal Campaign. I have been a member of Sierra Club since March 2001.
- 2. Through my membership and my work, I am familiar with Sierra Club's general goals, its current projects, and its membership information, as well as its activities surrounding mercury and air toxics, and EPA's efforts to reduce emissions of mercury and air toxics from coal- and oil-fired power plants.
- 3. Sierra Club's mission is: "to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives."
- 4. The Sierra Club is a non-profit environmental organization with approximately 636,000 members.
- 5. Many of Sierra Club's members fish in lakes, streams, and coastal areas, and consume (or would prefer to consume) the fish that they catch in such water-

bodies. A past survey identified approximately 120,000 of our members who hunt and fish, most of whom fish.

- 6. In addition, approximately 174,150 Sierra Club members live within 30 miles of a coal-fired power plant, close enough to be affected by its air pollution.
- 7. The Sierra Club has long sought to educate the public regarding the dangers associated with mercury and other toxic pollution from coal-fired power plants. We have held educational events for our members and the public across the nation, such as public presentations at libraries and community centers, and mercury hair testing events, where members of the public could get a clipping of their hair sent to a lab to learn their mercury levels. And we have released educational tools such as our Safe Sushi smart phone app, designed to educate users about the mercury levels in different types of sushi.
- 8. The Sierra Club and its members have devoted substantial time, effort, and other resources to advocate for stronger protections from a variety of air pollution threats, including emissions of mercury and air toxics from coal- and oil-fired power plants. While at the Sierra Club, I have worked on numerous matters involving federal air pollution regulations and rulemakings promulgated by the U.S. Environmental Protection Agency ("EPA") under the Clean Air Act. The Sierra Club, with its members and supporters, has submitted thousands of

comments to EPA through the public notice and comment process, including detailed legal and technical analysis of particularly important EPA actions.

- 9. The Sierra Club submitted hundreds of pages of extensive written comments, including detailed legal and technical analysis, during the public notice and comment period on EPA's Mercury and Air Toxics Standards. In addition, 100,000 Sierra Club activists sent in comments in support of the standards, 800 volunteers attended one of the public hearings held by EPA, and 58 events were held by Sierra Club activists and staff in their local community to demonstrate support and raise awareness around these standards. The Sierra Club has also devoted substantial resources to the reconsideration proceedings by which EPA has amended the Rule, and the litigation surrounding the Rule.
- 10. Sierra Club and its members were also significantly involved in the regulatory and legal events that led to the Standards' finalization. For example, the Sierra Club opposed EPA's attempt to avoid regulation of coal- and oil-fired power plants' toxic emissions, up to and including a challenge to that decision in federal court.
- 11. Sierra Club and its members have an interest in ensuring that the Standards are upheld and that our members enjoy the reduction in mercury and toxic air pollution emissions, and the benefits to public health and the environment, produced by the Standards. Should the Standards be vacated or weakened, in

whole or in part, Sierra Club will be denied the benefits of its long support and advocacy in favor of the Rule (and its precedent action), while its members will suffer the resulting increase in mercury and other toxic pollution.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on May 18, 2016

Mary Anne Hitt

Mary Anne Hitt

I, Patricia Schuba, hereby declare:

USCA Case #16-1127

- 1. I am an adult resident of Missouri and I reside at 2322 Highway 100, Labadie, Missouri 63055. I make these statements based upon personal knowledge.
 - 2. I have been a member of Sierra Club since 1992.
- 3. My family farm is located about 3 miles from the Labadie coal-fired power plant, which is in Franklin County, Missouri and is owned and operated by Ameren Missouri. The farm has been in the family since 1870 and has a special designation as a Century Farm. We had every intention to keep the property in our family for generations to come, but now my family is having conversations questioning the safety of raising future generations here. My family owns four farms in the immediate area where we raise our own food, cattle and sheep, and sell and grow crops.
- 4. I and my family once fished the lakes, streams, and ponds of our farm, and enjoyed eating the fish we would catch. When I was a child, my father and I would routinely fish on our property. As an adult, however, I learned that mercury accumulates in fish, posing risks of neurological damage to those who consume such fish. I understand that coal-fired power plants are the single largest source of mercury in the United States, and that the U.S. Environmental Protection Agency has concluded that power plants deposit significant quantities of mercury into nearby water bodies. In light of the proximity of the Labadie Plant, and my knowledge of mercury pollution from other plants, I and my family have ceased fishing on our farm.
- 5. I understand that coal-fired power plants like the Labadie plant emit dangerous air pollutants in addition to mercury, such as toxic metals, and acid gases, as well as

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particulate matter, sulfur dioxide, nitrogen oxides, and other pollutants. I know that these pollutants can cause or contribute to a wide range of health problems, including asthma, respiratory and cardiovascular disease, and cancer.

- I have many concerns about the impacts of the pollution from the Labadie plant on our farm. All of our crops and animals are exposed to the plant's pollution. We are worried about the safety of the food that we eat and the impacts of the pollution on the property that the next generation will inherit. My family used to live off the food grown on the farm. We never used pesticides on the farm, and we always thought that we had healthy and safe food. Now, because we wonder about the safety of the food, we buy organic produce to supplement the food we eat from the farm.
- 7. Everything my family owns is on the farm. I worry about the impacts of the pollution from the Labadie plant on the value of the property. I would like to see the air pollution from the plant reduced because I believe it would increase the value of our family farm, and the health of our land, water, crops and animals.
- 8. I have concerns about the impacts of the pollution from the plant on my health and the health of my family. I do not want to be exposed to air pollution, or to mercury pollution, nor do I wish my family and friends to be exposed to such pollution. I am concerned about my exposure to plant's particulate matter emissions (including the toxic substances that may be contained in particulate matter) because I know particulate matter can penetrate deep into the lungs and can lead to a range of respiratory problems. Because of these concerns, we keep the house windows closed even in summertime. We also operate standing indoor air filters to help improve air quality.

- 9. I used to enjoy hiking along the Missouri botanical preserve arboretum, which is located a few miles away from the plant. I also used to go running around the farm. I no longer hike or run in the area because of my concerns about how the pollution from the plant is impacting my health. I try not to travel anywhere close to the plant unless I have to, and when I do, I spend as little time outdoors as possible.
- 10. I understand that in February 2012, the U.S. Environmental Protection Agency (EPA) published the Utility Mercury and Air Toxics Standards ("MATS Rule"), which limits the amount of mercury, particulate matter (and thereby toxic metals), and acid gases which may be emitted by new and existing coal-fired power plants, including the Labadie Plant. I also understand that in April 2016, the U.S. Environmental Protection Agency published a supplemental finding that regulation of those power plants' air toxics was appropriate and necessary, a necessary prerequisite to such regulation.
- 11. As a result of the MATS Rule' implementation, I will benefit from the new pollution standards. The Rule will reduce emissions of mercury, particulate matter (including toxic metals), acid gases, and other air toxics from the Labadie and other existing coal plants, lessening the amount of air pollution to which I, my family, and my friends are exposed, improving my ability to use my property and nearby areas, and reducing the amount of mercury in the fish I, my family and friends might catch and eat. The Rule will help to protect my health, my family's and friends' health, as well as the public health and the environment. If the MATS Rule is set aside or delayed, however, I will be denied those benefits.

Dated this 5_th day of May, 2016.