UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ENVIRONMENTAL INTEGRITY PROJECT 1000 Vermont Avenue NW, Suite 1100 Washington, DC 20005, CENTER FOR FOOD SAFETY 660 Pennsylvania Avenue SE, Suite 302 Washington, DC 20003, HUMANE SOCIETY OF THE UNITED STATES 2100 L Street NW Washington, DC 20037, CLEAN WISCONSIN 634 West Main Street, #300 Madison, WI 53703, IOWA CITIZENS FOR COMMUNITY IMPROVEMENT 2001 Forest Avenue Des Moines, IA 50311, and ASSOCIATION OF IRRITATED RESIDENTS 29389 Fresno Ave Shafter, CA 93263 *Plaintiffs*, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and REGINA McCARTHY, in her official capacity as Administrator, 1200 Pennsylvania Ave. NW Washington, DC 20460 *Defendants*.	Case No.: 15-cv-139 **COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF** Administrative Procedure Act, 5 U.S.C. § 551

COMPLAINT

Plaintiffs Environmental Integrity Project (EIP), Center for Food Safety (CFS), the Humane Society of the United States (HSUS), Iowa Citizens for Community Improvement (ICCI), Association of Irritated Residents (AIR), and Clean Wisconsin (collectively, Plaintiffs), on behalf of themselves and their members, allege as follows:

I. NATURE OF ACTION

1. This is an action for injunctive and declaratory relief under the Administrative Procedure Act (APA), 5 U.S.C. §§ 551 *et seq*., challenging the failure of the United States Environmental Protection Agency (EPA or the Agency) to answer a 2011 legal petition as required by law. That petition requested that EPA use its authority under the federal Clean Air Act (CAA), 42 U.S.C. §§ 7401 *et seq*., to find that ammonia gas pollution (NH_3) endangers public health and welfare, to designate ammonia as a CAA "criteria pollutant" under CAA § 108, and to establish National Ambient Air Quality Standards (NAAQS) for ammonia in the ambient air to protect public health and welfare with an adequate margin of safety under CAA § 109.

2. Ammonia gas harms public health and welfare in numerous ways, including directly causing acute and chronic respiratory health impacts; mixing with other pollutants to form fine particulate matter ($PM_{2.5}$) that causes, *inter alia*, respiratory symptoms, decreased lung function, aggravated asthma symptoms, heart disease, and premature death; decreasing quality of life in rural communities; polluting water and soil through deposition; creating regional haze that reduces visibility in parks and other scenic places; and decreasing property values. Large livestock operations are the leading source of ammonia gas emissions in the U.S.

3. Despite the significant and growing body of scientific research demonstrating that ambient ammonia pollution emitted by animal feeding operations (AFOs), concentrated animal feeding operations (CAFOs), and other sources cause and contribute to air pollution that endangers public health and welfare, EPA has not acted to directly regulate this pollutant under the CAA and as a result, thousands of sources continue to emit ammonia pollution unabated. CAFOs are not currently required to meet any testing, performance, or emission standards under the CAA.

4. Accordingly, on April 5, 2011, EIP and twenty other national, regional, and community-based organizations (collectively, Petitioners) submitted a formal petition to EPA to make an endangerment finding for ammonia and to establish health and welfare-based ambient pollution standards (2011 Petition or Petition). *See* Ex. A. Plaintiffs were among the signatories to the petition. The Petition detailed the ways in which ambient ammonia air pollution endangers public health and welfare and the reasons it meets the CAA requirements for listing as a criteria pollutant.

5. Nearly four years have passed since EPA received the 2011 Petition. However, EPA has not formally responded or taken any meaningful action on the Petition, in violation of the APA. Records obtained in May 2014 pursuant to a July 2013 Freedom of Information Act (FOIA) request indicate that EPA is not actively considering the Petition or moving toward a final determination on the Petition, but rather has yet to take the matter under any meaningful consideration. *See* Ex. B (FOIA Response).

6. As EPA lags, evidence of ammonia air pollution's health and welfare impacts continues to amass, supporting swift action to regulate the pollutant under the CAA. Accordingly, we respectfully request that the Court declare that EPA's failure to respond to

Plaintiffs' 2011 petition within a reasonable time violates the APA; order EPA to make a final decision on the 2011 Petition within 90 days; and retain jurisdiction over this matter until EPA has fulfilled its legal obligations, as set forth in this complaint.

II. JURISDICTION AND VENUE

7. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 (federal question) and 1346 (United States as Defendant).

8. The relief requested is authorized pursuant to 28 U.S.C. §§ 2201 and 2202 (declaratory relief). An actual, justiciable controversy exists between Plaintiffs and EPA, within the meaning of 28 U.S.C. § 2201 (declaratory judgments).

9. Plaintiffs have a right to bring this action pursuant to the APA, 5 U.S.C. §§ 551-559, 702-706.

10. Venue is properly vested in this Court pursuant to 28 U.S.C. § 1391(e), because one or more Plaintiffs reside in this District.

III. PARTIES

Plaintiffs

11. Plaintiff EIP is a national nonprofit organization headquartered in Washington, D.C. EIP is dedicated to advocating for more effective enforcement of environmental laws, including the CAA. Since 2002, EIP has worked to improve federal and state regulation of AFOs and CAFOs and to improve air and water quality in areas significantly impacted by these facilities' pollution, focusing in the Upper Midwest and the Mid-Atlantic. EIP advocates for application of clean air laws to AFOs nationwide, because these operations endanger public health and welfare with their unrestricted pollution emissions. EIP also works to gather and analyze pollution data and provide this information to the public, and has been actively engaged

in EPA's ongoing process, now stalled, to develop accurate tools to estimate AFO air pollution. EIP has a strong organizational interest in strengthening the CAA's regulation of AFO ammonia pollution and is therefore injured by EPA's failure to respond to the 2011 Petition.

12. Plaintiff CFS is a national nonprofit membership organization dedicated to protecting human health and the environment by curbing the proliferation of harmful food production technologies, such as AFOs, and instead promoting sustainable agriculture. CFS represents 600,000 farmer and consumer members throughout the country who support safe, sustainable agriculture. CFS's mission is to protect the public's right to know how their food is produced. CFS utilizes regulatory actions, citizen engagement, legislation, and when necessary, litigation, to promote transparency and accountability in the factory farm industry. CFS believes that EPA must regulate ammonia and other pollutants from factory farms in order to protect human health and the environment and create a healthier, safer food supply.

13. Plaintiff HSUS is a nonprofit organization headquartered in the District of Columbia and incorporated in the State of Delaware. The HSUS is the largest animal protection organization in the United States, representing millions of members and constituents. Since its establishment in 1954, the HSUS has advocated against the inhumane treatment of animals raised for food. To that end, the HSUS actively advocates for better laws to protect animals and the environment; conducts mission-specific campaigns; and advocates against practices that injure, harass or otherwise harm animals, including farm animals and wildlife. Specifically, with its mission to create a humane and sustainable world for all animals—including people and communities—the HSUS endeavors to ensure that its members are aware of and not injured by hazardous substances, including ammonia, released by CAFOs. HSUS has actively campaigned to regulate air pollutants being emitted by CAFOs through efforts with the EPA, in Congress,

and in the Courts. A member of HSUS in the Lathrop, California community teamed up with the HSUS to bring a suit against a large chicken CAFO that emitted toxic levels of ammonia into their neighborhood, and HSUS has petitioned the EPA to list and regulate CAFOs as stationary sources under the Clean Air Act. In the course of HSUS cases, experts documented ambient ammonia levels above recommended health limits in the local community. HSUS brings this action on behalf of itself and its members.

14. Plaintiff ICCI is a nonprofit organization that works to empower and unite grassroots Iowans of all ethnic backgrounds to take control of their communities; involve them in identifying problems and needs and in taking action to address them; and be a vehicle for social, economic, and environmental justice. ICCI's thousands of members work to protect rural communities from factory farm air and water pollution at the state and national level. Many ICCI members live, farm, and recreate in rural Iowa, and are directly and adversely affected by AFO ammonia emissions.

15. Plaintiff AIR is a California non-profit corporation that advocates for air quality and environmental health in the San Joaquin Valley, with members living in Kern, Kings, Tulare, Fresno, and Stanislaus counties. Members of AIR live, raise their families, work, and recreate in the San Joaquin Valley. They are adversely affected by exposure to levels of air pollution that exceed the health-based $PM_{2.5}$ air quality standards. The adverse effects of such pollution include actual or threatened harm to their health, their families' health, their professional, educational, and economic interests, and their aesthetic and recreational enjoyment of the environment in the San Joaquin Valley. On the basis of air quality issues, AIR has fought the growth of local dairy CAFOs in the San Joaquin Valley. For many years, AIR has requested that the San Joaquin Valley Air Pollution Control District regulate ammonia as a precursor

to $PM_{2.5}$ because it forms ammonium nitrate in the winter. Wintertime $PM_{2.5}$ levels in Kern County, at the southern end of the San Joaquin Valley, are the worst in the nation.

16. Plaintiff Clean Wisconsin protects Wisconsin's clean water and air and advocates for clean energy by being an effective voice in the state legislature and by holding elected officials and polluters accountable. Clean Wisconsin's mission is to protect the special places that make Wisconsin such a wonderful place to live, work and play.

17. The environmental, health, aesthetic, economic, informational, and recreational interests of Plaintiffs' members have been and will continue to be adversely affected by EPA's continued failure to act on this Petition.

Defendants

18. Defendant EPA is an "agency" for the purpose of the APA. *See* 5 U.S.C. §§ 551(1), 701(b)(1). EPA is tasked with implementing the federal CAA and regulating air pollution to protect the nation's public health and welfare.

19. Defendant Regina McCarthy is sued in her official capacity as the Administrator of the EPA. As EPA Administrator, Ms. McCarthy is responsible for EPA's actions to address the Petition.

20. Administrator McCarthy and EPA are collectively referred to herein as EPA, the Agency, or Defendant.

IV. LEGAL BACKGROUND

Clean Air Act

21. Congress enacted the CAA in 1970 to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population," CAA § 101(b)(1), and to "encourage or otherwise promote reasonable

Federal, State, and local governmental actions . . . for pollution prevention." *Id*. § 101(c). EPA is charged with implementing the CAA, and is responsible for administering federal air pollution programs and delegating authority for state air pollution programs.

22. One of the CAA's primary programs is the criteria pollutant program, under which EPA regulates common air pollutants by establishing National Ambient Air Quality Standards, or NAAQS, to protect public health and welfare by limiting the concentration of criteria pollutants in the ambient air. EPA has regulated six air pollutants under the criteria pollutant program: particulate matter (PM) 10 microns or less in diameter (both PM_{10} and the smaller $PM_{2.5}$ fraction), carbon monoxide, nitrogen oxides, sulfur oxides, ground-level ozone, and lead.

23. Section 108 of the CAA establishes the requirements for listing new criteria pollutants under the NAAQS program. The provision requires the EPA Administrator to publish and periodically revise a list that "includes each air pollutant: (A) emissions of which, in h[er] judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare; (B) the presence of which in the ambient air results from numerous or diverse mobile or stationary sources; and (C) for which air quality criteria had not been issued before December 31, 1970, but for which [s]he plans to issue air quality criteria under this section." CAA § 108(a)(1).

24. The CAA defines "air pollutant" broadly as "any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term 'air pollutant' is used."

CAA § 302(g). EPA defines the ambient air as "that portion of the atmosphere, external to buildings, to which the general public has access." 40 C.F.R. § 50.1(e).

25. Once EPA lists a pollutant as a criteria pollutant under Section 108, the listing triggers non-discretionary duties under Section 109 to establish primary and secondary standards sufficient to protect public health and welfare. The primary standards must protect public health, including the health of sensitive populations. The secondary standards must protect public welfare, "which includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants." CAA § 302(h). These standards are referred to collectively as the NAAQS.

26. Section 109 requires EPA to review the NAAQS at least every five years and "promulgate such new standards as may be appropriate in accordance with section [108]," providing that the Agency "may review and revise criteria or promulgate new standards earlier or more frequently." CAA § 109(d).

27. Once EPA establishes a NAAQS, areas which do not meet the NAAQS must adopt a state implementation plan (SIP) to reduce emissions and attain the standard by the applicable deadline. To ensure compliance with the NAAQS, states must implement permitting programs applicable to stationary sources in nonattainment areas (New Source Review) and in areas that meet the standard (Prevention of Significant Deterioration).

28. All stationary sources that meet "major" source thresholds for emissions of a criteria pollutant or other regulated pollutant must obtain a preconstruction New Source Review

or Prevention of Significant Deterioration permit and a CAA operating permit, known as a Title V Permit. Title V permits include all SIP requirements and all other CAA requirements, including those necessary to bring the airshed into compliance with, or maintain compliance with, the NAAQS.

Administrative Procedure Act

29. Under the APA, agencies must "give an interested person the right to petition for the issuance, amendment, or repeal of a rule." 5 U.S.C. § 553(e). A "rule" is "the whole or part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy." *Id*. § 551(4).

30. The APA requires that "[w]ith due regard for the convenience and necessity of the parties or their representatives and within a reasonable time, each agency shall proceed to conclude a matter presented to it." *Id*.. § 555(b). If an agency denies a petition in whole or in part, it must provide "[p]rompt notice" to the petitioner. *Id*. § 555(e).

31. The APA grants a right of judicial review to "[a] person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action." *Id*. § 702. "Agency action" is defined to include the "failure to act." *Id*. § 551(13).

32. Courts "shall compel agency action unlawfully withheld or unreasonably delayed," *id*. § 706(1), and "hold unlawful and set aside agency action, findings, and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Id*. § 706(2)(A).

V. FACTUAL BACKGROUND

Sources of Ammonia Emissions

33. Numerous industries contribute to the nation's ammonia gas emissions, including fertilizer plants, coal plants, sewage treatment plants, petroleum refineries, paper mills, and natural sources. However, EPA has described livestock operations as a "dominant" contributor. EPA, *Estimating Ammonia Emissions from Anthropogenic Nonagricultural Sources – Draft Final Report* 1 (Apr. 2004). U.S. livestock production itself is dominated by AFOs and CAFOs. U.S. Department of Agriculture, National Agricultural Statistics Service (2012).

34. AFOs and CAFOs are facilities that confine livestock in buildings or feedlots without vegetation, storing the large quantities of waste generated in pits, lagoons, or stockpiles before disposal, typically via application to crop land. CAFOs are the subset of the largest AFOs, and can house hundreds, thousands, or even millions of animals in confinement conditions. These operations, according to EPA, "congregate animals, feed, manure and urine, dead animals, and production operations on a small land area. Feed is brought to the animals rather than the animals grazing or otherwise seeking feed in pastures, fields, or on rangeland." EPA Region 7, *What is a CAFO?*, http://www.epa.gov/rgytgrnj/water/cafo/index.htm. EPA recently estimated that there are approximately 20,000 CAFOs nationwide. National Pollutant Discharge Elimination System ("NPDES") Concentrated Animal Feeding Operation ("CAFO") Reporting Rule, 76 Fed. Reg. 65,431, 65,445 (Oct. 21, 2011).

35. AFO and CAFO waste contain organic nitrogen compounds, which produce ammonia and ammonium (NH_4^+) as byproducts of the microbial decomposition process during storage and application. As a result, AFOs emit ammonia gas from all areas containing waste,

including livestock confinement buildings and their ventilation systems, feedlots, liquid and solid animal waste storage facilities, and land application fields.

36. These emissions have both short- and long-range impacts, and have a typical transport time ranging from one to five days.[1] Because "[p]recipitation readily removes most reactive nitrogen compounds, such as ammonia and nitrogen oxides, from the atmosphere,"[2] a significant percentage of volatilized ammonia can re-deposit within these first few days. Deposition comprising up to 20% of the volatilized gas occurs within several hundred meters of the emissions source.[3] Ammonia that stays in the atmosphere may react with acidic compounds such as nitrogen oxides and sulfur dioxide, forming small particles of ammonium nitrate and ammonium sulfate known as ammonium aerosols.[4] Ammonia that converts to ammonium aerosol particles rather than depositing directly has a much longer average transport time, ranging from one to fifteen days, and these particles may travel thousands of kilometers before re-depositing.[5]

Public Health Impacts of Ammonia

37. Exposure to ammonia alone or in combination with other pollutants can cause a broad range of acute and chronic health impacts, including eye, nose, throat, and chest irritation, headache, dizziness, urge to cough, and general discomfort. EPA and peer-reviewed research demonstrates ammonia's toxicity; prolonged exposure to low concentrations of ammonia can

[1] Viney P. Aneja et al., *Ammonia Assessment from Agriculture: U.S. Status and Needs*, 37 Envtl. Quality 515, 516 (2008) [hereinafter Aneja].
[2] U.S. Department of the Interior, U.S. Geological Survey (USGS), *Atmospheric Deposition Program of the U.S. Geological Survey: Fact Sheet FS-112-00* at 2 (Dec. 2000), *available at* http://bqs.usgs.gov/AcidRain/program.pdf.
[3] Shabtai Bittman & Robert Mikkelsen, *Ammonia Emissions from Agricultural Operations: Livestock*, 93 Better Crops through Plant Food 1, 29 (2009).
[4] *Id*.
[5] Aneja, *supra*, at 516.

cause long-term health impacts, while short-term exposure to extremely high concentrations can be fatal.

38. Several federal government agencies have established public exposure recommendations and worker exposure limits and regulations for ammonia gas due to its proven health and safety risks. However, with the exception of the Occupational Safety and Health Administration's limited workplace exposure limits, which assume exposures of no more than 40 hours per week, these are recommendations based on exposure research, rather than enforceable limits. Moreover, these various health benchmarks and exposure limits were established considering exposure to ammonia in isolation. AFOs and CAFOs emit ammonia in combination with numerous other air pollutants, including hydrogen sulfide, particulate matter, methane, volatile organic compounds (VOCs) and endotoxins. These ammonia emissions contribute to a mix of air pollution that poses a greater public health threat than ammonia gas alone, and communities living near AFOs have documented adverse health effects as a result of these mixed exposures.

39. Researchers who have studied the health impacts of ammonia air pollution, alone and in combination with these other AFO air emissions, have recommended that EPA regulate ammonia under the CAA. In 2002, Iowa State University and the University of Iowa issued a comprehensive study that compiled and analyzed significant published research on the human health effects of ammonia gas exposure from CAFOs. This study found that exposure to very low levels of ammonia can cause adverse health effects and that peer-reviewed research has linked exposure to CAFO emissions to an increased prevalence of respiratory symptoms. As a

result, the Universities recommended that EPA regulate ammonia under the CAA NAAQS program and establish a health-based ambient ammonia limit of 0.15 ppm.[6]

40. In 2008, the Pew Commission on Industrial Farm Animal Production (Commission), an independent project of Johns Hopkins Bloomberg School of Public Health and the Pew Charitable Trusts, released another comprehensive report on the impacts of industrial livestock production. This report, "Putting Meat on the Table: Industrial Farm Animal Production in America,"[7] compiled the published literature on a wide range of CAFO impacts, including ammonia and other air emissions, and their effects on public health. Among its recommendations, the Commission concluded that "EPA should enforce all provisions of . . . the [CAA] that apply to [industrial livestock operations] and "should develop a standardized approach for regulating air pollution" from CAFOs under the CAA.[8] The Commission also noted the complicated health effects of the mixed air pollutants found in CAFO emissions and the importance of considering these mixed exposures when assessing health risks.

41. In addition to the established health effects of ammonia itself, the gas is also a precursor to the formation of $PM_{2.5}$, which causes a distinct set of health threats. Ambient ammonia pollution that reacts with other compounds forms ammonium aerosol particles that are smaller than 2.5 microns in diameter, and are therefore $PM_{2.5}$. Because such extremely small particles are inhalable and can lodge deeply in the lungs and even enter the bloodstream, $PM_{2.5}$ causes a suite of significant public health impacts, including respiratory symptoms, decreased lung function, aggravated asthma symptoms, chronic bronchitis, irregular heartbeat, heart attacks, and premature death.

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[6] Iowa State Univ. & Univ. of Iowa Study Group, *Iowa Concentrated Animal Feeding Operations Air Quality Study* 9 (2002).
[7] Pew Commission on Industrial Farm Animal Production, *Putting Meat on the Table: Industrial Farm Animal Production in America* (2008).
[8] *Id*. at 75.

42. Research indicates that ammonia emissions are a significant driver of seasonal $PM_{2.5}$ formation in certain geographic regions, and that reductions in ammonia emissions are an effective way to reduce $PM_{2.5}$ concentrations, particularly in winter.[9] One study estimated that ammonia comprises 47% of the $PM_{2.5}$ in the Eastern U.S.[10] Another study conservatively estimates that ammonia emissions from livestock specifically lead to the formation of 9-11% of total $PM_{2.5}$ in the U.S., and up to 20% of winter $PM_{2.5}$ in the Upper Midwest.[11] Ammonium nitrate in the San Joaquin Valley ranges between 54% and 65% of total $PM_{2.5}$ mass during peak winter days.[12]

Public Welfare Impacts of Ammonia

43. AFO ammonia emissions negatively impact public welfare in several ways. Ammonia emissions re-deposit in water and on land, contributing to nitrogen pollution in waterways and to the acidification of soils and forests. Nitrogen deposition in waterways leads to nutrient overloading, or eutrophication, that causes algae blooms, harms the aquatic ecosystem, and leads to the creation of "dead zones" where fish and other aquatic life cannot survive. Terrestrial ammonia nitrogen deposition decreases soil quality and cropland productivity, harms vegetation, and degrades the health of forest ecosystems.

44. Ammonia air pollution and the ammonium aerosol particles it creates contribute to the formation of regional haze by scattering and absorbing light particles. In addition to the health impacts to humans and wildlife resulting from particulate matter, haze harms public

[9] R. W. Pinder et al., *Environmental Impact of Atmospheric NH_3 Emissions Under Present and Future Conditions in the Eastern United States*, 35 Geophysical Res. Letters L12808, 1 (June 2008).
[10] Natalie Anderson et al., *Airborne Reduced Nitrogen: Ammonia Emissions from Agriculture and Other Sources*, 29 Env't Int'l 277 (2003).
[11] Alexander N. Hristov, Associate Professor of Dairy Nutrition, Penn State Department of Dairy and Animal Science, *Livestock Contribution to Fine Particulate Matter (PM2.5) in the U.S.*, 3 (Feb. 16, 2009).
[12] San Joaquin Valley Air Pollution Control District, *2012 PM2.5 Plan* at 2-10, 2-11 (Dec. 20, 2012), http://www.valleyair.org/Air_Quality_Plans/PM25Plan2012/CompletedPlanbookmarked.pdf.

welfare by degrading visibility in wilderness areas, areas of cultural significance, and other scenic areas, such as the Grand Canyon, Yosemite, Sequoia National Park, Shenandoah National Park, and the Columbia Gorge National Scenic Area. Haze has also been associated with impacts to climate and changes in precipitation.

45. Of immediate concern to those living near AFOs, AFO ammonia emissions contribute to nuisance odors in rural communities, in turn threatening personal comfort and well-being. Research has demonstrated that exposure to AFO emissions, including ammonia, can adversely affect mood and increase rates of anger, tension, fatigue, confusion, and depression. These emissions further decrease quality of life by making it unpleasant for rural citizens to spend time outdoors.

46. Economic researchers and courts have recognized that ammonia air pollution, in combination with other AFO air emissions and AFO quality of life impacts, also contributes to a documented decline in property values near AFOs. Missouri researchers calculated that every Missouri CAFO lowered surrounding property values by approximately $2.68 million.[13] The Supreme Court of Nebraska has held that a tax board acted arbitrarily when it failed to adjust a home's value downward due to its proximity to a large cattle feedlot. *Darnall Ranch, Inc. v. Banner Co. Bd. of Equal.*, 753 N.W.2d 426 (Neb. 2008).

EPA's National Air Emissions Monitoring Study

47. Despite these numerous public health and welfare impacts from ammonia and the $PM_{2.5}$ it forms in the atmosphere, EPA has not used its authority under the CAA or other air pollution statutes that it administers to quantify, control, or reduce ambient ammonia pollution.

[13] Mubarak, H., T.G. Johnson, & K.K. Miller, *The Impacts of Animal Feeding Operations on Rural Land Values*, Report R-99-02, College of Agriculture, Food and Natural Resources, University of Missouri–Columbia, 8 (1999).

In fact, EPA has set no requirements for AFOs to restrict air emissions of any pollutants under the CAA or other air pollution laws.[14] EPA has initiated a protracted process to develop methods to estimate air emissions from AFOs, including ammonia, however, and now seeks to justify its delay in responding to the 2011 Petition by relying on this related, but wholly distinct, process.

48. In recognition that a lack of emissions estimates for AFOs has hindered EPA from effectively regulating AFOs under the CAA and other statutes it administers, EPA entered into an Air Compliance Agreement with thousands of AFO operators in 2005 to obtain information necessary to develop emissions estimating methodologies (emission factors). These AFOs paid for a two-year National Air Emissions Monitoring Study (NAEMS) and agreed to participate in air emissions monitoring. In exchange, EPA granted them safe harbor from EPA enforcement for past civil violations of the permitting provisions of the CAA and the ammonia emissions reporting requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Emergency Planning and Community Right-to-Know Act (EPCRA) until EPA establishes AFO emission factors.

49. NAEMS involved monitoring emissions of ammonia, hydrogen sulfide, VOCs, and particulate pollution at 24 AFO sites between 2007 and 2009. The study only monitored emissions from confinement areas and waste storage systems, and did not address land application of waste, a major source of ammonia emissions. Within 18 months of the conclusion of NAEMS data collection, EPA was to evaluate the data collected and publish unit-specific emission factors. Under the Air Compliance Agreement, once EPA published the final emission factors, participating AFOs would have been required to apply the factors to their facilities to calculate their emissions; assess whether their facilities are in compliance with the CAA, CERCLA, and EPCRA; and either bring their facilities into compliance with the statutes or

[14] *See* discussion of potential future regulation of ammonia as a $PM_{2.5}$ precursor, *infra*.

certify to the EPA that no federal statutory requirements apply to their facilities' emissions, based on the emission factors provided.

50. EPA issued two draft emission factors, addressing the broiler chicken sector and hog and dairy open waste storage systems, for public comment in March 2012. Subsequently, EPA's Science Advisory Board Animal Feeding Operation Emission Review Panel issued a report highly critical of the NAEMS methodology, the data generated, and the initial draft emission factors. EPA has not issued any additional or revised draft emission factors since.

51. EPA's limited actions to establish AFO emission factors do not bring EPA closer to a determination on the 2011 Petition. The emission factors that EPA may eventually establish for AFO ammonia emissions could play a role in state agency efforts to reduce ambient ammonia levels to comply with the health and welfare limits Petitioners seek through their Petition. However, the emission factor development process is fundamentally distinct from an EPA process to determine whether ambient ammonia pollution from AFOs and all other sources may cause or contribute to an endangerment to public health and welfare. The determination that existing ammonia exposures endanger health and welfare must be made based on evidence of the risk of health and environmental impacts from ammonia from all sources, and does not depend on any particular industry sector's contribution to ambient ammonia pollution. Moreover, the establishment of emission factors cannot lead to any CAA regulation of ambient ammonia pollution absent separate EPA action granting the 2011 Petition. Thus EPA cannot rely on the Air Compliance Agreement and NAEMS process to justify the Agency's delay in responding to the 2011 Petition or to take the place of substantive action to abate the public health threat from this pollutant.

The 2011 Petition

52. EPA is charged with designating criteria pollutants, establishing NAAQS for those pollutants that are protective of public health and welfare, and reviewing the NAAQS at least every 5 years. CAA §§ 108, 109. Scientific research demonstrates that ammonia emissions from AFOs and other sources cause and contribute to pollution that may endanger public health and welfare. However, despite this evidence, EPA has failed to designate ammonia as a criteria pollutant.

53. Petitioners submitted the Petition to EPA on April 5, 2011, and in that document Petitioners summarized evidence demonstrating that ammonia emissions from AFOs and other sources harm public health and welfare and necessitate an endangerment finding by EPA. EPA sent a letter to EIP acknowledging receipt of the Petition on May 9, 2011.

The Petition also provided a legal roadmap for EPA's necessary actions, laying out the Agency's authorities and obligations to take certain actions in response to the endangerment posed by ambient ammonia air pollution.

Post-Petition Events

54. On July 9, 2013, EIP convened a teleconference with EPA staff overseeing consideration of the 2011 Petition to determine its status. EPA stated that it was considering the Petition in conjunction with a separate 2009 petition to list CAFOs as a source category under CAA § 111 and establish performance standards for CAFO air emissions, including, but not limited to, ammonia. EPA also indicated it planned to complete the NAEMS process and establish AFO EEMs prior to addressing these two petitions.

55. On this call EIP also requested that EPA open a public docket for documents related to the Petition, such as public input and scientific research about the adverse health and welfare impacts of ammonia air pollution. ("A docket serves as the repository for documents or information related to a particular EPA activity. Agencies, such as EPA, most commonly use dockets for rulemaking actions, but dockets may also be used for various non-rulemaking activities." EPA Docket Center, http://www.epa.gov/dockets/faqs.htm.) The Agency declined to open a docket.

56. On July 22, 2013 EIP submitted a FOIA request for, *inter alia*, "[a]ll records, including all external and internal communications, shared or otherwise maintained by EPA, related to the April 5, 2011 Environmental Integrity Project et al. petition for the regulation of ammonia as a criteria pollutant under Clean Air Act sections 108 and 109."

57. On May 13, 2014, EPA provided documents responsive to EIP's July 2013 FOIA request related to the 2011 Petition. *See* Ex. B (FOIA Response). The FOIA response consisted almost entirely of email communications between Petitioners and EPA staff, inquiring as to the status of the Petition and scheduling teleconferences to discuss the status of the Petition. None of the disclosed records indicated that EPA had taken any meaningful, substantive actions with regard to the Petition or had made any progress towards making a final determination on the Petition.

58. On August 5, 2013, EIP submitted an indexed compilation of 63 scientific studies, reports, and other documents to EPA in support of, and in aid of the Agency's consideration of, the Petition. These studies and reports include both works referenced in the 2011 Petition and additional studies and research, including studies published since the filing of the Petition. On

May 28, 2014, EIP submitted an additional recent study on the health impacts of agricultural ammonia emissions to EPA, to aid in the Agency's consideration of the Petition.[15]

59. On January 4, 2013, the D.C. Circuit Court of Appeals issued an opinion that establishes a rebuttable presumption that precursors to $PM_{2.5}$, like ammonia, are subject to regulation under the Clean Air Act in areas that are failing to meet their $PM_{2.5}$ standards, which could affect regulation of AFO emissions under limited circumstances. *Natural Resources Def. Council v. EPA*, 706 F.3d 428, 435 n.7 (D.C. Cir. 2013). The Court remanded EPA's final rule governing implementation of the $PM_{2.5}$ NAAQS, holding that EPA had incorrectly issued its $PM_{2.5}$ regulation under the statute's "general implementation provisions," when it should instead have issued them under the "particulate-matter-specific provisions," because $PM_{2.5}$ is a fraction of PM_{10}. *Id*. at 429. Pursuant to the decision, EPA must require states to submit air quality plans under this specific provision (Subpart 4 of Part D of Title I of the CAA), which the court held is applicable to all standards for PM_{10} (particles 10 microns or less in diameter), including those for $PM_{2.5}$. With respect to major stationary sources, Subpart 4 establishes a rebuttable presumption that precursors to PM_{10} (and therefore also precursors to $PM_{2.5}$) are significant contributors to non-attainment. CAA § 189(e). The revised rule will therefore require states to either regulate major stationary sources of $PM_{2.5}$ precursor pollutants, including ammonia, in non-attainment areas, or to rebut the presumption that the precursors significantly contribute to the non-attainment. CAA § 189(e).

60. This shift in presumption, however, does not ensure that states will regulate ammonia emissions. States may seek to rebut the presumption that they must regulate major

[15] Jacob, D. & Paulot, F., *Hidden Cost of U.S. Agricultural Exports: Particulate Matter from Ammonia Emissions*, 48 ENVIRONMENTAL SCIENCE & TECHNOLOGY 903 (2014), *available at* http://acmg.seas.harvard.edu/publications/2014/paulot_export_2014.pdf.

stationary sources of ammonia. *See, e.g., Ass'n of Irritated Residents v. U.S. Envtl. Prot. Agency*, 423 F.3d 989, 996-97 (9th Cir. 2005).

61. Nearly four years have passed since Petitioners filed their legal petition urging EPA to take action to address ammonia air pollution under the CAA, yet EPA still has not formally responded to, or even begun a significant review of, the 2011 Petition. EPA's denial of EIP's request to open a public docket as a repository for related information further indicates the agency's failure to consider the substance and merits of the Petition in a meaningful way.

Harm to Plaintiffs

62. EPA's unlawful delay in responding to the 2011 Petition injures Plaintiff organizations by, *inter alia*, denying them vital information about EPA's plan to address ammonia air pollution from AFOs, CAFOs, and other sources. By denying Plaintiffs the essential information that a Petition response would contain, EPA's failure to respond to the 2011 Petition has violated Plaintiffs' procedural and substantive rights under the APA. Additionally, EPA's failure to act on the Petition directly harms Plaintiffs' concrete organizational interests by impeding their abilities as public interest nonprofit organizations to facilitate public involvement in governmental decision-making, and by foreclosing the statutory right that allows for public participation through petitioning for rulemaking. As such, EPA's failure to act has effectively negated Plaintiffs' right to petition a federal agency for rulemaking under the APA. Further, EPA's continued failure to respond to the 2011 Petition deprives Plaintiffs of a decision on the Petition's merits, and, if necessary, the opportunity to seek judicial review of EPA's final decision.

63. All of the Plaintiff organizations are adversely affected by EPA's continued failure to respond to the 2011 Petition, because this delay prevents Plaintiffs from pursuing clean

air protections central to their organizational missions and has required Plaintiff organizations to expend significant resources they could have spent elsewhere to obtain an EPA determination on the Petition.

64. Plaintiffs HSUS, CFS, ICCI, AIR, and Clean Wisconsin also have members whose concrete interests in their health, environmental protection, and quality of life are being and will be adversely affected by EPA's continued failure to respond to the 2011 Petition. These Plaintiffs' members are suffering and will suffer an ongoing threat to their health and welfare and the health and welfare of their environment as long as ammonia air pollution goes unaddressed by EPA. Specifically, Plaintiffs have members throughout the country who live near AFOs and CAFOs and routinely breathe the ammonia air pollution that these facilities emit. These members have experienced, and continue to experience, physical and mental harm due to unregulated ammonia emissions, including burning of the eyes, nose, and throat, other respiratory symptoms, headaches, nausea, and other chronic health problems. These members have been forced to curtail outdoor activities due to ammonia air pollution, including ammonium nitrate and ammonium sulfate, reducing their ability to use and enjoy their property. EPA's failure to address the 2011 Petition has prevented Plaintiffs and their members from obtaining relief from these concrete harms.

65. The requested relief will redress these harms by requiring EPA to respond to the 2011 Petition, which will result either in a response that fulfills EPA's statutory duty to protect public health and welfare from ammonia air pollution, or a final agency action that Plaintiffs may challenge if they disagree with EPA's response, in whole or part. Both results would provide Plaintiff organizations and their members with the information to which they are entitled

pursuant to the APA, and also secure their procedural right to receive a timely response to a legal petition for rulemaking.

VI. CLAIM FOR RELIEF

66. Plaintiffs incorporate paragraphs 1 through 66, *supra*, by reference.

67. EPA is an "agency" for purposes of the APA. *See* 5 U.S.C. §§ 551(1), 701(b)(1).

68. The CAA is a federal environmental statute designed to prevent and regulate air pollution for the protection of the nation's air quality and the public health and welfare. 42 U.S.C. § 7401.

69. The APA requires agencies to "give an interested person the right to petition for the issuance, amendment, or repeal of a rule." *Id*. § 553(e); *see also id*. § 551(4) (defining "rule" as "the whole or part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy"). The APA right to petition encompasses the right to petition for a new, revised, or final rule concerning EPA regulation of ammonia under the CAA criteria pollutant program. *See id*. §§ 551, 553(e).

70. Upon receiving a petition submitted pursuant to the APA, EPA has a duty to provide a timely response to the petitioners. *Id*. § 555(b) (a federal agency must, "within a reasonable amount of time . . . conclude a matter presented to it"); *Id*. § 555(e) ("Prompt notice shall be given of the denial in whole or in part of a written application, petition, or other request of an interested person . . . ."). This response must be substantive and must either grant or deny the petition.

71. The APA provides a right of judicial review to "a person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action." *Id*. § 702.

Plaintiffs and their members are adversely affected by EPA's past and continuing failure to respond to the 2011 Petition.

72. The APA further states that a reviewing court "shall compel agency action unlawfully withheld or unreasonably delayed." *Id*. § 706(1). EPA's failure to respond to and take action on the 2011 Petition constitutes unlawfully withheld and unreasonably delayed agency action. EPA's failure to act in response to the 2011 Petition is particularly unreasonable considering that public health and welfare are at stake.

VII. REQUEST FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court:

(1) Declare that EPA has violated the APA by failing to provide a timely response to the 2011 Petition;

(2) Declare that EPA continues to be in violation of the APA by failing to respond to the 2011 Petition;

(3) Order EPA to respond to the 2011 Petition within 90 days;

(4) Retain jurisdiction over this action to ensure compliance with this Court's decree;

(5) Award Plaintiffs attorneys' fees and all other reasonable expenses incurred in pursuit of this action; and

(6) Grant such further relief as the Court deems just and proper.

Respectfully submitted this 28th day of January, 2015,

/s/ Tarah Heinzen

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