

Mon Dec 08 16:48:00 EST 2014
Leavy.Jacqueline@epamail.epa.gov
FW: 60-Day Notice of Intent re. VOC Emission Factors for Animal Feeding Operations
To: CMS.OEX@epamail.epa.gov

From: Tarah Heinzen [mailto:theinzen@environmentalintegrity.org]
Sent: Monday, December 08, 2014 3:44 PM
To: Mccarthy, Gina
Subject: 60-Day Notice of Intent re. VOC Emission Factors for Animal Feeding Operations

Dear Administrator McCarthy,

Attached please find a 60-day notice of intent to sue, submitted on behalf of Iowa Citizens for Community Improvement. The notice alleges that EPA has unreasonably delayed in establishing emission factors for Animal Feeding Operation emissions of volatile organic compounds, as required under Clean Air Act Section 130. I have also sent this notice via certified mail. If you would like to discuss this matter, please contact me at your convenience.

Sincerely,

Tarah Heinzen

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December 8, 2014

Via Certified Mail and electronic mail

Ms. Gina McCarthy
Administrator
U.S. Environmental Protection Agency
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McCarthy.gina@Epa.gov

Re: Notice of Intent to Sue for Unreasonable Delay of the Nondiscretionary Duty to Establish Emission Factors under Section 130 of the Clean Air Act

Dear Administrator McCarthy,

We write on behalf of Iowa Citizens for Community Improvement (Iowa CCI or Plaintiff) to provide you with notice of our intent to file suit against the United States Environmental Protection Agency (EPA) and EPA Administrator Gina McCarthy, in her official capacity, for failure to perform nondiscretionary duties under Section 130 of the Clean Air Act (CAA), 42 U.S.C. § 7430. Section 130 requires EPA to establish emission factors for Animal Feeding Operations (AFOs).

Under section 130 of the CAA, 42 U.S.C. § 7430, the Administrator has a mandatory duty to establish emission factors for the purpose of estimating emissions of volatile organic compounds (VOCs) from sources for which EPA has not previously established them. AFOs are a category of sources subject to Section 130, and EPA has not proposed or finalized any emission factors for the industry. The Administrator has therefore failed to perform her nondiscretionary duty with regard to VOC emission factors for AFOs, despite the fact that this obligation has existed since Congress amended the CAA to require emission factors in 1990.

Unregulated emissions from AFOs present serious risks to surrounding rural communities, because they contain dangerous air pollutants, including VOCs, some of which are known human carcinogens.¹ Reactive VOCs are also precursors to the formation of ozone pollution. Researchers have identified numerous VOCs in AFO air emissions. Some of these

¹ EPA, An Introduction to Indoor Air Quality, http://www.epa.gov/iaq/voc.html#Health_Effects (last visited July 24, 2014).

VOCs, such as methanol, are also listed hazardous air pollutants regulated under Section 112 of the CAA.²

Although EPA entered into an agreement with thousands of AFO operators in 2005 to fund a study of emissions – including VOCs – from AFOs, the Agency has yet to establish any emission factors for the industry.³ Without emission factors, rural communities will continue to suffer the health and environmental impacts caused by nearby AFOs, and regulators will have little ability to protect them. EPA must establish emission factors for AFOs in order to comply with Section 130 of the Act and to meet its broader responsibility to implement the CAA in a manner that protects the public health and welfare.⁴

Section 304 of the CAA, 42 U.S.C § 7604(a)(2), authorizes citizen actions “against the Administrator where there is an alleged failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator.” Citizens must provide notice to the Administrator at least sixty days before filing a civil suit under CAA Section 130. 42 U.S.C. §7604(b)(1)(A); 40 C.F.R. § 54.2. In accordance with Section 304 of the CAA, this letter serves to notify you that Plaintiff intends to file suit in federal district court any time beginning sixty days from the postmarked date of this letter. 42 U.S.C. § 7604; 40 C.F.R. § 54.2(d).

I. CAA Emission Factors

Accurate measurement of pollutant emissions is fundamental to implementation of the CAA. EPA, state agencies, and facilities use emission factors to estimate emissions of air pollutants when source-specific test data is not available.⁵ While the CAA does not define “emission factor,” the EPA has explained that an emission factor “is a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant.”⁶ Emission factors are generally assumed to be representative of long-term averages for all facilities in the source category.⁷

Emission factors are used to estimate approximately eighty percent of national emissions from virtually all sources of air pollution.⁸ In turn, the emissions estimates calculated from the

² See, e.g., D.B. Parker et al., *Effect of Wind Tunnel Air Velocity on VOC Flux from Standard Solutions and CAFO Manure/Wastewater*, 53(3) AM. SOC’Y OF AGRIC. AND BIOLOGICAL ENG’RS 831 (2010), available at <http://naldc.nal.usda.gov/catalog/44602>.

³ See EPA Animal Feeding Operations Emission Estimating Methodologies Docket, www.regulations.gov (search EPA-HQ-OAR-2010-0960).

⁴ See 42 U.S.C. § 7401 (b)(1) (explaining that the purpose of the CAA is “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare”).

⁵ See EPA, *Compilation of Air Pollutant Emission Factors: Stationary Point and Area Sources* (1995), available at <http://www.epa.gov/ttn/chief/ap42/index.html>.

⁶ EPA, *Emissions Factors & AP 42, Compilation of Air Pollutant Emission Factors*, <http://www.epa.gov/ttn/chief/ap42/index.html> (last visited Oct. 14, 2014).

⁷ *Id.*

⁸ *Id.* (citing U.S. Gov’t accountability office (GAO), GAO-01-46, *EPA Should Improve Oversight of Emissions Reporting by Large Facilities* 3 (2001), available at <http://www.gao.gov/new.items/d0146.pdf> (“In preparing

factors are used to craft regulations, develop emission reduction control strategies, require emissions reporting, guide enforcement, and protect communities from exposure.⁹ Reliable emission factors are therefore crucial to EPA's ability to make air quality management decisions that are protective of public health.

II. Agency Efforts to Establish Emissions-Estimating Methodologies for AFOs

AFOs emit a variety of pollutants that have harmful environmental and human health impacts, including VOCs, ammonia, hydrogen sulfide, particulate matter, and microorganisms, as well as gases that contribute to climate change, such as carbon dioxide and methane.¹⁰ The generation rate for these harmful pollutants may vary between operations in accordance with weather, time, animal species, type of housing, manure handling system, feed type, and management system.¹¹ Accurate emissions estimates are therefore necessary in order to estimate daily and annual emissions from industrial livestock facilities, and to determine compliance with emissions standards under various environmental statutes.

In 2003, recognizing the need for information regarding agricultural sources of air pollution, EPA requested a report from the National Academy of Sciences evaluating what data it needed to quantify AFO air emissions.¹² The Academy's report found that the direct measurement of emissions was not feasible and existing data were insufficient to properly estimate AFO emissions.¹³ In order to obtain more reliable data, EPA entered into a voluntary consent agreement with AFO operators in 2005, according to which the operators agreed to finance a two-year National Air Emissions Monitoring Study (NAEMS) of AFO air emissions. The agreement granted participating operators a "safe harbor" from liability for past violations of the CAA, the Emergency Planning and Community Right-to-Know Act (EPCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The study collected emissions data from animal confinement structures and waste storage and treatment units in broiler, egg layer, swine, and dairy AFOs from 2007 to 2009. EPA was then to analyze the data and develop emissions-estimating methodologies (EEMs) for various pollutants, including VOCs, from these sectors.

emissions reports, . . . large facilities rely primarily on estimates and extrapolation instead of directly measuring their pollutant emissions. To estimate their annual emissions of each pollutant, most facilities use industry- and pollutant specific emissions factors. . . . EPA's data show that, nationally, emissions factors are used for 80 percent of emissions determinations.").

⁹ Office of Inspector General, EPA, 2006-P-00017, EPA Can Improve Emissions Factors Development and management 1 (2006), available at <http://www.epa.gov/oig/reports/2006/20060322-2006-P-00017.pdf> ("Quantifying air emissions is a vital aspect of air pollution programs. Regulatory authorities and others use emissions values in: (1) developing emissions inventories, (2) identifying and evaluating control strategies, (3) determining applicability of permit and regulatory requirements, and (4) assessing risks.").

¹⁰ Claudia Copeland, *Air Quality Issues and Animal Agriculture: A Primer*, Cong. Research Serv. Rep. RL32948 at 2 (May 21, 2010).

¹¹ *Id.*

¹² *Id.* at 31.

¹³ *Id.*

Over objections from environmental advocates who were concerned the study would not yield data that was representative of the industry as a whole, EPA elected to include only a small number of sites in its final study plan selecting 25 farms in 10 states.¹⁴ On January 13, 2011, EPA released the data gathered through the study, but has not issued a final summary report or other document interpreting the data.¹⁵ To shore up gaps in the data, on January 19, 2011, EPA issued a supplemental Call for Information, requesting that interested parties submit data relevant to the Agency's effort to develop EEMs.¹⁶ However, EPA rejected almost all data submitted in response to the Call for Information, citing issues with integrating the data sets.¹⁷ In February of 2012, EPA released draft EEMs for several pollutants, including VOCs, from the broiler sector and a draft ammonia EEM for open swine and dairy waste storage structures.¹⁸

Also in February 2012, EPA sought input from the Agency's Science Advisory Board (SAB) on the draft EEMs. In April 2013, the SAB issued its final report, finding that the small sample size limited the ability of EPA's models to predict emissions across the industry generally, and "recommend[ed] that the EPA not apply the current versions of the statistical and modeling tools for estimating emissions beyond the farms in EPA's data set."¹⁹ The SAB further concluded that EPA's VOC data are inadequate to support its draft broiler VOC EEM or any AFO emission factor.²⁰ At this point, it appears highly unlikely EPA will develop and finalize emission factors for VOCs from AFOs using the NAEMS data.

III. EPA Has a Non-Discretionary Duty to Promulgate Emission Factors for VOCs from AFOs

While data gaps and other shortcomings of the NAEMS no doubt contribute to the significant challenges of developing informed EEMs, they do not excuse EPA's statutory obligations under the CAA, and they do not lessen EPA's responsibility for implementing the CAA in a manner that is protective of public health and the environment. Section 130 of the CAA, 42 U.S.C. § 7430, requires the Administrator to

¹⁴ Claudia Copeland, *Air Quality Issues and Animal Agriculture: EPA's Air Compliance Agreement*, Cong. Research Serv. Rep. RL32947 at 7 (July 20, 2012).

¹⁵ *Id.* at 11-12; see also EPA, Basic Information: Emissions Monitoring at Animal Feeding Operations (AFOs), <http://www.epa.gov/airquality/agmonitoring/basicinfo.html> (listing EPA documents pertaining to the NAEMS).

¹⁶ *Call for Information: Information Related to the Development of Emission-Estimating Methodologies for Animal Feeding Operations*, 76 Fed. Reg. 3060, 3061 (Jan. 19, 2011).

¹⁷ EPA, *Development of Emissions-Estimating Methodologies for Broiler Operations, Draft* at 4-11 – 4-23 (Feb. 2012); EPA, *Development of Emissions Estimating Methodologies for Lagoons and Basins at Swine and Dairy Animal Feeding Operations, Draft* at 3-6 – 3-13 (Feb. 2012).

¹⁸ See [Notice of Availability: Draft Documents Related to the Development of Emissions Estimating Methodologies for Broiler Animal Feeding Operations and Lagoons and Basins for Swine and Dairy Animal Feeding Operations](#), 77 Fed. Reg. 14716 (Mar. 13, 2012). The draft EEMs addressed broiler AFO emissions of ammonia, hydrogen sulfide, particles, and VOCs, and ammonia emissions from lagoons and basins at swine and dairy AFOs.

¹⁹ Scientific Advisory Board, *SAB Review of Emissions-Estimating Methodologies for Broiler Animal Feeding Operations and for Lagoons and Basins at Swine and Dairy Animal Feeding Operations* at 2 (Apr. 19, 2013).

²⁰ *Id.*

[R]eview and, if necessary, revise, the methods (“emission factors”) used for purposes of this chapter to estimate the quantity of emissions of . . . volatile organic compounds . . . from sources of such air pollutants (including area sources and mobile sources). In addition, the Administrator shall establish emission factors for sources for which no such methods have previously been established by the Administrator.

This nondiscretionary duty is not qualified by how difficult it may be to acquire accurate data.

EPA has relied on extremely sparse data to create emission factors for other polluting industries.²¹ Indeed, the statutory command, which requires EPA to review and update emissions factors every three years, contemplates a process through which EPA can adjust the assumptions underlying its regulatory activities as better information becomes available.²² The statute does not, however, permit EPA to avoid establishing emissions factors in the first place by citing the difficulty of collecting representative data.

The data that are available with respect to AFO emissions make clear that AFOs produce significant quantities of harmful air pollutants, including VOCs.²³ Yet EPA has failed to propose a viable methodology for estimating AFO emissions of these pollutants, and its efforts to establish EEMs have stagnated since 2012. The proposed emission factors for broiler AFO emissions have not advanced beyond draft form, EPA was unable to propose even draft VOC EEMs for swine and dairy lagoons and basins, and it appears that EPA has made no effort to rectify the identified gaps and flaws in its study methodology.

EPA’s inaction is a clear violation of the CAA’s unambiguous requirement to establish emission factors for VOC emissions from AFOs. The Administrator has unreasonably delayed compliance with Section 130 of the CAA. EPA has a continuing duty to establish emission factors that will enable it to begin estimating and regulating AFO VOCs as appropriate and as required by the CAA. EPA is now 24 years overdue in complying with this statutory mandate.

IV. Persons Giving Notice

Iowa CCI 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. Iowa CCI and its thousands of members work to protect rural

²¹ For example, the N₂O emission factors for the combustion of bituminous and subbituminous coal are based on approximately 75 data points. EPA, Emission Factor Documentation for AP-42 Section 1.1 Bituminous and Subbituminous Coal Combustion, Tables 4-18 and 4-19 (April 1993).

²² See 42 U.S.C. § 7430.

²³ EPA’s request for information regarding EEMs for CAFOs yielded multiple studies illustrating that emissions from AFOs are “of major environmental concern” and include “hundreds of identified VOCs.” See, e.g., Viney P. Aneja, Jessica Blunden, *et al*, *Workshop on Agricultural Air Quality: State of the Science*, 42 *ATMOSPHERIC ENVIRONMENT* 3195, 3196 (2008); Viney P. Aneja, William H. Schlesinger, *et al*, *Effects of Agriculture upon the Air Quality and Climate: Research, Policy, and Regulations*, 43 *ENV’T SCI. & TECH.* 4234, 4235 (2009).

communities from AFO air pollution at the state and national level. Iowa CCI's offices are located at 2001 Forest Avenue, Des Moines, Iowa 50311, and the main phone number is (515) 282-0484.

EPA's failure to establish VOC emission factors for AFOs has injured and continues to injure members of Iowa CCI. Iowa CCI's members lack information about the quantity of VOCs emitted by AFOs in their communities and the threat those emissions pose to their health and welfare. As a result, they are reasonably concerned about the risks of exposure to VOC air emissions from AFOs and have refrained from spending time outdoors or engaging in recreational activities that could increase exposure to emissions. These injuries are directly traceable to EPA's inaction, and would be redressed by EPA action to establish AFO emission factors for VOCs.

Conclusion and Relief Sought

The Administrator is required to establish Section 130 emission factors for sources of VOCs for which emissions factors have not been previously established. This requirement has been in effect for over two decades, yet EPA has failed to produce VOC emission factors for AFOs. Moreover, EPA has acknowledged the dangers of, and data limitations with respect to, air pollution from AFOs for over a decade. EPA cannot manufacture an excuse for delayed compliance by pointing to data gaps which are attributable in large part to the Agency's own decisions. Plaintiff intends to sue the Administrator in the United States District Court for the District of Columbia for unreasonable delay in performing her nondiscretionary duty under Section 130 of the CAA, and seek to compel EPA to establish emission factors for VOCs from AFOs that reflect these emissions. In addition to requesting the court to compel EPA to establish emission factors for VOCs from AFOs, plaintiffs also intend to seek attorneys' fees and other costs of litigation, as well as any other appropriate relief.

If you have any questions regarding the allegations in this notice or would like to discuss this matter further, please contact us at the phone number or email below.

Respectfully Submitted,



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CC (Via Certified Mail)

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