August 28, 2017

E. Scott Pruitt Administrator William Jefferson Clinton Building 1200 Pennsylvania Avenue, N. W. Mail Code: 1101A Washington, DC 20460

### Via Certified Mail

# **Re:** Notice of Intent to Sue for Failure to Promulgate Emission Guidelines for Methane and VOC Emissions from the Oil and Gas Sector

Dear Administrator Pruitt:

On behalf of our millions of members throughout the country, Environmental Defense Fund ("EDF"), Clean Air Task Force, Clean Air Council, Center for Biological Diversity, Earthworks, Environmental Integrity Project ("EIP"), Natural Resources Defense Council ("NRDC"), and Sierra Club respectfully transmit this notice of intent to sue the U.S. Environmental Protection Agency ("EPA") for failure to perform its nondiscretionary duty under the Clean Air Act ("CAA") to issue final emission guidelines limiting methane and volatile organic compound ("VOC") emissions from existing sources in the oil and natural gas sector, and for unreasonable delay in carrying out that duty.

EPA has known for many years that methane and VOCs are harmful to public health and welfare, that the oil and gas sector emits large amounts of these dangerous pollutants, and that low-cost controls are widely available to reduce emissions from the sector. Furthermore, having issued methane and VOC new source performance standards ("NSPS") for this industry under section 111(b) of the CAA, the agency has an obligation to issue emission guidelines for existing sources in this sector under section 111(d) of the statute. Yet the agency has failed, and continues to fail, to promulgate existing source emission guidelines in a timely manner. EPA's ongoing failure to control emissions from the vast majority of harmful pollution sources in the oil and gas sector violates the Clean Air Act and harms the health and welfare of our organizations' members.

### I. PARTIES

This letter is sent on behalf of eight nonprofit organizations whose members are harmed by EPA's ongoing failure to fulfill its Clean Air Act obligations to regulate methane and VOC emissions from existing oil and gas operations.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> We are aware of a corresponding notice of intent to sue, filed on June 29, 2017 by the Commonwealths of Massachusetts and Pennsylvania, the States of New York, California, Connecticut, Illinois, Maine, Maryland, Massachusetts, New Mexico, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington, as well as the District of Columbia, the City of Chicago, and the California Air Resources Board.

EDF is a non-partisan, non-profit organization representing over two million members nationwide. Since 1967, EDF has linked law, policy, science, and economics to create innovative, equitable, and cost-effective solutions to today's most pressing environmental problems. EDF pursues initiatives at the state, national, and international levels designed to protect human health and the environment.

Clean Air Council is dedicated to protecting and defending everyone's right to breathe clean air and has fought for 50 years to improve air quality across Pennsylvania. On behalf of its more than 8,000 members in the mid-Atlantic region, the Council works through public education, community advocacy, and government oversight to ensure the enforcement of environmental laws.

The Clean Air Task Force works to help safeguard against the worst impacts of climate change by catalyzing the rapid global development and deployment of low carbon energy and other climate-protecting technologies through research and analysis, public advocacy leadership, and partnership with the private sector.

The Center for Biological Diversity is a national non-profit organization dedicated to the preservation, protection and restoration of biodiversity, native species, ecosystems, public lands and waters and public health. On behalf of more than 1.3 million members and online activists throughout the United States, the Center's Climate Law Institute seeks to reduce U.S. greenhouse gas emissions and other air pollution to protect biological diversity, the environment, and human health and welfare.

Earthworks is an organization dedicated to protecting communities and the environment from the impacts of energy and mineral development while seeking sustainable solutions. With approximately 70,000 nationwide members, Earthworks collaborates with communities and grassroots organizations to reform government policies to protect air, water, public lands, and communities. This involves holding the oil and gas industry accountable for the regulations we advocate for including the reduction of ozone forming smog, methane emissions, and harmful air pollutants from oil and gas development.

EIP is a national nonprofit organization based in Washington, D.C., dedicated to enforcing environmental laws and holding polluters and governments accountable to protect public health. EIP has three goals: (1) to provide objective analyses of how the failure to enforce or implement environmental laws increases pollution and affects public health; (2) to hold federal and state agencies, as well as individual corporations, accountable for failing to enforce or comply with environmental laws; and (3) to help local communities obtain the protection of environmental laws.

NRDC is a non-profit environmental membership organization with offices throughout the country that uses law, science, and the support of more than two million members and activists throughout the United States to ensure a safe and healthy environment for all living things. NRDC's mission is to safeguard the Earth: its people, its plants and animals, and the natural systems on which all life depends. Among NRDC's top priorities is the prevention and

mitigation of global warming in order to protect the natural resources threatened by climate change, as well as the health and safety of all humans. To this end, NRDC has been actively involved in advocating for stringent control of methane from the oil and gas sector, our nation's second largest industrial contributor to climate change.

Founded in 1892, Sierra Club is the nation's oldest grassroots environmental organization and has over three million members and supporters. 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 resources and ecosystems; 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. A major priority of Sierra Club is to protect the climate and the health and welfare of the public by combatting pollution from oil and natural gas development.

Our organizations have filed administrative comments and petitions urging EPA to expand and strengthen standards for reporting and reducing emissions from sources in the oil and natural gas sector, including requirements for existing sources. For example, in comments on EPA's 2012 NSPS for this sector, many of our groups urged EPA to regulate methane and VOCs from existing sources.<sup>2</sup> In an August 29, 2012 letter to then EPA Administrator Lisa Jackson, we notified the agency of our intent to sue EPA for its failure to determine the appropriateness of regulating oil and gas methane emissions and attendant failure to issue performance standards and emission guidelines to control methane emissions from new and existing sources, respectively.<sup>3</sup> In October 2012, many groups also filed an administrative petition for reconsideration and rulemaking urging EPA to satisfy its duty to regulate emissions from existing sources.<sup>4</sup> In a 2015 comment letter on EPA's proposed NSPS for methane and VOC emissions, many groups urged EPA to adopt standards reducing emission from existing sources<sup>5</sup> and, in August 2016, filed an administrative petition for reconsideration when EPA declined to adopt such standards in the 2016 Rule, underscoring the critical need for EPA to move swiftly to satisfy this duty.<sup>6</sup>

### II. BACKGROUND

Methane is a potent greenhouse gas ("GHG") with a climate-forcing effect that is 36 times more powerful than that of carbon dioxide over a 100-year horizon and over 87 times more powerful

<sup>&</sup>lt;sup>2</sup> Sierra Club et al., Comment letter on New Source Performance Standards: Oil and Natural Gas Sector; Review and Proposed Rule for Subpart OOOO (Nov. 30, 2011), EPA-HQ-OAR-2010-0505-4240.

<sup>&</sup>lt;sup>3</sup> Many of our organizations also filed a protective petition for review of the 2012 Rule on account of EPA's failure to directly regulate methane. D.C. Circuit Court of Appeals No. 13-1108, *American Petroleum Institute v. EPA* (April 3, 2013).

<sup>&</sup>lt;sup>4</sup> Environmental Defense Fund et al., Petition for Reconsideration of Final Rule Published at 77 Fed. Reg. 49,490 (Aug. 16, 2012), entitled "Oil and Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews; Final Rule," (Oct. 15, 2012), EPA-HQ-OAR-2010-0505-4575.

<sup>&</sup>lt;sup>5</sup> Clean Air Task Force et al., Comment Letter on "Oil and Natural Gas Sector: Emission Standards for New and Modified Sources," (Dec. 4, 2015), EPA-HQ-OAR-2010-0505-7322.

<sup>&</sup>lt;sup>6</sup> Clean Air Task Force et al., Petition for Reconsideration in the Matter of: Final Rule Published at 81 Fed. Reg. 35,824 (June 3, 2016), entitled "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources," (Aug. 2, 2016), EPA-HQ-OAR-2010-0505-7683.

over a 20-year time horizon.<sup>7</sup> Approximately one-third of the anthropogenic climate change we are experiencing today is attributable to methane and other short-lived climate pollutants.<sup>8</sup> According to EPA's most recent Inventory of Greenhouse Gas Emissions and Sinks, U.S. oil and gas operations emitted nearly 8.3 million metric tons of methane into the air in 2015, approximately 31 percent of the nation's total methane emissions for that year.<sup>9</sup> By 2018, nearly 90 percent of methane emissions from the sector will come from oil and gas facilities built before 2012.<sup>10</sup> Accordingly, reducing emissions from existing oil and gas sources is an essential element of any effective strategy for addressing climate change. Existing source standards for this industry could drastically reduce not only methane and VOCs, but also toxic contaminants like benzene, a known human carcinogen.

Reflecting its understanding of the serious threats posed by oil and gas sector emissions, EPA has promulgated a number of performance standards for new and modified sources in the sector. EPA finalized new source performance standards limiting VOC emissions from the oil and gas sector in 2012. 77 Fed. Reg. 49,490 (Aug. 16, 2012). Building on the 2012 standards and following a white paper process designed to collect additional emissions, cost, and control technology information from sources in the sector,<sup>11</sup> EPA finalized the nation's first standards directly limiting methane emissions from new and modified sources in the oil and natural gas sector in June 2016.<sup>12</sup> The 2016 NSPS includes requirements for both methane and VOC and addresses new equipment in the production, gathering and boosting, processing, and transmission and storage segments of the supply chain. In addition, as states like Colorado have recognized in their own standards, 5 Colo. Code Regs. § 1001-9:XVII.F.4.b, the same technologies on which EPA based its new source standards can also be used to reduce emissions from existing sources.

EPA projected the 2016 NSPS would deliver substantial benefits, reducing methane emissions by approximately 300,000 tons in 2020 and 510,000 tons in 2025. 81 Fed. Reg. at 35,827. It would further reduce VOC emissions by 150,000 tons in 2020 and 210,000 tons in 2025, and

<sup>&</sup>lt;sup>7</sup> Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Thomas Stocker et al., eds. 2013), Chapter 8 - Natural and Anthropogenic and Natural Radiative Forcing, at 714, *available at* <u>https://www.ipcc.ch/pdf/assessmentreport/ar5/wg1/WG1AR5\_Chapter08\_FINAL.pdf;</u> Bradbury, et al., Dep't of Energy, Office of Energy Policy and Systems Analysis, *Greenhouse Gas Emissions and Fuel Use within the Natural Gas Supply Chain – Sankey Diagram Methodology* (July 2015), at 10.

<sup>&</sup>lt;sup>8</sup> Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Thomas Stocker et al., eds. 2013) *available at* <u>http://www.climatechange2013.org/images/report/WG1AR5\_ALL\_FINAL.pdf</u>; *see also* Clean Air Counsel et. al., Comment Letter on "Oil and Natural Gas Sector: Emission Standards for New and Modified Sources: Stay of Certain Requirements" and "Oil and Natural Gas Sector Emission Standards for New and Modified Sources: Three Month Stay of Certain Requirements" at 3, (Aug. 9, 2017), EPA-HQ-OAR-2010-0505-1138.

<sup>&</sup>lt;sup>9</sup> EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2015* (2017) at ES-16, Table ES-2, <u>https://www.epa.gov/sites/production/files/2017-02/documents/2017\_complete\_report.pdf</u>. *See also* EPA, Overview of Greenhouse Gases, *available at* <u>https://www3.epa.gov/climatechange/ghgemissions/gases/ch4.html</u>.

<sup>&</sup>lt;sup>10</sup> ICF, Economic Analysis of Methane Emission Reduction Opportunities in the U.S. Onshore Oil and Natural Gas Industries (Mar. 2014) at 1-1, available at <u>https://www.edf.org/energy/icf-methane-cost-curve-report</u>.

<sup>&</sup>lt;sup>11</sup> See Oil and Gas White Papers Public Submittals of Technical Information and Data, (April 15, 2014) EPA-HQ-OAR-2014-0557. EPA developed five oil and gas white papers and initially posted those papers on April 15, 2014. <sup>12</sup> 78 Fed. Reg. 58,416 (Sept. 23, 2013) (finalizing storage vessel implementation amendments); 79 Fed. Reg. 41,752 (July 17, 2014) (proposing additional amendments); 79 Fed. Reg. 79,018 (Dec. 31, 2014) (finalizing amendments); 81 Fed. Reg. 35,824 (June 3, 2016) (finalizing 2016 methane and VOC NSPS).

hazardous air pollutants ("HAPs") by 1,900 tons in 2020 and 3,900 tons in 2025. *Id.* But the new sources from which these already significant reductions are achieved produce only a small fraction of the total emissions from the oil and gas sector. Existing infrastructure will continue to account for the vast majority of sector-wide emissions for many years.<sup>13</sup> Thus, to achieve needed emission reductions from this industry EPA must regulate existing sources in addition to new sources.

## III. EPA HAS FAILED TO PERFORM ITS NON-DISCRETIONARY DUTY TO ESTABLISH EMISSION GUIDELINES.

EPA's promulgation of the NSPS in 2016 for methane and promulgation of NSPS in 2012 and 1985 for VOCs triggered the agency's statutory obligation under section 111(d) of the CAA to establish emission guidelines for existing sources of these pollutants in the oil and gas sector. Section 111(b) of the statute requires the EPA Administrator to establish standards of performance governing the emission of air pollutants from new sources in the oil and gas sector and to review, and if appropriate revise, those standards at least every 8 years. 42 U.S.C. § 7411(b)(1)(B). Section 111(d) of the CAA, as well as EPA's implementing regulations, then require EPA to issue emission guidelines covering existing oil and gas operations for which standards of performance have been issued. *Id.* § 7411(d); 40 C.F.R. § 60.22(a). The existing source requirements apply to those pollutants that have not been identified as criteria pollutants or regulated as hazardous air pollutants, but that are regulated under the new source performance standards for a category of sources. *Id.* § 7411(d).

Methane and VOCs are not classified as criteria pollutants under sections 108-110 of the CAA, nor has EPA issued section 112 regulations for the oil and gas sector that cover these pollutants. Because EPA has promulgated standards of performance for new sources of methane and VOC emissions in the oil and natural gas source category pursuant to section 111(b), the agency's mandatory duty to regulate methane and VOCs from existing sources in that sector has been triggered.

Moreover, the structure of section 111 confirms congressional intent that emission guidelines be adopted expeditiously. The Act provides that EPA must finalize new source standards within a year of proposing those standards, 42 U.S.C. § 7411(b)(1)(B), and must review new source standards at least every eight years. *Id.* Because section 111(d) emission guidelines are implemented through a process of state plan submission and approval, those guidelines must be established on, or very soon after, the finalization of new source standards to avoid overlap with the next required eight-year review period. Indeed, in the past, EPA has often established new source standards and emission guidelines at the same time. *See, e.g.*, 81 Fed. Reg. 59,322 & 81 Fed. Reg. 59,276 (Aug. 29, 2016) (simultaneously finalizing new source standards and emission guidelines for municipal solid waste landfills); 80 Fed. Reg. 64,510 & 80 Fed. Reg. 64,662 (Oct. 23, 2015) (same for electric generating units).

Unfortunately, well over a year has passed since EPA issued the methane NSPS and more than five years have elapsed since the agency adopted the NSPS addressing VOCs, yet the EPA has

<sup>&</sup>lt;sup>13</sup> The independent consulting firm ICF has estimated that in 2018, oil and gas infrastructure built prior to 2012 will still account for 90% of the sector's overall methane emissions. ICF, *supra* n. 10.

shown no signs of even beginning work to fulfill its obligation to develop emission guidelines for existing sources. On the contrary, in March, EPA summarily and without seeking public comment withdrew an information collection request ("ICR") that the agency had previously identified as an element of its approach to begin regulating existing sources. 82 Fed. Reg. 12,817 (March 7, 2017). In the wake of this withdrawal, the agency has taken no action to move forward with existing source requirements.

Emission guidelines for existing sources in the oil and natural gas sector are statutorily mandated and of vital importance for improving public health and reducing the impacts of climate change. EPA's failure to establish such guidelines for methane and VOCs is contrary to section 111(d) of the Act and its implementing regulations. 42 U.S.C. 7411(d), 40 C.F.R. 60.22(a). Accordingly, we provide notice that we intend to sue you as Administrator and EPA for failure to perform this non-discretionary duty.

## IV. EPA HAS UNREASONABLY DELAYED ESTABLISHING EMISSION GUIDELINES.

EPA has long known of the importance and feasibility of controlling emissions from existing sources in the oil and gas sector, and its failure to issue the required emission guidelines despite ample time for doing so constitutes unreasonable delay. With the promulgation of new source performance standards for VOC emissions in 2012 and for methane and VOC emissions in 2016, section 111(d) imposes a non-discretionary duty to establish emission guidelines for those pollutants. EPA's regulations implementing section 111(d) likewise require the agency to publish emission guidelines "[c]oncurrently upon or after proposal of standards of performance for the control of a designated pollutant from affected facilities." 40 C.F.R. § 60.22(a).

The agency has known since 1985, when it first promulgated new source performance standards for VOC emissions from sources within the sector, that VOC emissions from oil and gas operations endanger public health and welfare. 50 Fed. Reg. 26,122 (June 24, 1985) (new source performance standard for VOC emissions from natural gas processing plants). And EPA's knowledge that the oil and gas sector is one of the largest industrial sources of methane in the U.S. dates back to 1997, when the agency began quantifying GHG emissions by sector in the U.S. Greenhouse Gas Inventory.<sup>14</sup> The 1997 report estimates that methane made up 10.6% of total U.S. GHG emissions in 1995, noting that "[m]ethane's overall contribution to global warming is large" and that the increase of methane's concentration in the atmosphere was "due largely to increasing emissions from anthropogenic sources, such as . . . the production and processing of natural gas and oil."<sup>15</sup> And nearly eight years ago, in December 2009, EPA formally determined that six well-mixed GHGs—including methane—endanger public health and welfare, a finding later upheld in its entirety by the U.S. Court of Appeals for the D.C. Circuit. *See* 74 Fed. Reg. 66,496 (Dec. 15, 2009) (GHG endangerment finding); *Coal. for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 122-28 (D.C. Cir. 2012) (rejecting industry

<sup>&</sup>lt;sup>14</sup> EPA, U.S. Greenhouse Gas Inventory Report Archive, <u>https://www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-archive</u> (last visited July 21, 2017).

<sup>&</sup>lt;sup>15</sup> The 1997 U.S. Climate Action Report, Chapter 3, submitted by the United States of America Under the United Nations Framework Convention on Climate Change, Greenhouse Gas Inventory at 10-12, https://www.epa.gov/sites/production/files/2016-02/documents/inv\_97.pdf.

challenges to GHG endangerment finding), *rev'd in part on other grounds*, *Util. Air Reg. Grp. v. EPA*, 134 S. Ct. 2427 (2014).

EPA has likewise had a robust understanding of the availability and cost-effectiveness of control technologies for the sector for decades. Technologies now being utilized to comply with the NSPS were developed and tested through voluntary programs such as the Natural Gas STAR Program, which dates back to 1993. Moreover, major energy-producing states like Colorado, Wyoming, and California have promulgated state-level standards aimed at reducing oil and gas emissions from new and existing sources, leveraging these very same technologies. As these states have demonstrated, the methods for controlling emissions from existing sources are largely the same as for new sources. These low-cost technologies and practices can reduce emissions at existing sources, making substantial reductions from existing oil and gas infrastructure eminently cost-effective and achievable.

Though EPA has, in the past, issued emission guidelines at the same time as new source standards for a listed category, *supra* at 5, it has been over five years since the agency promulgated new source performance standards for VOC emissions, 77 Fed. Reg. 49,490 (Aug. 16, 2012), and more than a year since the agency promulgated such standards for methane and VOCs. 81 Fed. Reg. 35,824 (June 3, 2016). The 2016 standards were themselves overdue since at least 2012, when EPA unlawfully declined to determine the appropriateness of regulating methane emissions directly. Indeed, beyond the Administrator's withdrawal of the ICR, described above, which reversed the agency's previous approach for establishing existing source regulations, EPA has taken no actions related to existing sources, let alone expressed an intent to establish standards for these sources. On the contrary, as Administrator, you have only initiated actions to weaken or repeal the NSPS by issuing sequential stays of key requirements of that rule,<sup>16</sup> with EPA's first unlawful attempt to delay enforcement of the NSPS recently vacated by the D.C. Circuit. *Clean Air Council v. Pruitt*, No. 17-1145, 2017 U.S. App. LEXIS 11803 (D.C. Cir. July 3, 2017).

With the relevant knowledge and information at hand for many years and with no indication that the agency intends to issue emission guidelines for existing sources in the oil and gas sector, EPA's failure to satisfy the statutory requirements of section 111 under the Clean Air Act constitutes judicially reviewable unreasonable delay. Therefore, we are also providing the required 180-day advanced notice that we intend to sue EPA and you as Administrator for unreasonable delay in establishing emissions guidelines for methane and VOCs under section 111(d) of the Clean Air Act. 42 U.S.C. § 7411(d); 40 C.F.R. § 60.22(a).

### V. CONCLUSION

EPA's long experience with control strategies that curb methane and VOC emissions from oil and gas operations, the promulgation of new source performance standards in 2012 and 2016 for the sector, and extensive data demonstrating that methane and VOC emissions from oil and gas operations are harming human health and welfare all confirm that the agency must meet its

<sup>&</sup>lt;sup>16</sup> 82 Fed. Reg. 25,730 (June 5, 2017) (90-day stay of certain provisions of 2016 NSPS) 82 Fed. Reg. 27,641 (June 16, 2017) (proposed three-month stay of same provisions); 82 Fed. Reg. 27,645 (June 16, 2017) (proposed two-year stay of same provisions).

statutory mandate to regulate existing sources of these harmful emissions in the oil and gas sector.

Accordingly, EDF, Clean Air Council, Clean Air Task Force, Center for Biological Diversity, Earthworks, EIP, NRDC, and Sierra Club submit this notice of intent to sue for EPA's failure to promulgate existing source emission guidelines for the oil and natural gas source category as mandated by section 111(d) of the Clean Air Act and EPA's regulations at 40 C.F.R. § 60.22(a), and for the agency's unreasonable delay in the completion of that action. In keeping with the requirements of federal regulations, you are hereby notified that the names and address of the parties giving the notice are as shown below. We are willing to explore effective means of resolving this matter without the need for litigation. However, if we do not hear from you within the applicable time periods provided in section 304 of the CAA, we intend to file suit in the appropriate United States District Court.

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