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RETURN RECEIPT REQUESTED**

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December 11, 2012

Lisa P. Jackson
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**RE: Clean Air Act Notice of Intent to Sue for Failure to Determine
Whether Standards of Performance Are Appropriate for Methane
Emissions from Oil and Gas Operations, and to Establish Such Standards
and Related Guidelines for New and Existing Sources**

Dear Administrator Jackson:

The States of New York, Connecticut, Delaware, Maryland, Rhode Island, and Vermont, and the Commonwealth of Massachusetts, respectfully request that the Environmental Protection Agency remedy its failure under the Clean Air Act to set performance standards for new sources and guidelines for existing sources that curb emissions of methane from the oil and gas sector. EPA has determined that emissions of this potent greenhouse gas endanger public health and welfare, and that processes and equipment in the oil and gas sector emit vast quantities of methane. Moreover, EPA has compelling data, including from 18 years of experience administering the Natural Gas Star Program, demonstrating that many measures to avoid (or reduce) methane emissions from new and existing oil and gas operations are available and cost-effective. Despite these findings, EPA has missed the applicable deadline for determining whether standards and guidelines limiting methane emissions from oil and gas operations under section 111 of the Clean Air Act are appropriate and for issuing such standards. EPA's ongoing failure to address the sector's methane emissions violates the Clean Air Act and harms the health and welfare of our residents.

I. Background

From severe droughts and heat waves to a string of devastating storms in the northeast over the last two years, it is becoming ever more apparent that increasing greenhouse gas pollution contributes to climate disruption in the U.S. and around the globe. Methane is a very potent greenhouse gas -- pound for pound, it warms the climate about 25 times more than carbon dioxide. EPA has found that the impacts of climate change caused by methane include "increased air and ocean temperatures, changes in

precipitation patterns, melting and thawing of global glaciers and ice, increasingly severe weather events, such as hurricanes of greater intensity and sea level rise.” 77 Fed. Reg. 49,490, 49,535 (Aug. 23, 2011). Oil and gas systems are the largest source of methane emissions in the U.S. and the second largest industrial source of U.S. greenhouse gas emissions behind only electric power plants. For example, methane emissions from this sector make almost one-fifth of the contribution to climate change that carbon dioxide emissions from coal-fired power plants do. EPA must fully comply with its legal obligations under the Clean Air Act to regulate emissions that endanger public health and welfare by controlling this significant source of dangerous greenhouse gas pollution.

Section 111 of the Clean Air Act requires EPA 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. *See* 42 U.S.C. § 7411(b)(1)(B). As part of this 8-year review, EPA had a mandatory duty (1) to make a determination whether standards covering methane emissions are “appropriate,” and, (2) if it is appropriate, to promulgate standards. The Act and EPA’s regulations also require EPA to issue emission guidelines covering the release of methane from any existing oil and gas operations for which standards of performance have been issued. *See id.* § 7411(d); 40 C.F.R. § 60.22(a).

EPA originally promulgated standards of performance for the oil and gas sector in 1985. The 8-year deadline for reviewing these standards expired in 1993. EPA finally signed a rule to complete the mandated review for oil and gas operations on April 17, 2012. 77 Fed. Reg. 49,490 (Aug. 16, 2012). However, although the agency revised the standards for several pollutants, EPA did not make the required appropriateness determination regarding methane, nor did EPA establish performance standards or emission guidelines for methane emissions from this industrial sector.

Consequently, unless you promptly correct these failures, we intend to file suit in federal district court against you as EPA administrator and EPA for failures to timely:

- (1) make the required determination whether standards of performance limiting methane emissions from oil and gas sources are appropriate and, if so, failing to timely issue revised performance standards limiting methane emissions from this source category; and
- (2) issue emissions guidelines for the control of methane emissions from existing oil and gas sources.

Jurisdiction to adjudicate and enforce the Administrator’s failure to carry out non-discretionary duties lies with the district court under section 304 of the Act. *See Environmental Defense Fund v. Thomas*, 870 F.2d 892, 897 (2d Cir. 1989); *Portland Cement Ass’n v. EPA*, 665 F.3d 177, 194 (D.C. Cir. 2011). This letter provides notice as required under section 304 of the Clean Air Act, 42 U.S.C. § 7604, and 40 C.F.R. part 54. Unless EPA takes the required actions by the end of the applicable notice period, we intend to bring a suit for EPA’s failure to perform the non-discretionary duties outlined in 42 U.S.C. §§ 7411(b)(1)(B), 7411(d), and 40 C.F.R. § 60.22(a), and for the agency’s unreasonable delay in the performance of these duties. The suit will seek injunctive and declaratory relief, the costs of litigation, and may seek other relief.

II. EPA Failed to Perform Its Non-Discretionary Duties to Determine Whether Standards of Performance for Methane Are Appropriate and, if so, to Establish Such Standards and Related Emissions Guidelines.

Section 111 of the Clean Air Act requires EPA to establish “standards of performance” for emissions of air pollutants from categories of new, modified, and existing sources. After EPA sets initial

standards of performance for a listed category, section 111(b)(1)(B) imposes a timetable for EPA to review and revise those standards: “The Administrator shall, at least every 8 years, review and, if appropriate, revise such standards following the procedure required by the subsection for promulgation of such standards.” 42 U.S.C. § 7411(b)(1)(B). EPA failed timely to review the standards of performance that it initially established in 1985 for sources in the oil and gas sector, leading multiple groups to file suit in 2009 to compel such review. That case, *Wild Earth Guardians v. EPA*, No. 1:09-CV-00089 (D.D.C.), resulted in a consent decree setting forth a schedule for proposing any final revisions by November 30, 2011.

In August 2011, EPA proposed revisions to the oil and gas NSPS. 76 Fed. Reg. 52,738 (Aug. 23, 2011). EPA did not propose any standards for methane emissions, despite previously determining that methane and other greenhouse gases endanger public health and welfare. 74 Fed. Reg. 66,496 (Dec. 15, 2009). Numerous organizations submitted comments on the proposed rule stating that EPA was required, as part of its mandated 8-year statutory review, to determine whether it was “appropriate” to add standards of performance for additional, previously-unregulated pollutants, such as methane, and, if so, to revise them accordingly.

EPA signed a final rule revising some aspects of the oil and gas standards on April 17, 2012, which was published in the Federal Register on August 16, 2012. 77 Fed. Reg. 49,490. EPA failed to determine whether it is appropriate to establish methane standards. Instead, EPA stated that “[i]n this rule, we are not taking final action with respect to regulation of methane. Rather, we intend to continue to evaluate the appropriateness of regulating methane with an eye toward taking additional steps if appropriate.” *Id.* at 49,513. The agency further stated that “over time,” it would assess emissions data received pursuant to the recently implemented greenhouse gas emissions reporting program, but set forth no timetable for taking final action to address methane emissions. *Id.*

EPA’s failure to decide one way or another within the 8-year statutory review deadline whether it is appropriate to revise the oil and gas NSPS to regulate methane emissions violates section 111(b)(1)(B) of the Clean Air Act. That section imposes a clear-cut nondiscretionary duty of timeliness that requires EPA to make a decision within the 8-year review period whether it is “appropriate” to revise the standards to regulate methane, regardless of whether the substance of that decision is discretionary. The Second Circuit Court of Appeals in *Thomas*, 870 F.2d at 900, held that substantially similar language contained in section 109(d) of the Clean Air Act -- which provides that, at five-year intervals, EPA “shall complete a thorough review” and “promulgate such new standards as may be appropriate”-- imposed a nondiscretionary duty to make a decision. In that case, like here, EPA had declined to make any formal decision to either revise or decline to revise the standards for a specific pollutant. EPA argued that its non-decision was unreviewable by the D.C. Circuit under section 307 because it involved no decision or other agency “action” and was also not subject to challenge in district courts under section 304 because it was discretionary.” *Id.* at 896. The Court rejected EPA’s argument, holding that EPA may not leave the matter “in a bureaucratic limbo subject neither to review in the District of Columbia Circuit nor to challenge in the district court. *Id.* at 900. While the Court agreed that the “as may be appropriate” language of section 109(d) provided EPA with discretion to determine whether revision was appropriate and what the substance of those revisions should be, the presence of the language “shall complete” and “required” in that section implied that the district court “has jurisdiction to compel the Administrator to make *some* formal decision whether or not to revise the [standards].” *Id.*

Here, section 111(b)(1)(B) contains the mandatory term “shall” -- which applies to both of the verbs “review” and “revise”-- and a clear-cut statutory deadline of “at least every 8 years.” Because EPA cannot make any revisions without first completing its review, the language requires EPA to both complete the review and make the revisions within the 8-year review period. Therefore, a district court

has jurisdiction to compel EPA to make a determination one way or another as to whether revision of the oil and gas NSPS is appropriate and to issue any revision it determines is appropriate.

In addition, EPA has a mandatory duty to include in its 8-year review new pollutants like methane that it has not previously regulated, but that it has since determined endanger public health and welfare. It would be wholly inconsistent with the mandatory nature of section 111 if EPA could refuse to address, as part of its 8-year review, air pollutants that are emitted by an already-listed source category and that EPA has already determined endanger public health and welfare. Rather, the structure of the Act demonstrates Congress' intent that EPA thoroughly review and revise NSPS for a source category at least every 8 years and not limit such review to making changes to existing standards, but instead require EPA to enact more stringent air pollution requirements as circumstances change, as new information becomes available regarding the adverse public health and welfare effects of air pollutants, and as new technologies become available to control emissions of such pollutants. Congress contemplated the 8-year review to encompass EPA's revision of the standards to address other air pollutants, particularly those emitted by a source category that, based on current information, are now determined to significantly contribute to that source's endangerment of public health and welfare and/or for which there is demonstrated control technology available. Further, EPA's past practice confirms that the agency must consider during its 8-year review all of the air pollutants emitted by the source category under review and set NSPS for any of those pollutants that cause or contribute significantly to that source's endangerment of public health and welfare and for which there is demonstrated control technology. *See* 41 Fed. Reg. 3826-27 (Jan. 26, 1976) (addition of standards for SO₂ and CO in NSPS for primary aluminum reduction plants); 42 Fed. Reg. 22506-07 (May 3, 1977) (addition of standards for NO_x, SO₂, and CO in NSPS for lime manufacturing plants); 49 Fed. Reg. 25,106-07 (June 19, 1984) (addition of standards for PM, CO, and hydrocarbon emissions in NSPS for fossil fuel-fired industrial steam generating units).

EPA failed to act on regulation of methane under section 111 despite possessing extensive information that adding methane standards for oil and gas operations is "appropriate." In prior 8-year reviews of standards of performance under section 111, EPA has consistently applied two criteria in determining whether it is appropriate to include a standard for a health- and welfare-endangering air pollutant: (i) the extent of the source category's contribution to the emissions of the pollutant, and (ii) the availability of methods to reduce those emissions. *See, e.g.,* 75 Fed. Reg. 54,970 (Sept. 9, 2010) (finalizing new NO_x standard for cement plants). Applying these criteria to the oil and gas sector demonstrates that methane standards are appropriate at this time.

First, EPA has recognized that "processes in the Oil and Natural Gas source category emit significant amounts of methane." 76 Fed. Reg. at 52,756/1. Indeed, the proposal stated that the sector's methane emissions are equivalent to more than 328 million metric tons of carbon dioxide per year. *Id.* at 52,756/2. As a result, oil and gas operations are the second largest industrial source of U.S. greenhouse gas emissions, behind only electric power plants. *Cf.* 74 Fed. Reg. 16,448, 16,597 Table VIII-1 (April 10, 2009) (showing 2009 estimates of greenhouse gas emissions from other industrial source categories). As EPA explained in the 2012 final rule, "methane emissions from the oil and gas industry represent about 40 percent of the total methane emissions from all sources and account for about 5 percent of all CO₂e [carbon dioxide equivalent] emissions in the United States, with natural gas systems being the single largest contributor to United States anthropogenic methane emissions." 77 Fed. Reg. at 49,535/2. Although EPA projects that the standards adopted in the 2012 final rule for emissions of volatile organic compounds (VOCs) and hazardous air pollutants will have the incidental benefit of also reducing annual methane emissions by about 19 million metric tons CO₂e, *id.* at 49,535/3, the vast majority of methane emissions from this sector will remain uncontrolled.

EPA's failure even to consider directly controlling methane emissions through standards and guidelines resulted in the omission of controls for certain operations that emit large amounts of methane.

For example, EPA declined to establish standards for compressors and pneumatic controllers in the natural gas transmission and distribution segment asserting that, although this equipment emits large quantities of methane, much of the VOCs already have been removed by the time the natural gas stream reaches these sources. *See* 77 Fed. Reg. at 49,522-23 (declining to regulate transmission and distribution compressors because of “the relatively low level of VOC emitted from these sources”).

Second, there are readily available methods to reduce methane emissions. In fact, the high methane content of these currently uncontrolled emissions means that adopting standards and guidelines that require methane emissions controls would be cost-effective (or even profitable) at many of these additional emission points. In the final rule, EPA recognized the economic value of emissions control measures for oil and gas equipment that lead to the recovery of hydrocarbon products, including methane, “that can be used on-site as fuel or reprocessed within the production process for sale.” 77 Fed. Reg. at 49,534/1. Indeed, EPA found that the rule “will result in net annual costs savings of about \$11 million (in 2008 dollars).” *Id.* By ending the waste of methane at sources of emissions not covered by the standards for VOCs, standards of performance that address methane emissions directly likely would add to the economic benefits of the rule. For instance, although compressors located at a wellhead or in the transmission, storage, and distribution segment are not covered under the rule, 77 Fed. Reg. at 49,492/2, EPA has determined that the payback period for compressor maintenance activities that reduce methane emissions is a mere 1 to 3 months. *See* EPA, “Reducing Methane Emissions from Compressor Rod Packing Systems” (Oct. 2006) at 1 (indicating payback periods from 1 to 3 months for compressor maintenance activities that reduce methane emissions). In addition, through EPA’s voluntary Natural Gas Star Program, EPA has worked with oil and gas companies to identify more than 100 cost-effective technologies and practices to reduce methane emissions from sources of emissions not covered by the rule. *See* <http://www.epa.gov/gasstar/tools/recommended.html>.

Section 111(d) of the Clean Air Act also requires EPA to address methane emissions from existing sources, as well as from new and modified facilities. 42 U.S.C. § 7411(d)(1)(A). The Act requires EPA to establish procedures under which each state submits to the agency a plan to adopt, implement, and enforce standards of performance for existing sources for certain pollutants, and to promulgate standards of performance under such plans. *Id.* § 7411(d). The existing source requirements apply to those pollutants, such as methane, that have not been identified as criteria pollutants or hazardous air pollutants, but that are regulated under the new source performance standards for a category of sources. *Id.* § 7411(d)(1). Thus, the Act creates a direct connection between the new source standards and those to be developed for existing sources.

EPA’s regulations require the agency to publish “emissions guidelines” “which reflect[] the degree of emission reduction achievable through the application of the best system of emission reduction which (taking into account the cost of such reduction) the Administrator has determined has been adequately demonstrated for designated facilities.” 40 C.F.R. §§ 60.21(e), 60.22(a, b). These guidelines are implemented by state agencies who develop and submit to EPA plans to curb emissions of designated pollutants from existing sources. *Id.* § 60.23(a); 42 U.S.C. § 7411(d)(1). EPA has issued emission guidelines at the same time as new source standards for a listed category. *See* 62 Fed. Reg. 48,348 (Sept. 15, 1997) (standards of performance and emissions guidelines for hospital/medical/infectious waste incinerators); 61 Fed. Reg. 9905 (Mar. 12, 1996) (same for municipal solid waste landfills); 60 Fed. Reg. 65,387 (Dec. 19, 1995) (same for municipal waste combustors).

In sum, EPA has failed to review and update as necessary the existing oil and gas standards. EPA’s continuing failure to make a final appropriateness determination during its 8-year review and to make the necessary revisions is contrary to section 111(b)(1)(B) of the Clean Air Act. *See* 42 U.S.C. § 7411(b)(1)(B). EPA’s failure to make an appropriateness determination also has prevented EPA from fulfilling its duty to publish emissions guidelines covering methane emissions from existing facilities in

the oil and gas sector. EPA's continuing failure to publish these guidelines is contrary to section 111(d) of the Clean Air Act and the regulations implementing that section. *See* 42 U.S.C. § 7411(d); 40 C.F.R. § 60.22(a). We are therefore providing notice that, as of 60 days from the date of this letter, we intend to sue you as EPA administrator and EPA for EPA's failure to take these non-discretionary actions.

III. EPA Has Unreasonably Delayed Determining Whether Standards of Performance for Oil and Gas Operations Are Appropriate and, if so, Establishing Such Standards and Related Emissions Guidelines.

As set forth above, section 111(b)(1)(B) imposes a non-discretionary duty on EPA to review and, if appropriate, revise the NSPS for each category of sources, and section 111(d) and 40 C.F.R. § 60.22(a) impose a non-discretionary duty to establish emissions guidelines covering existing sources. Even if those provisions can be read to contain any ambiguity as to the deadline for these mandatory duties, EPA has unreasonably delayed taking action on methane emissions from the oil and gas sector.

EPA has long known the significance of the oil and gas sector's contribution to methane emissions and the availability and cost-effectiveness of measures for reducing those emissions. EPA's knowledge that oil and gas operations are one of the nation's largest methane sources dates to at least 1997, as the agency has published annual sector-by-sector inventories of U.S. greenhouse gas emissions since 1997, covering emissions since 1990.¹ Similarly, EPA has long had ample data on measures for controlling methane emissions. For example, in 2008, EPA explained that because of its experience implementing the agency's Natural Gas STAR Program, a voluntary public-private partnership with the oil and gas industry initiated in 1993, "many of [the] technologies and management practices" available to control methane emissions from the sector "have been well documented (including information on cost, benefits and reduction potential) and implemented in oil and gas systems throughout the U.S." EPA, Office of Air and Radiation, Technical Support Document for the Advanced Notice of Proposed Rulemaking for Greenhouse Gases; Stationary Sources, Section VII at 30 (June 2008).

EPA has been actively engaged in rulemaking to revise the oil and gas sector standards of performance at least since April 2010, when the agency began sending requests to visit regulated facilities to gather information. *See, e.g.*, Letter from K.C. Hustvedt, EPA, to Tom Monahan, ExxonMobil Production Co. (Apr. 30, 2010) Docket No. EPA-HQ-OAR-2010-0505-0053. In response to the 2009 litigation discussed above, EPA proposed revisions to the standards of performance for oil and gas operations in August 2011. 76 Fed. Reg. at 52,738. However, instead of drawing on the successes of the Natural Gas Star Program to propose a course of action, or even soliciting comment on the issue, the agency chose to ignore the problem. The proposal stated only that "[a]lthough this proposed rule does not include standards for regulating [methane emissions], we continue to assess these significant emissions and evaluate appropriate actions for addressing these concerns." *Id.* at 52,756/2. Multiple parties filed comments in November 2011 objecting to the failure to propose methane standards for this source category. Commenters argued that EPA had abundant evidence that uncontrolled methane emissions from oil and gas operations significantly contribute to atmospheric greenhouse gas pollution, that control measures are available and cost-effective, and that methane standards therefore are appropriate and legally required. *See, e.g.*, Comments of Sierra Club et al. at 74-80 (Nov. 30, 2011) Docket No. EPA-HQ-OAR-2010-0505-4240.

Notwithstanding these comments and the detailed information EPA already had in its possession, the agency has failed to make any appropriateness determination regarding the oil and gas sector's

¹ Links to each annual GHG emissions inventory are at http://www.epa.gov/climatechange/emissions/usgginv_archive.html.

methane emissions, or to propose or promulgate performance standards to meet its obligations under section 111(b)(1)(B) of the Act with regard to the oil and gas sector's methane emissions. EPA's failure to complete the rulemaking required under section 111(b)(1)(B) to address methane emissions from new and modified oil and gas operations has also resulted in an unreasonable delay in establishing emissions guidelines for the controlling methane emissions from existing oil and gas sector sources. EPA's unreasonable delay in issuing these guidelines in turn delays both the date by which states must submit plans for the control of methane from existing oil and gas operations, 40 C.F.R. § 60.23(a), and the date by which existing sources must comply with approved pollution control standards, *see id.* § 60.24(c). Therefore, we are also providing 180-day notice that we intend to sue you as EPA administrator and EPA for EPA's unreasonably delaying final agency action to determine whether standards for methane emissions from oil and gas operations are appropriate, to make the necessary revisions to 40 C.F.R. Part 60, and to issue emissions guidelines for methane emissions from existing oil and gas operations.

IV. Conclusion

EPA's acknowledgement that oil and gas operations account for a large share of methane emissions points to the urgent need to reduce these emissions. The agency's long experience with control strategies that recover methane emissions from oil and gas operations for productive uses confirms that there are cost-effective measures for this source category that would provide an appropriate basis for establishing a standard of performance for methane emissions. But EPA's failure to make progress in deciding whether standards are appropriate demonstrates that litigation may be needed to prompt the required agency action. Accordingly, the States of New York, Connecticut, Delaware, Maryland, Rhode Island, and Vermont, and the Commonwealth of Massachusetts, submit this notice of intent to sue for EPA's failure to complete the review of the standards of performance for oil and gas operations as mandated by section 111(b)(1)(B) of the Clean Air Act and for the agency's unreasonable delay in the completion of that action. The States of New York, Connecticut, Delaware, Maryland, Rhode Island, and Vermont, and the Commonwealth of Massachusetts, also give notice of their intent to sue for EPA's failure to complete the emissions guidelines for existing sources required 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.

We are willing to explore any 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 Act, we intend to file suit in United States District Court.

Very truly yours,

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