Re: Clean Air Act Notice of Intent to Sue for Failure to Complete a Thorough Review of the Air Quality Criteria for Sulfur Oxides and the National Ambient Air Quality Standards for Sulfur Dioxide and Nitrogen Oxides, to Make Such Revisions to the Sulfur Oxides Air Quality Criteria and the Sulfur Dioxide and Nitrogen Oxides National Ambient Air Quality Standards as May Be Appropriate, to Promulgate Such New National Ambient Air Quality Standards for Sulfur Oxides and Nitrogen Oxides as May Be Appropriate, and to Publish Notice of Such Actions in the Federal Register

Dear Administrator McCarthy:

On behalf of the Center for Biological Diversity and the Center for Environmental Health, I am writing to provide you with notice that we intend to sue you for your failure to complete a mandatory review of the air quality criteria for Sulfur Oxides (SO\textsubscript{x}) and the primary National Ambient Air Quality Standards (NAAQS) for Sulfur Dioxide (SO\textsubscript{2}) and Nitrogen Oxides (NO\textsubscript{x}), to revise the SO\textsubscript{x} air quality criteria and SO\textsubscript{2} and NO\textsubscript{x} NAAQS as may be appropriate, to promulgate such new NAAQS for SO\textsubscript{x} and NO\textsubscript{x} as may be appropriate, and to publish notice of such actions in the Federal Register. 42 U.S.C. § 7409(d)(1) provides you with a non-discretionary duty to review and, as appropriate, revise the air quality criteria for SO\textsubscript{x} and the NAAQS for SO\textsubscript{2} and NO\textsubscript{x} and, if necessary, promulgate additional NAAQS for SO\textsubscript{x} and NO\textsubscript{x}. Moreover, notice of any revisions to such air quality criteria and notice of any new or newly modified NAAQS must be published in the Federal Register. See 42 U.S.C. §§ 7408(d),
7607(d). We intend to bring a suit sixty days from the date of this letter, or shortly thereafter, under section 304 of the federal Clean Air Act, 42 U.S.C. § 7604, for your failure to perform the non-discretionary duties outlined in 42 U.S.C. §§ 7408(d), 7409(d)(1), & 7607(d). The suit will seek injunctive and declaratory relief, the cost of litigation, and may seek other relief.

Two sections of the Clean Air Act govern the establishment and revision of air quality criteria and NAAQS. Section 108 (42 U.S.C. § 7408) requires EPA to identify pollutants that “may reasonably be anticipated to endanger public health and welfare” and to issue air quality criteria for those pollutants. Section 109 (42 U.S.C. § 7409) requires EPA to promulgate primary and secondary NAAQS for pollutants identified under section 108.

Section 109 further requires that “at five year intervals” EPA “shall complete a thorough review of the criteria published under [section 108] and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate.” 42 U.S.C. § 7409(d)(1). Despite this clear requirement, it has been more than five years since EPA last completed such a review to update the air quality criteria for SOx and NAAQS for SOx and NOx.

SOx are a group of gases formed primarily from the combustion of fuel containing sulfur, such as coal. SOx are also released during the manufacture of metals and in some oil refining processes. SO2 is the sulfur oxide that EPA has used as a surrogate parameter for regulation of all SOx emissions since first promulgating NAAQS for SO2 in 1971. See 36 Fed. Reg. 8186.

SO2 emissions have a variety of negative effects on both human health and the environment. SO2 pollution contributes to respiratory problems, particularly for children and the elderly, and aggravates existing heart and lung diseases. SO2 emitted over a short period can be harmful to asthmatics. SO2 also contributes to the formation of acid rain, which damages trees, crops, historic buildings, and monuments and alters the acidity of both soils and water bodies. In addition, because SO2 emissions can be transmitted long distances, they contribute to visibility impairment problems in many national parks and wilderness areas. Office of Air Quality Planning and Standards, EPA, “SO2 – How Sulfur Dioxide Affects the Way We Live & Breathe” (Nov. 2000), available at http://www.epa.gov/air/urbanair/so2/index.html.

EPA’s last review of the air quality criteria document, which EPA now calls an integrated science assessment, for SOx was completed no later than September 12, 2008. 73 Fed. Reg. 53,002 (Sept. 12, 2008). Following the issuance of the SOx air quality criteria document, EPA revised the primary SOx NAAQS no later than June 22, 2010. 75 Fed. Reg. 35,520 (June 22, 2010). More than five years has passed since EPA completed its last review and revision of the SOx criteria document and NAAQS but EPA has not fulfilled its mandatory duty to review thoroughly and update as necessary this air quality criteria and NAAQS. According to the clear statutory deadlines, such a review should have been completed by no later than June 22, 2015. Thus, EPA’s ongoing failure to complete this review and to make the necessary revisions to the NAAQS is contrary to Section 109(d)(1) of the Clean Air Act. See 42 U.S.C. § 7409(d)(1).
Nitrogen oxides (NO$_x$), such as NO$_2$, are highly reactive gases emitted primarily through
the combustion of fossil fuels in mobile and stationary sources. NO$_x$ are a precursor of ground-
level ozone and particulate matter pollution and NO$_x$ emissions also play a role in the
accumulation of excess nitrates in drinking water, the eutrophication of aquatic ecosystems and
nitrification of soils, global climate change, increases in toxic pollutant levels, and the depletion
of the ozone layer. 70 Fed. Reg. 8888-89. EPA has used NO$_2$ as a surrogate for NO$_x$ since first

EPA last reviewed and revised the primary NO$_x$ NAAQS no later than February 9, 2010.
75 Fed. Reg. 6,474 (Feb. 9, 2010). EPA’s last review of the air quality criteria document, which
EPA now calls an integrated science assessment, for NO$_x$ was completed no later than January
impacts from NO$_2$ are worse than was known when EPA set the 2010 NAAQS. For example, for
setting the 2010 NAAQS, the science was sufficient to infer a likely causal relationship between
short-term exposure NO$_2$ and respiratory effects. Integrated Science Assessment for Oxides of
Nitrogen – Health Criteria, January 2016 (2016 ISA) at lxxxii. However, the 2016 ISA solidifies
this finding such that EPA can definitively say there is a causal relationship between short term
NO$_2$ exposure and respiratory effects. There are now controlled human exposure studies
showing NO$_2$ can trigger asthma attacks. 2016 ISA at lxxxiii. There is also now consistent
evidence showing long-term exposure can cause the development of asthma. 2016 ISA at lxxxiv.

Moreover, for the setting of the 2010 NAAQS, the science was inadequate to infer a
relationship between short-term NO$_2$ exposure and cardiovascular effects. In the 2016 ISA,
however, the science now suggests that there is a causal relationship between NO$_2$ and
cardiovascular effects. Integrated Science Assessment for Oxides of Nitrogen – Health Criteria,
January 2016 (2016 ISA) at lxxxii. The same is true for long-term exposure and cardiovascular
effects, diabetes, birth outcomes, total mortality and cancer. Id. These suggestions of a causal
relationship are very important. NAAQS setting is not like a tort case where EPA must prove
causation by a preponderance of the evidence. Rather, Congress’ directive that EPA provide an
adequate margin of safety is meant to address uncertainties associate with inconclusive scientific
and technical information. 2016 ISA at lxxxi. This new science, however, provides no protection
to the American public until EPA uses the science to revise the NAAQS.

More than five years has passed since EPA completed its last review and revision of the
NO$_x$ NAAQS but EPA has not fulfilled its mandatory duty to review thoroughly and update as
necessary this NAAQS. According to the clear statutory deadlines, such a review should have
been completed by no later than February 9, 2015. Thus, EPA’s ongoing failure to complete this
review and to make the necessary revisions to the NAAQS is contrary to Section 109(d)(1) of the

In keeping with the requirements of federal regulations, you are hereby notified that the
full names and addresses of the persons giving the notice are:
However, if you wish to discuss this matter, please contact the undersigned counsel at the address indicated below.

The Center for Biological Diversity and the Center for Environmental Health and their counsel have a policy of trying to resolve these matters without the need for litigation. Therefore, we look forward to you contacting us at 303-442-4033 to resolve this matter. However, if we do not hear from you in 60 days, we will be forced to assume that you are not interested in settling this matter and will file our complaint.

Sincerely,

Robert Ukeiley

Counsel for the Center for Biological Diversity and the Center for Environmental Health