



PETITION TO THE ADMINISTRATOR OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY TO REVOKE THE 8-HOUR OZONE (1997 STANDARD) CLEAN DATA DETERMINATIONS FOR THE NEW YORK-NORTHERN NEW JERSEY-LONG ISLAND, SHEBOYGAN, ST. LOUIS, AND WASHINGTON METRO NONATTAINMENT AREAS.

Petitioner the Sierra Club petitions the United States Environmental Protection Agency and Administrator Gina McCarthy (“EPA”) to revoke the 8-hour ozone (1997 Standard) Clean Data Determinations (“CDD”) for the New York-Northern New Jersey-Long Island, Sheboygan, St. Louis, and Washington Metro Nonattainment Areas. In support of this Petition, Sierra Club states the following:

I. INTRODUCTION

A. The Interests of the Petitioner

Petitioner THE SIERRA CLUB is a national environmental organization with over two million members and activists in all fifty states and the District of Columbia. The Sierra Club’s mission is to protect, explore, and enjoy the planet. To this end, the Sierra Club works to mobilize Americans to fight against air and water pollution and to preserve our nation’s natural beauty. Sierra Club members live, work and recreate near, and breathe the air in and around, the areas at issue in this Petition.

B. Ozone as a Pollutant

Pollution sources, including power plants, motor vehicles, and industrial facilities, emit pollutants that react in the presence of sunlight to create ozone. EPA, *Ozone and Your Health*, 2 (available at <http://www.epa.gov/air/ozonepollution/pdfs/health.pdf>)

Ozone is commonly referred to as smog. It has numerous harmful effects on the human respiratory systems, including inducing asthma attacks in asthmatics and aggravating chronic lung diseases such as emphysema and bronchitis. EPA, *Smog—Who Does it Hurt?*, 2-3 (available at <http://www.epa.gov/air/ozonepollution/pdfs/smog.pdf>). Long-term exposure to ozone may result in the permanent scarring of lung tissue. EPA, *Ozone and Your Health*, 2 (available at <http://www.epa.gov/air/ozonepollution/pdfs/health.pdf>).

Exposure to ozone can also lead to “chronic, adverse effects on lung development in children from the age of 10 to 18 years....” See Gauderman, W. James, *et al.*, *The Effect of Air Pollution on Lung Development from 10 to 18 Years of Age*, N. Engl. J.

Med. 351:11, at 1057 (Sept. 9, 2004). However, the greatest harm “may occur later in life, since reduced lung function is a strong risk factor for complications and death during adulthood.” *Id.* at 1063. Thus, it is imperative that EPA timely address ozone levels, especially in areas where EPA has previously stopped the further implementation of public health and welfare safeguards against ozone.

C. Regulatory Basis

EPA regulates the emission of pollutants from sources through the Clean Air Act. *See generally* 42 U.S.C. § 7401. Through this power, EPA has promulgated National Ambient Air Quality Standards (NAAQS) to regulate the concentration of ground level ozone. 40 C.F.R. § 50.10(a) (1997).

Under the 1997 8-hour ozone standards, geographic areas with a concentration of ozone greater than 0.080 parts per million (ppm) are designated as nonattainment (0.085 ppm rounds up as nonattainment, while less than 0.085 ppm rounds down). *See* 40 C.F.R. § 50 Appendix I 2.1.1 (1997). Areas that have successfully reduced ozone concentration to less than 0.084 ppm may petition the EPA to be reclassified as attainment if they meet four additional criteria.

State Implementation Plans (SIPs) explain how the state will reduce ozone pollution within the nonattainment area. States developed SIPs following the designation of areas as nonattainment. 40 C.F.R. § 51.900(j) (2004). States are required to report to EPA on the progress of fulfilling the SIP, with the ultimate goal of satisfying and maintaining the NAAQS requirement for ozone within the state at each nonattainment area.

A Clean Data Determination is an EPA determination that an area has monitoring data showing that the area has met the 8-hour ozone (1997 Standard) NAAQS for a three-year period. 40 C.F.R. § 51.918 (2005). Specifically, the Clean Data Determination is made when the three-year average of the fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.084 PPM for each ambient air quality monitoring site within the area. 40 C.F.R. § 50 Appendix I.2 (1997). This three-year average is called a Design Value. EPA made Clean Data Determinations for several nonattainment areas which were apparently heavily influenced by reduced emissions due to the Great Recession and weather that was very favorable to avoiding ozone formation.

Obtaining a Clean Data Determination suspends the obligation on the corresponding state to submit certain nonattainment SIP elements for the area to the EPA for as long as the area remains in attainment with the 8-hour ozone NAAQS. 40 C.F.R. § 51.918 (2005). However, obtaining a Clean Data Determination is not the same as a re-designation of the area from nonattainment to attainment. The state must meet additional statutory requirements in order for a nonattainment area to be redesignated. *Id.*

A Clean Data Determination is therefore only a voluntary, probationary step along the process from ozone pollution nonattainment to attainment, and the privilege of not

submitting certain nonattainment SIP elements to EPA will be revoked if EPA determines that the area has subsequently violated the 8-hour ozone NAAQS. 40 C.F.R. § 51.918 (2005).

EPA must ensure that areas which fail to continue to attain the 1997 8-hour ozone NAAQS for subsequent three-year periods are stripped of their Clean Data Determination distinction. If not, the continued distinction of Clean Data Determination endangers public health and welfare. Unfortunately, EPA has failed to do that for the New York-Northern New Jersey-Long Island, Sheboygan, St. Louis, and Washington Metro 1997 ozone NAAQS Nonattainment Areas. Therefore, Sierra Club has to file this petition to get EPA to take this one small step in an effort to protect the health of the millions of people who live, work and recreate in these four nonattainment areas.

II. EPA MUST PROMPTLY REVOKE THE 8-HOUR OZONE (1997 STANDARD) CLEAN DATA DETERMINATIONS FOR AREAS THAT ARE CURRENTLY VIOLATING THE 1997 OZONE STANDARD

EPA promulgated Clean Data Determinations for the New York-Northern New Jersey-Long Island, Sheboygan, St. Louis, and Washington Metro Areas 1997 ozone NAAQS Nonattainment Areas. *See* EPA Green Book, 8-Hour Ozone (1997) Federal Register Notice Clean Data Determination/Attainment Determinations, (*available at* <http://www.epa.gov/oar/oaqps/greenbk/gfr2rpt5.html>). The 2010-2012 Design Values show that these areas are not in attainment with the 8-hour ozone (1997 Standard) NAAQS. Ozone Design Values 2010-2012 , Table 1b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (Exhibit # 1, attached). Therefore, EPA must promptly withdraw these Clean Data Determinations.

Table 1b. Design Values in Areas Previously Designated Nonattainment for the 1997 8-Hour Ozone NAAQS

AQS Data Retrieval: 5/3/2013 Last Updated: 5/8/2013

Designated Area	EPA Region(s)	Designation Status ¹	Classification ¹	2010-2012 Design Value (ppm) ^{2,3}	Meets NAAQS?	Most Recent Attainment Determination Action ⁵	Redesignation FR Effective Date
New York-N New Jersey-Long Island, NY-NJ-CT	1,2	Nonattainment	Subpart 2/Moderate	0.086	No	7/18/2012	
Sheboygan, WI	5	Nonattainment	Subpart 2/Moderate	0.087	No	3/31/2011	
St Louis, MO-IL	5,7	Nonattainment	Subpart 2/Moderate	0.086	No	5/30/2012	See footnote 6
Washington, DC-MD-VA	3	Nonattainment	Subpart 2/Moderate	0.087	No	3/29/2012	

Notes:
1. Area classification and designation status as of May 7, 2013.
2. The level of the 1997 8-hour ozone NAAQS is 0.08 parts per million (ppm). The design value is the 3-year average of the annual 4th highest daily maximum 8-hour ozone concentration.
3. The design values shown here are computed using Federal Reference Method or equivalent data reported by State, Tribal, and Local monitoring agencies to EPA's Air Quality System (AQS) as of May 3, 2013. Concentrations flagged by State, Tribal, or Local monitoring agencies as having been affected by an exceptional event (e.g., wildfire, volcanic eruption) and concurred by the associated EPA Regional Office are not
4. One or more sites in this area has violated the NAAQS prior to 2010-2012 and does not have a valid 2010-2012 design value. Although a 2010-2012 design value is shown, this design value may not represent the worst 2010-2012 air quality in the area. Consequently, we have not used it to indicate "Yes" or "No" in the "Meets NAAQS?" column.
5. Most recent EPA action to determine that either 1) the area has attained the standard by its applicable attainment deadline under section 181(b) of the Clean Air Act, or 2) the area has attained the standard under the Clean Data Policy (known informally as a Clean Data Determination).
6. One or more states in this multi-state area have satisfied Clean Air Act requirements for redesignation to Maintenance. This area will continue to be designated Nonattainment until all states in the multi-state area have completed their requirements.

Ozone Design Values 2010-2012 , Table 1b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (Exhibit # 1, attached).

Exhibit # 3 provides the 2010-2012 Design Values for all monitoring sites in the New York-Northern New Jersey-Long Island, Sheboygan, St. Louis, and Washington Metro Areas that are not in attainment with the 8-hour ozone (1997 Standard) NAAQS. *See* EPA, AirData, Report: Monitor Values (*available at* http://www.epa.gov/airdata/ad_rep_mon.html) (requiring the user to manually select the pollutant, year, and geographic area/county for each year in the three-year period to determine the Design Value for the monitoring site) (Exhibit # 3, attached). Exhibit # 3 is created from data on EPA's AirData webpage.

A. The New York-Northern New Jersey-Long Island Area

The New York-Northern New Jersey-Long Island Area is composed of the counties of New York, Bronx, Kings, Queens, Richmond, Rockland, Westchester, Suffolk, and Nassau in the State of New York, the counties of Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, and Warren in the State of New Jersey, and the counties of Fairfield, New Haven, and Middlesex in the State of Connecticut. 77 Fed. Reg. 36,163 (June 18, 2012). The New York-Northern New Jersey-Long Island Area is designated nonattainment for the 8-hour ozone (1997 Standard), and further classified as Subpart 2/Moderate.

EPA gave Final Approval for the Clean Data Determination for the New York-Northern New Jersey-Long Island Area on June 18, 2012. 77 Fed. Reg. 36,164 (June 18, 2012). This Final Approval was issued after confirming that the 2007-2009 and 2008-2010 Design Values for the area were each 0.084 ppm, being equal to the 0.084 ppm threshold. Ozone Design Values 2010-2012 , Table 3b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (Exhibit # 2, attached). The Design Value remained at 0.084 ppm for the 2009-2011 period. *Id.* EPA promulgated the Clean Data Determination to be effective on July 18, 2012. 77 Fed. Reg. 36,168 (June 18, 2012)

The 2010-2012 Design Value for the New York-Northern New Jersey-Long Island Area is 0.086 ppm. *See* Ex. 3. *See also* Ozone Design Values 2010-2012 , Table

1b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (Exhibit # 1, attached). As the Design Value for the area is higher than the 0.084 ppm threshold, the New York-Northern New Jersey-Long Island Area is in violation of the NAAQS, and the Area no longer supports a Clean Data Determination.

Five monitoring sites in the area are in violation of the 1997 8-hour ozone NAAQS for the 2010-2012 monitoring period. *See* Ex. 3; *see also* Ozone Design Values 2010-2012 , Tables 5 & 6 (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (tables labeled for the 2008 ozone NAAQS. However, monitor-level data is the same for the 1997 ozone NAAQS).

Monitoring site # 361030002, located in Suffolk County, New York, recorded 0.085 ppm for the 2010-2012 three-year period. Monitoring site # 340230011, located in Middlesex County, New Jersey, recorded 0.085 ppm for the 2010-2012 three-year period. Monitoring site # 090093002, located in New Haven County, Connecticut, recorded 0.086 ppm for the 2010-2012 three-year period. Monitoring sites # 090013007 and # 090019003, both located in Fairfield County, Connecticut, each recorded 0.085 ppm for the 2010-2012 three-year period.

EPA must therefore revoke the Clean Data Determination for the New York-Northern New Jersey-Long Island Area which will reinstate the respective SIP requirements for the State of New York, the State of New Jersey, and the State of Connecticut within this nonattainment area. 40 C.F.R. § 51.918 (2005).

B. The Sheboygan Area

The Sheboygan Area is composed of Sheboygan County in Wisconsin. 76 Fed. Reg. 11,080 (Mar. 1, 2011). # 551170006 is the only ozone monitoring site in the Sheboygan Area. The Sheboygan Area is designated nonattainment for the 8-hour ozone (1997 Standard), and further classified as Subpart 2/Moderate.

EPA gave Final Approval for the Clean Data Determination for the Sheboygan Area on March 1, 2011. This Final Approval was issued after confirming that the 2006-2008 Design Value for the area was 0.082 ppm and that the 2007-2009 Design Value was 0.079 ppm for the Area, both being less than the 0.084 ppm threshold. 76 Fed. Reg. 11,080 (Mar. 1, 2011). Ozone Design Values 2010-2012 , Table 3b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (Exhibit # 2, attached). The Design Value further fell to 0.078 ppm for the 2008-2010 three-year period. *Id.* As the 2006-2008 and 2007-2009 Design Values were both less than the 0.085 ppm threshold, EPA promulgated the Clean Data Determination to be effective on March 31, 2011. 76 Fed. Reg. 11,081 (Mar. 1, 2011).

The 2009-2011 Design Value for the Sheboygan Area was 0.081 PPM, a noticeable increase from the preceding three-year average of 0.078 ppm. *See* EPA, AirData, Reports: Monitor Values (*available at*

http://www.epa.gov/airdata/ad_rep_mon.html) (requiring the user to manually select the pollutant, year, and geographic area/county for each year in the three-year period to determine the Design Value for the monitoring site). This upwards trend continued for the 2010-2012 period, resulting in a Design Value of 0.087 ppm for the Sheboygan Area. Ex. 3. *See also* Ozone Design Values 2010-2012 , Table 3b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>). As this Design Value is higher than the 0.084 ppm threshold, the Sheboygan Area is in violation of the NAAQS, and the Area no longer supports a Clean Data Determination.

EPA must therefore revoke the Clean Data Determination for the Sheboygan Area which will reinstate the SIP requirements for Wisconsin within this nonattainment area. 40 C.F.R. § 51.918 (2005).

C. The St. Louis Area

The St. Louis Area is composed of the City of St. Louis and the counties of Franklin, Jefferson, St. Charles, and St. Louis in Missouri. 77 Fed. Reg. 33,647 (June 9, 2011). The St. Louis Area is designated nonattainment for the 8-hour ozone (1997 Standard), and further classified as Subpart 2/Moderate.

EPA gave Final Approval for the Clean Data Determination for the St. Louis Area on June 9, 2011. 77 Fed. Reg. 33,648 (June 9, 2011). This Final Approval was issued after confirming that the 2008-2010 Design Value for the area was 0.077 ppm, being less than the 0.084 ppm threshold. Ozone Design Values 2010-2012 , Table 3b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (Exhibit # 2, attached). EPA promulgated the Clean Data Determination to be effective on July 11, 2011. 77 Fed. Reg. 33,647 (June 9, 2011).

The 2009-2011 Design Value for the St. Louis Area was 0.079 ppm, an increase from the preceding three-year average of 0.077 ppm. Ozone Design Values 2010-2012 , Table 3b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (Exhibit # 2, attached). This upwards trend continued for the 2010-2012 period, resulting in a Design Value of 0.086 ppm. *Id.* *See also* Ex. 3. As this Design Value is higher than the 0.084 ppm threshold, the St. Louis Area is in violation of the NAAQS, and the Area no longer supports a Clean Data Determination.

The violating monitoring site for the 2010-2012 monitoring period is # 291831002, located in the city of West Alton, Saint Charles County, Missouri. *See* EPA, AirData, Reports: Monitor Values (*available at* http://www.epa.gov/airdata/ad_rep_mon.html) (requiring the user to manually select the pollutant, year, and geographic area/county for each year in the three-year period to determine the Design Value for the monitoring site); *see also* Ozone Design Values 2010-2012 , Tables 5 & 6 (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (tables labeled for the 2008 ozone NAAQS. However, monitor-level data is the same for the 1997 ozone NAAQS).

EPA must therefore revoke the Clean Data Determination for the St. Louis Area which will reinstate the respective SIP requirements for Missouri within this nonattainment area. 40 C.F.R. § 51.918 (2005).

D. The Washington Metro Area

The Washington Metro Area is composed of the District of Columbia, the independent cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park in the Virginia, the counties of Arlington, Fairfax, Loudoun, and Prince William in Virginia, and the counties of Calvert, Charles, Frederick, Montgomery, and Prince George's in Maryland. *See* EPA Green Book, 8-Hour Ozone (1997) Nonattainment State/Area/County Report, (*available at* <http://www.epa.gov/oar/oaqps/greenbk/gncc.html>). The Washington Metro Area is designated nonattainment for the 8-hour ozone (1997 Standard), and further classified as Subpart 2/Moderate.

EPA gave Final Approval for the Clean Data Determination for the Washington Metro Area on February 28, 2012. 77 Fed. Reg. 11,739 (Feb. 26, 2012) This Final Approval was issued after confirming that the 2007-2009 Design Value for the area was 0.080 ppm, being less than the 0.084 ppm threshold. Ozone Design Values 2010-2012 , Table 3b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>). EPA promulgated the Clean Data Determination to be effective on March 29, 2011. 77 Fed. Reg. 11,740 (Feb. 26, 2012).

The 2008-2010 Design Value for the Washington Metro Area was 0.081 ppm, an increase from the preceding three-year average of 0.080 ppm. Ozone Design Values 2010-2012 , Table 3b (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (Exhibit # 2, attached). The Design Value for 2009-2011 increased to 0.082 ppm. *Id.* This upwards trend continued for the 2010-2012 period, resulting in a Design Value of 0.087 ppm. *Id. See also* Ex. 3. As this Design Value is higher than the 0.084 ppm threshold, the Washington Metro Area is in violation of the NAAQS, and the Area no longer supports a Clean Data Determination.

Three monitoring sites in the area are in violation of the 1997 8-hour ozone NAAQS for the 2010-2012 monitoring period. *See* Ex. 3; *see also* Ozone Design Values 2010-2012 , Tables 5 & 6 (*available at* <http://www.epa.gov/ttn/analysis/dvreview.htm>) (tables labeled for the 2008 ozone NAAQS. However, monitor-level data is the same for the 1997 ozone NAAQS).

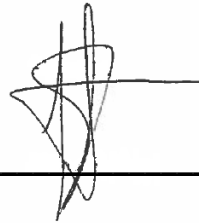
Monitoring site # 240338003, located in Prince George's County, Maryland, recorded 0.087 ppm for the 2010-2012 three-year period. Monitoring site # 510130022, located in Arlington County, Virginia, recorded 0.086 ppm for the 2010-2012 three-year period. Monitoring site # 510590030, located in Fairfax County, Virginia, also recorded 0.086 ppm for the 2010-2012 three-year period.

EPA must therefore revoke the Clean Data Determination for the Washington Metro Area which will reinstate the respective SIP requirements for the District of Columbia, Maryland, and Virginia within this nonattainment area. 40 C.F.R. § 51.918 (2005).

III. CONCLUSION

As the 2010-2012 Design Values for the New York-Northern New Jersey-Long Island, Sheboygan, St. Louis, and Washington Metro Areas are in violation of the 8-hour ozone (1997 Standard) NAAQS, Sierra Club respectfully requests that US EPA revoke Clean Data Determination for these Areas within 30 days.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Joshua Stebbins', is written over a solid horizontal line.

Counsel for Petitioner

Joshua Stebbins
50 F Street NW, 8th Floor
Washington, DC 20001
(202) 675-6273

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