

**BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

IN THE MATTER OF THE PROPOSED)
AIR QUALITY TITLE V OPERATING)
PERMIT FOR)
)
DUKE ENERGY PROGRESS, INC.)
)
ASHEVILLE STEAM ELECTRIC PLANT)
PROPOSED PERMIT NO. 11-628-15)
)
PROPOSED BY THE WESTERN NORTH)
CAROLINA REGIONAL AIR QUALITY)
AGENCY)

**PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO
ISSUANCE OF THE PROPOSED TITLE V OPERATING PERMIT FOR
THE ASHEVILLE STEAM ELECTRIC PLANT**

Pursuant to Section 505 of the Clean Air Act, the Sierra Club hereby petitions the Administrator of the United States Environmental Protection Agency (“EPA”) to object to issuance of the Title V operating permit (“Proposed Permit”) proposed by the Western North Carolina Regional Air Quality Agency (“WNCRAQA”) for Duke Energy Progress, Inc.’s (“Duke Energy”) Asheville Steam Electric Plant, a coal-burning power plant located at 200 CP&L Drive, Arden, North Carolina 28704, in Buncombe County (“Asheville Plant” or “Plant”). The Proposed Permit is not in compliance with applicable requirements under the Clean Air Act; therefore, objection by EPA is proper.¹

Specifically, the permit lacks the conditions necessary to ensure compliance with applicable requirements that prohibit the exceedance of governing ambient air quality standards—*i.e.*, sufficiently stringent numerical limits on the emission of sulfur dioxide (“SO₂”). In addition, the permit lacks a schedule for compliance with current violations of applicable requirements and of the existing permit. These objections were timely raised in Sierra Club’s comments on WNCRAQA’s draft Title V permit renewal for the Asheville Plant (“Draft Permit”), submitted on April 30, 2015 and attached hereto as Exhibit 1.² WNCRAQA has not offered—and, indeed, cannot offer—any reasonable justification for its failure to impose more stringent limits on SO₂ emissions. For these reasons, and as discussed in greater detail below, EPA should object to issuance of the Proposed Permit.

¹ 42 U.S.C. § 7661d(b).

² Sierra Club Comments on Draft Title V Permit Renewal for Duke Energy Progress’ Asheville Steam Electric Plant, Permit No. 11-628-15 (Apr. 30, 2015) (“Sierra Club Comments”).

I. Governing Law and Regulations

A. The Clean Air Act, Implementation Plans, and the Title V Permitting Program

The Clean Air Act is intended to protect and enhance the public health and public welfare of the nation.³ To this end, EPA promulgates primary and secondary National Ambient Air Quality Standards (“NAAQS”) for six “criteria” pollutants—sulfur dioxides, nitrogen oxides, particulate matter, carbon monoxide, ozone, and lead.⁴ Primary NAAQS are health-based standards set at a level adequate to protect the public from the harmful effects of exposure to the criteria pollutants with an adequate margin of safety.⁵ State and regional air quality agencies that are delegated implementation authority under the Clean Air Act develop and implement plans that include applicable requirements,⁶ the compliance with which advances attainment of the federal NAAQS and other standards. These applicable requirements are then executed with respect to individual facilities through permitting programs established under Title V of the Act, which govern the operation of major emissions sources within a given state.⁷

More specifically, major stationary sources of air pollution are prohibited from operating except in compliance with a Title V operating permit.⁸ Title V permits must require compliance with all applicable federal, state, and local regulations in one legally enforceable document, thereby ensuring that all Clean Air Act requirements are applied to the facility.⁹ These permits “shall include enforceable emission limitations and standards . . . and such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable implementation plan.”¹⁰ Title V permits must also contain monitoring, recordkeeping, reporting, and other requirements to assure continuous compliance by sources with all applicable requirements.¹¹

As EPA explained in the preamble to its Title V program rule, the program was created to ensure that a major stationary source’s operating requirements are clear and that the source’s compliance with those requirements is likewise clear, so that the public can monitor and enforce compliance.¹² “[R]egulations are often written to cover broad source categories,” leaving it “unclear which, and how, general regulations apply to a source.”¹³ Title V permits are intended

³ See 42 U.S.C. § 7401(b)(1).

⁴ *Id.* at § 7409.

⁵ *Id.*

⁶ 40 C.F.R. § 70.2 (1) (defining “applicable requirements” to mean “[a]ny standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA.”)

⁷ See 42 U.S.C. §§ 7410, 7661.

⁸ 42 U.S.C. § 7661a(a).

⁹ See 42 U.S.C. § 7661c; 40 C.F.R. § 70.6(a)(1) (requiring that all Title V permits contain all “those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance”); WNCRAQA Code § 17.0508(b) (same).

¹⁰ See 42 U.S.C. § 7661c(a).

¹¹ See 40 C.F.R. Part 70.

¹² U.S. EPA, Operating Permit Program, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992).

¹³ *Id.*

to bridge this gap by “mak[ing] more readily enforceable a source’s pollution control requirements” and “tailor[ing] and clarify[ing] how the general rules apply to the specific source,”¹⁴ thus providing an easy way “to establish whether a source is in compliance.”¹⁵ An interested person should be able to understand from a permit how much pollution the permitted facility is legally authorized to emit and how that facility is monitored for compliance. Members of the public should not be forced to retain experts and pay for highly technical air dispersion modeling or other resource-intensive analyses in order to determine whether a source is violating applicable requirements and its permit. Instead, the permitting agency must translate any narrative applicable requirements into quantifiable and readily enforceable permit conditions.

In addition, a Title V permit must include a compliance schedule for “requirements for which the source is not in compliance at the time of permit issuance.”¹⁶ Permits must contain “a description of the compliance status of the source” and, for sources not in compliance at the time of permit issuance, “a narrative description of how the source will achieve compliance” with applicable requirements.¹⁷ Thus, Title V permits must spell out enforceable, specific steps to be taken by sources with histories of noncompliance in order to return those sources to compliance.

B. North Carolina-Specific Regulations

EPA delegated to North Carolina the authority to administer the Title V operating permit program within the state. North Carolina adopted laws and regulations that grant the North Carolina Department of Environmental Quality the authority to fulfill this delegation, including administering a Title V permit program.¹⁸ North Carolina, in turn, delegated to WNCRAQA the authority to administer the program in Buncombe County and the City of Asheville.¹⁹ WNCRAQA likewise adopted regulations to fulfill this delegation, including administering a Title V program.²⁰ Just as state pollution control programs must be at least as protective as federal standards, local air pollution control program requirements must be as protective as the state air pollution control law and rules, but may be more stringent.²¹ Accordingly, Title V permits issued by WNCRAQA must include enforceable emission limitations and standards and such other conditions as are necessary to assure compliance with all applicable requirements at the time of permit issuance²²—that is, any standard or requirement provided for in the state or local implementation plan.²³

Both the North Carolina state implementation plan (“SIP”) and WNCRAQA’s local implementation plan include provisions—*i.e.*, applicable requirements—expressly prohibiting

¹⁴ S. Rep. 101-228, 1990 USCAAN 3385, 3730 (Dec. 20, 1989).

¹⁵ *Id.*

¹⁶ 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(c)(3).

¹⁷ 40 C.F.R. § 70.5(c)(8); *id.* § 70.6(c)(3).

¹⁸ *See generally* 15A N.C.A.C. 2Q.0501 *et seq.*

¹⁹ N.C.G.S. § 143-215.112.

²⁰ *See generally* WNCRAQA Code §§ 17.0501 *et seq.*

²¹ *See id.* § 143-215.112(a)(1).

²² *See* 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a)(1); WNCRAQA Code §§ 17.0501, 17.0508.

²³ 40 C.F.R. § 70.2 (defining applicable requirements); WNCRAQA Code § 17.0103(5) (same).

pollution that causes the exceedance of an ambient air quality standard and affirmatively requiring permit conditions to prevent such pollution. Specifically, both North Carolina and WNCRAQA regulations provide that:

No facility or source of air pollution shall cause *any ambient air quality standard in this Section to be exceeded or contribute to a violation of any ambient air quality standard in this Section.*²⁴

In addition, the “Emission Control Standards” of North Carolina’s and WNCRAQA’s regulations—Section 2D.0501(c) and Section 4.0501(c), respectively—require that:

In addition to any control or manner of operation necessary to meet emission standards in this Section, any source of air pollution shall be operated with such control or in such manner that the source *shall not cause the ambient air quality standards of Section .0400 of this Chapter to be exceeded at any point beyond the premises on which the source is located.*²⁵

Those regulations, which represent a specific strategy by North Carolina for ensuring clean air, further require that:

When controls more stringent than named in the applicable emission standards in this Section are required *to prevent violation of the ambient air quality standards* or are required to create an offset, *the permit shall contain a condition requiring these controls.*²⁶

These regulatory provisions contemplate precisely the permitting scenario in which WNCRAQA now finds itself: emissions from a stationary source are causing concentrations of harmful pollutants above the governing health-based standard and an applicable requirement in the implementation plan must be translated into facility-specific numerical limits in order to prevent the illegal pollution. The last sentence of Section 4.0501(c) of the WNCRAQA Code, quoted above, makes quite explicit the need for such translation, imposing upon WNCRAQA a duty to adopt the specific permit conditions necessary to prevent violation of ambient air quality standards.

C. The 2010 National Ambient Air Quality Standard for Sulfur Dioxide

In June of 2010, recognizing the inadequacy of the primary SO₂ NAAQS that had been adopted nearly four decades earlier, EPA revoked the 24-hour and annual standards (the 1971 SO₂ NAAQS) and issued a new primary NAAQS for sulfur dioxide (the 2010 SO₂ NAAQS).²⁷ In order to protect the public against adverse respiratory effects associated with short-term

²⁴ 15A N.C.A.C. § 2D.0401(c); WNCRAQA Code § 4.0401(c) (emphasis added).

²⁵ 15A N.C.A.C. § 2D.0501(c); WNCRAQA Code § 4.0501(c) (emphasis added).

²⁶ *Id.* (emphasis added).

²⁷ U.S. EPA, Final Rule, Primary National Ambient Air Quality Standard for Sulfur Dioxide, 75 Fed. Reg. 35,520 (June 22, 2010) (codified at 40 C.F.R. § 50.17(a)).

exposure, the new SO₂ NAAQS is a one-hour standard set at 75 parts per billion (“ppb”).²⁸

Due to both the shorter averaging time and the concentration value, the 2010 SO₂ NAAQS is far more stringent than the 1971 SO₂ NAAQS.²⁹ When setting the new standard, EPA determined that exposure to sulfur dioxide for even very short periods of time—such as five minutes—causes decrements in lung function, aggravation of asthma, and respiratory and cardiovascular morbidity.³⁰ Indeed, there is a very tight correlation between exposure to sulfur dioxide and asthma, and short-term SO₂ exposure is linked to increased visits to emergency departments and hospital admissions—particularly, in at-risk populations including children, the elderly, and asthmatics.³¹ As such, the new, more stringent NAAQS is projected to have enormous benefits for public health. EPA has estimated that the new standard will prevent 2,300 to 5,900 premature deaths and 54,000 asthma attacks a year.³² In other words, where SO₂ concentrations are higher than 75 ppb, EPA expects premature deaths and asthma attacks to occur.

Following EPA’s promulgation of the 2010 SO₂ NAAQS, both North Carolina and WNCRAQA updated their regulations pertaining to SO₂ ambient air quality standards.³³ Both regulations were revised to include the new federal standard: “The primary one-hour annual ambient air quality standard for oxides of sulfur is 75 parts per billion.”³⁴ Accordingly, the one-hour, 75-ppb ambient air quality standard now governs in North Carolina.

II. Factual and Procedural Background

A. Operations at Duke Energy’s Asheville Plant

Duke Energy owns and operates a 50-year-old, fossil fuel-fired power plant just south of the City of Asheville in Buncombe County. The Asheville Plant’s two coal-burning boilers, units 1 and 2, each have a nameplate capacity of approximately 200 megawatts and came online in 1964 and 1971, respectively. Despite being equipped with ratepayer-funded pollution control technology—*i.e.*, flue gas desulfurization systems or “scrubbers”—the Asheville Plant remains a significant source of SO₂ pollution. In 2015, the two coal-burning units emitted approximately 2.1 million pounds of sulfur dioxide as well as 1.5 million pounds of nitrogen oxides and 1.6 million tons of carbon dioxide. Of particular concern, the Asheville Plant’s scrubbers have not been operated at maximum efficiency, likely resulting in additional, avoidable SO₂ pollution.

²⁸ 40 C.F.R. § 50.17(a).

²⁹ U.S. EPA, Final Regulatory Impact Analysis (RIA) for the SO₂ National Ambient Air Quality Standards (NAAQS) tbl. 5.14 (2010), *available at* www.epa.gov/ttnecas1/regdata/RIAs/fso2ria100602full.pdf (“2010 SO₂ NAAQS RIA”).

³⁰ *See* U.S. EPA, Integrated Science Assessment for Sulfur Oxides—Health Criteria (2008); 75 Fed. Reg. at 35,525; *see also* U.S. EPA, Our Nation’s Air: Status and Trends Through 2008, 4 (2010) (health effects of SO₂ exposure include aggravation of asthma, leading to wheezing, chest tightness, increased medication use, hospital admissions, and emergency room visits), *available at* <http://www.epa.gov/airtrends/2010/report/airpollution.pdf>.

³¹ 75 Fed. Reg. at 35,525–26.

³² 2010 SO₂ NAAQS RIA, tbl. 5.14.

³³ 15A N.C.A.C. § 2D.0402(d); WNCRAQA Code § 4.0402(d).

³⁴ *Id.*

Moreover, Duke has been purchasing lower quality, higher sulfur coal.³⁵

Duke Energy installed scrubbers at the Plant in 2005 (Unit 1) and in 2006 (Unit 2). Both scrubbers were designed to achieve 97% removal efficiency of the sulfur dioxide exiting the boilers. During the first few months following installation, the scrubbers were found to be achieving 97% removal efficiency, and SO₂ emission rates declined dramatically.³⁶ However, after five months of operating with average SO₂ emission rates below 0.029 lbs/MMBtu—the rate found necessary to prevent violation of the one-hour, 75-ppb standard³⁷—the Plant’s rates increased and remained consistently far higher than the rates achieved during the first months of scrubber operation. For both of the coal-burning units at the Asheville Plant, the emission rate increases coincide with self-reported declines in the efficiency of the Plant’s scrubbers. As illustrated by annual scrubber efficiency data reported by Duke Energy and presented in Table 1 below, the Asheville Plant’s scrubbers were operating at or near their design efficiencies in 2008, but became less effective at removing sulfur dioxide in the years that followed.

Table 1 – Reported Efficiencies (%) for Asheville Plant Scrubbers at Full Operating Load³⁸

	2008	2009	2010	2011	2012
Unit 1	97.8	93.1	94.2	93.2	96.1
Unit 2	97.7	93.8	91.7	90.7	94.8

Although scrubber efficiency data were not published by EIA for 2013 and thereafter, SO₂ removal efficiencies calculated based on fuel coal sulfur content and actual SO₂ emissions reveal a continued underutilization of the Asheville Plant’s scrubbers—with efficiencies consistently near or below 90% and as low as 78%.³⁹

In addition to the sub-par operation of the Plant’s scrubbers, Duke’s own reporting of fuel type shows that, since October 2011, the sulfur content of the coal being burned at the Asheville Plant has been around 3%—roughly 150% higher than the sulfur content of coal burned during prior years.⁴⁰ The switch to burning coal with higher sulfur content is likely a contributing factor to the recent SO₂ emission rate increases at the Plant. But despite such increases in SO₂ emissions and the resulting impacts on downwind air quality, Duke defends its fuel type choice: according to former Duke Energy Vice President Vince Stroud, “we’re spending almost \$4 billion as a company on various environmental plans, mostly for scrubbers, in the last few years, so we might as well go for the cheaper, high-sulfur coal.”⁴¹ Acknowledging the coal switch, Duke spokeswoman Catherine Butler stated: “[h]igher sulfur coal provides a cost savings to our

³⁵ See Sierra Club Comments, Ex. B (Ranjit Sahu, Analysis of Scrubber Operation: Duke Energy – Asheville Power Plant, (Feb. 16, 2015)).

³⁶ *Id.*

³⁷ See *infra* Section II.B.

³⁸ Data compiled from EIA Form 923, Schedule 8, Part F (data for 2013, 2014, and 2015 not available).

³⁹ Sierra Club Comments, Ex. B.

⁴⁰ *Id.*

⁴¹ Gregory Zuckerman, “High-Sulfur Coal Has Investors Glowing,” *The Wall Street Journal*, Apr. 24, 2006, available at <http://online.wsj.com/articles/SB114583391429033632>.

customers.”⁴² However, Duke’s customers pay rates that are set periodically by the North Carolina Utility Commission and do not reflect Duke’s real-time, actual expenditures for scrubber reagents and fuel. The comments of company representatives fail to identify the increased profits that Duke’s shareholders will enjoy as a result of cutting costs by burning dirty coal that degrades air quality.

B. Sulfur Dioxide Pollution from the Asheville Plant

In light of the SO₂ emission rate increases, the Sierra Club commissioned an independent, third-party air dispersion modeling consultant, Air Resource Specialists (“ARS”),⁴³ to evaluate whether the Plant was violating the applicable requirements that it not cause exceedances or violations of the 75-ppb standard for sulfur dioxide. Recognizing the “strong source-oriented nature of SO₂ ambient impacts,”⁴⁴ EPA concluded that air dispersion modeling is “the most technically appropriate, efficient, and readily available method for assessing short-term ambient SO₂ concentrations in areas with large point sources.”⁴⁵ In promulgating the 2010 SO₂ NAAQS, EPA explained that “it is more appropriate and efficient to principally use modeling to assess compliance for medium to larger sources.”⁴⁶ As compared with modeling, EPA repeatedly has stated that air quality monitor data is unlikely to accurately ascertain SO₂ impacts from sources like the Asheville Plant.⁴⁷ More recently, EPA stated: “because ambient SO₂ concentrations are not the result of complex chemical reactions . . . , they can be modeled accurately using well-understood air quality modeling tools, especially in areas where one or only a few sources exist.”⁴⁸ In any event, no ambient air quality monitoring for sulfur dioxide is conducted in Buncombe County, making modeling the only option.

ARS utilized AERMOD, the air dispersion model developed and approved by EPA,⁴⁹ and followed applicable federal and state modeling guidance. The modeling was based on actual

⁴² Ben Bradford, *Hazy Regs Cloud Duke’s Sulfur Emissions at Asheville Plant*, WFAE, Feb. 24, 2015, available at <http://wfae.org/post/hazy-regs-cloud-dukes-sulfur-emissions-asheville-plant>.

⁴³ ARS has a long track record of conducting modeling and environmental compliance analyses for both industry and regulators. Retaining ARS entailed a substantial investment of resources.

⁴⁴ 75 Fed. Reg. at 35,370.

⁴⁵ *Id.* at 35,551.

⁴⁶ *Id.* at 35,570; see also *Montana Sulphur & Chem. Co. v. EPA*, 666 F.3d 1174 (9th Cir. 2012) (affirming use of modeling to ascertain SO₂ pollution impacts); U.S. EPA, Final Response to Petition From New Jersey Regarding SO₂ Emissions From the Portland Generating Station, 76 Fed. Reg. 69,052 (Nov. 7, 2011) (using modeling to set emission limits sufficient to prevent air pollution).

⁴⁷ See, e.g., 75 Fed. Reg. at 35,570 (noting that for medium to large sources monitoring is “less appropriate, more expensive, and slower to establish”); U.S. EPA 1994 SO₂ Guideline Document at 2-5 to 2-6, available at http://www.epa.gov/ttn/oarpg/t1/memoranda/so2_guide_092109.pdf (“A small number of ambient SO₂ monitors usually is not representative of the air quality for an area. . . . [D]ispersion modeling will generally be necessary to evaluate comprehensively a source’s impacts”); see also *Montana Sulphur & Chem. Co. v. E.P.A.*, 666 F.3d at 1184 (“EPA explained that it was ‘not practical, given the number and complexity of sulfur dioxide sources, to install a sufficient number of monitors to provide the spatial coverage provided by air quality dispersion models.’”).

⁴⁸ U.S. EPA, Data Requirements Rule for the 1-Hour Sulfur Dioxide (SO₂) Primary National Ambient Air Quality Standard (NAAQS), 79 Fed. Reg. 27,447, 27,449 (May 13, 2014).

⁴⁹ According to sworn testimony by a scientist in EPA’s Air Quality Modeling Group, the AERMOD model is “readily capable of accurately predicting . . . whether individual sources cause or contribute to a violation of the SO₂ NAAQS. . . . the performance of the AERMOD model was extensively evaluated based on a total of 17 field study

emissions data collected from the Plant's continuous emission monitoring system and real-time meteorological data collected by the National Weather Service at the Asheville Regional Airport. All assumptions made were conservative, so as to underestimate the impact of pollution from the Plant. For example, the modeling assumed that the background SO₂ concentration was zero; therefore, all impacts calculated are solely attributable to emissions from the Plant.⁵⁰

The results of the ARS analysis of the Asheville Plant's emissions were stunning: sulfur dioxide emissions from the Plant have caused and are continuing to cause unsafe ambient air conditions downwind of the Plant.⁵¹ The Plant is regularly and repeatedly causing SO₂ levels far in excess of the ambient air quality standard included in North Carolina and WNCRAQA regulations. The analysis revealed that, on one out of *every three to four days* between 2010 and 2014, the Plant caused SO₂ concentrations higher than 75 ppb in the Asheville community's air. On certain days, SO₂ concentrations were nearly *3.5 times higher* than the 75-ppb standard. Areas with elevated SO₂ concentrations include neighborhoods in South Asheville, Fairview, and Leicester, as well as hiking trails in Bent Creek Forest. Given that exposure to sulfur dioxide for even very short periods of time can result in serious adverse health effects, the communities within the area of impact are rightly concerned.

Sierra Club shared the modeling results with WNCRAQA including a recommendation that a numerical emission limit of 0.029 lbs/MMBtu was needed to prevent exceedances of the 75-ppb standard.⁵² Nevertheless, WNCRAQA adopted numerical limits that will allow Duke to emit sulfur dioxide at a rate more than *triple* its average emission rate in recent years. Indeed, if the Asheville coal units emit as much sulfur dioxide as allowed under the Proposed Permit, surrounding communities could be exposed to SO₂ pollution at unsafe concentrations almost daily (on 83% of the days analyzed) including, on some days, concentrations nearly eighteen times higher than the 75-ppb standard that EPA has judged as safe, and people living farther than thirty miles from the Plant could be exposed to unsafe air pollution.⁵³ Without action by WNCRAQA to enforce the narrative prohibition on such pollution or to revise the Title V permit to include a numerical emission limit that would allow the public to itself monitor for compliance and enforce that prohibition, people living downwind of the Plant could face unhealthy air for years to come.⁵⁴

data bases These evaluations demonstrate the overall good performance of the AERMOD model based on technically sound model evaluation procedures, and also illustrate the significant advancement in the science of dispersion modeling represented by the AERMOD model as compared to other models." *Nat'l Env'tl. Dev. Association's Clean Air Project v. EPA*, Docket No. 10-1252, Decl. of Roger W. Brode at 2-3 (Jan. 18, 2011).

⁵⁰ See Sierra Club Comments, Ex. A (Air Resource Specialists, Inc., Air Quality Dispersion Modeling, 1-Hour Average Standard for Sulfur Dioxide, Duke Energy – Asheville Plant, Expert Report (Feb. 13, 2015)) ("ARS Modeling Report").

⁵¹ ARS Modeling Report at 26.

⁵² *Id.* at 18-27.

⁵³ Air Resource Specialists, Inc., Air Quality Dispersion Modeling, 1-Hour Average Standard for Sulfur Dioxide, Duke Energy – Asheville Plant, Expert Report – Supplement #1 (June 15, 2016), attached hereto as Exhibit 2.

⁵⁴ In May 2015, shortly after pleading guilty to criminal violations of the Clean Water Act in connection with its negligent discharge of pollutants from coal ash ponds at the Asheville Plant and other facilities across the state, Duke announced its intention to retire the Asheville Plant. Thus, absent action by WNCRAQA, the fouling of the Asheville community's air with SO₂ could continue through 2020.

C. Public Opposition to the Draft Permit and WNCRAQA's Response

The Asheville Plant's current Title V permit was issued January 18, 2011, and expired on May 31, 2015.⁵⁵ WNCRAQA received Duke Energy's renewal application on August 22, 2014 and, on March 26, 2015, noticed the Draft Permit for public comment and scheduled a public hearing for April 29, 2015. Hundreds of Asheville residents attended the hearing and called on WNCRAQA to revise the draft permit in order to protect the health of their families and guarantee clean air in their communities. Testimony was nearly uniform in support of a revised permit with numerical limits on SO₂ emissions that would allow the community to monitor and enforce compliance with the permit and regulatory requirements that the Plant not cause any exceedance of the 75-ppb standard.

On April 30, 2015, the Sierra Club submitted timely, detailed comments on the Draft Permit, urging WNCRAQA to establish modeling-based, numerical emission limits stringent enough to ensure that the people of Asheville would no longer be exposed to unsafe amounts of sulfur dioxide. Among other issues raised in those comments, the Sierra Club criticized the Draft Permit as failing to comply with requirements under the Clean Air Act and the WNCRAQA local implementation plan due to the impermissibly lenient proposed numerical limits for SO₂ emissions.⁵⁶ More specifically, the Sierra Club submitted air dispersion modeling demonstrating that the 24-hour, 2.3 lbs/MMBtu limits for SO₂ emissions included in WNCRAQA's Draft Permit were not stringent enough to ensure that compliance with such limits will ensure compliance with the narrative prohibition that the Plant not cause downwind exceedances of the 75-ppb standard.⁵⁷ To translate the narrative prohibitions into clear numerical emission limits, WNCRAQA needed to set one-hour limits of approximately 0.029 lb/MMBtu for the Asheville coal units—an emission rate that the Plant was achieving in 2006, before scrubber efficiency declined and Duke began buying dirtier coal.

Despite its own regulations requiring the transmittal of the Proposed Permit to EPA within 45 days of the hearing,⁵⁸ WNCRAQA did not issue the Proposed Permit until April 15, 2016—352 days after the hearing. Adding insult to injury, when WNCRAQA finally did issue the Proposed Permit, it flatly ignored the pleas of the community for clean air and refused to set the requisite numerical emission limits that ensure compliance with the 75-ppb standard for sulfur dioxide. Instead, WNCRAQA adopted limits that allow Duke to continue burning coal and emitting sulfur dioxide at the Asheville Plant without any change in operations. Duke could actually increase the Plant's SO₂ emissions and still comply with the newly proposed numerical limits. Those limits (0.519 lbs/MMBtu for Unit 1 and 0.532 lbs/MMBtu for Unit 2)⁵⁹ are based on a "retroactive modeling analysis" submitted by Duke that purports to demonstrate compliance

⁵⁵ WNCRAQA, Air Quality Permit, Permit No. 11-628-10B ("2011 Asheville Permit").

⁵⁶ Sierra Club Comments at 8–10.

⁵⁷ *Id.*

⁵⁸ See WNCRAQA Code § 17.0525(a)(6)(B).

⁵⁹ The Proposed Permit specifies that a limit of 26,880 pounds of SO₂ per 24-hour block period applies to each boiler. Based on the units' respective maximum heat input capacity, these limits equate to 0.519 lbs/MMBtu for Unit 1 and 0.532 lbs/MMBtu for Unit 2. See WNCRAQA, Memo Re: Public Comments Regarding Proposed Title V Permit Renewal for Duke Energy Progress, Inc. – Asheville Steam Plant Facility 18 (Mar. 22, 2016) ("WNCRAQA Memo").

with the 1971 SO₂ NAAQS—24-hour and annual standards, which have since been revoked and which were replaced with the more stringent one-hour 75-ppb standard in 2010. Because they are based on obsolete standards, compliance with the proposed numerical limits cannot prevent emissions that cause downwind exceedances of the 75-ppb ambient air quality standard. In short, the proposed numerical limits do nothing to protect the public and require nothing of Duke.

WNCRAQA does not dispute that its newly proposed numerical limits are not stringent enough to ensure that compliance with them will prevent downwind SO₂ concentrations greater than 75 ppb. Moreover, there is no dispute that, when the Plant emits sulfur dioxide at the rates WNCRAQA has proposed to allow—which are designed to prevent violations of the 45-year-old, now-revoked standard—it will cause violations of the governing 75-ppb standard. As discussed below, WNCRAQA’s memorandum addressing public comments⁶⁰ fails to present a reasonable interpretation of its regulations that could justify the proposed limits and the ongoing violation of the current permit and applicable requirements. As a result, the community continues to suffer from concentrations of sulfur dioxide at levels that EPA has concluded are harmful to human health.

Although WNCRAQA cannot—and, indeed, does not attempt to—justify its reliance on outdated standards, its actions with respect to the Proposed Permit, nevertheless, demonstrate its agreement with the following: (1) the prohibitions against causing an exceedance or contributing to a violation of an ambient air quality standard are applicable requirements; (2) the permitting agency has a duty to translate those applicable requirements into numerical emission limits that the public can monitor and enforce; and (3) plant-specific air dispersion modeling is the proper tool for setting numerical emission limits.

III. GROUNDS FOR OBJECTION TO ISSUANCE OF THE PROPOSED TITLE V OPERATING PERMIT FOR DUKE ENERGY’S ASHEVILLE PLANT

The Sierra Club hereby petitions EPA to object to issuance of the Proposed Permit for the Asheville Plant because the permit fails to impose conditions that ensure compliance with applicable requirements that prohibit the exceedance of the 75-ppb standard for sulfur dioxide and fails to establish a schedule for compliance with current violations of those applicable requirements and of the existing permit. The people who live in the neighborhoods downwind of Duke’s Plant and who are exposed to unsafe levels of sulfur dioxide on a regular basis have waited long enough for relief. The Clean Air Act entitles them to relief. Accordingly, we respectfully urge EPA to object to the Proposed Permit.

A. The Proposed Permit Lacks the Permit Conditions Necessary to Monitor and Enforce Compliance with All Applicable Requirements.

WNCRAQA’s Proposed Permit fails to translate the narrative provisions of the local implementation plan into specific permit conditions the compliance with which the public can readily monitor and enforce. The plain language of WNCRAQA’s regulations prohibits sources like the Asheville Plant from causing an exceedance of or contributing to the violation of an

⁶⁰ *Id.* at 18.

ambient air quality standard.⁶¹ Here, the relevant ambient air quality standard for sulfur dioxide is 75 ppb.⁶² Therefore, a Title V permit for a major SO₂-emitting source must include permit conditions that ensure that the source will not cause downwind concentrations of sulfur dioxide great than 75 ppb. Because the Proposed Permit lacks such permit conditions, EPA should object.

1. *WNCRAQA's Narrative Prohibitions of Pollution that Causes the Exceedance of or Contributes to the Violation of an Ambient Air Quality Standard Are Applicable Requirements.*

As discussed above, WNCRAQA's regulations prohibit air pollution sources from "caus[ing] any ambient air quality standard . . . to be exceeded" and from "contribut[ing] to a violation of any ambient air quality standard"⁶³ and also require that all sources "shall be operated with such control or in such manner that the source shall not cause . . . ambient air quality standards . . . to be exceeded at any point beyond the premises on which the source is located."⁶⁴ These provisions are part of WNCRAQA's local implementation plan and, as such, are applicable requirements under the Clean Air Act.⁶⁵

WNCRAQA does not directly dispute that these provisions are applicable requirements. (Indeed, it points to Section 4.0501(c) of the WNCRAQA Code as the authority for its newly proposed numerical SO₂ emission limits.⁶⁶) Instead, WNCRAQA ignores the plain language of the applicable requirements—as well as Sierra Club's comments discussing that language—and attempts to rebut a strawman argument that commenters have not put forward, stating that: "promulgation of a [NAAQS] does not, in and of itself, result in an applicable requirement in the form of an emission limit for Title V sources."⁶⁷

WNCRAQA misapprehends the Sierra Club's comments, which nowhere suggest that EPA's adoption of the 2010 SO₂ NAAQS creates a new applicable requirement where one did not exist before. The applicable requirements we point to—the prohibitions on causing an exceedance of or contributing to the violation of ambient air quality standards in Sections 4.0401(c) and 4.0501(c)⁶⁸—were created by WNCRAQA long before the 2010 SO₂ NAAQS were promulgated. The fact that these requirements were drafted in such a way that compliance with them necessarily implicates the particular ambient air quality standards that WNCRAQA has since adopted does not diminish their enforceability. Rather, it underscores WNCRAQA's responsibility to translate those narrative provisions with respect to the governing ambient air quality standard—for sulfur dioxide: 75 ppb—into specific permit conditions when renewing Title V permits.

⁶¹ WNCRAQA Code § 4.0401(c); *id.* § 4.0501(c).

⁶² *Id.* § 4.0402(d).

⁶³ *Id.* § 4.0401(c).

⁶⁴ *Id.* § 4.0501(c).

⁶⁵ 40 C.F.R. § 70.2 (defining applicable requirements); WNCRAQA Code § 17.0103(5) (same).

⁶⁶ Proposed Permit at 4.

⁶⁷ WNCRAQA Memo at 4.

⁶⁸ WNCRAQA Code § 4.0401(c); *id.* § 4.0501(c).

2. *The Title V Operating Permit for the Asheville Plant Must Include Permit Conditions that Ensure Compliance with All Applicable Requirements.*

WNCRAQA apparently recognizes the need to translate the narrative provision of Section 4.0501(c) into numerical emission limits; it has done just that in the Proposed Permit, which sets numerical limits designed to prevent the violation of the decades-old, now-revoked 1971 SO₂ NAAQS.⁶⁹ However, WNCRAQA's efforts to avoid its regulatory duty of setting permit conditions that will prevent downwind sulfur dioxide pollution at concentrations above 75 ppb leave it without an explanation for the newly proposed limits. WNCRAQA tries to justify its action by pointing to the ongoing EPA area designation process for the 2010 SO₂ NAAQS. This is a red herring. The area designation process is distinct from WNCRAQA's Title V permitting obligations. Moreover, and as discussed below, EPA already has rejected this very argument.⁷⁰

The Clean Air Act,⁷¹ federal regulation,⁷² and WNCRAQA's own regulation⁷³ are clear. Title V permits "shall include enforceable emission limitations and standards . . . and such other conditions *as are necessary to assure compliance with applicable requirements* of this chapter, including the requirements of the applicable implementation plan"⁷⁴ and "shall specify emission limitations and standards, including operational requirements and limitations, *that assure compliance with all applicable requirements* at the time of permit issuance."⁷⁵ These provisions require the adoption of specific permit conditions that have been shown to assure compliance with the applicable requirements that a pollution source not cause the exceedance of governing ambient air quality standards.

In addition, Section 4.0501(c) of the WNCRAQA Code expressly directs the permitting authority to impose additional permit conditions that effectuate the prohibition on violating an ambient air quality standard. Where more stringent limits than provided by regulation are necessary to prevent SO₂ concentrations above 75 ppb, "the permit *shall contain* a condition requiring these controls."⁷⁶ Unable to escape this clear mandate, WNCRAQA attempts to rewrite Section 4.0501(c) and grant itself the discretion to set limits that prevent exceedances of the now-revoked 1971 SO₂ NAAQS rather than the current standard. WNCRAQA represents the above-quoted provision as "broad language indicating that 'controls more stringent than named in the applicable emission standards in this Section' *may be required* 'to prevent violation of the ambient air quality standards'"⁷⁷—conveniently omitting the mandatory "shall contain" language. WNCRAQA's interpretation only works if EPA fails to read the relevant regulation in full. Again, that regulation provides:

⁶⁹ Proposed Permit at 4.

⁷⁰ WNCRAQA Memo at 5–6, 19–20.

⁷¹ 42 U.S.C. § 7661c(a).

⁷² 40 C.F.R. § 70.6(a)(1).

⁷³ WNCRAQA Code § 17.0508(b).

⁷⁴ See 42 U.S.C. § 7661c(a) (emphasis added).

⁷⁵ 40 C.F.R. § 70.6(a)(1); WNCRAQA Code § 17.0508(b) (emphasis added).

⁷⁶ WNCRAQA Code § 4.0501(c) (emphasis added).

⁷⁷ WNCRAQA Memo at 5 (emphasis added).

When controls more stringent than named in the applicable emission standards in this Section are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit *shall contain a condition requiring these controls*.⁷⁸

This language imposes upon WNCRAQA a clear duty to set additional permit conditions when those conditions prove necessary to prevent air pollution at concentrations above governing ambient air quality standards—in the case of sulfur dioxide: 75 ppb. Whether such additional permit conditions are required is a question of fact, not a matter of agency discretion. Here, the facts demonstrate that such conditions are required. WNCRAQA does not dispute those facts, and, thus, its failure to fulfill the duty to establish requisite permit conditions is unlawful, and its attempt to dispose of that duty by ignoring the clear regulatory language is unreasonable.

Simply put, WNCRAQA’s decision to establish numerical emission limits in the Proposed Permit designed to prevent the exceedance of a 45-year-old standard that has since been expressly revoked⁷⁹ is unreasonable as well as arbitrary and capricious. Indeed, WNCRAQA admits that the modeling and newly proposed limits were calibrated to ensure that the Asheville units “could comply with the SO₂ standard that was in effect in 2003,” even though it is issuing a permit in 2016, long after the 2010 SO₂ NAAQS were promulgated and went into effect in North Carolina.⁸⁰ There is simply no justification for this action.

Moreover, in issuing Title V permits in the past, the North Carolina Division of Air Quality (“DAQ”) has relied on a provision of the SIP—15A N.C.A.C. § 2D.0501(c)—that is nearly identical to the applicable requirements in WNCRAQA’s implementation plan⁸¹ in order to impose numerical emission limits for sulfur dioxide from coal-burning power plants more stringent than the 2.3 lbs/MMBtu limit prescribed by state regulation. For example, the Title V permits for Duke’s Marshall Steam⁸² and Roxboro Steam Electric Plant,⁸³ both cite the applicable requirement prohibiting pollution that causes the exceedance or violation of the NAAQS and used modeling to calculate numerical limits for SO₂ emissions intended to ensure that the plants did not violate the SO₂ NAAQS that were in force and effect at the time those limits were first established.⁸⁴

WNCRAQA itself acknowledges that the numerical SO₂ emission limit DAQ imposed in the permit for the Roxboro plant (imposed prior to North Carolina’s adoption of the 2010 SO₂ NAAQS), “was required as a result of modeling that was conducted several years ago to address the 1971 SO₂ NAAQS.”⁸⁵ WNCRAQA attempts to argue that “this limit is not related to the

⁷⁸ WNCRAQA Code § 4.0501(c) (emphasis added).

⁷⁹ 75 Fed. Reg. 35,550.

⁸⁰ WNCRAQA Memo at 18.

⁸¹ Compare 15A N.C.A.C. §§ 2D.0401(c), 2D.0501(c), with WNCRAQA Code §§ 4.0401(c), 4.0501(c).

⁸² Air Quality Permit No. 03676T50, for Duke Energy Carolina’s Marshall Steam Station (Mar. 5, 2014).

⁸³ Air Quality Permit No. 01001T48, for Duke Energy Progress’ Roxboro Steam Electric Plant (Feb. 7, 2014).

⁸⁴ The 2010 SO₂ NAAQS became effective in North Carolina in October 2014. See 15A N.C.A.C. § 2D.0402(d); 78 Fed. Reg. 47,191-02.

⁸⁵ WNCRAQA Memo at 4.

2010 SO₂ NAAQS, and cannot be used by the Agency to justify including a more stringent emissions limit to address the 2010 SO₂ standard in the permit as part of this renewal.”⁸⁶ But this argument misses the point entirely. What matters is that DAQ, the permitting authority, identified an applicable requirement and interpreted it as requiring the adoption of additional permit conditions—*i.e.*, numerical limits on the emission of sulfur dioxide—necessary to prevent violation of ambient air quality standards and included those limits as permit conditions. Ignoring DAQ’s prior practice in this context is unreasonable, and WNCRAQA fails to explain why basing an emission limit on modeling was appropriate in the past, and is appropriate now, but only for an outdated and revoked NAAQS standard.

As discussed in our comments, WNCRAQA must include modeling-based numerical emission limits for sulfur dioxide in the Title V permit for the Asheville Plant. Those limits must be stringent enough to ensure that, when met, the Plant will not cause downwind exceedances of the 75-ppb standard for sulfur dioxide. WNCRAQA has not identified any reason to reject the ARS modeling analysis submitted with our written comments. That analysis demonstrates that the proposed emission limits are insufficient to prevent the exceedance of the 75-ppb ambient air quality standard and that a limit of 0.029 lb/MMBtu is warranted. Without such a limit, the permit cannot ensure compliance with the applicable requirements identified above.

3. *EPA’s Decisions on Other Title V Permits Require an Objection to the Proposed Permit.*

WNCRAQA relies on selective citation of EPA’s actions on other Title V permits to argue that the Proposed Permit for the Asheville Plant is lawful. Contrary to WNCRAQA’s assertions, however, EPA’s prior actions justify an objection to the Proposed Permit, which lacks numerical emission limits stringent enough to ensure compliance with WNCRAQA’s narrative prohibitions on exceeding or violating the 75-ppb standard for sulfur dioxide. For example, WNCRAQA argues that EPA’s decision with respect to the New Hampshire Department of Environmental Services’ (“NHDES”) reissuance of the Schiller coal plant’s Title V permit supports WNCRAQA’s actions in this case. Yet EPA objected to that permit on the grounds that the permit did not include numerical emission limits stringent enough to ensure that the plant would not cause violations of the 2010 SO₂ NAAQS.⁸⁷ WNCRAQA’s cherry-picking citation of EPA’s order hides this fact.

Like North Carolina, New Hampshire’s SIP includes an applicable requirement that prohibits a major source from causing a violation of a NAAQS, and it requires NHDES to set limits to ensure compliance with that applicable requirement—though, in New Hampshire, the prohibition is against causing NAAQS violations in downwind states:

The division shall apply special emission limits to stationary sources on a case-by-case basis to insure that their air quality impacts on adjacent states . . . shall not prevent the attainment or maintenance of National Ambient Air Quality Standards in those states.⁸⁸

⁸⁶ *Id.*

⁸⁷ *In the Matter of Pub. Serv. of NH*, Order on Petition No. VI-2014-04 (July 28, 2015) (“Schiller Order”).

⁸⁸ N.H. Code Admin. R. Env-A 616.01.

In that proceeding, Sierra Club argued that NHDES had a duty to translate the applicable requirement into numerical SO₂ emission limits that ensured the Schiller plant would not cause a violation of the NAAQS in Maine when it reissued the plant's Title V permit. Sierra Club submitted AERMOD modeling demonstrating that the proposed permit limits were not stringent enough to ensure compliance with the prohibition on causing NAAQS violations in downwind states. NHDES refused to impose the requisite stricter limits, arguing—like WNCRAQA has here—that Sierra Club was impermissibly trying to enforce the NAAQS and short circuit EPA's area designation process. NHDES argued that establishing the numerical limits necessary to prevent NAAQS violations through the Title V permitting process was “premature” and that the people of Maine would have to wait for the full NAAQS designation and SIP process to play out before NHDES would act to include emissions limits effecting the applicable requirement not to violate the NAAQS in the Title V permit.⁸⁹

EPA flatly rejected NHDES's argument. Though EPA's analysis occurred in the context of interstate transport (because transport was the focus of the applicable requirement at issue), EPA's reasoning in objecting to the Schiller permit bears directly on EPA's review of the Proposed Permit for the Asheville Plant. EPA concluded that, where the SIP included an applicable requirement barring violations of NAAQS, the permitting authority must translate such applicable requirement via specific permit limits. Moreover, EPA agreed with the Sierra Club that air dispersion modeling demonstrated the insufficiency of the proposed limits.⁹⁰ Thus, EPA objected, in part, to the Schiller permit, finding that:

Although NH Rule 616 is an applicable requirement for purposes of New Hampshire's Title V program, there is no . . . reasonable interpretation provided in the permit record explaining that either (1) the rule does not apply to the Proposed Permit; or (2) the terms and conditions of the current permit are adequate to satisfy NH Rule 616. . . .

Specifically, the permit record must include the state's interpretation and application of Rule 616 as it applies to the case-specific facts of the Schiller facility, including consideration of the information identified in the Petition and the public comments.⁹¹

Moreover, EPA specifically rejected NHDES's argument that, because there is a separate, parallel area designation process, NHDES did not need to translate an applicable requirement prohibiting NAAQS violations into numerical emission limits in a Title V permit renewal context. NHDES argued that “it [was] in the process of addressing its obligations relative to the 2010 1-hour SO₂ NAAQS through the designations process” and that it was “premature to attempt to address SO₂ emissions from Schiller Station relative to the 2010 1-hour SO₂ NAAQS until the attainment designation process is finalized, because the level and type of limitations required, if any cannot be determined until that process is complete.” Again, EPA flatly rejected

⁸⁹ Schiller Order at 8.

⁹⁰ *Id.* at 9–10.

⁹¹ *Id.*

NHDES's contention, explaining that the prohibition of NAAQS violations in downwind states was an applicable requirement and that:

[A] permit must comply with all applicable requirements that are part of an approved SIP. The petition cites to NH Rule 616, which is a part of the New Hampshire SIP and is a Title V applicable requirement for sources in New Hampshire.⁹²

Rather than responding to EPA's reasoning in objecting to the Schiller permit, which reasoning is directly on point, WNCRAQA, instead, relies on EPA's discussion of another New Hampshire SIP provision—one that simply codified the 2010 SO₂ NAAQS. This part of EPA's order, however, has no bearing here. Sierra Club is not arguing that simply because North Carolina and WNCARQA adopted the 2010 SO₂ NAAQS new emission limits are required. Instead, Sierra Club and other commenters on the Draft Permit identified relevant applicable requirements—*i.e.*, the narrative prohibitions on causing exceedance or violation of an ambient air quality standard in Section 4.0501(c), which closely resemble the NH SIP interstate transport narrative provision—and it is those applicable requirements that compel the inclusion of numerical emission limits. Moreover, Section 4.0501(c) identifies the very “operational requirements and limitations” necessary to assure compliance—namely, permit conditions requiring more stringent controls. Thus, WNCRAQA's reliance on the Schiller Order is misplaced.

Similarly, WNCRAQA asserts that EPA's refusal to object to the Homer City Title V permit in Pennsylvania justifies WNCRAQA's refusal to translate the applicable requirements identified above into specific permit conditions. Yet again, however, WNCRAQA glosses over critical points that undercut its position with respect to the Asheville Plant's Proposed Permit. First, WNCRAQA never identifies the fact that by the time EPA acted on Sierra Club's petition to object to the Homer City permit, the Pennsylvania Department of Environmental Protection (“PaDEP”) already had imposed SO₂ limits sufficient to ensure that the plant's emissions would not cause the violation of the 2010 SO₂ NAAQS.⁹³

Second, in Homer City, EPA identified the relevant inquiry as whether petitioners have demonstrated that the emission limits they request are necessary to assure compliance with an applicable requirement included in the SIP.⁹⁴ This is the core issue in this case. WNCRAQA ignores both of these points and, instead, tries to create a parallel where one does not exist.

Finally, unlike New Hampshire's and North Carolina's applicable requirements—which specifically prohibit emissions that will cause violation of air quality standards and require the permitting agency to impose additional permit conditions to prevent such violations—the applicable requirement in Pennsylvania does not refer to any specific standard or to the

⁹² *Id.* at 10.

⁹³ *In the Matter of EME Homer City Generation LP*, Order on Petition Nos. III-2012-06, III-2012-07, and III-2013-02 11 (July 30, 2014) (“Homer City Order”) (“Notably . . . the Homer City Petitioner recognizes that ‘PADEP has, in fact, taken steps to set permit limits for the Plant to prevent exceedances of the SO₂ NAAQS.’”).

⁹⁴ *Id.* at 15 (“[T]itle V permits do need to include conditions necessary to assure compliance with applicable requirements.”).

imposition of permit conditions. Instead, the Pennsylvania regulation at issue in the Homer City matter was a general prohibition of air pollution: “No person may permit air pollution as that term is defined in the act.”⁹⁵ Repeatedly characterizing Pennsylvania’s pollution prohibition as “broad,” “general,” and “sweeping,” EPA deferred to PaDEP’s interpretation of its rule as not imposing any independent duties other than what PaDEP was already doing.⁹⁶

WNCRAQA’s regulations could not be more different than the general Pennsylvania provision quoted above: (1) they expressly prohibit behavior that will lead to pollution at concentrations above governing air quality standards, and (2) they expressly require that, when issuing a permit, WNCRAQA set specific conditions necessary to prevent exceedances of such standards. Thus, the New Hampshire regulations that led EPA to object when sufficiently stringent SO₂ emission limits were not incorporated are far more on point.

4. *EPA’s Area Designation Process Does Not Foreclose the Protection of Public Health through Individual Permitting Action.*

As WNCRAQA has correctly noted, EPA has been working with stakeholders on its process for implementation of the 2010 SO₂ NAAQS and, in coming years, will determine whether the air quality in particular geographic areas across the country satisfies the new standard. For areas that elect to use monitoring to characterize air quality, final area designations by EPA are not due until December 2020. State attainment plans based on such designations are not due until August 2022. By that time, the Asheville coal units will have been retired. This fact is little comfort to the parents whose children will be breathing air with elevated levels of sulfur dioxide in the intervening years.

WNCRAQA points to no authority in support of the proposition that simply because EPA and the states have processes for area designation and SIP revision, such processes obviate clear regulatory duties to issue permits that ensure compliance with applicable requirements. WNCRAQA’s unsupported assertions do not warrant any deference. EPA already has rejected the argument that the area designation process suspends a permitting agency’s duty to set permit limits that ensure compliance with applicable requirements.⁹⁷ Accordingly, WNCRAQA’s invocation of the area designation process to absolve it of its duty to establish permit conditions protective of public health should be rejected.

B. The Proposed Permit Lacks a Schedule for Compliance with Current Violations of Applicable Requirements and the Plant’s Existing Permit.

As discussed above, Section 4.0501(c) sets forth applicable requirements with which operators must comply. Specifically, that section requires that a source of air pollution “shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards of Section .0400 of this Chapter to be to be exceeded at any point beyond the premises on which the source is located.” As the air dispersion modeling submitted with our

⁹⁵ 25 Pa Code § 121.7.

⁹⁶ Homer City Order at 19.

⁹⁷ See *supra* Section III.A.3.

comments on the Draft Permit demonstrates, the Asheville Plant has caused, and likely will continue to cause, the exceedance of the 75-ppb ambient air quality standard for sulfur dioxide at points beyond the Plant's premises. Because the Section 4.0501(c) requirement is included as a condition of the Plant's current Title V permit,⁹⁸ Duke has been operating the Asheville Plant in violation of that permit.⁹⁹

In addition to its duty to set numerical emission limits that translate this applicable requirement when issuing a Title V permit, WNCRAQA must provide "a description of the compliance status of the source."¹⁰⁰ Where, as here, a permittee is operating a source of air pollution in violation of its existing permit, the permitting agency must provide "a narrative description of how the source will achieve compliance" with applicable requirements¹⁰¹ and establish a compliance schedule for "requirements for which the source is not in compliance at the time of permit issuance."¹⁰² The Proposed Permit includes none of these components.

In response to our comments regarding the Plant's compliance status, WNCRAQA ignores the applicable requirement and permit condition that we identify as being violated by the Plant's operations, stating that "the Sierra Club has not demonstrated that promulgation of a NAAQS results in an applicable requirement for Title V permitting purposes."¹⁰³ Again, such response reveals a fundamental misunderstanding of the governing regulations and the comments put forward. The Sierra Club has not argued that the promulgation of a NAAQS results in a new applicable requirement. On the contrary, we have pointed to the *existing* applicable requirement included in Section 4.0501(c) of WNCRAQA's Code, which also has been incorporated into the current permit—and with which Duke claims to be complying.¹⁰⁴ Unlike in the Homer City matter where petitioners' arguments regarding current violations were rejected because the current permit did not include nor was required to include emission limits reflecting the 2010 SO₂ NAAQS, the current permit for the Asheville Plant already includes the requirement that the Plant be operated so as not to cause air pollution at levels above governing standards.¹⁰⁵ It is WNCRAQA's duty to provide notice that Duke has been violating its permit, explain how it will come into compliance—*e.g.*, by keeping Plant emissions below a sufficiently stringent numerical limit—and set a schedule for such compliance. Sierra Club requests that EPA object to the permit on these grounds as well.

⁹⁸ 2011 Asheville Permit Sec. 5(II).

⁹⁹ Proposed Permit at 39.

¹⁰⁰ 40 C.F.R. § 70.5(c)(8).

¹⁰¹ 40 C.F.R. § 70.6(c)(3).

¹⁰² 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(c)(3).

¹⁰³ WNCRAQA Memo at 9.

¹⁰⁴ See Duke Energy, Permit Renewal Application for the Asheville Steam Electric Plant 1-1 (August 2014).

¹⁰⁵ 2011 Asheville Permit Sec. 5(II).

IV. CONCLUSION

For the reasons cited above, the Sierra Club respectfully requests that the Administrator grant this Petition to Object to the issuance of the proposed Title V operating permit for the Asheville Plant and order WNCRAQA to include in a new permit modeling-based, numerical emission limits for sulfur dioxide stringent enough to guarantee that pollution from the Asheville Plant will not cause exceedances of one-hour, 75-ppb ambient air quality standard downwind of the Plant.

Respectfully submitted this 17th day of June, 2016,

/s/ Bridget M. Lee

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