BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF Public Service Company of Colorado, dba Xcel Energy, Pawnee Station Permit Number: 96OPMR129 Issued by the Colorado Department of Public Health and Environment, Air Pollution Control Division	)	PETITION TO OBJECT TO ISSUANCE OF A STATE TITLE V OPERATING PERMIT Petition Number: VIII-2010-

Pursuant to Section 505(b)(2) of the Clean Air Act, 42 USC § 7661d(b)(2), and 40 CFR § 70.8(d), WildEarth Guardians (hereafter "Petitioner") hereby petitions the Administrator of the U.S. Environmental Protection Agency ("EPA") to object to the issuance of the January 1, 2010 Title V operating permit (hereafter "Title V Permit") issued by the Colorado Department of Public Health and Environment, Air Pollution Control Division ("Division") for Public Service Company of Colorado doing business as Xcel Energy (hereafter "Xcel Energy") to operate the Pawnee coal-fired power plant located in Morgan County, Colorado. *See* Exhibit 1, Public Service Company of Colorado, Pawnee Station Title V Permit, Permit Number 96OPMR129 (January 1, 2010).

WildEarth Guardians hereby petitions the Administrator to object to the issuance of the Title V permit due to its failure to assure compliance with prevention of significant deterioration ("PSD") requirements under the Clean Air Act, to require sufficient periodic monitoring to ensure harmful levels of particulate matter are not released from the smokestack of the power plant, to limit and sufficiently monitor fugitive particulate emissions, to limit toxic air emissions in accordance with section112(j) of the Clean Air Act, and to ensure that carbon dioxide emissions are appropriately limited in accordance with the Clean Air Act.

INTRODUCTION

The Pawnee coal-fired power plant is a major stationary source of air pollution located near Brush, Colorado. The power plant consists of one 547 megawatt coal-fired boiler that generates steam to produce electricity. In the process, the power plant releases massive amounts of air pollution that is known to be harmful to public health and the environment. According to

the Technical Review Document ("TRD") for the Title V Permit and data from the EPA's Acid Rain Program Database, the Pawnee coal-fired power plant annually releases:

- 4,595 tons of nitrogen oxides ("NO_x");
- 13,217 tons of sulfur dioxide ("SO_2");
- 598.62 tons of carbon monoxide ("CO");
- 73.71 tons of volatile organic compounds ("VOCs");
- 153.91 tons of particulate matter less than 10 microns in diameter ("PM_{10}");
- 20.3 tons of hydrochloric acid;
- 360 pounds of mercury, a potent neurotoxin; and

See Exhibit 2, Technical Review Document for Renewal/Modification of Operating Permit 96OPMR129 (Revised September 2009) at 26-27 and Exhibit 3, 2008 Emissions Data for Pawnee Station from EPA Acid Rain Program Emissions Database (Last Accessed February 19, 2010). Furthermore, according to data submitted to the EPA's Acid Rain Program, in 2008 the Pawnee plant annually releases 3,837,802 tons of carbon dioxide, a greenhouse gas that is fueling global warming.

The Division submitted the proposed Title V Permit for EPA review on November 9, 2009. The EPA's 45 day review period ended on December 24, 2009. To the best of Petitioner's knowledge, the EPA did not object to the issuance of the Title V Permit for the Pawnee coal-fired power plant. Since that time, the Division has issued a final Title V Permit, dated January 1, 2010. This petition is thus timely filed within 60 days following the conclusion of EPA's review period and failure to raise objections.

This petition is based on objections to the permit raised with reasonable specificity during the public comment period. To the extent the EPA may somehow believe this petition is not based on comments raised with reasonable specificity during the public comment period, Petitioner requests the Administrator also consider this a petition to reopen the Title V Permit for the Pawnee coal-fired power plant in accordance with 40 CFR § 70.7(f).[1] A permit reopening and revision is mandated in this case because of one or both of the following reasons:

1. Material mistakes or inaccurate statements were made in establishing the terms and conditions in the permit. *See* 40 CFR § 70.7(f)(1)(iii). As will be discussed in more detail, the Title V Permit for the Pawnee coal-fired plant suffers from material mistakes in violation of applicable requirements, etc.; and

2. The permit fails to assure compliance with the applicable requirements. *See*, 40 CFR § 70.7(f)(1)(iv). As will be discussed in more detail, the Title V Permit for the Pawnee coal-fired power plant fails to assure compliance with several applicable requirements.

[1] To the extent the Administrator may not believe citizens can petition for reopening for cause under 40 CFR § 70.7(f), Petitioner also hereby petitions to reopen for cause in accordance with 40 CFR § 70.7(f) pursuant to 5 USC § 555(b).

PETITIONER

Petitioner WildEarth Guardians is a Santa Fe, New Mexico-based nonprofit membership group dedicating to protecting and restoring the American West. WildEarth Guardians has an office in Denver and members throughout Colorado. On July 3, 2009, Petitioner submitted detailed comments regarding the Division's proposal to renew the Title V Permit for the Pawnee Station. *See* Exhibit 4, WildEarth Guardians Comments on Proposed Title V Permit (July 3, 2009). The objections raised in this petition were raised with reasonable specificity in comments on the draft Title V Permit. As will be explained in more detail, to the extent that objections may not have been raised with reasonable specificity in comments on the draft Title V Permit, this was due to the fact that it was either impracticable to raise such objections during the public comment period or the grounds for such objection arose after the public comment period.

Petitioner requests the EPA object to the issuance of Permit Number 96OPMR129 for the Pawnee coal-fired power plant and/or find reopening for cause for the reasons set forth below.

GROUNDS FOR OBJECTION

I. THE TITLE V PERMIT FAILS TO ASSURE COMPLIANCE WITH PSD REQUIREMENTS

A Title V Permit is required to include emission limitations and standards that assure compliance with all applicable requirements, including requirements under the Clean Air Act's Prevention of Significant Deterioration ("PSD") program, at the time of permit issuance. *See* 42 USC § 7661c(a); 40 CFR § 70.6(c)(1). In this case, evidence indicate that PSD requirements are, in fact, applicable to the Pawnee power plant and that the facility is currently in violation of PSD requirements. Despite this, the Title V Permit fails to both assure compliance with PSD and to bring the Pawnee power plant into compliance with PSD through a compliance plan.

Pursuant to Part C of the Clean Air Act, the Colorado State Implementation Plan ("SIP") requires that no construction or operation of a major modification of a major stationary source occur in an area designated as attainment without first obtaining a permit under 40 CFR § 51.166 and the Colorado SIP. *See* 40 CFR § 51.166(a)(7)(iii) and the Colorado SIP, 5 CCR § 1001-5, Part D. The Colorado SIP further prohibits the operation of a major stationary source after a major modification unless the source has applied Best Available Control Technology ("BACT") to control emissions of harmful air pollutants. *See* 40 CFR § 51.166(j) and the Colorado SIP, 5 CCR § 1001-5, Part D, Section VI.A.1.b.

The Pawnee coal-fired power plant is a major stationary source within an area classified as attainment for all criteria pollutants. According to information from Xcel Energy, the plant underwent major modifications between 1994 and 1997 without first obtaining the required PSD permit. These modifications have resulted in unpermitted and uncontrolled emissions of significant amounts of SO_2, NO_x, and PM_{10}. In response to this information, on June 27, 2002 the EPA issued a notice of violation ("NOV") to Xcel Energy regarding violations of PSD under the Clean Air Act at Pawnee coal-fired power plant. *See* Exhibit 4 at Exhibit 1, EPA Notice of

Violation to Xcel Energy (June 26, 2002). This NOV and the underlying violations have yet to be resolved. For more than fifteen years, and likely longer, the plant has operated and continues to operate in a state of noncompliance with the PSD provisions of the Clean Air Act and the Colorado SIP.

Accordingly, the Division was both required to prepare a Title V Permit that includes PSD requirements, including BACT requirements, and to include a compliance plan to bring the facility into compliance in accordance with 42 USC §§ 7661b(b) and 7661c(a) and 40 CFR § 70.6(b)(3). Unfortunately, the Division failed to do so. Accordingly, the Administrator must object to the issuance of the Title V Permit for the Pawnee coal-fired power plant. Evidence of noncompliance with PSD requirements and the failure of the Title V Permit to ensure compliance with applicable requirements are as follows:

A. EPA Issuance of a Notice of Violation Constitutes a Finding of Noncompliance

The EPA NOV issued to Xcel Energy on June 26, 2002 states:

> Xcel violated and continues to violate Clean Air Act, Part C: Prevention of Significant Deterioration of Air Quality ("PSD"), 42 U.S.C. §§7470 to 7492, and the permitting requirements of Colorado Air Quality Control Commission Regulation No. 3, Part B, IV.D.3 and 40 C.F.R. §52.21, by constructing and operating modifications at the Pawnee Station…without the necessary permits and by constructing and operating without the application of BACT required by the Colorado SIP.

Exhibit 4 at Exhibit 1 at 5. The 2002 NOV establishes that the EPA conclusively found that the Pawnee coal-fired power plant was in violation of PSD requirements..

Indeed, the 2002 NOV is sufficient to demonstrate noncompliance with PSD for the purposes of a Title V Permit. In a situation very similar to the situation regarding the Pawnee NOV, the Second Circuit held that an NOV is sufficient to demonstrate noncompliance with PSD for the purposes of the Title V permitting program. *See* NYPIRG *v. Johnson*, 427 F.3d 172, 180 (2nd Cir. 2005). In *NYPIRG v. Johnson,* the Second Circuit Court of Appeals recognized that "to issue a NOV, the Administrator must first find a source in violation of an applicable plan or permit." *Id.* at 181. The court further reasoned that in issuing an NOV, a permitting authority had determined that PSD requirements "are, indeed, applicable." *Id.* The court held that the issuance of an NOV by the State of New York constituted a finding of noncompliance with PSD requirements and that the EPA was required to object to the issuance of a Title V permit that failed to ensure compliance with PSD. *Id.* at 186.

According to 42 USC § 7413(a)(1), the EPA Administrator shall issue a notice of violation when he finds "that any person has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit." The statute clearly states that an NOV is issued by the EPA only after making a finding of a violation, or a finding of noncompliance. Further, because the EPA, rather than the stated, issued the NOV, it is even more clear here than in the *NYPIRG* case that the NOV constitutes a sufficient finding of noncompliance.

The Tenth Circuit has not yet addressed the sufficiency of an NOV as legal proof of noncompliance with PSD requirements under Title V. Only one circuit has issued a holding in conflict with the Second Circuit position on NOVs. *See Sierra Club v. Johnson*, 541 F.3d 1257 (11th Circuit 2008). The reasoning in *NYPIRG v. Johnson*, however, applies to the facts here regarding the Pawnee NOV. This reasoning mandates that in this case, the Title V Permit ensure the Pawnee coal-fired power plant complies with PSD. The Title V Permit fails to ensure compliance with PSD in light of the EPA's finding of noncompliance, and therefore the Administrator must object to its issuance.

B. Major Modifications Have Occurred at the Pawnee Plant, Triggering PSD

Even if the EPA rejects WildEarth Guardians' contention that an NOV constitutes a finding of noncompliance, at a minimum the NOV shows clear evidence of a valid suspicion of noncompliance. This valid suspicion is confirmed by actual documents from Xcel Energy that demonstrate major modifications occurred at the Pawnee coal-fired power plant without prior approval under PSD. Indeed, Xcel's own records confirm that at least two major modifications, likely more, were made to Pawnee during the 1990s:

(1) Reheater redesign and replacement.

An Xcel Capital Project Summary Sheet submitted July 7, 1993 states that:

> The top bank plus all 256 reheater assemblies in the two middle banks will be replaced during the planned ten-week outage in 1994. . . In addition to replacing the assemblies, we will upgrade some of the material used, and change some of the manufacturing methods to prevent further similar damage in the past and prolong the life of the new assemblies. The reheater assemblies will also be redesigned so as to prevent the excessive pluggage currently seen.

See Exhibit 4 at Exhibit 2. The Pawnee Planned Outages data shows that there were planned outages for "major turbine overhaul (720 hours or longer)" between 9/30/1994 and 12/31/1994. *See* Exhibit 4 at Exhibit 3. EPA operations data from 1994 shows that Pawnee reported zero hours of operation during the months of October and November, and only 284 hours in December. *See* Exhibit 4 at Exhibit 4. Together, these documents confirm that the 1994 modification noted in the NOV did occur. Further, the fact that Pawnee shut down operations for ten weeks is a strong indication that this modification was not routine maintenance or repair.

(2) Upgrade of condenser tubes.

An Xcel Request for Specific Appropriation dated July 10, 1996 states that $4.5 million in emergency funding was allocated for the new condenser tubes. *See* Exhibit 4 at Exhibit 5. It goes on to state that "The project will be completed during the January 4 through March 2, 1997 outage." *See* Exhibit 4 at Exhibit 6. Pawnee Planned Outages data shows that there were planned outages for "major turbine overhaul (720 hours or longer)" between 2/28/1997 and 4/30/1997. *See* Exhibit 4 at Exhibit 3. EPA operations data from 1997 shows that Pawnee

reported 168 hours of operation in February, zero hours in March, and 249 hours in April. *See* Exhibit 4 at Exhibit 7. Together, these documents confirm that the 1997 modification noted in the NOV did occur. Further, Xcel referred to this modification in its own documents as "major."

The NOV explained that these modifications did not fall within exemptions for "routine maintenance," "increased hours of operation," or "demand growth" set forth at 40 CFR § 51.166. The NOV concludes that "Each of the modifications resulted in a net significant increase in emissions for SO_2, NO_x, and/or PM as defined by 40 CFR §§ 51.166(b)(3) and (23) and Colorado SIP Rules at Air Quality Control Commission ("AQCC") Regulation No. 3, Part A, I.B.59 and Part A, I.B.37." Because these were modifications resulting in net significant increases of criteria pollutants, a PSD permit was required to be obtained before those modifications occurred. Xcel did not obtain such a PSD permit for the Pawnee coal-fired power plant, in violation of the Clean Air Act.

(3) Other modifications

Xcel's records also provide evidence of other modifications undertaken during the past twenty years. During April through June of 1989, there were planned outages for a "major turbine overhaul." *See* Exhibit 4 at Exhibit 8. In April of 1998, there was a planned outage for a "major boiler overhaul." Exhibit 4 at Exhibit 3. In March of 2000, there was another planned outage for a "major boiler overhaul." *See* Exhibit 4 at Exhibit 9.

Even if the EPA believes the NOV is not sufficient to constitute a violation of the PSD requirements, the evidence of modifications listed above must be dealt with under the PSD provisions of the Clean Air Act and the Colorado SIP, and accordingly through the Title V Permit for the Pawnee coal-fired power plant. Xcel clearly made at least two modifications to the Pawnee coal-fired power plant. Modifications clearly resulted in significant emissions increases, not only as reported in the NOV but also reported by Xcel Energy to the EPA's Acid Rain Program. *See* table below.

Annual SO_2 and NO_x emissions at Pawnee Coal-fired Power Plant.
***See* Emissions Data Attached as Exhibit 5.**

Year	SO_2 Tons	NO_x Tons
1995	15374.0	4869.0
1996	11633.4	3529.0
1997	13928.7	3817.8
1998	15325.6	3906.1
1999	16665.8	5319.7
2000	14678.1	4892.4
2001	17030.9	5845.4
2002	14832.6	4591.7
2003	16703.0	5369.0
2004	12549.6	4514.6

2005	11248.1	3668.1
2006	13072.5	4602.7
2007	14126.5	4415.3
2008	13217.2	4595.2

The amount of SO_2 emissions considered significant is 40 tons per year. 40 CFR § 51.166(b)(23). The amount of NO_x emissions considered significant is 40 tons per year. *Id*. Emissions data from the EPA shows that after the identified second modification (1997-1998), there occurred an SO_2 increase of 1396.9 tons and a NO_x increase of 88.3 tons annually. Thus, both significance thresholds were met after the 1997 modification. While data immediately before the 1994 modification is not available on the Clean Air Market website, the NOV claims that the 1994 modification did result in significant emissions increases. PM_{10} emissions of 15 tons per year are also considered significant under the regulations. 40 CFR § 51.166(b)(23). The NOV claims that a significant PM emission increase also occurred at Pawnee.

Given that Pawnee is currently in violation of PSD requirements, the Division was required to ensure the Title V Permit assured compliance with PSD and included a compliance plan to bring the Pawnee coal-fired power plant into compliance with PSD. These applicable requirements, however, are missing from the Permit, in violation of 42 USC § 7661c(a) and 40 CFR § 70.6(c)(1), and the Administrator must object to its issuance.

C. The Division's Response to Wild Earth Guardians' Comments Fails to Demonstrate that PSD is not an Applicable Requirement or that a Compliance Plan was not Required

WildEarth Guardians commented that the Division had a minimum responsibility to respond to significant comments regarding noncompliance with PSD as demonstrated by the 2002 NOV, Xcel Energy's own reports providing evidence of major modifications, and emissions data from the EPA. In accordance with prior Title V Petition rulings from the Administrator, WildEarth Guardians commented that the Division was required to "'provide the basis (e.g., citing to current or historical evidence, or the lack thereof) that supports its conclusion that PSD/NSR' was or was not applicable in relation to the aforementioned modifications. *See In the Matter of CEMEX Inc.,* Petition No. VIII-2008-01 (April 20, 2009) at 10." Exhibit 4 at 5. Unfortunately, the Division failed to respond in this manner.

In fact, while the Division agreed that the documentation provided by WildEarth Guardians "reflects that the reheater design and replacement and condenser tube upgrades occurred in the years noted in the EPA NOV," the Division provided no basis for concluding that these modifications did not trigger PSD requirements. *See* Colorado Air Pollution Control Division Response to Comments from WildEarth Guardians on Draft Pawnee Title V Permit (November 6, 2009) at 6-7, attached as Exhibit 6. While the Division implies that it may not believe the reheater design and replacement and condenser tube upgrades constituted physical changes or changes in the methods of operation and/or led to significant net emissions increases using the actual to potential test, the Division neither provides nor points to any explanation, information, or analysis demonstrating that the reheater design and replacement and condenser tube upgrades did not constitute physical changes or changes in the methods of operation and/or

lead to significant net emissions increases. *Id*.[2] Although the Division states that "the fact that the [reheater redesign and replacement and condenser tube upgrades] projects took place does necessarily indicate that a major modification occurred," this is not responsive to WildEarth Guardians' comments and fails to demonstrate that the reheater redesign and replacement and condenser tube upgrades did not constitute major modifications of the Pawnee coal-fired power plant. *Id*. at 7.

The only seemingly conclusive response provided by the Division on this issue is as follows:

> PSCo. [Public Service Company of Colorado] and EPA have disagreed on these issues, and EPA has not taken any further action on the 2002 NOV. As is customary, since these projects are addressed in EPA's NOV, the Division used its enforcement discretion and did not file a parallel investigation.

Exhibit 6 at 7. However, this response fails to provide any basis (e.g., citing to current or historical evidence, or the lack thereof) that supports its conclusion that PSD is not an applicable requirement with regards to the reheater redesign and replacement and condenser tube upgrades modifications cited by WildEarth Guardians in its comments. Simply because the Division has exercised enforcement discretion does not absolve the agency from performing its duties under Title V of the Clean Air Act. Furthermore, simply because the Division has chosen not to enforce PSD requirements with regards to the reheater redesign and replacement and condenser tube upgrade identified by WildEarth Guardians, does not mean that PSD is not an applicable requirement at the Pawnee coal-fired power plant. Title V of the Clean Air Act is clear that a Title V Permit must assure compliance with applicable requirements and that where a source is in violation of an applicable requirement, a compliance plan must be included in the Title V Permit to bring the source into compliance. *See* 42 USC § 7661c(a). Neither the Division nor the EPA have the discretion to ignore this statutory duty.

Similarly, in its response to comments, the Division provides no basis for concluding the other modifications, namely the turbine and boiler overhauls, identified by WildEarth Guardians do not demonstrate that PSD requirements were triggered at the Pawnee coal-fired power plant. Citing the evidence provided by WildEarth Guardians, the Division provided a number of inconclusive statements, none of which actually support the Division's assertions and appear to form a rational basis for the Division's ultimate conclusion. For instance, the Division simply

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[2] The Division possibly implies that the reheater redesign and replacement and condenser tube upgrades constitute "routine maintenance, repair and replacement," and therefore are not considered a "physical change or change in the method of operation, or addition to, a major stationary source." *See* Exhibit 6 at 7. However, there is no basis provided for this implied conclusion, no explanation provided that supports such an implied conclusion, and it is unclear whether the Division is or is not actually asserting that the modifications identified by WildEarth Guardians constitute routine maintenance. Importantly, the Division did not analyze the reheater redesign and replacement and condenser tube upgrades in accordance with the standards at 40 CFR § 52.21(cc) or 40 CFR § 51.166(y) to determine whether these modifications in fact constitute routine maintenance, repair, and replacement. Regardless, WildEarth Guardians provided information demonstrating that the reheater redesign and replacement and condenser tube upgrades did not constitute routine maintenance, repair, and replacement. *See* Exhibit 4 at 4. In concluding that PSD is not an applicable requirement at the Pawnee coal-fired power plant, the Division, at a minimum, failed to respond to this information.

claims that, "the turbine and boiler overhauls may not constitute modifications," asserting it is "common practice within the utility industry to conduct maintenance work on boilers and turbines during planned outages on a routine basis" and that such activities "would generally be considered routine, maintenance and repair." Exhibit 6 at 7. Amazingly, rather than analyze whether the specific turbine and boiler overhauls identified by WildEarth Guardians constitute routine maintenance in accordance with the standards at 40 CFR § 51.166(y), the Division simply infers that the overhauls are routine, asserting, "the fact that exhibits 3, 8 and 9 [of WildEarth Guardians' comments] indicate that such activities have occurred frequently over the time periods addressed in the exhibits support the inference that these activities are routine." *Id*.

These responses, however, provide no conclusive basis as to whether the turbine and boiler overhauls identified by WildEarth Guardians do or do not constitute major modifications and ultimately fail to support the Division's conclusions. Simply because the turbine and boiler overhauls "may not" constitute modifications, does not mean they do not constitute modifications, as the Division implies. And simply because maintenance work on boilers and turbines may constitute routine maintenance does not mean that the turbine and boiler overhauls identified by WildEarth Guardians in fact constitute routine maintenance. Furthermore, it is disconcerting that the Division would rely on an "inference," and not a reasoned analysis based on its own SIP and federal regulations, to provide a rational basis for its conclusion that PSD is not an applicable requirement or that a compliance plan is not required to be included in the Pawnee Title V Permit. The Division cannot issue offhand, unsupported "possibilities" or "maybes," or worse yet rely on inferences, to support regulatory findings under Title V of the Clean Air Act.

The Administrator cannot uphold such "inferred" and obviously inconclusive decisionmaking under Title V of the Clean Air Act and certainly cannot uphold the Division's response to comments as demonstrative of the applicability of PSD requirements to the Pawnee coal-fired power plant. The Administrator must object to the issuance of the Title V Permit on the basis of the Division's failure to adequately respond to significant comments presented by WildEarth Guardians.

II. THE TITLE V PERMIT FAILS TO REQUIRE ASSURE COMPLIANCE WITH PARTICULATE MATTER LIMITS APPLICABLE TO THE COAL-FIRED BOILER

Permitting authorities must ensure that a Title V Permit contain monitoring that ensures compliance with the terms and conditions of the permit. *See* 42 USC § 7661c(c) and 70.6(c)(1). Although as a basic matter, Title V Permits must require sufficient periodic monitoring when the underlying applicable requirements do not require monitoring (*see* 40 CFR § 70.6(a)(3)(i)(B)), the D.C. Circuit Court of Appeals has firmly held that even when the underlying applicable requirements require monitoring, permitting authorities must supplement this monitoring if it is inadequate to ensure compliance with the terms and conditions of the permit. As the D.C. Circuit recently explained:

> [40 CFR § 70.6(c)(1)] serves as a gap-filler….In other words, § 70.6(c)(1) ensures that all Title V permits include monitoring requirements "sufficient to assure compliance with

> the terms and conditions of the permit," even when § 70.6(a)(3)(i)(A) and § 70.6(a)(3)(i)(B) are not applicable. This reading provides precisely what we have concluded the Act requires: a permitting authority may supplement an inadequate monitoring requirement so that the requirement will "assure compliance with the permit terms and conditions."

See Sierra Club v. EPA, 536 F.3d 673, 680 (D.C. Cir. 2008). In other words, "a monitoring requirement insufficient 'to assure compliance' with emission limits has no place in a permit[.]" *Id*. at 677.

In this case, the Title V Permit fails to contain monitoring requirements that ensure compliance with underlying particulate matter emission rate for the coal-fired boiler established by the Colorado SIP. That emission rate, which is set forth in Section II, Condition 1.1 of the Title V Permit, limits emissions of particulate matter to no more than 0.1 lb/mmBtu from boiler . *See* Exhibit 1 at 5. The underlying requirements establishing this particulate matter emission limit, in this case the Colorado SIP at AQCC Regulation No. 1, Section III.A.1.c. (5 CCR 1001-3, Section III.A.1.c), do not require monitoring. Therefore, the Division was required to ensure the Title V Permit contained sufficient periodic monitoring to assure compliance with the particulate emission rate. The Division failed to do so, thus issuance of the Title V Permit is contrary to Title V requirements and the Administrator must object. Petitioner raised with reasonable specificity concerns over the failure of the Title V Permit to assure compliance with particulate limits. *See* Exhibit 4 at 5-6.

A. The Title V Permit Does not Require Actual Monitoring of Particulate Emissions

On its face, the Title V Permit is inadequate because it does not require actual monitoring of particulate matter emissions. Section II, Condition 1.1 of the Title V Permit states that compliance with particulate limits is demonstrated by "[m]aintaining and operating the baghouse in accordance with the requirements identified in [Section II] Condition 8.1" and "conducting performance tests annually in accordance with [Section II] Condition 8.2." Exhibit 1 at 6. None of these conditions explicitly require monitoring of actual particulate matter emissions to ensure compliance with the rate set forth in Section II, Condition 1.1 of the Title V Permit.

Indeed, Section II, Condition 8.1 relates only to the operation and maintenance of the baghouse and states only that "The boiler baghouses shall be maintained and operated in accordance with good engineering practices." Exhibit 1 at 28. Compliance with this Condition does not yield particulate matter data necessary to demonstrate compliance with the 0.1 lbs/mmBtu emission rate set forth in Section II, Condition 1.1 of the Title V Permit.

Although the Division may believe that baghouse operation and maintenance can substitute for actual particulate matter monitoring, this belief is unsupported in this case. While compliance with Condition 8.1 may help to keep particulate matter emissions in check, neither the Division, the TRD, nor the Title V Permit cite or otherwise disclose information showing that compliance with Section II, Condition 8.1 will, with any level of certainty, ensure continuous compliance with the quantitative 0.1 lb/mmBtu particulate matter emission rate. Adding to this,

Section II, Condition 8.1 is vague and unenforceable. Because good engineering practices are not defined in any specific way in the Title V Permit, it is impossible to understand what such practices are and whether they will, in fact, be sufficient to assure compliance with the particulate matter emission rate at Section II, Condition 1.1.

Furthermore, Section II, Condition 8.2 relates only to stack testing. *See* Exhibit 1 at 28-29. Although the Condition requires stack testing for particulate matter emissions, it does not actually require monitoring of particulate matter emissions to ensure compliance with the emission rate set forth in Section II, Condition 1.1. Because the Title V Permit fails to require actual monitoring of particulate matter emissions, it does not assure compliance with particulate emission rates and therefore, the Administrator must object to its issuance.

B. Stack Testing is too Infrequent, Even if it Could Demonstrate Compliance

The Division may believe that stack testing under Section II, Condition 8.2 can substitute for particulate matter monitoring, but this, too, is unfounded. For one thing, Section II, Condition 8.2 only requires that stack testing occur annually, at most, but even allows less frequent monitoring to occur. Thus, while the 0.1 lbs/mmBtu emission rate applies continuously, the stack testing requirement limits monitoring to only once per year and possibly even less frequently. This is problematic. In essence, even if the Division could reasonably rely on Section II, Condition 8.2 to assure compliance with particulate matter rate, this Condition would assure compliance with the limits only once per year, at best. This necessarily means the Title V Permit fails to assure compliance with the 0.1 lbs/mmBtu emission rate the remainder of the year, or years. If the Title V Permit limited emissions of particulate matter to no more than 0.1 lbs/mmBtu only once per year, then such monitoring may be appropriate. The Title V Permit has no such limit, however, and therefore the monitoring fails to assure compliance.

The failure to ensure more frequent monitoring of particulate matter is further problematic because heat input at the Pawnee coal-fired power plant has varied over the years. For instance, between 1996 and 2008, heat input was as high as 51,115,318 mmBtu and as low as 30,654,706, a difference of more than 20 million mmBtu. *See* Table below. Because the particulate emission rate set forth at Section II, Condition 1.1 is dependent on heat input, such variability calls into question the ability of the Division to reasonably rely on annual stack testing to assure continuous compliance with the particulate emission rate. Clearly a one-time test will not provide data representative of all operations at the Pawnee coal-fired power plant.

Table 1. Heat Input at the Pawnee Coal-fired Power Plant.
***See* Emissions Data Attached as Exhibit 5.**

Year	Heat Input (mmBtu)
1996	30,654,706
1997	36,882,239
1998	36,599,944
1999	45,855,909
2000	45,856,526
2001	51,115,318

2002	38,786,013
2003	45,594,819
2004	40,944,685
2005	34,507,188
2006	43,563,056
2007	39,942,263
2008	36,775,940

The need for continuous monitoring, or at least more frequent than once every year, is further bolstered by Section 302(k) of the Clean Air Act, which defines "emission limitation" as "a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis[.]" 42 USC § 7602(k). Because the particulate emission rate set forth in Section II, Condition 1.1 of the Title V Permit is an "emission limitation," it necessarily applies "on a continuous basis." Logically, for the Title V Permit to assure compliance with particulate emission rate, it must require continuous monitoring, meaning annual stack testing is wholly inadequate. The Administrator must therefore object to the issuance of the Title V Permit.

C. The Division Cannot Rely on Compliance Assurance Monitoring to Meet Title V Monitoring Requirements

In response to Petitioners' comments over the lack of adequate particulate monitoring, the Division re-asserted its belief that that compliance assurance monitoring ("CAM") requirements set forth in Section II, Condition 1.15 constitute sufficient periodic monitoring that ensures compliance with 40 CFR § 70.6(a)(3)(i)(B) and assures compliance with the particulate emission rate in Section II, Condition 1.1 in accordance with 40 CFR § 70.6(c)(1). *See* Exhibit 6 at 8-9. This assertion is invalid and unsupported in several key regards.

To begin with, the Title V Permit does not explicitly state that compliance with the particulate emission rate set forth at Section II, Condition 1.1 can be demonstrated by complying with CAM requirements at Section II, Condition 1.15, or the underlying CAM Plan in Appendix H to the Title V Permit. As already explained, Section II, Condition 1.1 simply states that compliance with the particulate emission rate shall be demonstrated through compliance with Section II, Condition 8.1 and Section II, Condition 8.3. Thus, as written, the Title V Permit does not support a relationship between compliance with CAM requirements and compliance with the particulate emission rate.

Furthermore, it is inappropriate for the Division to rely solely on the CAM requirements set forth in the Title V Permit to demonstrate compliance with the particulate emission rate at Section II, Condition 1.1. For one thing, it does not appear that the Division has established an accurate, quantitative correlation between compliance with CAM requirements and compliance with the numerical emission rate set forth at Section II, Condition 1.1. Further, although the CAM requirements at Section II, Condition 1.15 and the CAM Plan in Appendix H require monitoring of certain parameters, such as the condition of the baghouses, there are no quantitative requirements set forth that ensure any level of performance for these control

devices.[3] And although opacity limits apply to both Unit 1 and Unit 2, there is no information or analysis cited or incorporated into the permit that demonstrates compliance with these limits automatically mean compliance with the particulate rate at Section II, Condition 1.[4] Put simply, the Division seems to be attempting to put a square peg in a round hole, conveniently relying on CAM requirements as a misshapen substitute for compliance with a quantitative emission rate.

Although the Division claims that the preamble to the 1997 final CAM rule "indicates that CAM is consistent with the Title V periodic monitoring requirements," (*see* Exhibit 6 at 9), this is not supported by the preamble. While the EPA originally thought that Part 64 CAM requirements would supersede periodic monitoring requirements under Part 70, the EPA ultimately rejected this approach, stating "the existing part 70 monitoring, including periodic monitoring, requirements will continue to apply." 62 Fed. Reg. 54905. Furthermore, although EPA indicated that it may be appropriate, in some instances, to rely on Part 64 monitoring requirements to satisfy Part 70 requirements, the EPA made clear in the preamble to CAM that, "Part 64 is intended to provide a reasonable means of supplementing existing regulatory provisions that are not consistent with the statutory requirements of titles V and VII of the 1990 Amendments to the [Clean Air] Act." 62 Fed. Reg. 54904. In other words, the CAM rule does not supplant existing monitoring requirements, such as those under 40 CFR § 70, but rather aids in filling gaps where existing requirements may fall short of ensuring adequate monitoring. The Division's claim that CAM is "consistent" with Title V periodic monitoring requirements is not only presumptuous, but elevates form over substance. Ultimately, the Division is required to ensure sufficient periodic monitoring that provides reliable and representative data from the relevant time period in accordance with 40 CFR § 70.6.

To this end, the Division has failed to show that the specific CAM requirements set forth at Section II, Condition 1.18 and the CAM Plan in Appendix H assure compliance with the particulate emission rate at Section II, Condition 1.1. Simply because the Division asserts that CAM requirements assure compliance with the particulate emission rate in accordance with 40 CFR § 70.6(c)(1), does not make it so. The Administrator must therefore object to the issuance of the Title V Permit on the basis that the Division inappropriately relied on CAM requirements in the Title V Permit to assure compliance with particulate limits.

D. The Division Inappropriately Rejected Particulate Matter Continuous Emission Monitors as a Means of Ensuring Compliance with Particulate Limits

Compounding the failure to assure compliance with the particulate emission rate at Section II, Condition 1.1, the Division also arbitrarily rejected a means to ensure continuous compliance with the particulate emission rate. In comments, WildEarth Guardians requested that

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[3] For example, although the CAM Plan requires that baghouse inspections occur annually (*see* Exhibit 1 at Appendix H, Page 2), neither the CAM Plan nor Section II, Condition 1.15 require any standard of performance for the baghouse.

[4] Although the Division states that a "site-specific opacity trigger level" must be set by the CAM Plan (*see* Exhibit 4 at 6), the CAM Plan actually sets no site-specific opacity trigger that would assure compliance with the particulate emission rate. For instance, although an "excursion" is defined as an opacity value greater than 15% (*see* Exhibit 1 at Appendix G, Page 2), neither the CAM Plan nor the Title V Permit state that such an "excursion" equates to a violation of the particulate matter emission rate.

the Division require the use of particulate matter continuous emission monitoring systems ("PM CEMS") to assure compliance with the particulate emission rate in the Title V Permit. The EPA promulgated performance specifications for PM CEMS at 40 CFR § 60, Appendix B, Specification 11, on January 12, 2004. *See In the Matter of Onyx Environmental Service*s, Petition No. V-2005-1 at 13. This promulgation indicates that the use of PM CEMS is an accepted means of assessing compliance with particulate emission rates and limits.

Furthermore, the EPA has required other coal-fired power plants to install, operate, calibrate, and maintain a PM CEMS. In a 2000 consent decree, Tampa Electric Company agreed to install a PM CEMS on one of its coal-fired power plants in Florida to ensure compliance with PM limits. *See* Exhibit 7, *United States v. Tampa Electric Company*, Consent Decree (February 29, 2000) at 20. More recently, through a 2006 consent decree, two North Dakota utilities agreed to install PM CEMS at a coal-fired power plant in North Dakota. *See* Exhibit 8, *United States v. Minnkota Power Cooperative*, Consent Decree (April 24, 2006) at 26-28. Similarly, the EPA reached agreements with other utilities in Wisconsin and Illinois that have led to the installation, calibration, operation, and certification of PM CEMS. *See* Exhibits 9 and 10, *United States v. Wisconsin Electric Power Company*, Consent Decree (April 27, 2003) at 29-31; *United States v. Illinois Power*, Consent Decree (March 7, 2005) at 31-33. These consent decrees are implicit that PM CEMS are to be used to demonstrate compliance with PM limits.

Most recently, in proposed amendments to new source performance standards ("NSPS") for electric utility steam generating units, the EPA stated, "Based on our analysis of available data, there is no technical reason that PM CEMS cannot be installed and operate reliably on electric utility steam generating units." 70 Fed. Reg. 9865, 9872 (February 27, 2006). Although the final amendments to the NSPS for electric utility steam generating units did not require the utilization of PM CEMS, the EPA stated that PM CEMS may be used to demonstrate continuous compliance with particulate emission limits.

In comments, WildEarth Guardians stated that, "The use of PM CEMS would constitute sufficient periodic monitoring that will assure compliance with the particulate limits set forth in the Title V Permit. We request the APCD take advantage of its authority under 40 CFR § 70 to require the installation and operation of PM CEMS at the Pawnee coal-fired power plant through the Title V Permit." Exhibit 4 at 6. **In response, the Division did not deny that PM CEMS would ensure compliance with the requirements of 40 CFR §§ 70.6(a)(3)(i)(B) and 70.6(c)(1).** Indeed, the Division stated that it "agrees that a PM CEMS represents the most direct method to assure continuous compliance with emission limits." Exhibit 6 at 10.

Instead, the Division arbitrarily rejected requiring PM CEMS and restated its belief that the CAM requirements in the Title V Permit assure compliance with the particulate emission rate. However, as already explained, the CAM requirements do not assure compliance. The Division also pointed to EPA's NSPS for electric utility steam generating units, in which the EPA stated that when PM CEMS are not utilized, it may be appropriate to use "site-specific opacity triggers" to ensure continuous compliance. Yet as already explained, the Title V Permit does not actually state that an exceedance of any site-specific opacity trigger represents a violation of the particulate standards at Section II, Condition 1.1. Furthermore, the NSPS require that when a site-specific opacity trigger is utilized in conjunction with the use of a fabric filter

baghouse, a bag leak detection system be utilized to ensure compliance with particulate limits in accordance with 40 CFR § 60.48Da(o)(4). As the EPA stated, "[S]ources shall use bag leak detectors…in addition to developing a site-specific opacity trigger level[.]" 70 Fed. Reg. 9865, 9872 (February 27, 2006). The Title V Permit does not require that a bag leak detection system be utilized. Thus, the Division's reliance on the EPA's NSPS to justify its periodic monitoring determination is misplaced. If anything, the NSPS merely underscore the fact that the Division has failed to require sufficient periodic monitoring for particulate matter to ensure compliance with the limits at Section II, Condition 1.1.

The Division's response to Petitioner's comment do not provide a rational basis for rejecting the use of PM CEMS as a means of assuring compliance with the particulate emission rate in the Title V Permit and the requirements of 40 CFR §§ 70.6(a)(3)(i)(B) and 70.6(c)(1). The Administrator must object to the issuance of the Title V Permit based on the Division's arbitrary rejection of PM CEMS as a means to assure compliance with the particulate rate at Section II, Condition 1.1.

III. THE TITLE V PERMIT FAILS TO ENSURE COMPLIANCE AND SUFFICIENTLY MONITOR FUGITIVE PARTICULATE EMISSIONS

The Title V Permit sets forth limits on particulate matter, including PM_{10}, from fugitive sources associated with coal handling and storage, ash handling and disposal, and paved and unpaved roads. *See* Exhibit 1 at 18, Section II, Condition 4.1. Unfortunately, the Title V Permit fails to ensures compliance with these limits and fails to include adequate monitoring requirements sufficient to assure compliance in accordance with 40 CFR §§ 70.6(a)(3)(i)(B) and 70.6(c)(1). The Administrator must therefore object on this issue for the reasons set forth below.[5]

A. The Title V Permit Does not Actually Require Monitoring of Particulate Matter or PM_{10} from Coal Handling and Storage, Ash Handling and Disposal, and Paved and Unpaved Roads

To begin with, The Title V Permit requires no actual monitoring of particulate matter from fugitive sources associated with coal handling and storage, ash handling and disposal, and paved and unpaved roads. As a threshold matter, the Title V Permit fails to require sufficient periodic monitoring because it does not require any actual monitoring of particulate emissions from these sources.

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[5] WildEarth Guardians raised objections with reasonable specificity with regards to the adequacy of the Title V Permit at Section II, Condition 4 in comments. *See* Exhibit 4 at 7-8. WildEarth Guardians concerns focused on the failure of the Title V Permit to ensure compliance with opacity limits. In response, the Division asserted that the opacity limits under Section II, Condition 4 were unenforceable in accordance with the Colorado SIP and asserted instead that provisions related to the control of fugitive particulate emissions were sufficient under Title V. *See* Exhibit 6 at 11-13. Thus, to the extent the Administrator may not believe that WildEarth Guardians' objections related to the adequacy of Section II, Condition 4 were raised with reasonable specificity during the public comment period, the grounds for objection arose after the public comment period based on the Division's response to comments.

The Title V Permit states that, "In the absence of credible evidence to the contrary, compliance with the PM and PM_{10} emission limits are presumed provided the material handling limits (Condition 4.3) are met and control measures (Conditions 4.2 and 4.4 are followed)." Exhibit 1 at 18. However, Section II, Conditions 4.2, 4.3, and 4.4 do not actually require monitoring of particulate emissions from fugitive sources associated with coal handling and storage, ash handling and disposal, and paved and unpaved roads.

B. Conditions 4.2, 4.3, and 4.4 Fail to Limit Particulate Matter, are Unenforceable and/or Fail to Constitute Sufficient Monitoring

Compounding the failure of the Title V Permit to require monitoring of particulate emissions from fugitive sources associated with coal handling and storage, ash handling and disposal, and paved and unpaved roads is that the provisions of Section II, Conditions 4.2, 4.3, and 4.4 are unenforceable and/or fail to constitute sufficient monitoring in accordance with Title V and Title V regulations.

(1) Condition 4.2

Condition 4.2 states that "the source shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions." Exhibit 1 at 19. However, this Condition does not actually require that control measures and operating procedures be implemented in order to meet the particulate limits at Section II, Condition 4.1, only that emissions be "minimized." Furthermore, "minimized" is vague and undefined. It is unclear exactly what "minimized" means. In fact, the tables at Section II, Condition 4 of the Title V Permit explicitly state "N/A" with regards to minimizing emissions, at least for coal handling and storage and paved and unpaved roads, indicating there is no standard for minimizing emissions.

The Condition also states that a "fugitive dust control plan, or a modification to an existing plan" shall be required to be submitted only "if the Division determines that for this source or activity visible emissions are in excess of 20% opacity; or visible emissions are being transported off the property; or if this source or activity is operating with emissions that create a nuisance." Exhibit 1 at 19, Section II, Condition 4.2.1.[6] This provision indicates that a fugitive dust control plan may not even be required to address fugitive particulate emissions from coal handling and storage, ash handling and disposal, and paved and unpaved roads, which seems to imply that the control measures required by Section II, Condition 4.2 may also not be required. Indeed, the SIP states that AQCC Regulation No. 1, Section III.D. is only enforceable "through the procedures specified…in Section III.D.1.b. through III.D.1.e." AQCC Regulation No. 1, Section III.D.1.a.(iii)., 5 CCR 1001-3 Section III.D.1.a.(iii). The procedures in Regulation No. 1, Section III.D.1.b. through III.D.1.e. restate that a fugitive particulate matter control plan is only required:

[6] This Condition references a "fugitive dust" control plan, however the underlying authority as identified in the Title V Permit, AQCC Regulation No. 1, Section III.D.1.c., refers to a "fugitive particulate" control plan.

> If the Division determines that a source of activity which is subject to this Section III.D. (whether new or existing) is operating with emissions in excess of 20% opacity and such source is subject to the 20% emission limitation guideline; or if it determines that the source or activity which is subject to this Section III.D. is operating with visible emissions that are being transported off the property on which the source is located and such source is subject to the no off property transport emission limitation guideline; or if it determines that any source or activity which is subject to this Section III.D. is operating with emissions that create a nuisance[.]

AQCC Regulation No. 1, Section III.D.1.c. Thus, as a practical matter, the Title V Permit, as echoed in the Colorado SIP, allows Xcel Energy to avoid controlling fugitive particulate matter altogether. This hardly serves to ensure compliance with the particulate limits at Section II, Condition 4.1.

Although we do not take issue with the Colorado SIP, we do take issue with the fact that the Title V Permit relies on Section II, Condition 4.2 to ensure compliance with the applicable particulate emission limits set forth at Condition 4.1. Although the Title V Permit must include the underlying requirements within the Colorado SIP, the Title V Permit must supplement those requirements with terms and conditions necessary both to ensure the enforceability of and to ensure compliance with the limits for fugitive particulate emissions from coal handling and storage, ash handling and disposal, and paved and unpaved roads at the Pawnee coal-fired power plant. The Administrator must object to the Title V Permit on the basis that Condition 4.2 fails to ensure compliance with the fugitive particulate emission limits at Section II, Condition 4.

(2) Condition 4.3

Section II, Condition 4.3 simply sets limits on materials processing, in this case coal unloading and fly ash disposed. However, there is no information provided or referenced in the Title V Permit or the TRD indicating that meeting the relevant materials processing limits will in fact ensure compliance with the fugitive particulate emission limits set forth at Section II, Condition 4.1. There does not appear to be any correlation between the materials processing limits and particulate emissions that would support a finding that compliance with the limits at Condition 4.3 automatically ensures compliance with the particulate limits at Condition 4.1.

(3) Condition 4.4

It is unclear whether Section II, Condition 4.4 is enforceable. Based on our concerns over Section II, Condition 4.2 stated above, it appears that Xcel Energy is not actually required to follow the fugitive particulate control requirements of Condition 4.4. unless the Division "determines that for this source or activity visible emissions are in excess of 20% opacity; or visible emissions are being transported off the property; or if this source or activity is operating with emissions that create a nuisance." This is problematic. For one thing, there are no opacity or visible emissions monitoring requirements set forth in Section II, Condition 4, which at a minimum would be necessary to determine whether a fugitive particulate matter control plan is required. Most importantly however, if the control measures set forth at Condition 4.4 do not

have to be followed, there is no basis for concluding that the fugitive particulate limits for coal handling and storage, ash handling and disposal, and paved and unpaved roads will be met.

Adding to this, several of the measures set forth at Condition 4.4 are vague and unenforceable as a practical matter. For instance, while Section II, Condition 4.4.1.1 states that "Water shall be sprayed on the ash pit as necessary to minimize fugitive emissions [from ash handling and disposal]," it is unclear exactly when water must be sprayed on the ash pit, to what extent fugitive emissions must be minimized, and how exactly this measure will ensure particulate emissions from the ash pit will not exceed the limits in Section II, Condition 4.1. Furthermore, the Title V Permit actually requires no monitoring, recordkeeping, or reporting requirements to ensure compliance with Condition 4.4.1.1. Although a semi-annual compliance certification is required in accordance with Section II, Condition 4.4, a compliance certification fails to provide reliable data demonstrating that a source compliance with the control measures at Condition 4.4. Similarly, with regards to Section II, Condition 4.4.2.1, which sets a vehicle speed limit of no more than 15 miles per hour, the Title V Permit requires no monitoring, recordkeeping, or reporting to ensure compliance with this control measure. Condition 4.4.2.2, which requires that active unpaved haul roads be watered on a daily basis, suffers from the same flaws.

Finally, Section II, Condition 4.4 does not actually prescribe any measures to control fugitive particulate emissions from coal handling and storage, making it even more inappropriate for the Division to have relied on this Condition to ensure compliance with the fugitive particulate emission limits set forth in Condition 4.1.

C. The Title V Permit Fails to State that Failure to Comply with Conditions 4.2, 4.3, or 4.4 Constitutes a Violation of Particulate Limits

The Title V Permit finally fails to ensure compliance with the fugitive particulate standards at Section II, Condition 4.1 because it does not actually state that the failure to comply with any provision of Section II, Conditions 4.2, 4.3, and 4.4 constitutes a violation of the particulate emission limits. The Title V Permit states that, "In the absence of credible evidence to the contrary, compliance with the PM and PM_{10} emission limits are presumed provided the material handling limits (Condition 4.3) are met and control measures (Conditions 4.2 and 4.4 are followed)." Exhibit 1 at 18. This statement is problematic because while it presumes that compliance with the particulate standards is met when Section II, Conditions 4.2, 4.3, and 4.4 are met, it is unclear whether it presumes noncompliance with the particulate standards when any provision of Section II, Condition 4.2, 4.3, and 4.4 is not met. The Administrator must object to the issuance of the Title V Permit because nothing in the Permit actually states that a failure to comply with any provision of Condition 4.2, 4.3, and 4.4 constitutes a violation of the particulate limits at Section II, Condition 4.1.

IV. THE 20 PERCENT OPACITY LIMIT UNDER NSPS SUBPART Y APPLIES TO COAL UNLOADED TO STORAGE

The Administrator must object to the issuance of the Title V Permit because it fails to

ensure compliance with NSPS Subpart Y with regards to coal unloaded to storage activities at the Pawnee coal-fired power plant. The NSPS at Subpart Y apply to coal preparation and processing plants. Both in the TRD and in response to comments, the Division asserted that the NSPS Subpart Y in effect at the time of the Title V Permit issuance did not apply to coal unloaded to storage activities at the Pawnee coal-fired power plant. The Division's assertion is simply wrong.

Indeed, the Division's assertion is based on EPA's 1998 interpretation of the NSPS at 40 CFR Part 60, Subpart Y, which was published October 5, 1998 (63 Fed. Reg. 53288-43290). The 1998 interpretive rule appeared to exclude coal unloading to coal storage areas from its 20% opacity requirement. This interpretation was not explained nor was there a rational basis for this exclusion. While courts typically give some deference to interpretive rules, they do not merit *Chevron* deference, nor do they have any legally binding effect. *See U.S. v. Mead Corp.*, 533 U.S. 218, 232 (2001). In this case, the NSPS in effect clearly applied to "coal storage systems, and coal transfer and loading systems" that processes more than 200 tons/day. *See* 40 CFR § 60.250 (2008). In this case, the Division failed to demonstrate that coal unloaded to storage at the Pawnee coal-fired power plant is not a "coal storage system, and coal transfer and loading system" that processes more than 200 tons/day, and therefore not subject to the NSPS at Subpart Y. The Administrator must therefore object to the issuance of the Title V Permit.

V. THE TITLE V PERMIT FAILS TO ENSURE COMPLIANCE AND SUFFICIENTLY MONITOR PARTICULATE EMISSIONS FROM POINT SOURCES

The Title V Permit further fails to ensure compliance with particulate limits, including PM_{10} limits, from point sources under Section II, Condition 5, including the coal handling system, ash silo, soda ash handling system, and sorbent storage silos. The Title V Permit fails to ensure sufficient monitoring and lacks enforceable standards to assure compliance in accordance with Title V. The EPA must object to the Title V Permit for the reasons set forth below.

A. Section II, Condition 5 Requires no Actual Monitoring of Particulate Emissions

To begin with, the Title V Permit does not actually require any monitoring of particulate emissions from any point associated with the coal handling system, ash silo, soda ash handling system, and sorbent storage silos. As a practical matter, the Title V Permit does not require sufficient monitoring that provides reliable data from the relevant time period that is representative of the source's compliance with the particulate limits, in violation of 40 CFR § 70.6(a)(3)(i)(B).

B. Condition 5.1

Section II, Condition 5.1 establishes presumptive compliance with the PM and PM_{10} limitations for the coal handling system. Presumptive compliance is based on fulfilling the work practices listed in Conditions 5.1.1 through 5.1.5. *See* Exhibit 1 at 22, Section II, Condition 5.1.6. As explained below, however, these conditions are vague and unenforceable, and a system of presumptive compliance is insufficient to ensure that the particulate matter limitations are met.

To begin with, Section II, Condition 5.1.1, which relates to operation of the plant transfer tower/tripper deck and crusher baghouses, is vague and unenforceable because it does not define "good engineering practices." This undefined term implies certain practices, but it does not state what they are or explain whether such practices will actually ensure compliance with the applicable particulate emission limits. Moreover, these conditions do not state how operation in accordance with good engineering practices will be reported or monitored. Without any periodic monitoring requirements, this condition is unenforceable as a practical matter and in violation of 40 CFR § 70.6(a)(3)(i)(B). At a minimum, the Title V Permit must describe periodic monitoring that is sufficient to assess whether "good engineering practices" have been followed. To achieve this, the Title V Permit must define "good engineering practices" so that there is a standard to which actual operations can be compared.

Section II, Condition 5.1.3, which relates to the operation of conveyors and crushers, is vague and unenforceable because it does not define "integrity of the enclosures," nor does it state how such integrity will be maintained to prevent particulate emissions. Moreover, 5.1.3 does not explain what "used as necessary" means with regards to the operation of water spray suppression systems. Furthermore, there is no reporting or monitoring to ensure compliance with this requirement. To ensure compliance with this condition, the Title V Permit must include periodic monitoring of the conveyor and crusher enclosures and periodic monitoring of the use of the water spray suppression systems. Without such monitoring, Condition 5.1.3 is in violation of 40 CFR § 70.6(a)(3).

Section II, Condition 5.1.5, which relates to the number of transfer points, does not contain any periodic monitoring, thus it also violates 40 CFR § 70.6(a). The transfer points must be identified and reported in the Title V Permit so that the number of transfer points can be monitored to ensure compliance with the 13-transfer point limit in 5.1.5.

C. Condition 5.6

Conditions 5.6.2 and 5.6.3 also use the term "good engineering practices" without defining what that term means. These conditions fail to comply with 40 CFR § 70.6(a)(3)(i)(B) for the same reasons that Condition 5.1.1 fails, as described above. Sufficient periodic monitoring must be added to the Title V Permit to assure compliance with the relevant good engineering practices that are implied (but not properly explained) by Conditions 5.6.2 and 5.6.3.

D. Conditions 5.7 and 5.8

Although in response to WildEarth Guardians' comments, the Division agreed to revise Section II, Condition 5.7 to require annual Method 9 observations to assure compliance with the opacity limits for the transfer tower/tripper deck and crusher baghouses, it is unclear how a one-per-year Method 9 reading will provide reliable data that is representative of the source's compliance with the applicable opacity limits. This concern is bolstered by the fact that the opacity limit applies continuously, not annually. It is unclear how annual monitoring can assure continuous compliance with the applicable 20% opacity limit.

Section II, Conditions 5.7 and 5.8 are also problematic because they fail to require sufficient periodic monitoring to ensure compliance with opacity limits for other coal handling system point sources, besides the transfer/tower/tripper deck and crusher baghouses. Indeed, Conditions 5.7 and 5.8 are clear that opacity emissions from all point sources associated with the coal handling system shall not exceed 20%, including from crushers and conveyors 7 through 13, 17, and 18. Both Conditions 5.7 and 5.8 state that these opacity requirements "shall be presumed to be in compliance" if Section II, Conditions 5.1.1 through 5.1.3 are being met. As previously described however, Conditions 5.1.1 and 5.1.3 do not define key standards nor do they contain sufficient monitoring to ensure compliance with applicable requirements. Due to these failures, it will be impossible to ensure compliance with the opacity limits Conditions 5.7 and 5.8.

Moreover, even if Conditions 5.1.1 and 5.1.3 were corrected to include monitoring, presumptive compliance with the opacity requirements is not sufficient to comply with 40 CFR § 70.6(c)(1). If permit terms and conditions include monitoring but that monitoring is insufficient to ensure compliance with terms and conditions, the permitting authority must supplement the permit so that the Title V Permit meets Title V requirements. *See* Sierra *Club v. EPA*, 536 F.3d 673, 678 (D.C. Cir. 2008). Actual monitoring of opacity for all point sources associated with the coal handling system, including all sources subject to NSPS Subpart Y, must be written into the Title V Permit to assure compliance. The Administrator must therefore object to the issuance of the Title V Permit due to its failure to provide sufficient monitoring to assure compliance with opacity limits applicable to the coal handling system set forth at Section II, Conditions 5.7 and 5.8.

VI. THE TITLE V PERMIT FAILS TO ENSURE COMPLIANCE WITH AIR TOXIC LIMITS UNDER SECTION 112(J) OF THE CLEAN AIR ACT

The Title V Permit fails to assure compliance with section 112(j), 42 USC § 7412(j), of the Clean Air Act. In particular, the Title V Permit fails to assure compliance with case-by-case maximum achievable control technology ("MACT") requirements for the electric utility steam generating unit ("EGU") in operation at the Pawnee coal-fired power plant.

Indeed, the Title V Permit fails to assure compliance with Section 112(j) in the context of mercury and other hazardous air pollutant ("HAP") emissions from the EGU in operation at the Pawnee coal-fired power plant. As the TRD notes, "on February 8, 2008 a DC Circuit Court vacated the CAMR regulations for both new and existing units." Exhibit 2 at 7. In particular, the D.C. Circuit held in early 2008 that the EPA had inappropriately delisted EGUs from the list of sources whose emissions are regulated under Section 112 of the Clean Air Act. In light of this ruling, as well as the EPA's failure to promulgate a MACT standard for EGUs, the Division was required to develop a case-by-case MACT for the EGU in operation at the Pawnee coal-fired power plant and to include such case-by-case MACT in the Title V Permit. Such a case-by-case MACT was required to include mercury emission limits, as well as limits for other HAPs regulated under Section 112 of the Clean Air Act, such as lead compounds, hydrofluoric acid, and hydrochloric acid. It was especially critical for the Division to assure compliance with Section 112 given that the TRD discloses that the Pawnee coal-fired power plant is indeed a major source of HAPs. *See* Exhibit 2 at 5.

In response to WildEarth Guardians' comments, the Division asserted, "Although electric utility steam generating units (EUSGUs) were added to the list of source categories in Section 112(c) in December 2000, a deadline for promulgation of those standards was never set. Therefore, the case-by-case MACT requirements of 112(j) do not apply to EUSGUs." Exhibit 6 at 17. This response is misplaced. For one thing, there was a deadline for promulgation of MACT standards for EGUs. This deadline was "within 2 years after the date" on which EGUs were added to the list of source categories under Section 112, in accordance with Section 112(c)(5), 42 USC § 7412(c)(5), therefore putting the deadline at December 2002. Pursuant to Section 112(j), a case-by-case MACT standard was required 18 months after the deadline for promulgation of a MACT standard, and thus Section 112(j) requirements have applied since May 2004. The Division's rationale for determining Section 112(j) is not an applicable requirement with regards to the EGU is therefore unsupported.

Although it may be argued that Section 112(j) simply does not apply to EGUs on the basis that they may not be subject to the schedule for MACT promulgation set forth under Section 112(e)(1) or (3) due to the fact that they were added as a source category under Section 112 subsequent to the Clean Air Act Amendments of 1990, this argument makes little sense. For one thing, Section 112(e)(1) and (3) specifically reference Section 112(c)(1), which explicitly provides that the list of source categories promulgated under Section 112 may be periodically revised. Section 112(c)(5) of the Clean Air Act sets forth the standards for listing new source categories, as provided for under Section 112(c)(1), and sets forth deadlines for MACT promulgation for new sources. Taken together, Section 112(j)'s reference to Section 112(e)(1) and (3), which in turn references Section 112(c)(1), appears to strongly indicate that Section 112(j) requirements were meant to apply to new source categories listed under Section 112(c)(1) in accordance with Section 112(c)(5). To that end, it would make little sense in light of the purpose of Section 112(j), which is to ensure that all major sources of toxic pollutants meet strict regulatory standards, even when issuance of national MACT standards are delayed, to allow newly added source categories to somehow escape the application of Section 112(j).

The Administrator must therefore object to the issuance of the Title V Permit. Not only is the Division's rationale for not assuring compliance with Section 112(j) baseless, but clearly the Pawnee coal-fired power plant is subject to case-by-case MACT requirements under Section 112(j).

VII. THE TITLE V PERMIT FAILS TO ENSURE COMPLIANCE WITH PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS IN REGARDS TO CARBON DIOXIDE EMISSIONS

In issuing the Title V Permit, the Division failed to appropriately assess whether CO_2 is subject to regulation in accordance with PSD requirements and therefore failed to ensure compliance with PSD under the Clean Air Act, PSD regulations, and the Colorado SIP. Of particular concern is that the Division failed to assess the source's PSD compliance status in the context of CO_2 and therefore failed to ensure that the Title V Permit assures compliance with all applicable requirements.

Under Colorado regulations incorporated into the SIP, any source that emits more than 250 tons per year "of any air pollutant subject to regulation under the Federal Act" is subject to PSD permitting requirements, including the requirement that BACT be utilized to keep air emissions in check. *See* Air Quality Control Commission ("AQCC") Regulation Number 3, Part D § VI.A.1.a; *see also* 42 U.S.C. § 7475(a) and 40 C.F.R. § 51.166(j)(2). Similarly, the SIP requires that any major source that undergoes a modification leading to a significant emissions increase is also required to utilize BACT. AQCC Regulation No. 3, Part D § VI.A.1.b. The Clean Air Act makes clear that the BACT requirements extend to "each pollutant subject to regulation" under the Act. 42 U.S.C. § 7479(3) and 40 C.F.R. § 52.21(b)(12); *see also* AQCC Regulation No. 3, Part D § II.A.8. In this case, the Division failed to assess whether CO_2 is subject to regulation in accordance with PSD and whether the Title V Permit ensures compliance with PSD requirements under the Colorado SIP, the Clean Air Act, and PSD regulations in relation to CO_2 emissions from the Pawnee coal-fired power plant.

A. The Division did not Assess Whether Carbon Dioxide is Subject to Regulation under the Clean Air Act, in accordance with the Recent Environmental Appeals Board Ruling

At issue is the fact that the Division has inappropriately relied on EPA's interpretation of the phrase "subject to regulation" when issuing the Title V Permit and completely ignored whether CO_2 emissions should be limited by the application of BACT as required by PSD provisions in the Colorado SIP, the Clean Air Act, and PSD regulations. The EAB determined this interpretation fails to set forth "sufficiently clear and consistent articulations of an Agency interpretation to constrain" authority the EPA would otherwise have under the Clean Air Act. *Deseret Power*, slip op. at 37. In light of the EAB's ruling, it was therefore inappropriate for the Division to ignore CO_2 emissions by relying on EPA's prior interpretation of the phrase "subject to regulation" when issuing the Title V Permit.

Although EPA may claim that a December 18, 2008 interpretive memo issued by former EPA Administrator Stephen Johnson (hereafter "Johnson memo") "clarifies" EPA's position that CO_2 is not subject to regulation under PSD requirements (*see* Memorandum from Stephen L. Johnson, Administrator, to all Regional Administrators, "EPA's Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program" (December 18, 2008)) and therefore addresses the EAB's ruling, this is simply not true in this case. For one thing, the Johnson memo is clear that it does not bind states, such as Colorado, that administer the PSD program under their own SIP. Thus, the Johnson memo does not absolve the Division from rendering its own, independent interpretation of the meaning of the phrase "subject to regulation" as set forth in the Colorado SIP.

This is a major oversight on the Division's part. Indeed, the Colorado SIP appears to support a finding that CO_2 emissions are subject to regulation, and therefore subject to PSD requirements. Although the phrase "subject to regulation" is not explicitly defined in the Colorado SIP, there are three reasons to interpret the Colorado SIP to allow the State of Colorado to find that CO_2 emissions are subject to regulation under the Clean Air Act.

First, the U.S. Supreme Court recently held in *Massachusetts v. EPA*, 127 S. Ct. 1438 (2007), that CO_2 is a "pollutant" under the Clean Air Act. Although the EAB noted that the *Massachusetts* decision "did not address whether CO_2 is a pollutant 'subject to regulation' under the Clean Air Act" (*Deseret Power*, slip op. at 8) the EAB did not reject the interpretation that the decision supports a finding that CO_2 emissions are subject to regulation under the Clean Air Act. In fact, the EAB noted that the *Massachusetts* decision rejected key EPA memos that were relied upon when interpreting the phrase "subject to regulation" (*see e.g.*, *Id*. at 52, "The reasoning of the Fabricant Memo was subsequently rejected and overruled by the Supreme Court in *Massachusetts v. EPA*, 549 U.S. 497, slip op. at 29-30 (2007)").

Second, CO_2 is explicitly regulated by the Colorado SIP. In fact, AQCC Regulation No. 1 § VII. contains specific provisions requiring Public Service Company of Colorado monitor CO_2 at its coal-fired power plants. The Title V Permit also explicitly requires Xcel Energy to "install, certify and operate" CO_2 CEMs at the Pawnee coal-fired power plant. *See* Exhibit 1 at 8, Section II, Condition 1.8.

Finally, CO_2 is "subject to regulation" because it falls under the definition of "air pollutant" set forth in the Colorado SIP. Indeed, the AQCC Common Provisions Regulation, which is incorporated into the Colorado SIP, defines air pollutant as:

> Any fume, smoke, particulate matter, vapor, gas or any combination thereof that is emitted into or otherwise enters the atmosphere, including, but not limited to, any physical, chemical, biological, radioactive (including source material, special nuclear material, and by-product materials) substance or matter, but not including water vapor or steam condensate or any other emission exempted by the commission consistent with the Federal Act.

CO_2 is a gas that is emitted into the atmosphere, and therefore clearly regulated as a pollutant under the Colorado SIP. Furthermore, this definition derives directly from the Colorado Air Pollution and Prevention Control Act (*see* CRS § 25-7-103(1.5), a fact that seems to compel a finding that CO_2 is "subject to regulation" under the PSD. Indeed, the SIP explicitly states that PSD provisions apply "to any major stationary source and major modification **with respect to each pollutant regulated under the [Colorado Air Pollution and Prevention Control] Act** and the Federal Act that it would emit, except as this Regulation No. 3 would otherwise allow." AQCC Regulation No.3, Part D § VI.A. (emphasis added). The Colorado Air Pollution and Prevention Control Act clearly regulates CO_2, therefore the Colorado SIP seems to make clear that PSD provisions apply to any major sources and modifications with respect to CO_2 emissions.

Thus, not only has the recent EAB decision called into question the validity of the Division's failure to address CO_2 emissions in order to ensure the Title V Permit assures compliance with PSD requirements under the Clean Air Act, PSD regulations, and the Colorado SIP, but it appears as if the Division's failure to address CO_2 emissions in the context of PSD is contrary to the Colorado SIP. The Administrator must therefore object to the issuance of the Title V Permit to ensure a consistent and reasonable interpretation of PSD in the context of CO_2 emissions from the Pawnee coal-fired power plant.

B. Significant Increases in CO_2 Emissions Have Occurred at the Pawnee Coal-fired Power Plant

The need for Administrator to object and the Division to appropriately assess whether CO_2 emissions should be limited by the application of BACT as required by the Clean Air Act, PSD regulations, and the Colorado SIP, is especially evident in light of the fact that significant increases in CO_2 emissions have occurred at the Pawnee coal-fired power plant over the years. Based on data from the EPA's Clean Air Market's website, between the years 1998 and 2008, net CO_2 emissions increases occurred at the plant in 2000, 2001, 2003, 2006, and 2007.[7] *See* Table below. In 2006 alone, a more than 600,000 ton/year net increase in CO_2 emissions occurred at the Pawnee coal-fired power plant.

Pawnee CO_2 Emissions, 1997-2007.
***See* Emissions Data Attached as Exhibit 5.**

Two-year Baseline	Average Baseline CO_2 Emissions (tons/year)	Year	Total CO_2 Emissions(tons/year)	Increase/ Decrease (tons/year)
2007/2006	4283151.75	2008	3837802.3	-445349.45
2006/2005	4000332.30	2007	4097660.4	**97328.1**
2005/2004	3862073.70	2006	4468643.1	**606569.4**
2004/2003	4432818.70	2005	3532021.5	-900797.2
2003/2002	4320938.65	2004	4192125.9	-128812.75
2002/2001	4604664.10	2003	4673511.5	**68847.4**
2001/2000	4966282.65	2002	3968365.8	-997916.85
2000/1999	4693548.80	2001	5240962.4	**547413.6**
1999/1998	4221244.05	2000	4691602.9	**470358.85**

Under the Colorado SIP, a net increase in any pollutant "subject to regulation" under either the Colorado Air Pollution and Prevention Control Act or the Clean Air Act, but not specifically listed in the Colorado SIP, is "significant" at "any emissions rate." AQCC Regulation No. 3, Part D § II.A.44.b. If CO_2 is subject to regulation under the Colorado SIP, then any increase in emissions at a major stationary source is significant and triggers BACT requirements.

Because the Pawnee coal-fired power plant is a major stationary source under PSD, the increases in CO_2 emissions reported in 2000, 2001, 2003, 2006, and 2007 would be significant and would therefore trigger BACT requirements if it is determined that CO_2 emissions are

[7] Net emission increases and decreases were calculated by averaging actual CO_2 emissions from a consecutive 24-month period (i.e., the baseline) and comparing that average with actual emissions reported for the following year, a method similar to the "actual-to-projected-actual" PSD applicability test set forth in PSD regulations at 40 CFR § 51.166(a)(7)(iv)(*c*).

subject to regulation under the Colorado SIP. Coupled with the EAB's recent ruling and the Division's failure to adequately address whether CO_2 is subject to regulation under the Colorado SIP, these emission increases underscore the need for the Administrator to object to the issuance of the Title V Permit.

CONCLUSION

For the reasons stated above, Petitioner requests the Administrator object to the Title V Permit issued by the Division for the Pawnee coal-fired power plant. The Administrator has a nondiscretionary duty to issue an objection to the Title V Permit within 60 days in accordance with Section 505(b)(2) of the Clean Air Act.

Respectfully submitted this 20th day of February 2010

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TABLE OF EXHIBITS

1. Public Service Company of Colorado, Pawnee Station Title V Permit, Permit Number 96OPMR129 (January 1, 2010).
2. Technical Review Document for Renewal/Modification of Operating Permit 96OPMR129 (January 1, 2010).
3. 2008 Emissions Data for Pawnee Station from EPA Acid Rain Program Emissions Database.
4. WildEarth Guardians Comments on Proposed Title V Permit (July 3, 2009).
5. Emissions Data for Pawnee Station from EPA Acid Rain program Database
6. Colorado Air Pollution Control Division Response to Comments from WildEarth Guardians on Draft Pawnee Title V Permit (November 6, 2009).
7. *United States v. Tampa Electric Company*, Consent Decree (February 29, 2000).
8. *United States v. Minnkota Power Cooperative*, Consent Decree (April 24, 2006).
9. *United States v. Electric Power Company*, Consent Decree (April 27, 2003).
10. *United States v. Illinois Power*, Consent Decree (March 7, 2005).