

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

IN THE MATTER OF)	
Public Service Company of Colorado,)	
dba Xcel Energy,)	
Hayden Station)	
)	PETITION TO OBJECT TO
)	ISSUANCE OF A STATE
Permit Number: 96OPRO132)	TITLE V OPERATING
)	PERMIT
)	
Issued by the Colorado Department of)	
Public Health and Environment, Air)	
Pollution Control Division)	
)	Petition Number: VIII-2009-
)	
)	
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Pursuant to Section 505(b)(2) of the Clean Air Act 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 December 9, 2008 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 to operate the Hayden coal-fired power plant located in Rout County, Colorado. *See* Exhibit 1, Public Service Company of Colorado, Hayden Station Title V Permit, Permit Number 96OPRO132 (April 1, 2009).

Petitioner hereby petitions the Administrator to object to the issuance of the Title V permit due to its failure to require sufficient periodic monitoring to ensure harmful levels of particulate matter are not released from the smokestacks of the power plant and failure to ensure that carbon dioxide emissions are appropriately limited in accordance with the Clean Air Act.

INTRODUCTION

The Hayden coal-fired power plant is a major stationary source of air pollution located near Hayden, Colorado. The power plant consists of two coal-fired boilers that generate 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, the Hayden coal-fired power plant annually releases:

- 7,773.5 tons of nitrogen oxides (“NO_x”);

- 2,718.4 tons of sulfur dioxide (“SO₂”);
- 435.8 tons of carbon monoxide (“CO”);
- 55 tons of volatile organic compounds (“VOCs”);
- 222.73 tons of particulate matter less than 10 microns in diameter (“PM₁₀”);
- 2.68 tons of hydrochloric acid;
- 8.52 pounds of mercury, a potent neurotoxin; and
- Nearly 4,300,000 tons of carbon dioxide, a greenhouse gas that is fueling global warming.

See Exhibit 2, Technical Review Document for Renewal/Modification of Operating Permit 96OPRO132 (April 1, 2009) at 21-22.

The Division submitted the proposed Title V Permit for EPA review on December 9, 2008. The EPA’s 45 day review period ended on January 23, 2009. Based on Petitioner’s conversations with Region 8 EPA staff, the EPA did not object to the issuance of the Title V Permit for the Hayden coal-fired power plant. Since that time, the Division has issued a final Title V Permit, dated April 1, 2009. 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 Hayden 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 Hayden 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 Hayden coal-fired power plant fails to assure compliance with several applicable requirements.

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 November 6, 2008, Petitioner submitted detailed comments regarding the Division’s proposal to renew the Title V Permit for the Hayden Station. *See* Exhibit 3, WildEarth Guardians Comments on Proposed Title V Permit

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).

(November 6, 2008). 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 96OPRO132 for the Hayden 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 Require Assure Compliance With Particulate Matter Limits

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 established by the Colorado State Implementation Plan (“SIP”). That emission rate, which is set forth in Section II, Condition 1 of the Title V Permit, limits emissions of particulate matter to no more than 0.03 lb/mmBtu from both Unit 1 and Unit 2. *See* Exhibit 1 at 6.² The underlying requirement do not require monitoring. Therefore, the Division was required to ensure the Title V Permit contained

² As the Title V Permit states at Section II, Condition 1.1, this limit was established by the Colorado SIP, SIP for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by the EPA at 62 Fed. Reg. 2305 (January 16, 1997), Section VI.C.V.8.c.ii.(2). *See* Exhibit 1 at 7-8.

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 3 at 3.

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 “maintaining and operating the baghouse in accordance with the requirements identified in Section II, Condition 11.1” and “conducting performance tests annually in accordance with Condition 11.3.” Exhibit 1 at 8. None of these conditions explicitly require monitoring of actual particulate matter emissions to ensure compliance with the rate set forth in Condition 1 of the Title V Permit.

Indeed, Section II, Condition 11.1 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 31. Compliance with this Condition does not yield particulate matter data necessary to demonstrate compliance with the 0.03 lbs/mmBtu emission rate set forth in Section II, Condition 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 11.1 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 11.1 will, with any level of certainty, ensure continuous compliance with the quantitative 0.03 lb/mmBtu particulate matter emission rate. Adding to this, Section II, Condition 11.1 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.

Furthermore, Section II, Condition 11.3 relates only to stack testing. *See* Exhibit 1 at 31. 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. 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 is an Accepted Means of Demonstrating Compliance

The Division may believe that stack testing under Section II, Condition 11.3 can substitute for particulate matter monitoring, but this, too, is unfounded. For one thing, Section II, Condition 11.3 only requires that stack testing occur annually, at most. Even then, Section II,

Condition 1.1.2 states that the results of stack test are based only on the average of three 2-hour tests, meaning at best Section II, Condition 11.3 monitors particulate matter for six hours every year. *See* Exhibit 1 at 8. Thus, while the 0.03 lbs/mmBtu emission rate applies continuously, the stack testing requirement limits monitoring to only six hours per year (although Section II, Condition 11.3 actually allows stack testing to occur as infrequently as six hours every five years). This is problematic. In essence, even if the Division could reasonably rely on Condition 11.3 to assure compliance with particulate matter rate, this Condition would assure compliance with the limits only six hours a year, at best. This necessarily means the Title V Permit fails to assure compliance with the 0.03 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 0.03 lbs/mmBtu for only six hours every year, then such monitoring may be appropriate. The Title V Permit has no such limit, however, and therefore fails to assure compliance.

The failure to ensure more frequent monitoring of particulate matter is further problematic because heat input at the Hayden coal-fired power plant has varied over the years. For instance, between 1997 and 2007, heat input was as high as 26,183,738 mmBtu and as low as 19,575,309 for Unit 2, a difference of more than 7 million mmBtu. *See* Table 1 below. Because the particulate emission rate set forth at Condition 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 compliance with the particulate emission rate.

Table 1. Heat Input at the Hayden Coal-fired Power Plant (data from EPA’s Clean Air Markets website, <http://camddataandmaps.epa.gov/qdm/index.cfm>).

Year	Unit 1 Heat Input (mmBtu)	Unit 2 Heat Input (mmBtu)
1997	16,379,793	24,628,759
1998	13,021,291	24,932,374
1999	18,214,289	19,575,309
2000	12,131,870	26,183,738
2001	19,025,081	22,257,368
2002	18,836,045	24,378,570
2003	15,165,062	23,279,311
2004	18,696,872	22,152,361
2005	19,317,348	24,238,730
2006	16,323,085	25,125,127
2007	19,129,518	22,766,128

The need for continuous monitoring, or at least more frequent than once every year, is further bolstered by the Clean Air Act. Section 302(k) of the Clean Air Act 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 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 asserted its belief that that compliance assurance monitoring ("CAM") requirements set forth in Section II, Condition 1.18 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 Condition 1 in accordance with 40 CFR § 70.6(c)(1). *See* Exhibit 4, Colorado Air Pollution Control Division Response to Comments on Draft Renewal Operating Permit (December 6, 2009) at 4-5. 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 can be demonstrated by complying with CAM requirements at Section II, Condition 1.18, or the underlying CAM Plan in Appendix G 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 11.1 and Section II, Condition 11.3. 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. 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. Further, although the CAM requirements at Section II, Condition 1.18 and the CAM Plan in Appendix G 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 "implies that monitoring under CAM is more stringent than periodic monitoring" (*see* Exhibit 4 at 5), this is not supported by the preamble. While the EPA originally thought that Part 64 CAM

³ For example, although the CAM Plan requires that an inspection occur anytime the baghouses are not inspected according to schedule (*see* Exhibit 1 at Appendix G, Page 2), neither the CAM Plan nor Section II, Condition 1.18 require any standard of performance for the baghouses.

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.

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 “more rigorous” than periodic monitoring is presumptuous, to say the least. By the EPA’s own findings, CAM is meant to fill monitoring gaps, not supersede altogether existing monitoring requirements

Regardless, and again, 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 G assure compliance with the particulate emission rate at Section II, Condition 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, the Division also arbitrarily rejected a means to ensure continuous compliance with the particulate emission rate. In comments, Petitioner requested that 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 Services*, 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 5, 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 6, 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 7 and 8, United States v. 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. 9728. 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, Petitioner 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 Hayden coal-fired power plant through the Title V Permit.” Exhibit 3 at 3. **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 4 at 6. 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. Regardless, 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.

II. 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 assess whether carbon dioxide (“CO₂”) is subject to regulation in accordance with Prevention of Significant Deterioration (“PSD”) requirements and therefore failed to ensure compliance with PSD under the Clean Air Act, PSD regulations, and the Colorado SIP.

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 Best Available Control Technology (“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 ensure assess whether CO₂ 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 CO₂ emissions from the Hayden coal-fired power plant.

Although Petitioner did not raise objections during the public comment period regarding the failure of the Division to ensure compliance with PSD in relation to CO₂ emissions, this was due to the fact that the grounds for such objection arose after the public comment period. Indeed, our concerns stem from an Environmental Appeals Board (“EAB”) ruling issued on November 13, 2008, which remanded a PSD permit back to Region 8 of the EPA “to reconsider whether or not to impose a CO₂ BACT [best available control technology] limit in light of the Agency’s discretion to interpret, consistent with the CAA [Clean Air Act], what constitutes a ‘pollutant subject to regulation under this Act.’” *In re Deseret Power Electric Cooperative*, PSD Appeal No. 07-03, slip op. at 63 (EAB November 13, 2008), 14 E.A.D. at _____. This EAB ruling held that EPA’s traditional, albeit inconsistent and arbitrary, interpretations of the Clean Air Act were inadequate to justify a finding that CO₂ is not subject to regulation in accordance with PSD requirements under 42 USC §§ 7475(a)(4) and 7479(3). Because the EAB ruling was issued subsequent to the close of the public comment period for the draft Title V Permit, it was impracticable for Petitioner to raise with reasonable specificity objections related to this ruling.

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 relied on EPA’s interpretation of the phrase “subject to regulation” when issuing the Title V Permit and completely ignored whether CO₂ 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 CO₂ 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 CO₂ 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.

Furthermore, EPA Administrator Jackson recently granted a petition for reconsideration of the Johnson memo “to allow for public comment on the issues raised in the memorandum.” See Exhibit 9, Letter from EPA Administrator Lisa Jackson to David Bookbinder, Chief Climate Counsel, Sierra Club (February 17, 2009). Although Administrator Jackson declined to stay implementation of the Johnson memo while the EPA solicits public comment, she advised that “PSD permitting authorities should not assume the memorandum is the final word on the appropriate interpretation of Clean Air Act requirements.” *Id.* It is further apparent that it would be inappropriate for the EPA to allow the Division to simply rely on the Johnson memo in assessing whether CO₂ emissions should be limited by the application of BACT as required by the Clean Air Act, PSD regulations, and the Colorado SIP.

Indeed, it would be further inappropriate because the Colorado SIP appears to support a finding that CO₂ 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 CO₂ 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 CO₂ is a “pollutant” under the Clean Air Act. Although the EAB noted that the *Massachusetts* decision “did not address whether CO₂ 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 CO₂ 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, CO₂ is explicitly regulated by the Colorado SIP. In fact, AQCC Regulation No. 1 § VII. contains specific provisions requiring Public Service Company of Colorado monitor CO₂ at its coal-fired power plants, including the Hayden coal-fired power plant. Colorado’s SIP for Class I Visibility Protection Part I: Hayden Station Requirements at Section VI.C.V.9 further states that Public Service Company shall operate CO₂ CEMs at the Hayden coal-fired power plant. See also Title V Permit, Section II, Condition 1.9 at 11.

Finally, CO₂ 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.

CO₂ 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 CO₂ 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 CO₂, therefore the Colorado SIP seems to make clear that PSD provisions apply to any major sources and modifications with respect to CO₂ emissions.

Thus, not only has the recent EAB decision called into question the validity of the Division’s failure to address CO₂ 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 CO₂ 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 CO₂ emissions from the Hayden coal-fired power plant.

B. Significant Increases in CO₂ Emissions Have Occurred at the Hayden Coal-fired Power Plant

The need for Administrator to object and the Division to appropriately assess whether CO₂ 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 CO₂ emissions have occurred at the Hayden coal-fired power plant over the years. Based on data from the EPA’s Clean Air Market’s website, between the years 1997 and 2007, net CO₂ emissions increases occurred from both Units 1 and 2 at the plant in 2006, 2005, 2002, and 2000.⁵ *See* Tables 2 and 3 below. In 2002 alone, a more than 500,000 ton/year net increase in CO₂ emissions occurred at Units 1 and 2 of the Hayden coal-fired power plant. Although decreases in CO₂ emissions have occurred, the plant emitted more CO₂ emissions in 2007 than in 1997.

⁵ Net emission increases and decreases were calculated by averaging actual CO₂ 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).

Table 2. Hayden Unit 1 CO₂ Emissions, 1997-2007 (data from EPA's Clean Air Markets website, <http://camddataandmaps.epa.gov/gdm/index.cfm>).

Two-year Baseline	Average Baseline CO₂ Emissions (tons/year)	Year	Total CO₂ Emissions(tons/year)	Increase/ Decrease (tons/year)
2006/2005	1828355.24	2007	1674748.04	-153607.19
2005/2004	1950130.28	2006	1981962.43	31832.15
2004/2003	1736800.92	2005	1918298.13	181497.22
2003/2002	1743929.01	2004	1555303.70	-188625.31
2002/2001	1942263.55	2003	1932554.32	-9709.23
2001/2000	1596412.50	2002	1951972.77	355560.28
2000/1999	1554816.67	2001	1240852.22	-313964.45
1999/1998	1602383.03	2000	1868781.13	266398.10
1998/1997	1508277.04	1999	1335984.93	-172292.11

Table 3. Hayden Unit 2 CO₂ Emissions, 1997-2007 (data from EPA's Clean Air Markets website, <http://camddataandmaps.epa.gov/gdm/index.cfm>).

Two-year Baseline	Average Baseline CO₂ Emissions (tons/year)	Year	Total CO₂ Emissions (tons/year)	Increase/ Decrease (tons/year)
2006/2005	2532361.456	2007	2335858.60	-196502.86
2005/2004	2379855.208	2006	2577832.97	197977.77
2004/2003	2330636.339	2005	2486889.94	156253.60
2003/2002	2444537.54	2004	2272820.48	-171717.06
2002/2001	2392112.866	2003	2388452.20	-3660.66
2001/2000	2484615.113	2002	2500622.88	16007.77
2000/1999	2347025.049	2001	2283602.85	-63422.20
1999/1998	2283241.188	2000	2685627.37	402386.18
1998/1997	2542292.775	1999	2008422.73	-533870.05

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 CO₂ 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 Hayden coal-fired power plant is a major stationary source under PSD, the increases in CO₂ emissions reported in 2000, 2002, 2005, and 2006 would be significant and would therefore trigger BACT requirements if it is determined that CO₂ emissions is subject to

regulation under the Colorado SIP. Coupled with the EAB's recent ruling and the Division's total failure to address whether CO₂ 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 Hayden coal-fired power plant. The Title V Permit fails to assure compliance with Title V monitoring requirements under the Clean Air Act and fails to appropriately limit carbon dioxide emissions in accordance with PSD requirements under the Clean Air Act, PSD regulations, and the Colorado SIP. The Administrator thus 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 10th day of March 2009

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TABLE OF EXHIBITS

1. Public Service Company of Colorado, Hayden Station Title V Permit, Permit Number 96OPRO132 (April 1, 2009).
2. Technical Review Document for Renewal/Modification of Operating Permit 96OPRO132 (April 1, 2009).
3. WildEarth Guardians Comments on Proposed Title V Permit (November 6, 2008).
4. Colorado Air Pollution Control Division Response to Comments on Draft Renewal Operating Permit (December 6, 2009).
5. *United States v. Tampa Electric Company*, Consent Decree (February 29, 2000).
6. *United States v. Minnkota Power Cooperative*, Consent Decree (April 24, 2006).
7. *United States v. Electric Power Company*, Consent Decree (April 27, 2003).
8. *United States v. Illinois Power*, Consent Decree (March 7, 2005).
9. Letter from EPA Administrator Lisa Jackson to David Bookbinder, Chief Climate Counsel, Sierra Club (February 17, 2009).