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**BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING**

IN THE MATTER OF:)
BASIN ELECTRICAL POWER COOPERATIVE)
DRY FORK STATION,) Docket No. 07-2801
AIR PERMIT CT-4631)

**RESPONDENT DEPARTMENT OF ENVIRONMENTAL QUALITY'S
MEMORANDUM IN SUPPORT OF MOTION FOR PARTIAL SUMMARY
JUDGMENT**

Respondent, the Department of Environmental Quality ("DEQ"), through undersigned counsel and pursuant to WYO. R. CIV. P. rules 7(b)(1) and 56 and the Environmental Quality Council Rules, Chapter II, Sections 3 and 14, provides the following memorandum in support of its Motion for Partial Summary Judgment.

I. Background

On October 15, 2007, the Director of the DEQ and the Administrator of the Air Quality Division ("AQD") issued Air Quality Permit CT-4631 ("Permit") to Basin Electric Power Cooperative ("Basin") to construct the Dry Fork Station. The Permit authorized Basin to construct a 385 megawatt ("MW") net subcritical pulverized coal

("PC") furnace, boiler, turbine, and condenser; a coal unloading, storage, and handling system; air pollutant control equipment; a solid waste disposal system; and a water supply, treatment, and discharge system to be located adjacent to the Dry Fork Mine, approximately seven (7) miles north of Gillette, Wyoming.

On November 1, 2007, Sierra Club, Powder River Basin Resource Council, and Wyoming Outdoor Council (collectively "Protestants") filed a petition for hearing before the Environmental Quality Council ("EQC") in response to the permit granted to Basin. (Protestant's Pet. for Hr'g at 1). In the Petition for Hearing, Protestants alleged that DEQ failed to comply with Wyoming's Prevention of Significant Deterioration ("PSD") requirements and the Clean Air Act ("CAA"). (Protestant's Pet. for Hr'g at 8). Despite Protestants allegations, DEQ conducted the review of Basin's application and Best Available Control Technology ("BACT") analysis according to current Wyoming law and existing interpretation of the statutes, therefore, summary judgment is appropriate in these circumstances.

II. Protestant's Grounds of Appeal

Protestants allege DEQ erred in its determination that the project does not cause or contribute to an exceedence of the applicable sulfur dioxide ("SO₂") increment by: omitting sources of cumulative SO₂ emissions from its analysis, relying on revised modeling supplied by the applicant, and relying on unpromulgated "Significant Impact Levels" ("SILs") to define the contribution of the project to deterioration of air quality. (Protestant's Pet. for Hr'g at 17-18 (Claim VIII)).

Protestants also allege that DEQ should have required Basin to consider Supercritical, Untrasupercritical or Integrated Gasification Combined Cycle (“IGCC”) technology in the BACT analysis. (*Id.* at 10-12 (Claims II and III)).

Protestants further allege DEQ’s use of PM₁₀ as a surrogate for PM_{2.5} did not satisfy regulatory requirements for BACT, permit emission limits, or National Ambient Air Quality Standards (“NAAQS”) demonstrations.¹ (*Id.* at 16-17 (Claim VII)).

The Protestants have failed to provide sufficient evidence to present a material issue of fact in regard to the following issues:

- I. Did DEQ correctly use SILs to determine whether the Basin Dry Fork Station would cause or contribute to violations of the Class I PSD Increment?
- II. Did DEQ properly consider all sources of SO₂ emissions for the SO₂ increment calculation?
- III. Did DEQ improperly rely on revised modeling results supplied by the applicant?
- IV. Did DEQ properly exclude IGCC, Supercritical and Untrasupercritical boilers from the DEQ/AQD’s BACT analysis because these redefine the source?

¹ PM₁₀ refers to “particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers” and PM_{2.5} refers to “particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers.” WAQSR Ch. 1, § 3(a).

- V. Did DEQ properly utilize PM₁₀ emissions as a surrogate for evaluating PM_{2.5} emissions?

III. Standards for Summary Judgment

Chapter II, Section 14 of the DEQ Rules of Practice & Procedure (“DEQ RPP”) makes the Wyoming Rules of Civil Procedure applicable to matters before the EQC. (DEQ RPP Ch. 2, § 14) Summary judgment is appropriate if there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. WYO. R. CIV. P. 56(b), (c). Summary judgment procedures set out in WYO. R. CIV. P. 56 apply to administrative cases. *Rollins v. Wyoming Tribune Eagle*, 2007 WY 28, ¶ 6; 152 P.3d 367, 6 (Wyo. 2007). The purpose of summary judgment is to dispose of cases before trial that present no genuine issues of material fact. *Id.* A fact is material if proof of that fact would have the effect of establishing or refuting one of the essential elements of the cause of action or defense. *Id.*

Where there are no genuine issues of material fact, summary judgment concerns strict application of the law. *Bd. of County Comm'rs of County of Laramie v. City of Cheyenne*, 2004 WY 16, ¶ 8; 85 P.3d 999, 8 (Wyo. 2004). Summary judgment may involve statutory interpretation as a question of law to determine the Legislature’s intent. *Id.* at 1002-03.

IV. Undisputed Material Facts

On November 10, 2005, Basin submitted its air construction permit application to Wyoming DEQ to construct the Dry Fork Station. Ex. 1 (Schlichtemeier Aff. Ex. D). As

a part of the application, Basin conducted an analysis of the air quality impacts on Class I areas located within 300 kilometers of the proposed Dry Fork Station. Ex. 2 (Rairigh Aff. ¶ 2).

Based on the results of Basin's significance analysis at the Northern Cheyenne Indian Reservation ("NCIR"), a cumulative 24-hour SO₂ increment consumption analysis was conducted at the NCIR Class I area. Three years of meteorological data were used (2001, 2002, and 2003) to determine whether Class I SO₂ 24-hour increment was exceeded at any receptor within the NCIR for any 24-hour period in the three years that were modeled. Ex. 2 (Rairigh Aff. ¶ 29). The cumulative increment impact analysis requires that regional sources of SO₂ be included in the cumulative analysis to assess the degree of increment consumption at all receptors within Class I areas located within 300 km of the proposed source Ex. 2 (Rairigh Aff. ¶ 30).

After reviewing the application, on December 21, 2005, DEQ issued its first Completeness Review for Permit Application No. AP-3546 ("Completeness Review No. 1"). Ex. 1 (Schlichtemeier Aff. Ex. E). In this review, DEQ requested additional information from Basin regarding: the feasibility of achieving more stringent SO₂ emission limits; the feasibility of achieving more stringent NO_x emission limits; the feasibility of achieving more stringent PM₁₀ emission limits, and additional information regarding PSD Class II modeling issues. *Id.*

In response to the Completeness Review No. 1, Basin submitted additional technical information to support its permit application. Ex. 1 (Schlichtemeier Aff. Ex. F).

Basin's response received by the DEQ/AQD on or about March 6, 2006, included technical information and a detailed analysis of the technical feasibility and cost effectiveness of achieving more stringent SO₂, NO_x, and PM₁₀ emission limits. *Id.*

On March 28, 2006, DEQ issued its second Completeness Review ("Completeness Review No. 2"). Ex. 1 (Schlichtemeier Aff. Ex. G). Completeness Review No. 2 focused on modeling issues and requested additional information on PM₁₀ emissions from the main boiler. *Id.*

Specifically, DEQ reviewed the permit application and requested that additional modeling be conducted using the maximum permitted emission rates for Colstrip Units 3 and 4 in Montana. *Id.*

DEQ's request for Basin to use the maximum permitted emission rates for Colstrip Units 3 and 4 was based on DEQ's interpretation of the meaning of "maximum actual emission rates" as used in EPA's 1990 guidance; Draft New Source Review Manual ("NSR Manual"). Ex. 1 (*See* Schlichtemeier Aff. Ex. B at C.49). In addition, EPA provides discretion to reviewing authorities to use allowable or permitted emissions in lieu of actual emissions.

DEQ issued its third Completeness Review on May 3, 2006 ("Completeness Review No. 3") which requested additional technical information for the proposed auxiliary boiler, and a BACT analysis for mercury emissions from the proposed boiler. Ex. 1 (Schlichtemeier Aff. Ex. H). On May 30, 2006, DEQ issued its fourth Completeness Review ("Completeness Review No. 4") which focused on the technical

feasibility and cost effectiveness of achieving lower SO₂ and NO_x emission limits. Ex. 1 (Schlichtemeier Aff. Ex. I).

On June 19, 2006, the DEQ/AQD received Basin's response to Completeness Review No. 2 providing additional modeling analyses and discussions of PM₁₀ emissions from the main boiler. Ex. 1 (Schlichtemeier Aff. Ex. J). The results of the second modeling analysis show that the cumulative impacts from SO₂ sources located within 300 km of the NCIR exceed the allowable Class I SO₂ (24-hour) increment in the NCIR. Ex. 2 (Rairigh Aff. ¶ 39).

DEQ then analyzed the instances in which there were modeled exceedences and compared them to the results of Dry Fork's significance analysis for SO₂ (24-hour) that were greater than the Class I SIL for SO₂ (24-hour). Ex. 2 (Rairigh Aff. ¶ 40).

Based on these results, DEQ determined that Dry Fork would not significantly contribute to an increment violation because its modeled concentrations were below Class I SILs. *Id.*

On July 17, 2006, the DEQ/AQD received Basin's response to Completeness Review No. 3 addressing mercury (Hg) noting that a true top down BACT analysis was not possible and proposing a mercury optimization study for the DFS. Ex. 1 (Schlichtemeier Aff. Ex. K).

Also on July 17, 2006, the DEQ/AQD received Basin's response to Completeness Review No. 4 which provided DEQ with additional evaluations and analysis of the

feasibility of achieving more stringent NO_x and SO₂ emissions limits. Ex. 1 (Schlichtemeier Aff. Ex. L).

On August 18, 2006, the DEQ/AQD determined that Basin's Permit Application was complete and that the DEQ/AQD would proceed with its technical review of the Permit Application. Ex. 1 (Schlichtemeier Aff. Ex. M).

On February 5, 2007, DEQ completed its Permit Application Analysis NSR-AP-3546 for the Dry Fork Station. Ex. 1 (Schlichtemeier Aff. Ex. N). The Permit Application Analysis included a description of the proposed facility, emission summary, regulatory applicability review, BACT analysis, and impact modeling analysis. *Id.* The analysis concluded that the Dry Fork Station would comply with all applicable Wyoming Air Quality Standards and Regulations, and included DEQ's intent to issue a construction permit. *Id.* A draft permit, including BACT emission limits was included as a part of the Permit Application Analysis. *Id.*

On February 26, 2007, DEQ issued a public notice in the Gillette News-Record of its proposed decision to issue the permit. Ex. 1 (Schlichtemeier Aff. Ex. O). The DEQ held a public hearing on June 28, 2007 at the Campbell County Library in Gillette, Wyoming. Ex. 1 (Schlichtemeier Aff. ¶ 31). DEQ received thirty-one (31) comment letters on the proposed permit during public comment, including comments from EPA Region VIII, National Parks Service and a coalition of environmental groups (including the Powder River Basin Resource Council, Wyoming Chapter of Sierra Club, Wyoming Wilderness Association, Wyoming Outdoor Council, Biodiversity Conservation Alliance,

Western Resource Advocates, and Natural Resources Defense Council). Ex. 1 (*Id.*, Schlichtemeier Aff. Ex. T, p.1). On June 25, 2007, Basin submitted extensive comments to DEQ in response to the comments submitted by EPA, NPS, and the environmental organizations and included copies of important technical information and analysis previously submitted as a part of the permitting process. Ex. 1 (Schlichtemeier Aff. Ex. T).

On October 15, 2007, the Director of the DEQ and the Administrator of the Air Quality Division granted approval to Basin to construct the Dry Fork Station by approving the Permit. Ex. 1 (Schlichtemeier Aff. Ex. U).

V. ARGUMENT

A. **DEQ correctly used SILs to determine whether the Basin Dry Fork Station would cause or contribute to violations of the Class I PSD Increment.**

DEQ is charged with the responsibility to enforce air quality standards which apply to sources in Wyoming. WYO. STAT. ANN. §§35-11-104,109-110. The DEQ issues permits in accordance with the requirements of Article 2 of the Wyoming Environmental Quality Act (“WEQA”), WYO. STAT. ANN. §35-11-201, and Chapter 6 of the Wyoming Air Quality Standards and Regulations (“WAQSR”). Wyoming has a valid State Implementation Plan (“SIP”) approved by EPA to enforce and permit pollution emitting sources so long as they comply with the rules and regulations implemented by DEQ. 40 C.F.R. Part 52, Subpart ZZ (2007). Pursuant to Wyoming’s PSD regulations, DEQ is required to review major source facility applications to ensure that emissions from the proposed facility will not cause or contribute to an exceedance of ambient air

quality standards or violations of any PSD air quality increment. WAQSR Ch. 6, §§ 2 and 4. The Protestants argue that DEQ erred by: “determining that the project will not cause or contribute to an exceedence of the applicable SO₂ increment or otherwise interfere with the measures of the SIP designed to prevent significant deterioration of air quality; including omitting certain major sources of cumulative SO₂ emissions from the analysis; and relying on revised modeling supplied by the applicant.” (Protestants Pet. for Hr’g at 17). This argument fails to acknowledge established decisions and guidance as well as the long standing practice of DEQ applying Class II SILs during PSD reviews and the case law and common sense application of Class I SILs.

1. The Use of Significant Impact Levels is Appropriate and Established in Case Law and EPA Guidance

DEQ’s use of Class II SILs for increment impact analysis is based on well established case law and EPA guidance. The concept of SILs was established in the early 1980’s based on the idea of *de minimis* impacts. *Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1979). In *Alabama Power*, the D.C. Circuit recognized that “there is likely a basis for an implication of *de minimis* authority to provide exemption when the burdens of regulation yield a gain of trivial or no value.” *Id.* at 360-61. Based on the *Alabama Power* decision, EPA began to develop significant emission rates which would reflect emission levels below which EPA considered a proposed source’s emissions to be *de minimis* and not require a PSD permit. Similarly, EPA developed Class II SILs to identify ambient concentration thresholds for which a source would be considered to be *de minimis*. See 45 FR 52676, also 72 FR 54112. A source which demonstrates that its

impacts do not exceed a SIL at a specific location and time is not required to conduct more extensive modeling and air quality analysis to demonstrate that its emissions, in combination with the emissions of other sources, will not cause or contribute to an exceedence of the increment. *See* 72 FR 54139. If, however, the modeled impact from the source exceeds the SIL, that source must then conduct cumulative modeling to assess its impact in conjunction with the other sources located in its impact area and evaluate the amount of increment consumed by all modeled sources. *See* Ex. 2 (Affidavit of Ken Rairigh in Support of Wyoming Department of Environmental Quality’s Motion for Partial Sum. J. (Rairigh Affidavit) ¶ 17). When there is a modeled exceedence and the source is predicted to only contribute a *de minimis* amount, below the SILs, then it would not be considered to cause or contribute to the exceedence. *Id.* at 19.

The use of SILs by agencies has also been upheld by EPA. The U.S. Environmental Protection Agency’s Environmental Appeals Board (“EAB”) supports the use of SILs as evidenced by its Order Denying Review of the Prairie State Generating Company Permit. *In re Prairie State Generating Co.*, 13 E.A.D. ____, 2006 WL 2847225 (E.A.B, August 24, 2006) (Order Denying Review at 138), *aff’d* 499 F.3d 653 (7th Cir. 2007). In *Prairie State*, environmental groups objected to the issuance of a permit by the Illinois EPA (“IEPA”) for the construction of a 1,500 MW pulverized coal electric generating facility. *Id.* at 1. Environmental groups objected to the use of SILs as a threshold for determining whether the facility contributed to a predicted violation of NAAQS because the term “significant” did not appear in Section 165(a) (3) of the CAA

and the term “significant” had to be read into the regulations to reach the conclusion that the source did not cause or contribute to a violation. *Id.* at 139. The EAB dismissed this argument based on a number of authorities. First, the EAB interpreted the term “cause or contribute” to air pollution “must mean that some non-zero emission is permissible, otherwise such a determination could not be made.” *Id.* The EAB relied on the longstanding and well-recognized principle of EPA’s interpretation of “cause, or contribute to” to refer to significant, *i.e.* non-*de minimis*, emission contributions reflected both in EPA regulations and EPA guidance. *Id.*

The EAB agreed with IEPA’s determination that emissions of SO₂ would not exceed SILs and therefore held that this determination was consistent with EPA regulations, specifically the guidelines for air quality modeling published in Appendix W to 40 C.F.R. part 51. *Id.* The EAB stated “With respect to SO₂, Appendix W states that, ‘for sources located in attainment or unclassified areas, the demonstration as to whether the source will cause or contribute to an air quality violation should be based on,’ among other things, ‘the significance of the spatial and temporal contribution to any modeled violation.’” *Id.*

The EAB also relied on other agency guidance documents to demonstrate that SILs are appropriate, including a 1988 memorandum describing the conflict between the approaches suggested by the Protestants and the approach used by IEPA in the *Prairie State* case. *See* Ex. 3 (Memo from George A. Emison, Director, U.S. EPA Office of Air Quality Planning and Standards, to Thomas J. Maslany, Director, Air Management

Division, regarding “Air Quality for Prevention of Significant Deterioration (PSD)” (July 5, 1988) (“Emison Memo”).

The Emison Memo relied upon in the *Prairie State* case directly addresses the two approaches regarding the use of SILs. The Emison Memo states that “historically, the [EPA]’s position has been that a PSD source will not be considered to cause or contribute to a predicted NAAQS or increment violation if the source’s estimated air quality impact is insignificant (i.e., at or below defined *de minimis* levels).” *Id.* at 1. The Emison Memo contrasts the usage of SILs with the prohibition of SILs. The Emison Memo states:

[A] proposed source would automatically be considered to cause or contribute to any modeled violation that would occur within its impact area. In this approach, the source’s impact is modeled and a closed circle is drawn around the source, with a radius equal to the farthest distance from the source at which a significant impact is projected. If, upon consideration of both proposed and existing emission contributions, modeling predicts a violation of either NAAQS or an increment anywhere within this impact area, the source (as proposed) would not be granted a permit. The permit would be denied, even if the source’s impact was not significant at the predicted site of the violation during the violation period.

Ex. 3 (Emison Memo. at 1).

The Emison Memo goes on to describe the contrasting approach used by the IEPA in the *Prairie State* case:

The second approach similarly projects air quality concentrations throughout the proposed source’s impact area, but does not automatically assume that the proposed source would contribute to a predicted NAAQS or increment violation. Instead, the analysis is carried one step further in the event that a modeled violation is predicted. The

additional step determines whether the emissions from the proposed source will have a significant ambient impact at the point of the modeled NAAQS or increment violation when the violation is predicted to occur. If it can be demonstrated that the proposed source's impact is not "significant" in a spatial and temporal sense, then the source may receive a PSD permit.

Ex. 3 (Emison Memo. at 2).

The Emison Memo proceeds to specifically reject the first approach (the "non-zero" approach) by stating that "the most appropriate course of action to follow is the second approach (EAB's approach) which considers the significant impact of the source in a way that is spatially and temporally consistent with the predicted violations." *Id.*

It must be pointed out that the Emison Memo is directed specifically toward Class II SILs; however, other courts have applied Class I SILs to similar situations as Dry Fork.

In *Groce v. Dep't of Env'tl. Prot.*, 921 A.2d 567 (Pa.Cmwlth. Ct. 2007), a citizens group appealed an agency decision to approve a permit to build a 525 MW electric generating power plant in Pennsylvania. The appeal contested the issuance of the permit claiming that the permit did not include an adequate increment consumption analysis under the PSD program. *Id.* at 573. Similar to the Dry Fork application process, the agency conducted computer modeling in order to determine the impact of the plant on Class I receptors. *Id.* at 572. The preliminary computer modeling had shown that there was a predicted Class I increment exceedence, however, during the cumulative analysis, the emissions from the proposed source were determined to have a non-zero impact at Class I areas, or equivalently the modeled impacts were below Class I SILs. *Id.* at 577.

The citizens group advanced the argument that any modeled impact over zero from the proposed source would be a significant impact. *Id.* at 576. The court accepted the agency's findings and held:

“Congress did not intend to prohibit any and all economic growth based on infinitesimally small values calculated using highly developed and developing software. The [agency's] use of SIL thresholds in Class I areas balanced Congress' intent to protect air quality and promote economic growth in areas meeting the NAAQS, and there was substantial evidence that SIL thresholds were generally accepted in the field[.]”

Id. at 578.

DEQ used this approach to Class I SILs and increment consumption analysis for the Dry Fork Station application. *See* Rairigh Aff. ¶ 40. Protestants argue that this approach is improper and the DEQ should have rejected the permit based on the “non-zero” approach rejected by the EAB. (Protestant's Pet. for Hr'g at 17-18 (Claim VIII)). Protestants cite a memorandum from the EPA Region 8 Director of the Air and Radiation Program to North Dakota as their legal authority to require DEQ to use the “non-zero” increment consumption approach. *See* Ex. 4 (Memo from Richard R. Long, Director, U.S. EPA Region VIII Air and Radiation Program, to Terry L. O'Clair, Director, Division of Air Quality, North Dakota Department of Health, (April 12, 2002) hereinafter, “North Dakota Memorandum”). The use of the North Dakota Memorandum as authoritative, however, is unpersuasive in light of the weight of evidence to the contrary.

First, the North Dakota Memorandum addresses Class I impacts in the context of North Dakota modifying its SIP. *See* North Dakota Memorandum at 1. To consider the North Dakota Memo as authoritative would effectively ignore the precedent of the *Groce* case issued on the SILs issue after the issuance of this memo in April of 2002. When Protestants' expert witness, Khanh Tran, was asked whether the use of SILs in Class I areas was a typical approach for permitting agencies, Mr. Tran stated that most agencies follow that approach but not all. Ex. 5 (Tran Dep. 51:15-18 (August 12, 2008)). When asked if Mr. Tran knew of any agencies that did not apply SILs to Class I areas, Mr. Tran cited the above mentioned North Dakota Memo, but could not reference a single other permitting agency to support this assertion. Ex. 5 (Tran Dep. 52:13-25, 53:1-4). Furthermore, the North Dakota Memo does not provide any final determination by either North Dakota or the EPA. *See* Ex. 4 (North Dakota Memorandum at 1).

Based on the authority supporting DEQ's use of SILs in the cumulative increment analysis, it follows that a similar mechanism is needed in this case to deal with sources that do not have a significant impact such that further analysis of the source yields a gain of trivial or no value. Therefore, it was appropriate for DEQ to apply Class I SILs to the Dry Fork Station as a matter of law and it is proper to grant summary judgment in favor of DEQ on this issue.

2. The Use of Significant Impact Levels is Consistent with Current DEQ Procedures.

In addition to the case law and agency guidance on the issue of Class I SILs and increment consumption analysis, DEQ has been consistently applying Class I SILs to

PSD permit application analyses for approximately twelve (12) years. As stated in DEQ's response to comments received from Protestants:

Since 1996, [DEQ] has relied on the EPA proposed Class I SILs as screening tools to evaluate the air quality impact of proposed facilities on PSD increment. [DEQ] has found the SILs to be a practical means of defining "significant" and "contribution." Requiring the applicant to demonstrate that projected emissions will not cause significant deterioration recognizes that some level of non-zero emission is permissible. [DEQ] recognizes that merely because a computer model can generate an extremely small number does not make it significant-the key is whether the number indicates significant air quality impacts or *de minimis* impacts. If the modeled impacts are *de minimis*, i.e., less than the SIL, the permit applicant is generally not required to conduct a cumulative modeling analysis. However, if the modeled impacts are greater than the SIL, [DEQ] requires a more extensive, time-consuming and costly cumulative modeling analysis to demonstrate that the proposed facility will not cause or contribute to an increment violation. The use of SILs provides [DEQ] with a reasonable method to evaluate the proposed facility's impact on the allowable PSD increment.

Ex. 1 (Schlichtemeier Aff., Ex. T at 15).

The use of Class I SILs by DEQ is consistent with DEQ's PSD increment consumption analysis procedures. In the past six years, DEQ has applied the Class I SILs to approximately ten (10) permit applications as a screening tool. *See* Ex. 2 (Rairigh Aff. ¶ 23). These facilities include WYGEN 2, ExxonMobil, Solvay, Opal, OCI, Basin Dry Fork, WYGEN 3, and Two Elks Unit 2. *See* Ex. 2 (Rairigh Aff. ¶ 23). At least two of those permit application analyses revealed existing increment exceedences attributable to

a major source in Montana near the NCIR and SILs were used to demonstrate insignificant contribution to increment consumption in the NCIR.

B. DEQ properly considered all sources of SO₂ emissions for the SO₂ increment calculation.

Despite Protestants' allegations that DEQ failed to include certain sources in its analysis, Protestants have failed to present any evidence to support this argument. In fact, the Protestants' own expert witness acknowledged that there were no errors in the modeling process by CH2M Hill and the DEQ. Ex. 5 (Tran Dep. 20:22-25, 21:1-4). Additionally, Protestants failed to allege any fact that would suggest that DEQ did not properly consider all sources of SO₂ in the project area.

The Wyoming Rules of Civil Procedure clearly dictate that summary judgment is appropriate when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." WYO. R. CIV. P. 56(c). Summary judgment may be entered "against a party who fails to make a sufficient showing to establish the existence of an element essential to the party's case, and on which that party will bear the burden of proof." *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). "This standard provides that the mere existence of some alleged factual dispute between parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact." *Anderson v. Liberty Lobby, Inc.* 477 U.S. 242, 247-248 (1986).

Protestants allege that DEQ failed to include certain sources in its analysis, but have not provided any evidence to support this allegation. Additionally, Protestants' own expert witness admits that DEQ and CH2M Hill acted properly in conducting the modeling process. Based on the lack of any evidence presented by the Protestants, it is appropriate to grant summary judgment for the issue of DEQ failing to consider all sources of SO₂ for the increment calculation.

C. DEQ properly relied on revised modeling results supplied by the applicant.

Similar to Protestants' argument regarding DEQ's failure to consider all sources of SO₂, Protestants' argument that DEQ improperly relied on revised modeling results supplied by the applicant is completely unsupported by evidence in the record. Protestants' expert witness admitted that there were no errors conducted in the modeling by DEQ and CH2M Hill. Ex. 5 (Tran Dep. 20:22-25, 25:1-4). In the deposition of Khanh Tran, Protestants' expert witness in the field of air quality modeling, when asked whether the only issue regarding the air quality modeling was the interpretation of the results, Mr. Tran stated, "Yes." Ex. 5 (Tran Dep. 36:25, 37:1-4).

As stated above, summary judgment is appropriate when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." WYO. R. CIV. P. 56(c). "This standard provides that the mere existence of some alleged factual dispute between parties will not defeat an otherwise properly supported motion for summary judgment; the

requirement is that there be no genuine issue of material fact.” *Anderson v. Liberty Lobby, Inc.* 477 U.S. 242, 247-248 (1986).

Protestants have failed to present any evidence that DEQ improperly relied on modeling results submitted by the applicant. The record appropriately reflects DEQ’s thorough analysis and verification of the applicant’s modeling. Based on the lack of any issue of material fact, it is appropriate to grant summary judgment in favor of DEQ regarding the issue of DEQ improperly relying on revised modeling results supplied by the applicant.

D. IGCC, Supercritical and Ultrasupercritical Technologies were Appropriately Excluded from the DEQ/AQD’s BACT Analysis.

Protestants allege DEQ should have required Basin to consider IGCC, Supercritical and Ultrasupercritical technologies in the BACT analysis. (Protestant’s Pet. for Hr’g at 10-12 (Claims II and III)). The DEQ/AQD’s BACT analysis of the Dry Fork Station (“DFS”), was rational and complied with applicable statutes, regulations, guidance and EQC precedent. Under Wyoming law, the applicant proposes the facility. WAQSR Ch. 6, §§ 2(c)(v), 4(a). The DEQ/AQD, as Wyoming’s air quality permitting agency, analyzes the air quality impacts of the proposed facility and establishes emission limits which are protective of Wyoming’s air quality. WAQSR Ch. 6, §§ 2(c), 4(a). The scope of the DEQ/AQD’s BACT analysis and the range of emission limits and control measures considered are driven by the definition of the proposed facility, not a redefined facility. Control technologies are a means to reduce emissions from the proposed facility and are included in a BACT analysis; whereas, redefinition of a proposed facility would

involve changes to the fundamental scope of the proposed facility, more in the nature of an alternative to the proposed facility. *See Sierra Club v. U.S. E.P.A.*, 499 F.3d 653, 655 (7th Cir. 2007) (alternative coal supply evaluation would be a redefinition of a mine-mouth power plant). IGCC, Supercritical and Ultrasupercritical technologies are not control technologies but are alternatives to a PC plant. Ex. 1 (Schlichtemeier Aff. ¶¶ 45-46). The DEQ/AQD's BACT analysis distinguishes elements inherent to the proposed facility for reasons independent from air quality permitting from those elements that may be changed to achieve emission reductions without requiring a redefinition of the proposed facility. *Id.* (Schlichtemeier Aff. ¶¶ 34-47). The DEQ/AQD's BACT analysis of the DFS, not a redefined facility, was rational and in accordance with applicable law. The Protestants argue that DEQ should have required Basin to evaluate these completely different production technologies in the BACT analysis and ignore the scope and purpose of Basin's project as stated in its application. *See* ((Protestant's Pet. for Hr'g at 10-12 (Claims II and III)). However, the rule of law in Wyoming is that BACT does not require the applicant to redefine the project source. 6 WAQSR §§ 2(c), 4.

EPA's position is that "best available control technology does not include redesigning the plant proposed by the permit applicant." *Sierra Club v. U.S. E.P.A.*, 499 F.3d 653 (7th Cir. 2007). Historically, EPA has not considered BACT as a means for redefining the source when considering available control technologies. DEQ/AQD's decision not to require a BACT analysis of Supercritical or ultra-critical boilers was

consistent with its role to control pollution, EPA's longstanding interpretation of the BACT analysis, law and EQC precedent.

1. BACT Regulations do not require redefinition of the source.

DEQ's air quality construction permitting program requires a BACT analysis for each pollutant subject to regulation:

No approval to construct or modify shall be granted unless the applicant shows, to the satisfaction of the Administrator of the Division of Air Quality that: * * * (v) The proposed facility will utilize Best Available Control Technology with consideration of the technical practicability and economic reasonableness of reducing or eliminating the emissions resulting from the facility . . .

WAQSR Ch. 6, § 2(c)(v)(2006) (emphasis added).

BACT is:

an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each pollutant subject to regulation under these Standards or Regulations or regulation under the Federal Clean Air Act, which would be emitted from or which results for [sic] any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application or [sic] production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emission standard infeasible, he may instead prescribe a design, equipment, work practice or operational standard or combination thereof to satisfy the requirement of Best Available Control Technology. Such standard shall, to the

degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results. Application of BACT shall not result in emissions in excess of those allowed under Chapter 5, Section 2 or Section 3 of these regulations and any other new source performance standard or national emission standards for hazardous air pollutants promulgated by the EPA but not yet adopted by the State of Wyoming.

WAQSR Ch. 6, § 4(a) (emphasis added); *see also* 42 U.S.C. § 7479(3) (CAA definition)², 40 C.F.R. §§ 52.21(b)(12) (EPA's regulatory definition applicable to federally issued PSD permits), 51.166(b)(12) (EPA's regulatory definition applicable to SIP approved PSD programs, including Wyoming's).

The BACT process results in an emission limit for each regulated new source review ("NSR") pollutant which would be emitted from the proposed facility. Ex. 1 (Schlichtemeier Aff. ¶ 36). The emission limits are translated into permit conditions to be imposed on the applicant's proposed facility, not a redefined facility. *Id.* (Schlichtemeier Aff. ¶ 43). The control technology is the means by which the BACT emission limit is achieved. *See* Ex. 1 (Schlichtemeier Aff. ¶ 44). Although the DEQ/AQD may request that applicants consider other types of facilities, the BACT analysis is of the facility proposed by the applicant.

The EPA has established a five-step, top-down process for determining BACT. *See* Ex. 1 (Schlichtemeier Aff. Ex. B, NSR Manual); *In re Prairie State* at 14-18

² The CAA distinguishes alternatives to a proposed facility from potential control options for the proposed facility. *Cf.* CAA § 165(a)(2) (public comment opportunity for alternatives to the proposed permit) with CAA § 169(3) (proposed facility defined by the applicant is subject to BACT).

(describing top-down BACT analysis), *aff'd sub nom. Sierra Club v. U.S. E.P.A.*, 499 F.3d 653 (7th Cir. 2007); *see also Alaska v. EPA*, 540 U.S. 461, 475-76 (2004). Use of the EPA's top-down method is not mandatory, but is frequently used to ensure that the regulatory criteria were considered. *See In re Knauf Fiber Glass*, 8 E.A.D. 121, 128-132 (EAB 1999). There are five steps to the EPA's top-down method: 1) identify control options, 2) eliminate technically infeasible control technologies, 3) rank remaining technologies in descending order of control effectiveness, 4) evaluate the most effective controls, and 5) select the most effective remaining option. *See Ex. 1 (Schlichtemeier Aff. ¶¶ 10, 36-43, Ex. B at B.5).*

The DEQ generally follows the EPA's top-down BACT process. Ex. 1 (Schlichtemeier Aff. ¶ 10). The most stringent or "top" alternative is established as BACT unless the applicant demonstrates to the DEQ/AQD's satisfaction that the other considerations in the BACT process justify the conclusion that the most stringent technology is not BACT. These considerations include technical feasibility, economic reasonableness, and other factors. Ex. 1 (Schlichtemeier Aff. ¶¶ 37 - 41). If a technology is eliminated, the process continues and the next most stringent alternative is considered until BACT is reached. *Id.* (Schlichtemeier Aff. ¶ 37).

Although the top-down BACT process has five steps, only step one is at issue – was the DEQ/AQD required to evaluate IGCC, supercritical, or ultrasupercritical designs as control options for the PC boiler. *See* (Protestant's Pet. for Hr'g at 10-12 (Claims II and III)). Basin's application proposed a mine-mouth coal-fired electric power

generating station, including one PC boiler rated at 385 MW (net). Ex. 1 (Schlichtemeier Aff. Ex. D). The DEQ/AQD's BACT analysis and range of control measures considered was driven by Basin's definition of the proposed facility. See WAQSR §§ 2, 4, Ex. 1 (Schlichtemeier Aff. ¶¶ 14, 15, 34-46). A PC boiler combusts coal – coal is the fuel. *Id.* (Schlichtemeier Aff. ¶ 12). The Protestants allege that the DEQ/AQD's BACT analysis was deficient because the DEQ/AQD did not require Basin to evaluate IGCC, Supercritical or Ultrasupercritical boiler types. (Protestant's Pet. for Hr'g at 10-12 (Claims II and III)). However, Protestants' preference for such configurations would redefine the type of facility and affect choices that go beyond emissions control. Ex. 1 (Schlichtemeier Aff. ¶¶ 12, 15, 36-47; Ex. T at DEQ/AQD Bates Nos. 004159-4161). An IGCC facility does not combust coal – coal is converted to a synthetic gas ("syngas") for combustion in a gas turbine – syngas is the fuel that is combusted. Ex. 6 (Jenkins Dep. 120:4 – 125:23 (August 13, 2008)). Supercritical and ultrasupercritical boilers require completely different boiler and turbine designs than a PC boiler. Ex. 1 (Schlichtemeier Aff. ¶ 12). Nevertheless, although not required for BACT, Basin evaluated alternate technologies for generating electricity. See Ex. 1 (Schlichtemeier Aff. ¶¶ 29, 32; Ex. T at DEQ/AQD Bates Nos. 004182-004240). While the DEQ/AQD recognizes that it is not precluded from considering technologies that redefine the proposed source, it is not required to do so, and it has been the DEQ/AQD's longstanding practice not to do so as part of the BACT analysis. Ex. 1 (Schlichtemeier Aff. ¶¶ 34-36, 47; Ex. T at DEQ/AQD Bates Nos. 004159-4161). Consistent with the DEQ/AQD's

practice, the DEQ/AQD did not require Basin to evaluate a redefined facility as part of the BACT analysis.

2. EPA policy and guidance does not require redefinition of the source.

“Redefining the source” is a term of art described in EPA’s NSR Manual. Ex. 1 (Schlichtemeier Aff. Ex. B at B-13). Although EPA’s NSR Manual is guidance and not binding regulation, it is widely used in PSD permit application reviews, including BACT analysis. Ex. 1 (Schlichtemeier Aff. ¶ 10). As a statement of EPA policy, the NSR Manual states:

Historically, EPA has not considered the BACT requirement as a means to redefine the design of the source when considering available control alternatives. For example, applicants proposing to construct a coal-fired electric generator, have not been required by EPA as part of a BACT analysis to consider building a natural gas-fired electric turbine although the turbine may be inherently less polluting per unit product (in this case electricity). However, this is an aspect of the PSD permitting process in which states have the discretion to engage in a broader analysis if they so desire. Thus, a gas turbine normally would not be included in the list of control alternatives for a coal-fired boiler.

(NSR Manual at B.13); *see also In re Hawaiian Commercial & Sugar Co.*, 4 E.A.D. 95 (EAB 1992) (EAB upheld Hawaii’s evaluation of proposed facility noting that EPA regulations do not mandate a redefinition of the source in order to reduce emissions); *In re Pennsauken County, New Jersey, Resource Recovery Facility*, 2 E.A.D. 667 (E.A.B. 1992) (recognizing that permit conditions are not intended to redefine the source but are imposed on the source as defined by the applicant); *In re Knauf Fiber Glass, GMBH*, 8 E.A.D. 121 (EAB 1999)(redefining the source to lower emissions is not required).

3. EQC precedent does not require redefinition of the source.

The DEQ/AQD's longstanding interpretation of the WEQA and WAQSR, articulated in practice since at least 1996 and in over forty (40) PSD permit reviews, has been that BACT does not require a redefinition of the source.³ Ex. 1 (Schlichtemeier Aff. ¶ 11). In a 1993 EQC decision, the EQC affirmed this practice and policy. Ex. 7 (*In re Permit Issued to Black Hills Power and Light Company, Neil Simpson Unit #2 Permit No. CT-1028*, EQC Docket No. 2476-93 (August 30, 1993) *Findings of Fact, Conclusions of Law and Order and Permit CT-1028*). A rule of law developed in the context of agency adjudication applies to the future conduct of all persons subject to the agency's jurisdiction. *N.L.R.B. v. Bell Aerospace Co.*, 410 U.S. 267, 293-294 (1974). Protestants' request that the BACT definition and analysis be reinterpreted to require redefinition of the source flies in the face of DEQ/AQD's longstanding practice, a prior EQC decision, and applicants' understanding and expectation of the BACT process. Such a significant reinterpretation should more properly be addressed and subject to public comment via rulemaking or legislation, not an isolated case adjudication involving only three parties.

In *Neil Simpson*, a third party appealed a PSD permit issued by the DEQ/AQD for the construction of an 80MW pulverized coal-fired steam electric generating plant in Campbell County, Wyoming. Ex. 7 (Order at 1). Following hearing, the EQC affirmed

³ Since 1996, the DEQ/AQD has been tracking the number of PSD permit applications and permits issued. Prior to 1996, the DEQ/AQD did not separately track PSD permit applications or permits.

the DEQ/AQD's permitting decision. The EQC's Conclusions of Law state, in pertinent part:

4. In issuing PSD Permit No. CT-1028, the DEQ/AQD complied with all procedural requirements as required by applicable laws and regulations.

5. The Applicant, Black Hills, defined the proposed source, a coal-fired steam electric generating plant with a pulverized coal boiler. Federal and state laws and regulations do not require the DEQ/AQD to redefine the source and as a result cause Black Hills to build a different type of boiler, such as a circulating fluidized bed boiler, rather than a pulverized coal boiler. The DEQ/AQD properly exercised its discretion not to redefine the source.

* * *

12. . . . The EQC concludes that the Director and the Administrator issued Permit No. CT-1028 to Black Hills to construct NS#2 in compliance with all laws and regulations and finds no errors, either procedurally or substantively, in the DEQ/AQD decision.

Ex. 7, *In re Neil Simpson*, Order (August 30, 1993). Since 1993, although the DEQ/AQD may request applicants consider other types of facilities, the rule of law in Wyoming has been that redefinition of the source is not required.

In this case, Basin completed an evaluation of alternate technologies for generating electricity. See Ex. 1 (Schlichtemeier Aff. ¶¶ 29, 30; Exs. R, S, T). Basin's evaluation concluded that IGCC, Supercritical, and Ultrasupercritical designs would not meet the availability and capacity requirements necessary for a baseload unit. Ex. 1 (Schlichtemeier Aff. Ex. S; T at DEQ/AQD Bates Nos. 004182 – 4240). Basin's requirements included a minimum availability of 90% and a minimum capacity factor of 85% in order to meet projected electrical demand. Ex. 1 (Schlichtemeier Aff. Ex. T at

DEQ/AQD Bates No. 4195). Of the four coal based IGCC plants in the world, none has ever achieved those levels of operation, combusted sub-bituminous coal, or operated at high-elevation. Ex. 8 (Protestants' Response to Respondent DEQ's First Combined Discovery Request Including Interrogatories and Requests for Production of Documents Served On Protestants, Answer to Interrog. No. 20 at p.11). Basin's evaluation of supercritical boilers concluded that supercritical boilers were not appropriate for the size of its proposed facility. Ex. 1 (Schlichtemeier Aff. Ex. R at DEQ/AQD Bates. No. 001019-20).

The DEQ/AQD's BACT analysis of the DFS was rational and complied with applicable statutes, regulations, guidance and EQC precedent. The DEQ/AQD analyzed the air quality impacts of the proposed facility and established emission limits protective of Wyoming's air quality. The DEQ/AQD's BACT analysis of the proposed facility, not a redefined facility, was rational and in accordance with applicable law.

E. The DEQ/AQD properly analyzed PM_{2.5} Emissions using PM₁₀ as a Surrogate.

1. The DEQ/AQD's Use of the PM₁₀ Surrogate Policy is authorized by law.

Despite the fact that the DEQ used PM₁₀ as a surrogate for PM_{2.5}, the Protestants alleged that the DEQ should have included PM_{2.5} in its BACT analysis, set an emissions limit for PM_{2.5}, and ensured the plant would not violate the PM_{2.5} NAAQS. (Protest, ¶¶ 61-66). Protestants' position ignores EPA guidance and law. Use of PM₁₀ as a surrogate in a PM_{2.5} PSD analysis is not prohibited by the CAA, the WEQA, the CFR or the WAQSR. In fact, EPA's final rule *Implementation of the New Source Review (NSR)*

Program for Particulate Matter Less than 2.5 Micrometers (PM_{2.5}), 73 Fed. Reg. 28321 (May 1, 2008) (effective as of July 15, 2008), expressly provides that SIP approved states may continue to use the PM₁₀ Surrogate Policy until revised PSD program SIPs have been submitted:

to ensure consistent administration during the transition period, we have elected to maintain our existing PM₁₀ surrogate policy which only recommends as an interim measure that sources and reviewing authorities conduct the modeling necessary to show that PM₁₀ emissions will not cause a violation of the PM₁₀ NAAQS as a surrogate for demonstrating compliance with the PM_{2.5} NAAQS . . .

Id. at 28341.

In October 1997, after promulgating a national ambient air quality standard for PM_{2.5}, the EPA issued guidance addressing the “Interim Implementation of New Source Review Requirements for PM_{2.5}.” (commonly referred to as “PM₁₀ Surrogate Policy”) Ex. 1 (Schlichtemeier Aff. Ex. W, EPA, John S. Seitz, Memo., October 23, 1997 (“Seitz Mem.”)). The EPA Surrogate Policy allowed states to use PM₁₀ as a surrogate for PM_{2.5} in meeting NSR requirements under the CAA, including PSD permitting requirements. (*Id.*) At the time the memo was written, and continuing through EPA’s promulgation of its NSR PM_{2.5} Implementation Rule in May, 2008, EPA has allowed the use of PM₁₀ as a surrogate for PM_{2.5} until it had resolved the significant technical difficulties with “PM_{2.5} monitoring, emissions estimation, and modeling.” Ex. 1 (Schlichtemeier Aff. Ex. W, Seitz Mem. at 1). Since 1997, the DEQ/AQD has applied the PM₁₀ Surrogate Policy in over ten (10) PSD permitting actions. Ex. 1 (Schlichtemeier Aff. ¶ 48).

In April 2005, EPA re-affirmed continued use of the EPA Surrogate Policy. Ex. 9 (EPA, Stephen D. Page, “Implementation of New Source Review Requirements in PM-2.5 Nonattainment Areas,” April 5, 2005) (“Page Memorandum”). Although the Page Memorandum provided guidance on implementation of NSR in PM_{2.5} nonattainment areas, the memo also advised states to continue to follow the PM₁₀ Surrogate Policy because “administration of a PM-2.5 PSD program remains impractical” until promulgation of the PM_{2.5} Implementation Rule. Ex. 9 (Page Memo at 4).

In September 2007, just a few weeks before the DFS permit was issued, the EPA issued proposed PM_{2.5} rules addressing PSD increments, SILs, and significant monitoring concentrations (“SMCs”). 72 Fed. Reg. 54,112 (September 21, 2007). As part of this rulemaking, EPA proposed allowing continued use of the PM₁₀ Surrogate Policy until such time as EPA approved the state’s revised SIP: “A State implementing a NSR program in an EPA-approved State Implementation Plan (SIP) may continue to rely on the interim surrogate policy.” *Id.* at 54,114.

Finally, several months after the DFS permit was issued, the EPA finalized the PM_{2.5} PSD implementation rule in May, 2008. 73 Fed. Reg. 28,321 (May 16, 2008). The final rule codified continued use of the PM₁₀ Surrogate Policy until revised PSD program SIPs have been submitted. *Id.* at 28341. Even though this rule had not been promulgated

at the time of the DEQ permit decision, the DEQ/AQD's use of the PM₁₀ Surrogate Policy to analyze PM_{2.5} air quality impacts was consistent with the final rule.⁴

2. The DEQ/AQD's PM₁₀ Surrogate Analysis complied with applicable law.

The DEQ's PM₁₀ analysis included modeling of both filterable and condensable particulate matter for compliance with the PM₁₀ NAAQS and the maximum allowable increments of deterioration. (See Permit Application Analysis at 12–13, 16, 20–26, 34–39 (February 5, 2007), Analysis of Public Comments, pgs. 14, 21–22). The modeling results showed that the total PM₁₀ concentrations were below the PM₁₀ NAAQS and also less than the Class II SILs for PM₁₀ both the 24-hour and annual averaging periods. (Permit Application Analysis at 12, Analysis of Public Comments at 21–22). As shown in both DEQ's Permit Application Analysis and its Analysis of Public Comments, the DEQ followed the EPA Surrogate Policy to develop a PM₁₀ BACT limit that also reduces PM_{2.5} emissions and protects air quality.⁵

The DEQ/AQD's use of the PM₁₀ Surrogate Policy and attendant analysis complied with the law. The DEQ/AQD properly analyzed air quality impacts from PM₁₀

⁴ This rule also identifies NO_x, VOCs, SO₂, and ammonia as PM_{2.5} precursors. 73 Fed. Reg. 28325. Each of these PM_{2.5} precursors underwent a BACT analysis and have a BACT emission limit established in the permit. Ex. 1 (Schlichtemeier Aff. ¶ 14). Therefore, these PM_{2.5} precursor emissions are controlled and emissions limited by the permit.

⁵ The DEQ/AQD's BACT analysis concluded that an emission limit of 0.012 lb/MMBTU for filterable PM/PM₁₀ represented BACT for the boiler. Ex. 1 (Schlichtemeier Aff. Ex. N at DEQ/AQD Bates No. 001444; Ex. T at DEQ/AQD Bates No. 004170). Basin's proposed control technology to achieve this BACT emission limit is use of a RYTON or equivalent bag. *Id.* Protestants' expert opinion concludes that use of such bag is also effective at controlling PM_{2.5} emissions. Ex. 10 (Sahu Dep. at 283:18 – 285:1).

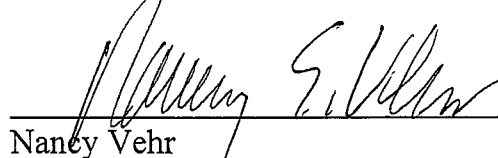
emissions as a surrogate for PM_{2.5} and established emission limits protective of Wyoming's air quality. The DEQ/AQD's PM₁₀ BACT analysis as a surrogate for PM_{2.5} was proper and in accordance with applicable law.

VI. CONCLUSION

On these five issues, there are no genuine issues of material fact and judgment may be rendered as a matter of law. Applying the law to the relevant facts leads to one conclusion - the DEQ/AQD's permitting action was rational and lawful. Therefore, Respondent DEQ respectfully requests the Council grant its Motion for Partial Summary Judgment.

DATED this 2nd day of September, 2008.

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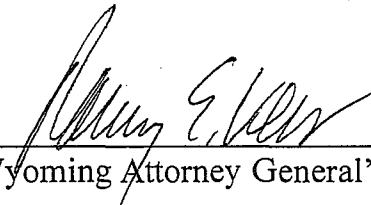
CERTIFICATE OF SERVICE

I hereby certify that I have served a true and correct copy of the foregoing RESPONDENT DEPARTMENT OF ENVIRONMENTAL QUALITY'S MEMORANDUM IN SUPPORT OF MOTION FOR PARTIAL SUMMARY JUDGMENT through United States mail, postage prepaid on this the 2nd day of September, 2008 to the following:

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EXHIBIT LIST

Exhibit No. 1 – Schlichtemeier Affidavit

- Exhibit A - WAQSR Ch. 6, § 4
- Exhibit B – NSR Manual, Chs. B, C
- Exhibit C – WAQSR Ch. 6, § 2
- Exhibit D – Permit Application (11/10/2005)
- Exhibit E – Completeness Review No. 1 (12/21/2005)
- Exhibit F – Basin Response No. 1 (3/10/2006)
- Exhibit G – Completeness Review No. 2 (3/28/2006)
- Exhibit H – Completeness Review No. 3 (5/3/2006)
- Exhibit I – Completeness Review No. 4 (5/30/2006)
- Exhibit J – Basin Response No. 2 (6/19/2006)
- Exhibit K – Basin Response No. 3 (7/17/2006)
- Exhibit L – Basin Response No. 4 (7/17/2006)
- Exhibit M – Completeness Determination (8/18/2006)
- Exhibit N – Permit Application Analysis (2/5/2007)
- Exhibit O – Publisher’s Affidavit No. 1 (2/26/2007)
- Exhibit P – File Memorandum (4/20/2007)
- Exhibit Q – Publisher’s Affidavit No. 2 (6/4/2007)
- Exhibit R – Basin Response (6/11/2007)
- Exhibit S – Basin Response (6/18/2007)
- Exhibit T – DEQ Response to Comments and Decision (10/15/2007)
- Exhibit U – Permit (10/15/2007)
- Exhibit V – WYGEN2 Decision and Permit CT-3030 (9/25/2002)
- Exhibit W – Seitz Memo
- Exhibit X – DEQ/AQD Permit Application Review Invoices

Exhibit No. 2 – Rairigh Affidavit

Exhibit No. 3 - Emison Memorandum

Exhibit No. 4 - North Dakota Memorandum

Exhibit No. 5 – Tran Deposition excerpts

Exhibit No. 6 – Jenkins Deposition excerpts

Exhibit No. 7 – Black Hills Power & Light Co., Neil Simpson Unit #2 Permit No. CT-1028

Exhibit No. 8 – Protestants Response to DEQ’s Discovery Request

Exhibit No. 9 - Page Memorandum

Exhibit No. 10 – Sahu Deposition excerpts