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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 BRIEF IN OPPOSITION TO PROTESTANTS' MOTION FOR SUMMARY JUDGMENT

Respondent, the Department of Environmental Quality ("DEQ"), through its 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 Brief in Opposition to Protestants' Motion for Summary Judgment.

I. BACKGROUND

On October 15, 2007, the Director of the Wyoming Department of Environmental Quality 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 ("DFS"). 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. (Protestants' 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"). (Protestants' Pet. for Hr'g at 8).

On September 2, 2008, Protestants filed a Motion for Summary Judgment regarding five issues involving the issuance of the permit. Protestants arguments must fail because they are not supported by the facts and by Wyoming law or the CAA.

II. STANDARD 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.

III. ARGUMENT

Protestants move for summary judgment on five issues. DEQ believes that summary judgment in favor of Protestants on any of these five issues would be clearly erroneous. First, Protestants request a determination that they have standing to pursue this appeal. Second, Protestants request that the Council ignore the longstanding practice of DEQ not requiring the redefinition of the source in the Best Available Control Technology ("BACT") analysis and to remand the permit and have DEQ consider Integrated Gasification Combined Cycle ("IGCC") and supercritical technology for the Dry Fork Station. Third, Protestants request that the Council remand the permit because DEQ continues to follow Environmental Protection Agency ("EPA") guidance regarding Particulate Matter 2.5 micrometers ("PM_{2.5}"), even though that guidance remains valid. Fourth, Protestants request that the permit be remanded because they do not agree with

the BACT analysis which was conducted for mercury. Finally, Protestants ask the Council to deny the DEQ issued permit based on their interpretation of Wyoming's increment analysis. For the reasons stated below, DEQ requests that the Council deny Protestants' Summary Judgment arguments.

A. Protestants do not have Standing to Challenge the Dry Fork Permit

Protestants are correct in stating that in order to obtain judicial review of administrative actions. Protestants must establish standing under the Wyoming Administrative Procedure Act ("WAPA"). WYO. STAT. ANN. § 16-3-114(a). Also. Protestants are correct in stating that in order to challenge a final agency action under the WAPA, a person must demonstrate that he or she is "aggrieved or adversely affected in fact" by that action. Id. However, a party is not considered aggrieved by an agency action when there is only a remote possibility of injury. Sinclair Oil Corp. v. Wyoming Public Service Com'n 63 P.3d 887 (Wyo. 2003). Furthermore, a party is not considered "aggrieved" by an administrative decision, as regards the right of appeal, when there is only a remote possibility of injury. Matter of Various Water Rights in Lake DeSmet Reservoir, 623 P.2d 764 (Wyo. 1981). To be considered to be "aggrieved or adversely affected in fact" the person must have a "legally recognizable interest" that has been affected by the agency's action. Jacobs v. State ex rel. Wyoming Workers' Safety & Comp. Div., 2004 WY 136, ¶7, 100 P.3d 848, 7 (Wyo. 2004). The person must

¹ Although Protestants' standing arguments target the WAPA requirements, Protestants must also satisfy any Wyoming Environmental Quality Act standing requirements. *See* WYO. STAT. ANN. §§ 35-11-101 through -1904.

demonstrate that the final agency action injured the person's interest in a perceptible, immediate, substantial, and pecuniary manner. *Id.* A speculative injury is insufficient to establish injury. *Id.*

Protestants' Motion for Summary Judgment alleges that they are "aggrieved" because "the Dry Fork Station will result in increased emissions of air pollutants that will harm these members' health, and the health of their families, the use and enjoyment of their own lands, and their enjoyment of public lands near the Dry Fork Station." Protestants' Mot. for Summ. J. at 10-11. However, Protestants fail to describe how these interests are distinguishable from those shared by both the general public and the DEQ. See WYO. STAT. ANN. § 35-11-102 (Wyoming Environmental Quality Act ("WEQA") policy and purpose include preventing, reducing and eliminating pollution; enhancing the state's air resources; and allowing the state to exercise its primary responsibilities and rights); Id. at § 35-11-109 (DEQ administers, enforces, and carries out the WEQA); Id. at §35-11-110. (DEO administers authority); Id. at §35-11-201 through 214 (DEO air quality responsibilities). DEQ, by its very nature, is presumed to act in the public interest. See Ririe v. Bd. Of Trustees of Sch. Dist. No. One, Crook County, 674 P.2d 214, 221 (Wyo. 1983) ("Without a showing to the contrary, state administrators are assumed to be men of conscience and intellectual discipline.") DEQ's interests in the matter are to protect and maintain the integrity of the programs it administers. The fact that the Protestants disagree with the terms of the permit is insufficient to establish injury. See Schulthess v. Carollo, 832 P.2d 552, 559 (Wyo. 1992) (interest in or disagreement with a

decision does not substitute for injury). Other than asserting interests shared by the general public and DEQ, Protestants have failed to provide facts to support any allegation of injury specific to their interests.² Based on the above factors, Protestants' Motion for Summary Judgment on standing should be denied.

B. DEQ's Permitting Process Afforded Opportunity for Public Comment

Protestants claim that DEQ's permit process did not allow Protestants' and other members of the public to obtain information and provide comments on the analysis. Protestants' Mot. for Summ. J. at 11, 29, and 31. This is simply incorrect. DEQ's BACT analysis was complete and the Protestants and other members of the public were given an opportunity to comment, including the opportunity to comment on DEQ's permit process and alternatives to the proposed source. See 42 U.S.C. § 7475(a)(2) (proposed permit subject to public comment including alternatives to proposed source). In fact, the public comment period was extended for the Dry Fork Station allowing for additional comments to be received from the public. See Ex. 1 (Schlichtemeier Aff., Ex. Q). Protestants failed to raise this claim in their Protest and Petition for Hearing. It is not properly before this Council. For this reason alone, this Council should dismiss their claim.

A recent environmental law journal commented: "A new litigation battleground between environmental advocates and the power industry has coalesced. National in scope, this confrontation has taken the form of lawsuits challenging individual preconstruction air-quality permits for virtually any new energy project powered by coal, waste coal, or other solid fuels." Glenn Unterberger, *Litigation Challenging Coal Plants, One Permit at a Time*, 22 Nat. Res. & Env't 30 (2008) (recognizing that national groups have teamed with local advocates to oppose virtually every new coal-fired project); *see also* http://www.sierraclub.org/environmentallaw/coal/plantlist.asp (Sierra Club website entitled "Stopping the Coal Rush").

However, even if the Council considers this allegation, Protestants' claim fails as a matter of law. "Procedural due process principles require reasonable notice and a meaningful opportunity to be heard before government action may substantially affect a significant property interest." *Pfeil v. Amax Coal West, Inc.* 908 P.2d 956, 961 (Wyo. 1995). "WAPA imposes basic procedural due process standards upon administrative activities and provides a mechanism for agencies to adopt procedural rules, which guide agency decision making in a predictable manner." *Thunderbasin Land, Livestock & Inv. Co. v. County of Laramie County*, 5 P.3d 774, 782 (Wyo. 2000). The purpose for notice and comment procedural rules is to give the public a reasonable opportunity to participate. *Tri-State Generation v. EQC*, 590 P.2d 1324, 1332 (Wyo. 1979).

The DEQ/AQD's public notice and comment period requirements for air quality construction permitting are set forth in WAQSR Ch. 6, § 2(m):

After the Administrator has reached a proposed decision based upon the information presented in the permit application to construct or modify, the Division of Air Quality will advertise such proposed decision in a newspaper of general circulation in the county in which the source is proposed. This advertisement will indicate the general nature of the proposed facility, the proposed approval/disapproval of the permit, and a location in the region where the public might inspect the information submitted in support of the requested permit and the Air Quality Division's analysis of the effect on air quality ... The public will be afforded a 30day period in which to make comments and recommendations to the Division of Air Quality. A public hearing may be called if sufficient interest is generated or if any aggrieved party so requests in writing within the 30-day comment period. After considering all comments, including those presented at any hearings held, the Administrator will reach a decision and notify the appropriate parties.

6 WAQSR § 2(m).

DEQ complied with the public notice regulatory requirements and provided the public with a reasonable opportunity to participate. See Ex. 1 (Schlichtemeier Aff., Exhs. O and Q). Protestants provided written comment and attended the public hearing. See Id., Ex. T at 1. During the DFS permitting process, DEQ complied with its rules regarding public participation.

DEQ's decision document and response to public comments in and of itself is not subject to a round of public comment. If that were the process, the process would be interminable. See Laramie River Conservation Council v. Indust. Siting Council, 588 P.2d 1241, 1251-52 (Wyo. 1978). Protestants' remedy is to challenge the DEQ's action on appeal. Id. Protestants have received and the DEQ has followed the process that was due. Besides failing to allege any facts to support their claim of due process violation, Protestants have failed to demonstrate any harm. See Grams v. EQC, 730 P.2d 784, 787 (Wyo. 1986)(Protestants have burden to show prejudicial error); ABC Builders Inc. v. Phillips, 632 P.2d 925, 934-35 (Wyo. 1981)(requiring prejudicial error affecting substantial right). Based on the above factors, Protestants' Motion for Summary Judgment which included due process arguments should be denied.

C. DEQ Properly Excluded IGCC, Supercritical and Ultrasupercritical Technologies from the BACT Analysis Because such Technologies Redefine the Source

WEQA's permitting system:

was designed to provide the state with the flexibility to deal with certain economic realities. The legislature knew that

business and industry, essential to the state's economic health, had to be maintained. And though it is an unfortunate statement on our modern age, technology is currently such that pollution can and does result from some commerce. So the legislature adopted the permit scheme for businesses normally discharging wastes, under which the businesses would be authorized in advance to continue polluting ... so long as the pollution remained within certain acceptable limits.

State v. Platte Pipeline Co., 649 P.2d 208, 212 (Wyo. 1982); see also 42 U.S.C. § 7470(3) (purpose of PSD permitting program is "to ensure that economic growth will occur in a manner consistent with the preservation of existing clean air resources.").

Protestants maintain that an air quality PSD BACT analysis mandates the consideration of alternative technologies even where such alternatives redefine the proposed source. Protestants' Mot. for Summ. J. pp. 11-32; see also Protestants' Pet. for Hr'g at 10-12 (Claims II and III). Protestants' position is contrary to Wyoming law. In Wyoming, the law is that the applicant proposes the facility and the DEQ/AQD analyzes the air quality impacts of the proposed facility and establishes emission limits protective of Wyoming's air quality. See WAQSR Ch. 6, §§ 2(c), 4(a); Ex. 7 (In re Permit Issued to Black Hills Power and Light Company at Conclusion of Law No. 5: "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."); see also Montana-Dakota Util. Co. v. Pub. Serv. Comm'n, 746 P.2d 1272, 1275 (Wyo. 1987)(agency may make law through adjudication

and use prior contested case decisions as precedent). The DEQ/AQD's BACT analysis and range of control measures considered was driven by Basin's definition of the proposed facility. Ex. 1 (Schlichtemeier Aff. ¶¶ 14, 15, 34-46); see also 6 WAQSR §§ 2, 4. The DEQ's BACT analysis properly excluded IGCC, supercritical and ultrasupercritical technologies because they would redefine the source. Applying the law to the material facts demonstrates that DEQ's actions complied with the law and

Protestants are not entitled to judgment as a matter of law.

Protestants cite Friends of the Chattahoochee, Inc. v. Couch, for the proposition that BACT requires consideration of IGCC. Protestants' Mot. for Summ. J. at 17. However, Chattahoochee was a case decided under Georgia's administrative law and policy, not Wyoming law, and it is currently under appeal before the Georgia Court of Appeals. See Longleaf Energy v. Friends of the Chattahoochee, Ga. Ct. App. Case No. A08D0472, (August 20, 2008). Protestants also cite permitting actions by state air quality agencies in Illinois, Michigan and New Mexico for the proposition that because these agencies considered IGCC in a PSD BACT analysis, Wyoming should do so as well. Like Georgia, these state permitting decisions were made under the respective state's law and policy, not Wyoming law.

Consistent with Wyoming's analysis, the Seventh Circuit Court of Appeals has analyzed and upheld a permitting agency's discretion not to require redefinition of the source in a BACT analysis:

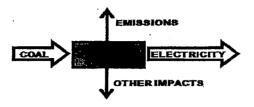
So it is no surprise that the EPA, consistent with our nuclear hypothetical and the petitioners' concession regarding it,

distinguishes between "control technology" as a means of reducing emissions from a power plant or other source of pollution and redesigning the "proposed facility" (the plant or other source) — changing its "fundamental scope." The agency consigns the latter possibility to the "alternatives" section of the Clean Air Act ... Refining the statutory definition of "control technology" — "production processes and innovative fuel combustion techniques" — to exclude redesign is the kind of judgment by an administrative agency to which a reviewing court should defer.

Sierra Club v. EPA, 499 F.3d 653, 654 (7th Cir. 2007). (internal citations omitted).

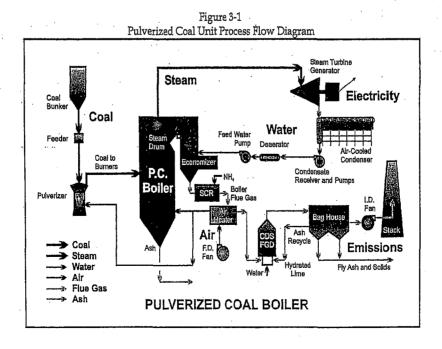
Because PC, supercritical, ultrasupercritical, and IGCC are all different power generation technologies, Protestants resort to distorting the BACT definition by selectively extracting isolated words, ascribing Protestants' own meaning to these isolated words and phrases, and ending up with Protestants' own overly broad definition. See Protestants' Mot. for Summ. J. at 19 (Production process for purposes of BACT analysis is the transformation of coal to electricity). After conducting this contorted exercise, Protestants express the meaning of "production process" as any process that uses coal to produce electricity. Basically, "coal in, electricity out." See Ex. 11 (Fowler Depo. at 214: 7 - 217:7) (no redefinition of the source occurs unless coal is not used to produce electricity or electricity is not produced from coal); Ex. 12 (Sahu Depo. at 69:14 - 71:19) (supercritical is not a "redesign" because it makes electricity from coal). According to Protestants, whatever occurs in between would not redefine the source. But that is precisely where the various generating technologies produce and convert energy to electricity. Protestants illustrate their "coal in, electricity out" production process as:

Figure 1-1 - Schematic Illustration of Coal-to-Electricity Production Process



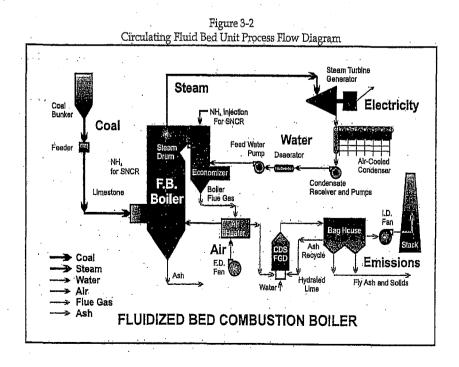
Ex. 1 (Schlichtemeier Aff., Ex. T at DEQ/AQD Bates No. 4197).

However, the "production process" for each of the various technologies is very different. The subcritical PC process involves starting with coal, pulverizing it into a fine powder that is conveyed to burners in the boiler. *Id.* at DEQ/AQD Bates No. 004197,004198. The coal is combusted, generating steam from the boiler which is conveyed to a steam turbine generator to convert the steam thermal energy into mechanical energy. *Id.* at DEQ/AQD Bates No. 004198. The turbine drives the generator to produce electricity. *Id.* The PC process is illustrated as:



Id. at DEQ/AQD Bates No. 004199.

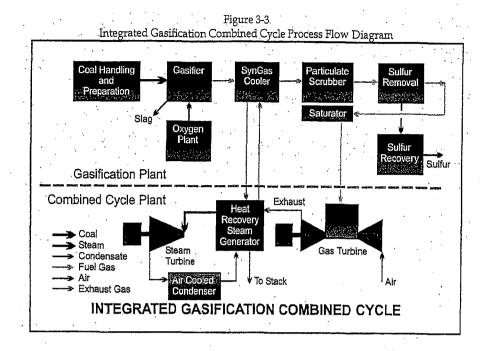
Although Protestants do not argue that DEQ should have considered circulating fluidized bed ("CFB") in the BACT analysis, the Council has previously concluded that CFB and PC are different sources, so a brief explanation of the CFB process may be helpful. See Ex. 7 (In re Neil Simpson, Order (August 30, 1993)). In general terms, the CFB process crushes coal into a coarse, not fine, form that is fed into a bed composed of fuel, ash, sand and a sulfur removal reagent. Ex. 1(Schlichtemeier Aff., Ex. T at DEQ/AQD Bates No. 004198). The fuel is then combusted to produce steam which is conveyed to a steam turbine generator which converts the steam thermal energy into mechanical energy. Id. The turbine drives the generator to produce electricity. Id. Differences between PC and CFB technologies include CFB combusting at a lower temperature, using a high fluidized velocity and recycling or reclaiming the larger size fuel particles. Id. The CFB process is illustrated as:



Id. at DEQ/AQD Bates No. 4200.

The subcritical and supercritical process differ based on their main steam turbine operating pressure and temperature. Ex. 1 (Schlichtemeier Aff., Ex. S at DEQ/AQD Bates No. 1013). Units above the critical point of water (3,208 psia and 705°F) are termed "supercritical" units. *Id.* In a supercritical boiler, the physical property of water is changed to a steam vapor in essentially a dry condition, so there is no boiler drum to separate steam from water as in the subcritical PC process. *Id.* Turbine blades are designed specifically for supercritical units. *Id.* The generator is directly coupled to the turbine to produce the energy that is converted to electricity. *Id.*

The IGCC process is actually an integration of two processes – gasification and combined cycle power generation. In general terms, the gasification process involves a chemical reaction between coal, steam and oxygen at high temperatures that produces a gas mixture referred to as syngas. Ex. 1(Schlichtemeier Aff., Ex. T at DEQ/AQD Bates No. 004200). The syngas is cooled, cleaned and then combusted in a combustion turbine to produce the energy that is converted to electricity. *Id.* The IGCC process is illustrated as:



Id.

These illustrations and process descriptions defeat Protestants' argument that the production process is simply "coal in, electricity out." The process for how the various generating technologies convert and produce energy to electricity – exactly what occurs in between "coal in, electricity out" – goes into defining the source. DEQ/AQD properly excluded IGCC, supercritical and ultrasupercritical technologies from the BACT analysis because such technologies would redefine the source.

Protestants also argue that because EPA's New Source Performance Standards ("NSPS") for electric utility steam generating units applies to PC and IGCC technologies, there is no redefinition. Protestants neglect to point out that NSPS and PSD are two different standards. NSPS are technology based standards, while the PSD permitting program's underlying purpose relates to ambient standards. *Compare* 42 U.S.C. § 7411

(NSPS) with 42 U.S.C. §§ 7470 – 7492 (PSD). EPA's categories or source groupings in the NSPS program do not mean that use of the term in the PSD program has the same meaning. See Envtl. Def. v. Duke Energy Corp., 127 S.Ct. 1423, 1428 (2007) (definition of "modification" may differ between PSD and NSPS programs). Definitions developed for programs and purposes unrelated to PSD BACT analysis does not change the fundamental differences in technology discussed and illustrated above. Including IGCC, supercritical, and ultrasupercritical technologies in a BACT analysis would redefine the source. DEQ is not required to redefine a source in the BACT analysis. The DEQ's BACT analysis properly excluded IGCC, supercritical and ultrasupercritical technologies because they would redefine the source. Applying the law to the material facts demonstrates that DEQ's actions complied with the law and Protestants are not entitled to judgment as a matter of law.

D. The Council Should Deny Protestants' Motion for Summary Judgment Regarding the PM_{2.5} BACT Analysis

Protestants argue that "DEQ must address PM_{2.5} emissions from the Dry Fork Station." Protestants' Mot. for Summ. J. at 32-46. DEQ did so using EPA's Particulate Matter PM₁₀ Surrogate Policy. The DEQ's analysis complied with the law and was properly performed. Applying the law to the facts leads to the conclusion that DEQ/AQD properly analyzed PM_{2.5} emissions using EPA's PM₁₀ Surrogate Policy, and established emission limits protective of Wyoming's air quality. For these reasons, Protestants' Motion should be denied.

Protestants devote several pages of their brief to a discussion of PM_{2.5} health effects underlying the development of the National Ambient Air Quality Standards ("NAAOS"). Protestants' Mot. for Summ. J. at 32-34. Protestants also argue that 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 16, 2008), giving State Implementation Plan ("SIP") approved states three years to implement the PM_{2.5} PSD requirements and until 2011 to address condensable particulate matter ("PM") emissions, is illegal. Protestants' Mot. for Summ. J. at 41-44. However, under the CAA such challenges may "be filed only in the United States Court of Appeals for the District of Columbia." 42 U.S.C. § 7607(b)(1). Protestants' arguments are not properly before this Council. Whether EPA's rules are ultimately upheld or not is a question for another day in a different forum. Currently, such rules have the force and effect of law. See Doidge v. Bd. Of Charities and Reform, 789 P.2d 880, 883 (Wyo. 1990)(challenged rules remain law until overturned).

Wyoming has not yet amended its rules to reflect the 2006 PM_{2.5} NAAQS. Wyoming's current rules reflect the 1997 PM_{2.5} NAAQS. This does not mean that DEQ has ignored the 2006 standards. To the contrary, DEQ is following the SIP development process and, as Protestants note, has recommended to EPA that every region in Wyoming be designated as attainment/unclassifiable for the 24-hour PM_{2.5} NAAQS. *See* Protestants' Mot. for Summ. J. at 34-35; *see also* Ex. 13 (Dec. 11, 2007 letter from Wyoming to EPA). Protestants incorrectly state that Wyoming's recommendations were

based only on monitoring data from three stations. Instead, Wyoming's recommendation also included monitoring data from sites that had data, just not three full years of data. *Id.* at 5. These other sites included locations within Campbell County including: Triton Coal, Belle Ayr, and Black Thunder. *Id.* The PM_{2.5} monitoring data from these locations reflect PM_{2.5} levels in the 12-19 ug/m³ range, not the 31-32 ug/m³ levels at Sheridan and Lander which the Protestants cite. *Id.* On August 18, 2008, EPA preliminarily approved Wyoming's recommendations. Ex. 14 (Aug. 18, 2008 letter from EPA to Wyoming).

However, the real issue before this Council is not a question of whether the Council should agree with the EPA's approach and conclusions reached in the PM_{2.5} NAAQS and PM_{2.5} NSR Implementation rules, including EPA's PM₁₀ Surrogate Policy. Though reasonable parties may disagree with EPA's approach or conclusions, the issue before this Council is whether DEQ properly analyzed PM_{2.5} emissions using EPA's PM₁₀ Surrogate Policy. It is undisputed that DEQ followed EPA's PM₁₀ Surrogate Policy. Likewise, Protestants have not brought forward any facts to demonstrate that DEQ did not properly follow EPA's PM₁₀ Surrogate Policy. Applying the law to the facts leads to the conclusion that DEQ/AQD properly analyzed PM_{2.5} emissions using EPA's PM₁₀ Surrogate Policy, and established emission limits protective of Wyoming's air quality. For these reasons, Protestants' Motion should be denied.

The DEQ's PM₁₀ Surrogate analysis included modeling of both filterable and condensable particulate matter for compliance. *See* Ex. 1 (Schlichtemeier Aff., Ex. N at 12-13, 16, 20-26, 34-39; Ex. T at 14, 21-22). DEQ's modeling analysis concluded that

the total Particulate Matter 10 micrometers ("PM₁₀") concentrations were less than the PM₁₀ NAAQS and less than the Class II Significant Impact Levels ("SILs") for both the 24-hour and annual averaging periods. Ex. 1 (Schlichtemeier Aff., Ex. N at 25-26; Ex. T at 21-22). PM_{2.5} precursors, including nitrogen oxide ("NO_x"), volatile organic compounds ("VOCs"), sulfur dioxide ("SO₂"), and ammonia had separate BACT analysis and have a BACT emission limit established in the Permit. *See* Ex. 1 (Schlichtemeier Aff. ¶ 14). Therefore, these PM_{2.5} precursor emissions are already limited under the Permit. Additionally, Basin's proposed control technology to achieve the PM/PM₁₀ permit limit is the very technology that Protestants' expert concluded was effective at controlling PM_{2.5}. Ex. 10 (Sahu Dep. at 283:18 – 285:1). As shown by both DEQ's Permit Application Analysis and its Analysis of Public Comments, the DEQ properly followed EPA's PM₁₀ Surrogate Policy to develop a PM₁₀ BACT limit that also reduces PM_{2.5} emissions and protects Wyoming's air quality.

Protestants claim that the technical difficulties for implementing the PM_{2.5} NSR requirements no longer exist. Protestants' Mot. for Summ. J. at 38-40. Protestants are incorrect. Recall, this Permit was issued in October 2007. A mere six months prior to issuance, EPA acknowledged that uncertainties remained: "we are undertaking laboratory studies . . . to characterize the artifact formation and other uncertainties associated with conducting Method 202." 72 Fed. Reg. 20586, 20653 (April 25, 2007). EPA also recognized that CTM-039 required additional validation testing. *Id.* Several months after the permit was issued, DEQ acknowledged that uncertainties remained:

"[d]eficiencies noted in the 1997 memo have not been fully addressed." Ex. 15 (January 17, 2008 Letter from DEQ to EPA Rule Docket EPA-HQ-OAR-2006-0605). DEQ commented that states lacked fugitive direct PM_{2.5} emission factors; it was unclear whether PM_{2.5} modeling for increment consumption or SILs analysis should include the condensable fraction of PM_{2.5} and the contribution from secondary particulate formation of PM_{2.5}. As DEQ stated, "[t]o fully implement a successful NSR PM_{2.5} program, States need to have all the tools available." *Id*.

DEQ's analysis of PM_{2.5} emissions using EPA's PM₁₀ Surrogate Policy, was consistent with and complied with the law. *See* Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers (PM_{2.5}), 73 Fed. Reg. at 28341. DEQ's PM₁₀ analysis modeled filterable and condensable particulate matter for compliance. DEQ/AQD properly analyzed emissions using EPA's PM₁₀ Surrogate Policy and established emission limits protective of Wyoming's air quality. Applying the law to the facts leads to one conclusion, Protestants' Motion should be denied.

E. The DEQ Properly Set a Mercury BACT Limit

Protestants' Protest and Petition for Hearing alleges that "WyDEQ's Mercury BACT limit is flawed." Protestants' Pet. for Hr'g at ¶¶ 48 - 53 (Claim V). Although DEQ completed a BACT analysis under WAQSR Ch. 6, § 2, Protestants claim that because DEQ's analysis was not a "top-down" BACT analysis, the resulting permit mercury emission limit and mercury control optimization study requirements were not supported by the law and the Permit must be remanded to DEQ for a top-down BACT analysis. (Protestants' Mot. for Summ. J., pgs 47 - 50). However, as a matter of law, Protestants claims fail.

BACT results in an emission limit which "the Administrator, on a case-by case basis . . . determines is achievable" for the source. WAQSR Ch. 6, § 4(a). If the Administrator determines that an emission standard is infeasible, the Administrator:

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 not result in emissions in excess of those allowed under [Wyoming's or EPA's NSPS or the National Emission Standards for Hazardous Air Pollutants ("NESHAPs")].

Id.

Generally, the DEQ follows EPA's five-step, top-down BACT analysis approach outlined in the EPA's NSR Manual. See Ex. 1 (Schlichtemeier Aff. at ¶ 10). However, if an emission standard is infeasible, the Administrator may prescribe a "design, equipment, work practice or operational standard or combination thereof" to satisfy BACT. 6

WAQSR § 4(a). The Permit's mercury emission limit and optimization study requirements are a combination of "design, equipment, work practice" and "operational standards" established by the DEQ through the BACT process. *See* Ex. 1 (Schlichtemeier Aff. at ¶ 14, Ex. U (Permit CT-4631 at ¶¶ 9, 10)). Combined, the NSPS mercury emission limit, the requirement for a mercury control system to be installed and operated within ninety days of startup, and the mercury optimization study requirements satisfy BACT. Protestants' claim fails, and their Motion for Summary Judgment should be denied.

When Basin filed the Permit Application, Basin estimated the boiler's uncontrolled mercury emissions in the range of 60.4 to 96.6 x 10^{-6} lb/MW-hr and proposed a controlled mercury emission rate of 78×10^{-6} lb/MW-hr, 12 month rolling average. Ex. 1 (Schlichtemeier Aff., Ex. D (Basin's Permit Application) at §§ 5.3.2, 5.3.4). Following DEQ's review of Basin's permit application, DEQ requested Basin provide a mercury BACT analysis. *Id.* at ¶ 19 (Ex. H (Completeness Review No. 3.) at 1). Specifically, DEQ requested Basin provide a mercury BACT analysis at emission levels of 10×10^{-6} , 20×10^{-6} , and 30×10^{-6} lb/MW-hr, and include control efficiencies and cost effectiveness. *Id.*

On July 17, 2006, the DEQ received Basin's Response to Completeness Review No. 3 addressing mercury emissions and controls. *Id.* at ¶ 22 (Ex. K (Basin Response No. 3)). Basin noted that after DEQ had requested the additional information, EPA had revised the Clean Air Mercury Rule ("CAMR") mercury emission limit to 97 x 10⁻⁶

lb/MW-hr "for new units with dry FGD burning subbituminous coal." *Id.* at (Ex. K at 1-2); *see also* Revision of December 2000 Clean Air Act Section 112(n) Finding Regarding Electric Utility Steam Generating Units; and Standards of Performance for New and Existing Electric Utility Steam Generating Units: Reconsideration, 71 Fed. Reg. 33,388, 33,395 (June 9, 2006) (NSPS Hg limit for new subbituminous coal (wet units) of 66 x 10 lb/MW-h and (dry units) of 97 x 10 lb/MW-h). Basin represented to DEQ that it would comply with the NSPS limit. Ex. 1 (Schlichtemeier Aff., Ex. K at 2). Although BACT limits are separate from NSPS limits, at a minimum, BACT is as restrictive as the NSPS. 42 U.S.C. § 7479(3)("In no event shall application of [BACT] result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to" the NSPS); *see also New York v. EPA*, 413 F.3d 3, 13 (D.C.Cir 2005) (noting that in certain circumstances BACT can be more stringent that the NSPS).

In addition to complying with the mercury NSPS limit, Basin stated that its proposed emission control strategies for other pollutants which included "dry scrubbing for SO₂ control and a fabric filter for control of particulates, represented Best

On December 13, 2006, Chapter 14, Section 4 of the WAQSR became effective, allowing Wyoming to participate in a national mercury cap-and-trade program established by the CAMR. Permit CT-4631 was issued on October 15, 2007. On March 14, 2008, the D.C. Circuit Court of Appeals vacated both EPA's rule de-listing coal-fired electric utility generating units from the list of sources regulated under Section 112 of the CAA and CAMR establishing NSPS and a national mercury cap-and-trade program. New Jersey v. EPA, 517 F.3d 574 (D.C. Cir 2008), reh'g denied (May 20,2008), Order extending time to file Pet. for Writ of Cert. until October 17, 2008, Docket No. 08A117 (U.S. Sup. Ct. Sept. 5, 2008). Through a footnote (Protestants' Mot. for Summ. J., pg 47, FN34), Protestants attempt to raise the issue of whether a case-by-case MACT determination was or is required for the DFS. Protestants failed to raise this issue in their Protest and it is not properly before this Council.

Demonstrated Technology (BDT) for control of mercury." Ex. 1 (Schlichtemeier Aff., Ex. K at 2). As flue gas is emitted, it will pass through "a series of emissions control devices including Low NO_x burners and overfire air for primary NO_x control, Selective Catalytic Reduction ("SCR") for additional NO_x removal, a fabric filter dust collector for particulate control, a dry Flue Gas Desulphurization ("FGD") system for SO₂ removal, and potential future sorbent injection system for mercury control if required." Id.; see also Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. 28606, 28614 (May 15, 2005) (best demonstrated technology for establishing Hg emission limits for new sources using sub-bituminous coal is "the use of effective PM controls (e.g., fabric filter or ESP) and wet or dry FGD systems); Id. at 28606 (Hg reductions can be obtained as a "co-benefit" of controlling SO₂ and NO_x emissions); Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4687 (Jan. 30, 2004) (recognizing that Hg emissions will be reduced by the air pollution controls designed and installed to reduce SO₂ and NO_x). While recognizing that mercury reductions could occur as a "co-benefit" of controlling other pollutants, EPA acknowledged that there were no commercially available, mercury-specific control technologies. See supra, 70 Fed. Reg. 28606, at 28614; 69 Fed. Reg. 4,665-70 (subbituminous coal produces mostly elemental mercury which is not easily removed by existing control equipment); See also In re Masonite Corp., 5 E.A.D. 551, 560-61 (EAB

1994)(where optimal removal efficiency has never been proven, permitting agency has discretion to set emission limit at level that will allow the permittee to achieve consistent compliance, not highest possible control efficiency); *Laramie River Conservation Council v. Indus. Siting Council*, 588 P.2d 1241, 1255 (Wyo. 1978)(ISC may issue permit even if empirical data is unknown or not otherwise discernable).

In addition to reviewing the mercury NSPS, Basin examined four recently issued permits: Newmont Nevada Mining, Unit 1 in Dunphy, Nevada; MidAmerican Energy, Council Bluffs Energy Center Unit 4, Iowa; Intermountain Power Agency, Intermountain Unit 3, Delta Utah; and Xcel Energy, Comanche Unit 3, Pueblo, Colorado. Ex. 1 (Schlichtemeier Aff., Ex. K at 2). With the exception of the Intermountain Unit 3, these units will burn subbituminous coal and have mercury emission limits established ranging between 16.5 x 10⁻⁶ lb/MW-hr and 20 x 10⁻⁶ lb/MW-hr. *Id.* at 3. Furthermore, both the MidAmerican Energy and Xcel Energy permits included testing and optimization evaluations for mercury controls. *Id.* The DEQ's analysis noted that these permit limits were based on case-by-case Maximum Achievable Control Technology ("MACT") or legal agreements, rather than BACT. Ex. 1 (Schlichtemeier Aff., Ex. N at 15).

Following its review of these permits, Basin concluded that a true mercury BACT analysis was not possible because control technologies, other than Activated Carbon Sorbent Injection, were in the developmental stage so there was limited information regarding possible alternatives and potential control efficiencies. *Id.* at 4. Primarily, Basin's concerns centered on the unknown effects such as "how changing operating

conditions can impact Hg emissions"; the uncertainty regarding mercury levels in the coal; and the accuracy of CEMs. *Id.* Given those uncertainties, Basin proposed incorporating the NSPS emission limit as a permit condition, and conducting a "Mercury Optimization Study" for one year which would review potential mercury control technology options such as Sorbent Injection, Sorbent Enhancement Additives; Coal Pretreatment Processes, and mercury oxidation technologies. *Id.* at 4-5.

After reviewing Basin's information, the DEQ concluded:

Based on emission limits in recently issued PSD permits, the Division concludes that 20 x 10⁻⁶ lb/MW-hr, 12 month average, represents a target emission rate for mercury. The Division also understands that Basin Electric will perform a mercury optimization study at Dry Fork Station. Therefore the permit will limit mercury emissions to 97 x 10⁻⁶ lb/MWhr and require installation and operation of a control system with a target emission rate of 20 x 10⁻⁶ lb/MW-hr. Basin Electric will be required to submit a protocol for the mercury optimization study including proposed control techniques, operational parameters, test methods, and procedures and to perform the mercury optimization study for one year. permit for this facility will be reopened to revise the mercury limit or add operational parameters as deemed appropriate by the Division based on the results of the study and the revisions will go through the public review process.

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

After the proposed Permit was placed for public comment, the DEQ followed up with Basin, asking for additional information on "the level of mercury control that [Basin] consider[s] available." *Id.*, Ex. P, pg. 1. On June 11, 2007, Basin noted that it planned to install a mercury injection control system and use it to perform the full scale mercury optimization study. *Id.*, Ex. R at 2.

After considering public comments, the DEO noted mercury emissions would be limited by the NSPS to 0.000090 lb/MW-hr. Id., Ex. T at 2. DEO also noted that it performed a BACT analysis under WAQSR Ch. 6, § 2: "mercury control is an evolving technology and control efficiencies are site specific depending on coal properties and control devices used for other pollutants." Id. at 22; see also Id. at 2, 13, 25. DEQ noted that after the one year mercury optimization study was complete, DEO would "reopen the permit and establish a final BACT emission limit based on the maximum reductions that can be achieved considering technical feasibility and cost." Id. at 13. In response to Basin's comments, the DEQ noted that although it did not specify the type of mercury control system to be installed, it expected that it would be a carbon injection system or another comparable control device" and DEQ expected that Basin would "evaluate carbon injection as part of the optimization study." Id. at 25. Following the study, DEQ would reopen the permit and "establish a final BACT emission limit based on the maximum reductions that can be achieved considering technical feasibility and cost. The final emission limit may be higher or lower than 20 x 10⁻⁶ lb/MW-hr." *Id.*

Given the limited information of possible alternatives and potential control efficiencies for mercury, and the uncertainties such as how changing operating conditions could impact mercury emissions, the DEQ's approach setting a mercury emission limit, requiring a mercury control system be installed, and providing for a mercury optimization study combine to form a "design, equipment, work practice" and "operational standards" which were established by the DEQ through the BACT process. In previous permitting,

DEQ has used this approach to address mercury emissions. See Ex. 16, (DEQ/AQD Permit CT-4517 (WYGEN 3) (Feb. 5, 2007)). These requirements satisfy BACT and are supported by the law. Protestants' claims fail and their Motion for Summary Judgment should be denied.

F. The Council Should Deny Protestants' Motion for Summary Judgment Regarding the SO₂ Increment Analysis

Protestants' Motion for Summary Judgment is improper because it relies on a very narrow reading of the WAQSR, is inconsistent with DEQ's interpretation of the WAQSR, and is not supported by case law. Protestants state "[t]he law in Wyoming is absolutely clear and unambiguous: DEQ is powerless to issue an air pollution permit to a source if the applicable emissions are predicted to exceed the maximum allowable increment in any Class I area." Protestants' Mot. for Summ. J. at 51. Protestants' interpretation of the WAQSR does not give effect to other sections of the WAQSR which modify the provisions relied on by Protestants to include the term "significant" to be factored into the increment analyses. These other provisions provide discretion to the Administrator of the AQD to determine when there has been significant deterioration and allow for the use of significant impact levels.

DEQ issues permits in accordance with the requirements of Article 2 of the WEQA, WYO. STAT. ANN. §35-11-201, and Chapter 6 of the WAQSR. Although the regulations concerning air construction permits are voluminous, Protestants cite one regulation to support their argument that the permit was improperly issued. Protestants state that "DEQ [can] issue a permit to construct a major source of air pollution 'only if

... the predicted impact (over and above the baseline concentration) of emissions defined above is less than the maximum allowable increment shown in Table 1." Protestants' Mot. for Summ. J. at 52-53. DEQ acknowledges that the increment modeling predicted exceedences of the SO₂ increment at the NCIR; however, Protestants' argument that DEQ is prohibited from using a "de minimus" or "insignificant" impact evaluation process to determine whether a source causes or contributes to an exceedence is flawed.

Protestants state that there is no "wiggle room" in the applicable regulation to allow for the consideration of insignificant impacts. Protestants' Mot. for Summ. J. at 55. This argument fails to take into account the rule's direct reference to the Administrator's discretion in determining whether "significant deterioration" has occurred.

Section 2 of Chapter 6 of the WAQSR imposes permit requirements and conditions for individuals seeking to obtain a construction permit for the construction of any new source. This section states:

"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:

* * *

(iii) The proposed facility will not cause significant deterioration of existing ambient air quality in the Region as defined by any Wyoming standard or regulation that might address significant deterioration."

WAQSR Ch. 6, §2(c)(iii)

"[A]ll portions of an act must be read in *pari materia*, and every word, clause, and sentence of it must be considered so that no part will be inoperative or superfluous." *In the Interest of KP v. State*, 102 P.3d 217, 224, (Wyo. 2004); *Hamlin v. Transcon. Lines*,

701 P.2d 1139, 1142 (Wyo. 1985). "A statute should not be construed to render any portion of it meaningless or in a manner producing absurd results." *KP v. State*, supra; *Reliance Ins. Co. v. Chevron U.S.A. Inc.*, 713 P.2d 766, (Wyo. 1986). "[Courts] presume that statutes are enacted by the legislature with full knowledge of existing law, so [courts] construe statutes in harmony with existing law, particularly other statutes relating to the same subject or having the same purpose." *Hede v. Gilstrap*, 107 P.3d 158, 163 (Wyo. 2005); *In re Collicott*, 20 P.3d 1077, 1080 (Wyo. 2001). Courts are guided by the full "text of the statute, pay[ing] attention to its internal structure and the functional relation between the parts and the whole." *Id.* "This Court will defer to an administrative agency's construction of its rules unless that construction is clearly erroneous or inconsistent with the plain meaning of the rules." *Pinther v. Wyoming Dep't of Admin. and Info.*, 866 P.2d 1300, 1302 (Wyo.1994); *Doidge v. State Bd. of Charities and Reform*, 789 P.2d 880, 884 (Wyo.1990).

Chapter 6, section 2 of the WAQSR states that the Administrator must make sure that the proposed facility will not cause <u>significant deterioration</u> of existing ambient air quality as defined by any regulation that might address significant deterioration. WAQSR Ch. 6, §2(c)(iii). The provision cited by Protestants for the grounds to deny the permit, 6 WAQSR § 4(b)(i)(A)(I), specifically references Chapter 6 Section 2 of the rules and incorporates the discretion of the Administrator in determining significant deterioration in the increment analysis.

6 WAQSR § 4(b)(i)(A)(I) states in part:

"A permit to construct pursuant to Chapter 6, Section 2 shall be issued only if the conditions of Chapter 6, Section 2 are complied with and if the predicted impact (over and above the baseline concentration) of emissions defined above is less than the maximum allowable increment shown in Table 1 for the classification of the area in which the impact is predicted and if the ambient standard for the pollutant(s) is not exceeded."

6 WAQSR $\S 4(b)(i)(A)(I)$ (emphasis added).

As mentioned above, "all portions of an act must be read in *pari materia*, and every word, clause, and sentence of it must be considered so that no part will be inoperative or superfluous." *In the Interest of KP v. State*, 102 P.3d 217, 224, (Wyo. 2004). If one does not read the term "significant deterioration" into the regulations, the term "significant" becomes inoperative and does not have any substance. If it was intended to exclude the significant analysis, the rules would have set forth the exact number to consider and not have included this "significant" reference. The incorporation of this provision into Section 4 provides discretion to the Administrator in determining significant deterioration and allows for the use of significant impact levels for modeled exceedences in the increment analysis. The use of the term "significant" puts the general public, the regulated community, and the regulators on notice that some level of impact is acceptable.

The primary issue in this case is really where the line is drawn for acceptable impacts. The Protestants argue that there is no level of impact or wiggle room that is acceptable. This interpretation ignores the "significant" language in Chapter 6, Section 2 and would have adverse consequences for the State of Wyoming.

An argument similar to Protestants' was discussed by the court in the case of Groce v. Dep't of Envtl. Prot., 921 A.2d 567 (Pa.Cmwlth. Ct. 2007). There 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 alternatively the modeled impacts were below Class I SILs. *Id.* at 577. The citizens group argued that any modeled impact over zero from the proposed source would be a significant impact. Id. at 576. The court rejected the non-zero approach by agreeing with the agency's findings:

"DEP argues that adopting the [Association's] non-zero approach would be impracticable, particularly as new software develops that allows modelers to measure even smaller amounts at greater distances. As DEP correctly points out, the [Association's] approach would depend solely on what measurement, no matter how small, is generated by a computer model and not whether a proposed source's impact has any significance to air quality. Simply stated, merely because a computer model can generate a number does not necessarily make it significant in our analysis.

The fact that the air dispersion model is capable of calculating infinitesimally small values does not mean that those values are meaningful outside the realm of pure mathematics. . . .

We agree with DEP that there has to be some common sense threshold to make mathematic modeling methods realistic and meaningful."

Id. at 577-578.

DEQ agrees with the approach used by the agency in the *Groce* case. There must be some kind of common sense approach to determining whether an impact is significant.

Protestants' next argument relies on a cannon of statutory construction that is inapplicable to this situation. Protestants state "[w]here a statute enumerates the subjects or things on which it is to operate, or the persons affected, or forbids certain things, it is to be construed as excluding for its effects all those not expressly mentioned under the rule of expression unius est exlusio alterius." Protestants' Mot. for Summ. J. at 55. This argument fails because the regulation references Chapter 6, Section 2 which provides the Administrator discretion in determining significant deterioration. Therefore, contrary to Protestants' argument, the rule referenced "significant deterioration" which would include significant impact levels.

Based on DEQ's interpretation of the WAQSR and the potential consequences of adopting Protestants' non-zero impact approach, the increment analysis for the Dry Fork Station should be upheld and Protestants' Motion for Summary Judgment should be denied.

IV. 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 deny Protestants' Motion for Summary Judgment and grant DEQ's Motion for Partial Summary Judgment.

DATED this 12th 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 BRIEF IN OPPOSITION OF PROTESTANTS' MOTION FOR SUMMARY JUDGMENT through United States mail, postage prepaid on this the 12th day of September, 2008 to the following:

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EXHIBIT LIST

Exhibits 1-10 were previously provided and are attached to DEQ's Memorandum in Support of Motion for Partial Summary Judgment:

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 DEO's Discovery Request

Exhibit No. 9 - Page Memorandum

Exhibit No. 10 – Sahu Deposition excerpts

Exhibit No. 11 – Fowler Deposition excerpts 214:7 – 217:7

Exhibit No. 12 – Sahu Deposition excerpts 69:14 – 71:19

Exhibit No. 13 – December 11, 2007 letter from Wyoming to EPA

Exhibit No. 14 - August 18, 2008 letter from EPA to Wyoming

Exhibit No. 15 – January 17, 2008 letter from DEQ to EPA Rule Docket

Exhibit No. 16 – DEQ/AQD Permit CT-4517 (WyGen 3), February 5, 2007