BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
OF THE STATE OF WYOMING

IN THE MATTER OF:	)	
BASIN ELECTRIC POWER COOPERATIVE	)	Docket No. 07-2801
DRY FORK STATION,	)	Presiding Officer, F. David Searle
AIR PERMIT CT–4631	)	
	)	

PROTESTANTS' REPLY IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

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I. DEQ IS REQUIRED TO CONSIDER IGCC AND SUPERCRITICAL TECHNOLOGY.

The purpose of a BACT analysis's initial Step 1 is to cast a broad net capable of ensuring that a project proponent and permitting authority identify and consider all potentially available emissions control options. Protestants' Exh. 12 at B.5; In re Knauf Fiber Glass, 8 E.A.D. 121, 130 (EAB 1999) (goal of Step 1 to "develop a comprehensive list of control options"). In opposing Protestants' Motion for Summary Judgment, Basin and DEQ champion an interpretation of the BACT process that would dramatically narrow—and undermine—the BACT process. This constricted view of the BACT process is fundamentally at odds with BACT's purpose and is contrary to the plain language of the Clean Air Act, Wyoming regulations, the NSR Manual, and legislative history. Accordingly, DEQ's and Basin's arguments should be rejected and summary judgment entered for Protestants on their IGCC and supercritical boiler claims.

A. The BACT Analysis Violated the Plain Language of Wyoming Law by Failing to Include IGCC or Supercritical Boiler Technologies.

Protestants' argument that the BACT analysis should have considered IGCC and supercritical boiler technologies is based on a straightforward syllogism:

1. The law requires that a BACT analysis consider inherently lower-emitting production processes. See 6 WAQSR § 4(a) (requiring that BACT analysis consider the "application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques"). A "production processes" is the "physical and chemical unit operations used to produce the desired product from a specified set of raw materials." Exh. 12 at B.13-14.

2. IGCC and supercritical boiler technologies are, like the less expensive subcritical pulverized coal plant favored by Basin, production processes that would transform a "specified … raw material[]," Powder River Basin coal, into the exact same "desired product," electricity.

Therefore,

3. The BACT analysis for the Dry Fork facility should have included IGCC and supercritical boiler technologies.

Basin and DEQ do not contest the first two steps in this syllogism, but attempt to evade the inescapable conclusion in step 3 by arguing that a BACT analysis can ignore alternative, lower-emitting production processes if those processes would "redefine the source." Basin Opp. at 3; DEQ Opp. at 9-10, 16. They then insist that "source" be defined very specifically as the power generating process and specific machinery chosen by the project proponent, in this case the process and machinery associated with the subcritical pulverized coal plant favored by Basin. As DEQ puts it, "exactly what occurs in between 'coal in, electricity out'—goes into defining the source." DEQ Opp. at 15. Because IGCC and supercritical boiler technologies would entail changes to how coal is transformed into electricity—that is, what happens between "coal in, electricity out"—Basin and DEQ argue those processes would redefine the source and so can be ignored in a BACT analysis.

This sweeping argument by Basin and DEQ is contrary to the relevant statutory and regulatory language. Wyoming law plainly requires that a BACT analysis consider lower emitting "production processes and available methods, including … innovative combustion techniques." 6 WAQSR § 4(a). If Basin's and DEQ's argument is accepted, however, a BACT analysis would always be able to exclude alternative production processes and especially "innovative combustion techniques" since those approaches, by necessity, would entail significant changes to the power generation technology. Indeed, it is precisely those significant changes that the BACT analysis process counts upon to decrease emissions. See In re Tenn. Valley Auth., 9 E.A.D. 357, 391 (EAB 2000) (finding the role of BACT is to encourage "state-of-the-art technology at newly constructed sources.").

Because Basin's and DEQ's approach would effectively eliminate the ability of a state permitting authority to require a BACT analysis of different power production processes and associated machinery, BACT analyses would be relegated to considering only add-on controls. The NSR Manual makes absolutely clear, however, that a BACT analysis may not be limited solely to "add-on controls," but must reach deeper into the industrial process to include "the use of materials and production processes and work practices that **prevent** emissions and result in lower 'production-specific' emissions." Protestants' Exh. 12 at B.10 (emphasis in original). Because Basin's and DEQ's interpretation of the BACT process leaves no room for the consideration of different "materials and production processes," their interpretation is contrary to the NSR Manual and must be rejected. See, e.g., Sponsel v. Park County, 126 P.3d 105, 108 (Wyo. 2006) ("We construe the statute as a whole, giving effect to every word, clause, and sentence, and we construe all parts of the statute in pari material.") (emphasis added); Stutzman v. Office of Wyo. State Eng'r, 130 P.3d 470, 475 (Wyo. 2006) (citation omitted) ("We will not interpret a statute in a way that renders any portion meaningless or in a manner producing absurd results.") (emphasis added).

Further undermining Basin's and DEQ's redefining the source argument is the NSR Manual's direction that "[l]ower-polluting processes should be considered based on demonstrations made on the basis of manufacturing identical or similar products from identical or similar raw materials or fuels." Id. (emphasis added). This provision plainly requires BACT analyses to cast a much, much broader net than would be proper under the restricted approach offered by Basin and DEQ. If this NSR provision had called for BACT analyses to explore "[l]ower-polluting processes . . . based on demonstrations made on the basis of manufacturing identical or similar products from identical or similar raw materials or fuels **through the power**

generation technology chosen by the project proponent," Basin's and DEQ's argument would have more force. But that final highlighted clause is absent and this Council cannot assume its presence by implication. See, e.g., Stutzman v. Wyo. State Eng'r, 130 P.3d 470, 475 (Wyo. 2006) (holding that to read language into a statute violates the "basic tenet of statutory construction" that "omission of words from a statute is considered to be an intentional act of the legislature").

In addition to decisively undercutting Basin's and DEQ's argument, the NSR Manual's requirement that "[l]ower-polluting processes should be considered based on demonstrations made on the basis of manufacturing identical or similar products from identical or similar raw materials or fuels" dovetails perfectly with Protestants' argument that a BACT analysis must consider all alternative production processes, i.e., processes that would produce the same "desired product" from the same "raw materials." See Protestants' Mot. at 12-15.

Basin's and DEQ's narrow view of the BACT analysis also conflicts with the Clean Air Act's legislative history. As Protestants have pointed out, Congress amended the Clean Air Act's BACT provision to add an explicit reference to "innovative fuel combustion techniques." Protestants' Mot. at 23-25. Furthermore, Congress did so to ensure that BACT analyses considered "all actions taken by the fuel user," specifically including "gasification." Id. Because—as DEQ and Basin have been at great pains to point out—pulverized coal plants and gasification facilities involve quite different technologies and machinery, this legislative history demonstrates that those differences alone cannot result in gasification's exclusion from the

BACT process. Congress added the reference to "innovative fuel combustion techniques," "to make sure there is no chance of misinterpretation" on that point. Id.[1]

The court in Friends of the Chattahoochee—the only court to consider whether a BACT analysis for a pulverized coal plant must consider IGCC—correctly read the amendment adding "innovative fuel combustion techniques" as clear evidence that IGCC is within the intended scope of a BACT analysis. Protestants' Exh. 1 at 14-15; see also Platte Dev. Co. v. State Envtl. Quality Council, 966 P.2d 972, 974 (Wyo. 1998) ("When the legislature has spoken in unambiguous terms . . . we are bound to the results so expressed.") (citing State ex rel. Wyo. Workers' Compensation Div. v. Bergeron, 948 P.2d 1367, 1369 (Wyo. 1997)).

Basin asks the Council to shrug off the Friends of the Chattahoochee decision because the Georgia court failed to follow what Basin asserts is EPA's "controlling interpretation." Basin Opp. at 7. Informal, non-final policy statements of EPA concerning the federal Clean Air Act, though, do not in any way "control" the Georgia court and certainly do not "control" how this Council interprets Wyoming law.[2] The language that controls the Council's actions here is the plain terms of Wyoming's BACT provision, which unambiguously require DEQ and Basin to prepare a BACT analysis that looks at all "lower-emitting production processes" and "innovative fuel combustion techniques." See, e.g., Olivas v. State ex rel. Wyo. Workers' Safety and Compensation Div., 130 P.3d 476, 484 (Wyo. 2006) (holding that state agencies are bound by the "clear and unambiguous" words of statutes and regulations); New Jersey v. EPA, 517 F.3d

[1] Protestants pointed out in their opening brief that subcritical coal plants are in the same source category as supercritical and IGCC facilities. Protestants' Mot. at 22-23. Basin offers no response on this point. For its part, DEQ asserts that "source" in the New Source Performance Standards should be treated differently than "source" in the PSD program. DEQ Opp. at 16. DEQ overlooks the fact that "identical words used in different parts of the same statute are … presumed to have the same meaning." Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Dabit, 547 U.S. 71, 86 (2006); see also Pasquantino v. U.S., 544 U.S. 349, 358-59 (2005) ("To give these same words a different meaning for each category would be to invent a statute rather than interpret one.").

[2] Nor are EPA's statements entitled to the "great deference" Basin believes. See Christensen v. Harris County, 529 U.S. 576, 587 (2000) (views set out in agency opinion letters are not accorded deference).

574, 582-83 (D.C. Cir. 2008) (holding EPA must comply with plain language of the Clean Air Act).[3] Because the BACT analysis for the Dry Fork facility failed to do so, it must be rejected by the Council and remanded to DEQ.

Finally, Basin asserts the Council must ignore the Georgia court's decision because, as a result of an appeal being filed, "Friends of the Chattahoochee is suspended and so it is not legal authority for anything." Basin Opp. at 7. While a judgment is suspended and cannot be enforced under Georgia law once appealed, the appeal does not wipe the decision from the books or negate the opinion's persuasive power. See Ga. Stat. Ann. § 9-12-19. While obviously not controlling on the Council, the Georgia court's opinion is noteworthy in being the only court decision addressing whether IGCC must be considered in a BACT analysis for a pulverized coal plant. In that regard, the opinion offers persuasive authority and the fact that the decision has been appealed does not render the decision any less on-point or convincing.[4]

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[3] Basin castigates the Georgia court for not paying sufficient heed to Sierra Club v. EPA, 499 F.3d 653, 654 (7th Cir. 2007). Basin Opp. at 7. Georgia courts, which lie within the Eleventh Circuit, are under no legal obligation to cite – let alone follow – opinions from the Seventh Circuit. In any event, Sierra Club was not on point because it had nothing to do with IGCC and everything to do with the question – not present in the Georgia case – whether a BACT analysis must include an alternative in which the production process would entail the use of a different source of raw material. See Protestants' Mot. at 21-22 (discussing Prairie State, this same case in the district court). Because the Dry Fork facility would use the same Powder River Basin coal regardless of what production process is used, and because this case involves "innovative fuel combustion techniques" like IGCC that are specifically mentioned in the Clean Air Act's legislative history and BACT definition, the Sierra Club decision is not germane here.

Basin's and DEQ's reliance upon In re Permit Issued to Black Hills Power and Light Co., a 15-year-old decision by the EQC is similarly misplaced. Basin Opp. at 8; DEQ Opp. at 9, 13. That case had nothing to do with IGCC or supercritical boiler technology. Nor is there any indication that the legal arguments regarding production processes were offered in that case. Consequently, Black Hills Power is not controlling here. See Cooper Industries, Inc. v. Aviall Servs., Inc., 543 U.S. 157, 170 (2004) ("Questions which merely lurk in the record, neither brought to the attention of the court nor ruled upon, are not to be considered as having been so decided as to constitute precedents.") (citation and quotations omitted).

[4] DEQ asks this Court to ignore Friends of the Chattahoochee, along with the views of the state permitting authorities that have required IGCC in BACT analyses, because they turned on federal or non-Wyoming state law. DEQ Opp. at 10. Because those cases involved BACT language that is effectively identical to the Wyoming statute, the decisions cannot be brushed aside so easily. Furthermore, this is entirely inconsistent with DEQ's approach with respect to $PM_{2.5}$ and SO_2 where the agency asks this Council to ignore Wyoming law and rely solely on non-binding EPA guidance.

B. The Council Should Remand the Inadequate BACT Analysis to DEQ.

Protestants' opening brief in support of partial summary judgment explained that the sole issue for this Council concerning IGCC and supercritical boiler technologies is whether they were appropriately excluded from the BACT analysis. Protestants' Mot. at 14 n.4. As Protestants pointed out, Basin does not even purport to have completed a BACT analysis that would pass legal muster if IGCC or supercritical boiler technologies needed to be included. Id. at 29-32. Therefore, if the Council agrees with Protestants that IGCC and supercritical boiler technology should have been included in the BACT analysis, the only appropriate remedy is a remand to DEQ. Id.

DEQ apparently misunderstands Protestants' point. Protestants have never claimed that they were denied their due process rights during the consideration of the BACT analysis. See DEQ Opp. at 6-8. Protestants cited the PSD permit public participation requirements to demonstrate that Basin's past documentation regarding IGCC and supercritical technologies cannot now, at this point, be offered to satisfy the BACT analysis requirement because doing so would deny the public its right to comment on these production processes. Thus, if the Council finds that IGCC and supercritical technology should have been considered as part of the BACT analysis, the proper remedy is to remand to the agency so that the public can be afforded its rightful opportunity to comment on whether these alternative production processes are BACT. Protestants' Mot. at 29-32.

For its part, Basin declares summarily that IGCC and supercritical boiler technologies are "not appropriate" for Dry Fork Station. Basin Opp. at 2. Basin claims to have come to this conclusion "reluctantly" and after careful consideration. Id. Whether Basin took a full open-minded look at these technologies is a question of fact that is not germane at this stage of

proceedings. What is worth noting here, though, is that whether or not a control technology is "appropriate" or not is something to be determined through the BACT process not, as Basin seems to assume, before the BACT process even begins or after the permit is appealed.[5] Accordingly, this Council should remand the permit to DEQ and require a BACT analysis that considers IGCC and supercritical technology.

II. DEQ MUST REGULATE $PM_{2.5}$ AS A SEPARATE POLLUTANT.

A. Neither DEQ Nor Basin Have Offered Any Justification for DEQ's Failure to Comply with Wyoming Law.

DEQ claims that its "analysis of $PM_{2.5}$ emissions using EPA's PM_{10} Surrogate Policy, was consistent and complied with the law." DEQ Opp. at 20. However, the relevant "law" is not established in EPA memos or in the preamble to a rule, which are the only places EPA's surrogate policy is found. The relevant law is found in Wyoming's air permitting regulations, which must be at least as stringent as the Clean Air Act. 6 WAQSR § 4(b)(i), (ii) (requiring NAAQS and BACT compliance for all regulated pollutants); 42 U.S.C. § 7475(a)(3), (4) (same). DEQ cannot disregard the plain language of its own regulations or the minimum requirements of the Clean Air Act. See, e.g., Olivas, 130 P.3d at 484 (holding that state agencies are bound by the "clear and unambiguous" words of statutes and regulations); Christensen, 529 U.S. at 588 ("To defer to [an agency position that is inconsistent with its regulations] would be to permit the agency, under the guise of interpreting a regulation, to create de facto a new regulation."). Neither Basin nor DEQ ever square the surrogate policy with Wyoming law. Indeed, neither party even mentions the relevant legal provisions. As Protestants have demonstrated, however,

[5] Basin indulges itself in a footnote in which it warns darkly of Protestants' nefarious anti-coal agenda. Basin Opp. at 6. It is unclear what Basin is trying to achieve with this footnote, but this rhetoric has no place before this Council. Protestants have brought this well-founded challenge in good faith. The Council's duty is to resolve the legal issues before it, not to engage, as Basin does, in uninformed speculation about Protestants' future actions.

the surrogate policy is inconsistent with Wyoming's regulations, the minimum requirements of the Clean Air Act, and relevant case law. Protestants' Mot. at 35-41; Protestants' Resp. at 10-18.

Nor is DEQ bound by the surrogate policy. The policy is not found in either Wyoming or federal law. It is simply EPA guidance. Basin's claim that the surrogate policy was "codif[ied] by rulemaking" is incorrect. Basin Opp. at 8. EPA did not codify the surrogate policy in a federal regulation; it merely expressed the policy in memos and in a preamble to regulations. As EPA has stated each and every time it has articulated the surrogate policy, it is not binding on states. See, e.g., 73 Fed. Reg. 28,321, 28,334-35 (May 16, 2008); Protestants' Exh. 33 at 2; Protestants' Exh. 34 at 4. In fact, Basin later concedes that the surrogate policy is nothing more than an "interpretative guideline." Basin Opp. at 9. As such, it is not entitled to deference from the Council. Christensen, 529 U.S. at 587 (holding that "interpretive guidelines" are not entitled to deference).[6] Indeed, the Council cannot afford deference to EPA's interpretation because it is inconsistent with the plain language of the Clean Air Act and Wyoming's regulations. Id. at 588; see also Manhattan Gen. Equip. Co. v. Comm'r of Internal Revenue, 297 U.S. 129, 134 (1936) (holding an agency action that is "out of harmony with the statute[] is a mere nullity") New Jersey v. EPA, 517 F.3d at 582 ("This explanation deploys the logic of the Queen of Hearts, substituting EPA's desires for the plain text of the [Clean Air Act]."); New York v. EPA, 413 F.3d 3, 41 (D.C. Cir. 2005) ("Absent clear congressional delegation . . . EPA lacks authority to create an exemption from New Source Review by administrative rule."); Sierra Club v. EPA, 294 F.3d 155, 160-62 (D.C. Cir. 2002) (holding EPA has no authority to extend an express

[6] The cases cited by Basin confirm this principle. Am. Newspaper Publishers Ass'n v. Alexander, 294 F. Supp. 1100, 1103, (D.D.C. 1968) ("The Court is free to interpret the statute differently if it chooses to do so."); Prod. Tool Corp. v. Employment and Training Admin., 688 F.2d 1161, 1165 (7th Cir. 1982) ("[Interpretive] rules are entitled to varying degrees of deference or weight, but a reviewing court ordinarily is free to substitute its own view of the relevant statute.").

statutory deadline in the Clean Air Act). Therefore, the question before the Council is not whether DEQ properly applied the surrogate policy, as DEQ claims. The question is whether DEQ's decision to apply the surrogate policy in this permitting decision is consistent with Wyoming law.[7] It is not.

Basin claims that DEQ is entitled to rely on EPA's "scientific expertise" in interpreting the Clean Air Act. Basin Opp. at 9. However, EPA's reason for continuing the surrogate policy in SIP-approved states is not based on science; it is based on a finding that requiring states to comply with the law would be "too confusing." 73 Fed. Reg. 28,341; see also id. (justifying the three-year transition period "ensure consistent administration"). However, EPA is "not free to evade the unambiguous directions of the law merely for administrative convenience." Natural Res. Def. Council v. EPA, 595 F. Supp. 1255, 1261 (D.N.Y. 1984) (quoting Brown v. Harris, 491 F. Supp. 845, 849 (N.D. Cal.1980)).

Protestants also disagree with Basin's policy argument that "it would be virtually impossible for [DEQ] to operate" without guidance from EPA. Basin Opp. at 10. Wyoming is a SIP-approved state. The Wyoming legislature charged DEQ with implementing the Clean Air Act and Wyoming's clean air regulations, and gave it the resources and expertise to do so. DEQ is not dependent on or beholden to EPA guidance. DEQ is beholden, however, to the plain language of Wyoming's regulations and the minimum requirements of the Clean Air Act, and it must ensure that its own actions comply with these laws.

[7] To the extent DEQ and Basin argue that the Council does not have this authority, they are wrong. DEQ Opp. at 17; Basin Opp. at 9. Protestants are challenging DEQ's failure to comply with Wyoming law, which requires NAAQS and BACT compliance for each regulated pollutant, including $PM_{2.5}$. DEQ is the one raising EPA's surrogate policy as a defense. It is well within this Council's authority to determine that DEQ is not excused from complying with Wyoming law because of EPA guidance. W.S. § 35-11-112 ("The council . . . shall hear and determine all cases or issues arising under the laws, rules, regulations, standards or orders issue or administered by the department or its air quality . . . divison[].")

DEQ also claims that the "technical difficulties" identified in the Seitz Memo remained in October 2007 when the permit issued. DEQ Opp. at 19. In fact, EPA found as early as November 2005 that these technical difficulties had "been resolved in most respects." 70 Fed. Reg. 65, 984 66,043 (Nov. 1, 2005). Plaintiffs expert confirmed that fact, and neither DEQ nor Basin offered any contrary expert testimony. Compare Protestants' Exh. 29 at 12-13, with Protestants' Exh. 27 at 3 (Basin's expert conceding he did "not specifically addressed $PM_{2.5}$ emissions" in his expert report).[8] Additionally, neither party denies that all non-SIP approved states and the EPA are now implementing NAAQS and BACT requirements for $PM_{2.5}$. See Protestants' Resp. at 14. Accordingly, the agency has not met its "heavy burden" of showing that compliance with Wyoming law is impossible. See, e.g., Alabama Power Co. v. Costle, 636 F.2d 323, 359-60 (D.C. Cir. 1980); Sierra Club v. Gorsuch, 551 F. Supp. 785, 787 (N.D. Cal. 1982) (holding that to allow EPA to postpone compliance with the Clean Air Act without a "convincing demonstration of evident impossibility, would be to, in effect, repeal the Congressional mandate"). Not only is it possible, it is being done.

Basin also argues that it "is simply not possible" for this Council to consider the issue of whether PM_{10} is an adequate surrogate for $PM_{2.5}$. Basin Opp. at 10 ("[T]his is a technical and factual assertion about the underlying science of $PM_{2.5}$ that goes far beyond the scope of this permit appeal.") Basin provides no explanation for why this technical issue is any different from the myriad of other technical and scientific issues that this Council is considering in this appeal. Indeed, the only difference is that Basin failed to produce expert testimony on this issue in

[8] To the extent that Basin tries to address this issue in the Affidavit of Kenneth J. Snell as to $PM_{2.5}$ and Mercury, it is untimely. Protestants filed a Motion to Strike simultaneously with this brief. As articulated in that Motion, because Basin filed the affidavit with its Response Brief, Protestants did not have the opportunity to provide rebuttal testimony or to depose Mr. Snell about his opinions with respect to $PM_{2.5}$. Indeed, Basin's attempt to unilaterally re-open the discovery period only for itself violates this Court's prior orders. Accordingly, Protestants ask this Council to strike this affidavit and give it no consideration in its resolution of the pending motions for summary judgment.

accordance with the discovery schedule the Council set in this case. As to the underlying issue of whether PM_{10} is an adequate surrogate, EPA has recognized for more than 11 years that PM_{10} and $PM_{2.5}$ needed to be regulated as separate and distinct air pollutants. EPA has also recognized that for states to properly regulate $PM_{2.5}$, they will need to "evaluate different sources for controls, to consider controls of one or more precursors in addition to direct PM emissions, and to adopt different control strategies." 72 Fed. Reg. 20,589; see also 70 Fed. Reg. 65,992; 71 Fed. Reg. 2,625; 72 Fed. Reg. 20,599. Indeed, EPA and non-SIP approved states are now conducting separate analyses for $PM_{2.5}$. Accordingly, the argument that there is no scientific reason to conduct a separate analysis for $PM_{2.5}$ and PM_{10} is not credible.

Finally, Basin's reliance on In re BP Cherry Point, 12 E.A.D. __, (EAB Jun. 21, 2005), 2005 WL 1520014, is misplaced. First, the case did not address a claim that the agency failed to implement BACT for $PM_{2.5}$. Second, although the EAB accepted an ambient air impact analysis that assumed all PM_{10} coming from the plant was $PM_{2.5}$, the agency actually engaged in the air quality impact analysis in the permit application. Id. ("Contrary to Petitioner's suggestion that EFSEC failed to address $PM_{2.5}$, the record includes an evaluation of the proposed Facility's emissions impacts with respect to both PM_{10} emissions and $PM_{2.5}$ emissions."). In contrast, the record in this case is void of any analysis. Although Basin provides an after-the-fact analysis for the first time in the Pearson Affidavit attached to its Opposition Brief, any ambient air quality analysis should have occurred during the permitting process, with the opportunity for public comment.

Contrary to Basin's assertion, Protestants do not claim that the Dry Fork station will, as a matter of fact, violate the $PM_{2.5}$ NAAQS. Basin Opp. at 12. Protestants do claim that DEQ improperly issued the permit without determining whether or not Dry Fork's emissions will

violate the $PM_{2.5}$ NAAQS. DEQ'S obligation to enforce the $PM_{2.5}$ NAAQS is particularly important because there are areas in Wyoming where $PM_{2.5}$ levels are approaching the NAAQS. Although Basin's after-the-fact analysis shows that there are monitors around the Dry Fork Station with lower readings than those on which Protestants relied, that does not change the fact that DEQ never provided this information to the public during the permitting process. Additionally, treating all PM_{10} as $PM_{2.5}$ does not account for secondary formation.

B. $PM_{2.5}$ Pollution from the Dry Fork Station Poses a Health Risk to Wyoming's Citizens.

Basin seeks to assure the Council that DEQ's failure to consider $PM_{2.5}$ as a separate pollutant is warranted because the Dry Fork Station is in an attainment area, and therefore there are no health risks associated with $PM_{2.5}$ emissions. Basin Opp. at 12-13. However, the PSD provisions Protestants allege DEQ violated are only applicable in attainment areas. Congress enacted these PSD provisions specifically to "protect public health and welfare from any actual or potential adverse effect which . . . may reasonably be anticipated to occur from air pollution or from exposure to pollutants . . . notwithstanding attainment and maintenance of all national ambient air quality standards." 42 U.S.C. § 7470(l) (emphasis added). The PSD program is designed to protect the public and prevent deterioration of areas with relatively clean air.

The Dry Fork Station will be a major emitter of $PM_{2.5}$ for decades to come. Scientific evidence shows that there is no safe level of $PM_{2.5}$ pollution. According to EPA, "[e]ven small reductions in $PM_{2.5}$ levels may have substantial health benefits on a population level." 70 Fed. Reg. 66,006. For example, decreasing $PM_{2.5}$ in the ambient air by only 0.5 $\mu g/m^3$ in a moderate-sized metropolitan area can prevent as many as 25-50 premature deaths each year. Id. Even in a smaller city, the same reduction would result in a "number of avoided mortalities." Id. Protestants' concerns about $PM_{2.5}$ are therefore not "overheated," as Basin claims. Basin Opp. at

12. Because DEQ failed to ensure compliance with $PM_{2.5}$ NAAQS and BACT, Protestants' Motion for Summary Judgment should be granted.

III. DEQ'S MERCURY ANALYSIS IS FLAWED.

A. DEQ Failed to Conduct a BACT Analysis or Set an Emission Limit for Mercury Prior to Issuing the Permit.

Wyoming law requires a BACT analysis and an emission limit for mercury prior to construction. 6 WAQSR §§ 2(c)(v), 4(b)(ii); see also Exh. 37 (DEQ stating that BACT analysis is required for mercury); Exh. 14 at 15 (same). DEQ did not engage in a BACT analysis, nor did the agency set an enforceable limit for mercury. Although DEQ requested that Basin complete a BACT analysis for mercury, Basin responded that it was not possible. Protestants' Exh. 40 at 4 ("[F]or Dry Fork Station a true BACT analysis is not possible for mercury."); see also DEQ Opp. at 25 ("Basin concluded that a true mercury BACT analysis was not possible."). DEQ did not perform any BACT analysis itself; it simply accepted Basin's conclusion. Protestants' Exh. 14 at 15; Exh. 19 at 2. Accordingly, there was no BACT analysis for mercury, and no BACT emission limit.

DEQ claims that while they normally follow the top-down BACT process, the agency simply set a "design, equipment, work practice, or operational standard" in this case. DEQ at 21-22. Not only has DEQ failed to point to an actual standard of any kind in the permit, this approach puts the cart before the horse. DEQ may only set a design, equipment, work practice, or operational standard after it engages in a top-down BACT analysis. BACT is defined as an "emission limitation based on the maximum degree of reduction" that DEQ determines is possible on a case-by-case basis. WAQSR § 4(a). Once DEQ engages in that case-by-case analysis and chooses BACT, it then has to determine how to enforce the BACT limit. Under the BACT definition, "[i]f the Administrator determines that technological or economic limitations

on the application of a 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 operation standard." Id. As the NSR Manual explains, it is only after Step 5 of the top-down process—"selecting BACT"—that DEQ can make the determination that the "measurement methodology" is insufficient to impose an emission standard.

> To complete the BACT process, the reviewing agency must establish an enforceable emission limit for each subject emission unit at the source and for each pollutant subject to review that is emitted from the source. If technological or economic limitations in the application of a measurement methodology to a particular emission unit would make an emission limit infeasible, a design, equipment, work practice, operation standard, or combination thereof may be prescribed. Also, the technology upon which the BACT emission limit is based should be specified in the permit. These requirements should be written in the permit so that they are specific to the individual emission unit(s) subject o PSD review.

Protestants' Exh. 12 at B.53, B.56 (emphasis added). Accordingly, to even determine whether a design, equipment, work practice, or operational standard is appropriate in this case, DEQ must go through the entire top-down process. Because DEQ failed to do so with respect to mercury, its analysis is flawed.

Furthermore, regardless of whether at the end of the process DEQ sets a BACT limit or a design, equipment, work practice or operational standard, the permit must actually limit emissions. BACT is defined as "an emissions limitation . . . based on the maximum degree of reduction of each pollutant." 6 WAQSR § 4(a) (emphasis added). Even with a design, equipment, work practice or operational standard, the "standard shall, to the degree possible, set forth emission reductions achievable by implementation of such design, equipment, work practice or operation." Id. § 4(a) (emphasis added). However, the only "emission limit" for mercury in the Dry Fork permit is no limit at all. Although Basin initially proposed a limit of 78 x 10^{-6} lb/MW-hr, DEQ allowed them to increase the limit to 97 x 10^{-6} lb/MW-hr. DEQ Opp. 22-

23.[9] Neither Basin nor DEQ dispute that the standard of 97 x 10^{-6} lb/MW-hr allows completely uncontrolled emissions of mercury from the Dry Fork Station. According to Basin, uncontrolled mercury emissions from the boiler will range from 60.4 to 96.6 x 10^{-6} lb/MW-hr. Protestants' Exh. 11 at 5-21. An emission "limit" that is actually higher than the uncontrolled emissions is no limit at all and violates Wyoming law.

B. DEQ Cannot Authorize an Optimization Study Without Engaging in a BACT Analysis and Setting a BACT Limit.

Rather than conducting a BACT analysis and setting a permit limit for mercury, DEQ will allow Basin to perform a year-long optimization study after construction, and then determine a BACT limit. Basin is also required to submit a protocol for this study at some point in the future. Protestants' Exh. 14 at 15. Not only does this violate Wyoming law requiring a BACT analysis and emission limit prior to construction, but it also impermissibly cuts the public out of the process. See 42 U.S.C. § 7475(a)(2); 6 WAQSR § 2(m). In In re RockGen Energy Center, 8 E.A.D. 536, 553-555 (EAB 1999), the EAB rejected a permit that exempted the facility from BACT limits during startup and shutdown and required the development of a plan for limiting emissions after the permit was issued. Id. The EAB found BACT limits must be established prior to construction. Id. The EAB also recognized that by developing a plan for emission controls after the permit was issued, the permitting agency improperly avoided the public notice and review requirements of the Clean Air Act. Id.

Although Basin relies on several examples where EAB approved "adjustable" BACT limits or "optimization clauses," there is a fundamental difference between the cases Basin cites and the Dry Fork permit. Basin Opp. at 26-27. In the cases cited by Basin, the agency actually engaged in a BACT analysis and set a permit limit. See In re Prairie State Generating Station,

[9] Although this is the NSPS limit, as DEQ acknowledges, "BACT limits are separate from NSPS limits." DEQ Opp. at 23. NSPS limits only set the bare minimum for BACT limits. 6 WAQSR § 4(a).

PSD Appeal No. 05-05 (EAB Aug. 24, 2006), slip op. at 106 ("It is beyond dispute that IEPA performed a top-down BACT analysis for PM."); In re AES Puerto Rico, L.P., 8 E.A.D. 324, 349-50 (EAB 1999) (stating the agency prepare a BACT determination and BACT limits for PM); In re Pennsauken County, N.J. Resource Recovery Facility, 2 E.A.D. 768, 771 (Adm'r 1989) (stating the permitting agency completed a revised BACT analysis for NOx). Accordingly, the petitioners in those cases were not challenging the failure to complete a BACT analysis, they were challenging the outcome of the BACT analysis. See, e.g., In re Prairie State, slip op. at 107 ("Petitioners' objections relate solely to IEPA's analysis performed at step 5 of the top-down method and thus do not demonstrate that IEPA wholly failed to perform a top-down BACT analysis."). Although the agencies issued permits that included adjustment or optimization clauses, they started with an enforceable permit limit, established through the top-down BACT process.

The existing BACT limit was critical to the outcome in In re Prairie State. In that case, the EAB recognized its prior holding in In re Rockgen Energy that BACT permit limits must be established prior to permit issuance. Id. at 112 n.91. The EAB was only able to distinguish the permit at issue from the impermissible permit in In re Rockgen Energy because the "optimization plan . . . provide[ed] for an increase in the stringency of the BACT limits and in no way exempt[ed] Prairie State from the BACT limits initially set in the Permit." Id. (emphasis added). While there is no blanket prohibition on optimization clauses or permit adjustments after permit issuance, the permitting agency must still engage in the top-down BACT process and set an emissions limit based on the best information available at the time.[10]

[10] Although DEQ claims that is has employed this practice before, that does not make it legal. Furthermore, the Wygen permit authorized a mercury optimization study on an existing plant, to determine the appropriate control technology for a new plant. The company was required to submit the results of the optimization study on the existing Wygen 2 plant before constructing the new Wygen 3 plant. DEQ Exh. 16 at 2.

In fact, the record shows that permitting agencies have engaged in this practice for other coal plant permits around the county. Basin identified four existing permits with mercury limits ranging from 16.5 and 20 x 10^{-6} lb/MW-hr that resulted from MACT analysis, which is similar to BACT analysis, as discussed below. Protestants' Exh. 40 at 2-3. Two of these permits had no optimization periods. Id. at 3. While the other two included optimization periods, they still included enforceable permit limits. Id. In the Mid American Energy case, the plant was required to meet the limit of 16.5 x 10^{-6} lb/MW-hr (or 1.7 x 10^{-6} lb/MMBtu) unless it was conducting a trial as part of its optimization study. Even during trials, the permit required the plant to use good practices for minimizing emissions. The permittee was also required to install activate carbon technology. Exh. 53 at 5, 13.

In contrast to these EAB cases and existing permits, DEQ performed no BACT analysis and set no enforceable BACT emission limit in the permit. As discussed above, DEQ and Basin cannot credibly argue that the emissions limit of 97 x 10^{-6} lb/MW-hr constitutes a BACT limit because it is higher than the uncontrolled emissions from the Dry Fork Station. Although DEQ set a "target emission rate" of 20 x 10^{-6} lb/MW-hr during the optimization study, that limit is nothing more than a goal. Exh. 54 at 104.

Indeed, Basin claims that it cannot comply with anything other than a permit limit of 97 x 10^{-6} lb/MW-hr. DEQ Exh. 1 (Exh. R at 2) ("Basin Electric considers the best level of mercury control available and at which it can commit to consistently achieve compliance as 97 x 10^{-6} MW/hr."). However, there is no question that Basin can achieve greater emissions reductions than none at all. As discussed above, Basin identified at least four permits for coal plants with mercury limits ranging from 16.5 to 20 x 10^{-6} lb/MW-hr. Protestants' Exh. 40 at 2-3. In its comments on the air permit, the National Park Service identified five additional permits, draft

permits, or applications with proposed mercury levels lower than 97 x 10^{-6} lb/MW-hr, including three at 20 x 10^{-6} lb/MW-hr and one at 24 x 10^{-6} lb/MW-hr. Protestants' Exh. 9 at 5 & Table 5. DEQ also noted that sorbent injection technologies can typically achieve at least 90% reductions. Protestants' Exh. 37. Furthermore, as Basin own expert noted, in 2004, EPA proposed 20 x 10^{-6} lb/MW-hr as the Maximum Achievable Control Technology ("MACT") for subbituminous coal-fired power plants. Protestants' Exh. 27 at 60; see also 60 Fed. Reg. 4,652 (Jan. 30, 2004). Mr. Snell also testified that although there are a number of variables and uncertainties, he believes the Basin would be able to achieve a limit of 20 x 10^{-6} lb/MW-hr. Exh. 54 at 118-119. Protestants' take no position at this point as to what the correct BACT limit is for the Dry Fork Station, only that there must be an enforceable limit, set through the BACT analysis.

C. A Mercury BACT Analysis is Not Impossible.

During the permitting process Basin claimed that it was not possible to conduct a "true BACT analysis" for mercury. Protestants' Exh. 40 at 4. Although Basin provided DEQ with no supporting documentation, DEQ accepted Basin's determination. Protestants' Exh. 14 at 15. Certainly, however, Basin did not meet its "heavy burden" of establishing impossibility. See, e.g., Alabama Power Co. v. Costle, 636 F.2d 323, 359-60 (D.C. Cir. 1980); Sierra Club v. Gorsuch, 551 F. Supp. 785, 787 (N.D. Cal. 1982) (requiring a "convincing demonstration" of impossibility).

In fact, as discussed above, the record shows that at least four other recently-permitted coal plants conducted a case-by-case MACT analysis that resulted in permit limits between 16.5 and 20 x 10^{-6} lb/MW-hr. Protestants' Exh. 40 at 2-3. The National Park Service identified other similar proposed and permitted limits. Protestants' Exh. 9 at 5 & Table 5. As the EAB has held, "the fact that other permitting authorities have concluded a particular limit is achievable should

establish a presumption of feasibility at step 2 of the top-down BACT analysis as recommended in the NSR Manual." In re Prairie State, slip op. at 108 n.85 (citing NSR Manual at B.7). The EAB also recognized that the permitting agency must have flexibility if those permit limits have only recently been issued and not demonstrated in practice. Id. However, that flexibility comes into play "when establishing the BACT limit at step 5 of the top-down method." Id. It is not an excuse for foregoing the top-down analysis altogether as DEQ and Basin did here.

Moreover, the fact that the four coal plants identified by Basin were able to conduct a case-by-case MACT analysis is strong evidence that Basin could conduct a BACT analysis. Similar to BACT, MACT is "an emission limit . . . which reflects the maximum degree of reduction in emissions that the Division, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the constructed . . . major source." 6 WAQSR § 6(f)(ix). Under Wyoming's regulations, MACT cannot be "less stringent than the emission control which is achieved in practice by the best controlled similar source." Id. § 6(h)(ii)(A). Much like BACT, DEQ must determine the "maximum degree of reduction . . . which can be achieved." Id. § 6(h)(ii)(B). Like the collateral impacts analysis in BACT, a MACT analysis can take into account costs, health and environmental impacts, and energy requirements. Id. § 6(h)(ii)(B). And, just like BACT, DEQ can prescribe a "design, equipment, work practice, or operational standard" if an emission limit is not feasible. Id. § 6(h)(ii)(C).

Neither DEQ nor Basin ever explain why the four plants mentioned above could engage in a case-by-case MACT analysis, but Basin cannot conduct a very similar BACT analysis. See DEQ Opp. at 25 (conceding that Mid American Energy and Xcel Energy mercury permit limits were based on a case-by-case MACT analysis, but failing to explain why a similar BACT

analysis is not possible in this case).[11] In fact, numerous air permitting agencies around the country have or are currently performing case-by-case MACT analyses for coal-fired power plants as a result of the vacature of EPA's Clean Air Mercury Rule ("CAMR").[12] DEQ is capable of conducting a similar BACT analysis.

Additionally, there are mercury control options that DEQ could have considered in a BACT analysis, including sorbent injection. DEQ concedes that this technology is past the "developmental stage." DEQ Opp. at 25. In fact, DEQ acknowledged that sorbent injection can typically achieve at least 90% mercury control. Protestants' Exh. 37. DEQ claims that it "expects" that Basin will install a carbon injection system and consider it as part of the optimization study, but it provides no explanation for why this was not considered in a BACT analysis, and a mandatory permit limit reflecting the expected emissions reduction imposed. Although Basin claims that it plans to install sorbent injection technology as part of its optimization study, DEQ Exh. 1 (Exh. R at 2), there is nothing in the permit requiring Basin to

[11] Basin relies solely on the Snell Affidavit submitted with its Opposition Brief to support its position that a mercury BACT analysis is impossible. As discussed in Protestants' Motion to Strike, this Affidavit is untimely, and Protestants have not had the opportunity to provide rebuttal expert testimony or to depose Mr. Snell with respect to his new opinions. Accordingly, Protestants ask the Council to strike the Snell Affidavit.

[12] For example, North Carolina, Arkansas, Louisiana, Montana, and Virginia have or are requiring case-by-case MACT analysis for coal plants proposed in their states. See Case-by-Case Maximum Achievable Control Technology Assessment for Hazardous Air Pollutants Unit No. 6 Cliffside Steam Station Project (July 2008) available at http://daq.state.nc.us/permits/psd/docs/cliffside/Case-by-Case_MACT_Assessment-Final_07-03-08.pdf; Response to Comments Dynegy Services Plum Point, LLC, Permit 1995-AOP-R2, at 13, available at http://www.adeq.state.ar.us/ftproot/Pub/air/files/SWEPCO-TURK/112%28g%29%20draft%20permit%20decision/Previous%20applications/06.13.08%20Turk%20112g%20Application%20-%20Appendix%20A/Plum%20Point%20Permit%2001.11.08.pdf; Letter from American Electric Power to Arkansas DEQ (Apr. 9, 2008), available at http://www.adeq.state.ar.us/ftproot/Pub/air/files/SWEPCO-TURK/112(g)%20draft%20permit%20decision/Previous%20applications/04.09.08%20Turk%20MACT%20Submittal.pdf; Public Hearing and Request for Public Comment on a Proposed Part 70 Air Operating Permit Reopening, Entergy Louisiana, LLC-Little Gypsy Generating Plant, AI Number 687 (Aug. 7, 2008), available at http://www.deq.louisiana.gov/apps/pubNotice/show.asp?qPostID=4463&SearchText=&st; Maximum Achievable Control Technology Analysis Roundup Power Project (June 4, 2004), available at http://www.deq.mt.gov/AirQuality/ARM_Permits/3182-00_MACT.pdf; Draft Article 7 (40 CFR Part 63 112(g)) Case-by-Case MACT Permit Stationary Source Permit to Construct and Operate, Virginia Electric and Power Company (2008), available at http://www.deq.state.va.us/export/sites/default/info/pdf/vchec/draft_dominion_mact_permit.pdf.

do so, and Basin still claims that it cannot comply with anything other than a permit limit of 97 x 10^{-6} lb/MW-hr. Id. This makes no sense if Basin is planning to use sorbent injection. Furthermore, requiring sorbent injection technology would not prevent Basin from trying other control strategies in an optimization study.

To the extent that Basin argues it cannot do a BACT analysis for mercury because no one has ever done one for a plant with its identical control technologies, that is not a legal excuse. See Basin Opp. at 22, 24; Snell Affidavit at 4-5. As the NSR Manual explains, to determine the range of options that should be considered in a BACT analysis, the permitting agency must first consider "existing controls for the source category in question." Protestants' Exh. 12 at B.5 (emphasis added). In this case, Wyoming regulations define the "source category" broadly as "fossil fuel-fired steam electric plants." 6 WAQSR § 4(a) (definition of major stationary source). The source category is not defined as coal-fired power plant, burning only subbituminous coal, that specifically uses SCR for NOx control, CDS for SO_2 control, and a fabric filter baghouse for PM_{10} control. In fact, the "candidate add-on controls" that the agency must consider "may have been applied to a broad range of emission unit types that are similar, insofar as emissions characteristics, to the emission unit undergoing BACT review." Protestants' Exh. 12, at B.11 (emphasis added); see also id. at B.1 (requiring consideration of "controls applied to similar source categories and gas streams, and innovative control technologies"). As discussed above, there are plenty of plants that are analyzing mercury options for coal-fired power plants, including plants burning subbituminous coal. That they may have varying methods of controlling different pollutants is no excuse for not even conducting a BACT analysis. Because DEQ failed to do a BACT analysis or set a BACT limit for mercury in the Dry Fork permit, the

Council should grant Protestants' Motion for Summary Judgment and remand the permit to DEQ.

IV. BECAUSE IT IS UNDISPUTED THAT DRY FORK CONTRIBUTES TO ONGOING SO_2 INCREMENT VIOLATIONS, THE PERMIT MUST BE DENIED.

Both DEQ and Basin concede that the required air pollution dispersion modeling shows that Dry Fork will contribute to ongoing SO_2 increment violations in the NCIR. The question thus boils down to a legal one: can Dry Fork's admitted contribution to violations nevertheless be overlooked as insignificant even though the increment is being violated at ten times DEQ's own significance level and the impact of Dry Fork emissions has been modeled to make up just under four percent of the violation? The answer is no.

A. DEQ and Basin Agree the Increment Issue is a Matter of Wyoming Law.

Protestants showed in their opening brief that this issue is solely a matter of Wyoming law. In their responsive briefs, neither DEQ or Basin argue otherwise. In fact, noticeably absent in the response briefs of DEQ and Basin are their prior, lengthy citations to federal law and EPA guidance. Only in the response brief of DEQ does the agency finally quote the actual regulation at issue. DEQ Opp. at 30-31.

B. DEQ's Claim that Section 2 Modifies Section 4 is Wrong.

Shifting from its reliance on EPA regulations and guidance, DEQ now argues for the first time that a provision in Section 2 of Chapter 6 supposedly modifies Section 4 of Chapter 6 allowing DEQ to write-off Dry Fork's increment violations. DEQ's eleventh hour effort to resuscitate its illegal policy must fail.

According to DEQ, it can excuse "insignificant" increment violations because "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." DEQ Opp. at 30. This is because, according to DEQ, "If one does not read the term 'significant deterioration' into the regulations, the term 'significant' becomes inoperative and does not have any substance." DEQ Opp. at 31. A quick review of the two regulatory provisions shows that DEQ's argument that is without substance.

Chapter 6, Section 2(c)(iii) provides:

> 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**.

Chapter 6, Section 4(b)(i)(A)(I) provides:

> 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.

First, when these two sections are read together as DEQ admonishes, it is clear that Section 2(c)(iii) prohibits the issuance of a permit if the air pollution source causes significant deterioration "as defined by any Wyoming Standard or regulation." Section 4(b)(i)(A)(I) and its Table 1 **is** that Wyoming regulation, and Section 4(b)(i)(A)(I) and Table 1 **define** what is significant deterioration. As Section 4(b)(i)(A)(I) states, the issuance of a permit is only allowed if the predicted impact of emissions "is less than the maximum allowable increment shown in Table 1." In other words, when read together, Section 2(c)(iii) states no permit may be issued if it causes significant deterioration as defined in Section 4(b)(i)(A)(I). Because emissions from Dry Fork and other applicable sources are not less than the defined maximum allowable

increment in Table 1, the permit must be denied.[13]

Second, when Section 2(c)(iii) and Section 4(b)(i)(A)(I) are read together it also is apparent that before a permit may be issued the air pollution source must meet all of the requirements in Section 2, **and** the source's predicted impact must be less than the maximum allowable increment in Table 1. The general language in Section 2 does not modify the more specific requirements of Section 4; rather, the very specific, numerical maximum allowable increment values in Table 1 of Section 4 are in addition to any requirement in Section 2 and are controlling.

In this regard it may be worth repeating the well-established maxim that a specific provision of law governs over the more general. Cooper v. Town of Pinedale, 1 P.3d 1197, 1199 (Wyo. 2000). Therefore, "[w]hen there is in the same statute a specific provision and also a general one, which in its most comprehensive sense would include matters embraced in a specific provision, the general provision must be understood to affect only those cases within its general language that are not within the purview of the specific provision, with the result that the specific provision controls." Singer and Singer, 2A Sutherland Statutes and Statutory Construction § 46.5 (2007). Because Section 4(b)(i)(A)(I) establishes the very specific "maximum allowable" levels of "significant deterioration" generally prohibited in Section 2(c)(iii), DEQ may not use Section 2(c)(iii) to rewrite and relax the specific limits in Section 4(b)(i)(A)(I) without following the rulemaking procedures on the Wyoming Administrative Procedure Act.

[13] Thus DEQ's claim that it has discretion to decide "where the line is drawn for acceptable impacts" is wrong. DEQ Brf. at 31. Section 4(b)(i)(A)(I) and Table 1 define what is the acceptable impact, 5 $\mu g/m^3$ for SO_2 on a 24-hour basis, and DEQ has no authority to decide that ambient levels greater than the specifically defined legal limit are nevertheless "acceptable".

C. Even if DEQ is Allowed to Relax the Maximum Allowable Increments Without Following Rulemaking Procedures, the Dry Fork Modeling Shows Impacts to the NCIR Ten Times Over DEQ's Self-Proclaimed "Significant Impact Levels."

Even if the Council finds DEQ has the discretion to decide that emission impacts that are four percent or less of the allowable increment are "insignificant," which it does not, the Dry Fork modeling shows that SO_2 increment violations are already over ten times DEQ's unpublished insignificance threshold. Clearly if DEQ has such discretion, it has been abused.

DEQ apparently takes the position that for increment violating emissions to be "significant," the 24-hour SO_2 Class I increment of 5.0 $\mu g/m^3$ must be exceeded by 0.2 $\mu g/m^3$, or four percent of the increment. The fundamental problem with this approach is that the Dry Fork modeling shows that predicted SO_2 levels in the NCIR are already 10 times greater than DEQ's 0.2 $\mu g/m^3$ significance level. As shown in DEQ's permit analysis, for meteorological year 2002, the highest, second highest SO_2 level was 7.0 $\mu g/m^3$ – 2.0 $\mu g/m^3$ over the 5.0 $\mu g/m^3$ maximum allowable increment and ten times over DEQ's 0.2 $\mu g/m^3$ significance level. Protestants' Exh. 14 at 40.

It strains both the law, and common sense, to suggest in the name of "insignificant" and "de minimis" impacts, that Dry Fork's impacts to the NCIR should be excused when it is uncontested that the increment violations caused by all sources including Dry Fork are greater than 10 times what even DEQ believes is "significant."

D. Basin's Claim that Section 2 Significant Impact Levels Apply is Wrong.

The only new argument that Basin brings to the discussion in its response brief is the novel suggestion that because there are published ambient air quality standard significance levels in WASQR Chapter 6, Section 2(c), DEQ should be allowed the discretion to create Class I increments as well. Basin Opp. at 16. DEQ hasn't the temerity to make this argument, and the

law will not support it.

All that Basin's argument highlights is that DEQ has published significance levels for ambient air quality standards, and has not for Class I increments. Even assuming for the sake of argument that DEQ would have the authority to promulgate significance levels for Class I areas, a questionable proposition, DEQ has not published such levels for Class I areas and does not have the authority to act as though it has.

For all the reasons set forth above, Basin's permit should be denied because emissions from Dry Fork and other applicable sources are greater than the allowable 24-hour SO_2 increment in the NCIR of 5.0 $\mu g/m^3$.

V. PROTESTANTS HAVE STANDING TO CHALLENGE THE DRY FORK STATION PERMIT BEFORE THE COUNCIL.

According to DEQ and Basin, individuals who live near and will see and breathe the pollution from the Dry Fork Station have no standing to object to the terms of the permit. That is not the state of the law in Wyoming. The Environmental Quality Council is a forum where concerned citizens may seek review of agency actions that impact their health and welfare. DEQ Rules of Practice and Procedure do not set rigid requirements that govern who is allowed to pursue such review. Rather, any "protestant" may file an appeal before the Council. "Protestant" is broadly defined as "any person . . . requesting a hearing before the Environmental Quality Council and who is objecting to an action of the Department of Environmental Quality and desiring affirmative relief." Chpt. 1 § 2(a)(ii).

Neither DEQ nor Basin offer any support to suggest that there are any other requirements for obtaining review before the Council. Powder River Basin Resource Council, Wyoming Outdoor Council, Sierra Club and their members are "protestants" within the meaning of the

term and have properly requested a hearing. No further showing is necessary. Protestants therefore request an order from this Council finding they have standing to pursue this appeal.

Basin is incorrect that Protestants "disbelieve this argument" because they submitted standing declarations alleging harm to the Council. Basin Opp. at 28. Rather, Protestants submitted these declarations to respond to DEQ's claim that when an EQC decision is challenged in court, evidence meeting the judicial standing requirements must be placed in the record before the Council. See Sierra Club and PRBRC v. EQC, Docket No. 171-041, Laramie County District Court, Brief of Respondent DEQ at 10 (June 19, 2008). While Protestants disagree that this is the legal standard, they have submitted standing declarations in this case to assure that they will not have to face this erroneous argument if an appeal to court is necessary in this case. Although Protestants seek to enter this information into the record, the Council is not being asked to decide whether Protestants have sufficiently demonstrated standing to obtain judicial review, nor would the Council have authority to do so. That will be a matter for the court if it becomes necessary. Protestants only seek an order from the Council finding that they are "protestants" and have standing in this administrative proceeding before the Council.

Furthermore, even if the Council were to—incorrectly in Protestants' view—apply the standing requirements that are applicable to judicial review in Wyoming to this proceeding, Protestants easily meet those requirements. To obtain judicial review in Wyoming state court under the APA, citizens must demonstrate they are "aggrieved or adversely affected in fact" by the final agency action they seek to challenge. Wyo. Stat. § 16-3-114(a). WEQA defines "aggrieved party" as a party seeking admission "because of damages that person may sustain or be claiming because of his unique position in any proceeding held under this Act." Wyo. Stat. § 35-11-103(a)(vii). Although Basin claims that this imposes a "heightened" standing

requirement, it provides no support for that position, and Protestants are not aware of any.[14] Basin Opp. at 29.

Regardless, Protestants members are "aggrieved and adversely affected" and "sustain damages because of their unique positions." They will be directly affected by the construction and operation of the plant, including the tons of pollutants the plant will emit each year. See Protestants' Exh. 2-8. Several members live in very close proximity to the Dry Fork site. The air pollution from the plant will affect their ability to enjoy their lands and increase the risk of serious health effects. These impacts are sufficient to confer standing. See, e.g., Cox v. City of Cheyenne, 79 P.2d 500, 506 (Wyo. 2003) (discussing health and safety concerns as support for standing); Platte Dev. Co. v. State, Envtl. Quality Council, 966 P.2d 972 (Wyo. 1998) (allowing challenge by nearby residents to DEQ's action transferring mine permit without questioning standing); Washakie County Sch. Dist. No. One v. Herschler, 606 P.2d 310, 317 (Wyo. 1980) ("Standing should not be construed narrowly or restrictively.") (citations omitted); see also Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., Inc., 528 U.S. 167, 183 (2000) ("[E]nvironmental plaintiffs adequately allege injury in fact when they aver that they use the affected area and are persons for whom the aesthetic and recreational values of the area will be lessened by the challenged activity.") (citations and quotations omitted); Natural Resources Def. Council v. Envtl. Prot. Agency, 464 F.3d 1, 7 (D.C. Cir. 2006) (holding a 1 in 200,000 lifetime risk that an individual will develop skin cancer as a result of EPA's rule sufficient to confer standing);

[14] Furthermore, Basin's rhetoric about "Wyoming not becoming embroiled in national agendas led by environmental organizations" ignores the fact that the organizations challenging this permit have members who are directly affected by air pollution in Wyoming, and are concerned for their health and the health of their children. Basin Opp. at 29. Indeed, Wyoming Outdoor Council and the Powder River Basin Resource Council are local Wyoming organizations and Sierra Club has an office in Sheridan. These organizations have long been dedicated to protecting Wyoming's environment. To suggest that their concern is nothing more than a "political agenda" is dismissive of the people who will be living with the air pollution impacts from the Dry Fork Station for the next 50 years. Id. at 14.

DEQ's allegations that Protestants fail to show how their "interests are distinguishable from those shared by both the general public and DEQ" also must fail. See, e.g., Massachusetts v. Envtl. Prot. Agency, 127 S.Ct. at 1453 (rejecting EPA's argument that "because greenhouse gas emissions inflict widespread harm, the doctrine of standing presents an insuperable jurisdictional obstacle"); Lujan v. Defenders of Wildlife, 504 U.S. 555, 581 (1992) (holding that "it does not matter how many persons have been injured by the challenged action" as long as the "party bringing suit . . . show[s] that the action injures him in a concrete and personal way"). Furthermore, the suggestion that DEQ shares the same interests as the Protestants and must be presumed to act in the public interest is highly erroneous, as demonstrated by this case. Protestants filed this challenge precisely because DEQ failed to act in the public interest to ensure, among other things, that the most efficient technology will be used to achieve the lowest pollutant emissions possible. Indeed, a presumption that DEQ always acts in the public interest would preclude any challenges by the public against the agency, which would largely defeat the role of this Council. See Chpt. 1 § 2(a)(ii) (noting protestants request a hearing before the Council when "objecting to an action of the Department of Environmental Quality").

In any event, all the Council has to determine in this case is that Protestants meet the definition of "protestants" in the Council's regulations and are therefore entitled to proceed before the Council.

Conclusion

For these reasons, Protestants request the Council grant their Motion for Summary Judgment.

Dated: September 19, 2008

Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that on September 19, 2008, I served a copy of the foregoing PROTESTANTS' REPLY IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT and accompanying exhibits via e-mail and U.S. Mail, addressed to:

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/s/ Robin Cooley

EXHIBIT 53

Iowa Department of Natural Resources
Air Quality PSD Construction Permit
Notice of MACT Approval

Permit Holder

Firm: MidAmerican Energy Company

Contact:

Chad A. Teply
Outage Project Manager

(712) 366-5316

2115 Navajo Road
Council Bluffs, IA 51501

Responsible Party:

Jack L. Alexander
Sr. Vice President Supply and Marketing

2115 Navajo Road
Council Bluffs, IA 51501

Permitted Equipment

Emission Unit(s): CBEC 4 Boiler (7,675 MMBTU/hr),
Three (3) Carbon Silos (4,800 ft^3 each), and Fugitive Emissions

Control Equipment: Baghouse, Low NO_x Burners, Overfire Air, Selective Catalytic Reduction, Activated Carbon, and Lime Spray Dryer Flue Gas Desulfurization

Emission Point: 141

Equipment Location: 2115 Navajo Road
Council Bluffs, IA 51501

Plant Number: 78-01-026

Permit No.	Proj. No.	Description	Date	Testing
03-A-425-P	02-528	Original permit.	6/17/03	Yes

Under the Direction of the Director of
the Department of Natural Resources

PERMIT CONDITIONS

The owner or operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the following conditions.

1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20-31; and 40 CFR Parts 51, 52, 60, 61 and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least thirty (30) days prior to transferring to the new location (See 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the National Ambient Air Quality Standards. In such case, a supplemental permit shall be required prior to the initiation of construction of additional control equipment or equipment modifications needed to meet the standards.

This permit is for the construction and operation of the specific emission unit(s), control equipment and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emission unit, control equipment or emission point without the required revisions to this permit.

3. Construction

This permit shall become void if construction on the proposed project has not been initiated within eighteen (18) months after the date of the issuance of this permit and completed within forty-eight (48) months after the date of the issuance of this permit.

It shall be the responsibility of the owner to ensure that construction conforms to the final plans and specifications as submitted and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created. A supplement to this permit shall be obtained if the owner proposes changes to the final submitted plans and specifications.

4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 31.

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5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) *"Maintenance and Repair".*

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6. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

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7. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

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8. Notification, Reporting and Recordkeeping

A. The owner shall furnish the DNR the following written notifications:
   1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
   2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
   3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
   4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;

8. Notification, Reporting and Recordkeeping (Continued)

5. Transfer of equipment ownership, within 30 days of the occurrence;
6. Portable equipment relocation, at least thirty (30) days before equipment relocation.

B. The owner shall furnish DNR with the following reports:
1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
2. Indicator opacity reports in accordance with Opacity Policy 3-b-08 (See footnote 1, Permit Condition 10);
3. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than forty-five (45) days after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
4. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.

C. The owner shall send correspondence regarding this permit to the following addresses:

Mr. David Phelps
Construction Permit Supervisor
Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Urbandale, IA 50322
Telephone: (515) 281-8189
Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator
Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Urbandale, Iowa 50322
Telephone: (515) 242-6001
FAX: (515) 242-5127

E. The owner shall send reports and notifications to:

Mr. Chuck Corell Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Urbandale, IA 50322 Telephone: (515) 281-8448 Fax: (515) 242-5127	DNR Field Office 4 1401 Sunnyside Lane Atlantic, IA 50022 Telephone: (712) 243-1934 Fax: (712) 243-6251

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to $10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

10a. BACT Emission Limits

Pollutant	Tons/Yr[1]	Additional Limits
State Particulate Matter (PM)	NA	0.027 lb/MMBTU[2]
PM_{10}	NA	0.025 lb/MMBTU[2]
Opacity[3]	NA	5%[4]
Sulfur Dioxide (SO_2)[3]	3,362	0.1 lb/MMBTU[5]
Nitrogen Oxides (NO_X)[3]	2,353	0.07 lb/MMBTU[5]
Volatile Organic Compounds	121	0.0036 lb/MMBTU[2]
Carbon Monoxide (CO)[3]	5,177	0.154 lb/MMBTU[6]
Lead (Pb)	NA	0.000026 lb/MMBTU
Flourides (F)	NA	0.0009 lb/MMBTU
Total Reduced Sulfur (TRS)	NA	0.001 lb/MMBTU
Sulfuric Acid Mist (H_2SO_4)	NA	0.00421 lb/MMBTU

[1] Standard is a 12-month rolling total.
[2] Standard is expressed as the average of 3 runs.
[3] Compliance with the emission standards shall be demonstrated through the use of Continuous Emission Monitoring Systems (CEMS).
[4] Standard is a 1-hr average.
[5] This standard is a 30-day rolling average not including periods of startup, shutdown, and malfunction.
[6] Standard is a 1 calendar day average.

10b. 112g Emission Limits

Pollutant	Lb/MMBTU
Mercury	1.7×10^{-6} (1)
Hydrogen Chloride (HCl)	0.0029 (1)
Total Selected Metals (TSM)[2]	1.04×10^{-4} (1)
Federal PM[3]	0.018(1)
CO[4]	0.154 (5)

[1] Standard is expressed as the average of 3 runs.
[2] Total Selected Metals (TSM) means the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel, and selenium.
[3] The federal particulate matter standard listed is a surrogate to show continual compliance with the total selected metals standard.
[4] Compliance with the emission standards shall be demonstrated through the use of a CEMS.
[5] Standard is a 1 calendar day average.

10c. Other Emission Limits

Pollutant	lb/hr	Tons/Yr[1]	Additional Limits	Reference (567 IAC)
Federal PM	NA	NA	13 ng/J heat input[2]	23.1(2)"z"[3]
PM_{10}	195.1[4, 5]	NA	NA	NAAQS
Opacity[6]	NA	NA	20%[7]	23.1(2)"z"[3]
SO_2[6]	921.0[4, 8]	NA	520 ng/J heat input[9]	23.1(2)"z"[3]
NO_X[6]	614.0[10, 11]	NA	200 ng/J gross energy output[12]	23.1(2)"z"[3]
VOC	NA	NA	NA	NA
CO[6]	1,966.0[10, 13]	NA	NA	NAAQS
Pb	0.20[5, 10]	NA	NA	NAAQS

[1] Standard is a 12-month rolling total.
[2] 13 ng/J = 0.03 lb/MMBTU.
[3] IAC reference to NSPS Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978). See also 40 CFR §60.40a – 40 CFR §60.49a.
[4] Emission rate used to demonstrate no exceedences of the National Ambient Air Quality Standards (NAAQS) or of the increment.
[5] Standard is expressed as the average of three (3) runs
[6] Compliance with the emission standards shall be demonstrated through the use of a CEMS.
[7] Opacity shall not exceed 20% (6-minute average), except for one (1) 6-minute period per hour of not more than 27% opacity.
[8] Standard is expressed as a three (3) hour average.
[9] 520 ng/J = 1.20 lb/MMBTU. Compliance with this standard is determined on a 30-day rolling average basis. See permit Condition 14.E.
[10] Emission rate used to demonstrate no exceedences of the NAAQS.
[11] Standard is expressed as a calendar month average.
[12] 200 ng/J = 1.6 lb/megawatt-hour (gross). Compliance with this standard is determined on a 30-day rolling average basis.
[13] This standard is expressed as a one (1) hour standard.

11. Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Parameter	Value
Stack Height, (ft, from the ground)	550
Discharge Style	Unobstructed vertical
Stack Opening, (inches, dia.)	295.8
Exhaust Temperature (°F)	165
Exhaust Flowrate (scfm)	2,256,500

The temperature and flowrate is intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

12. Initial Performance Testing Requirements

Pollutant	Testing Required	Test Run Time	Test Method
Federal PM	Yes[1]	2 hours	40 CFR 60, Appendix A, Method 5
State PM	Yes	2 hours	Iowa Compliance Sampling Manual
PM_{10}	Yes	3 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	Yes[1, 2]	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Yes[1, 2]	1 hour	40 CFR 60, Appendix A, Method 6C
NO_X	Yes[1, 2]	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	Yes	1 hour	40 CFR 60, Appendix A, Method 25A
CO	Yes[2, 3]	1 hour	40 CFR 60, Appendix A, Method 10
Pb	Yes	1 hour	40 CFR 60, Appendix A, Method 12
F	Yes	2 hours	40 CFR 60, Appendix A, Method 13A
TRS	Yes	1 hour	40 CFR 60, Appendix A, Method 16B
H_2SO_4	Yes	1 hour	40 CFR 60, Appendix A, Method 8
Mercury	Yes	1 hour	Draft ASTM Z65907
HCl	Yes	1 hour	40 CFR 60, Appendix A, Method 26
TSM[4]	Yes	1 hour	40 CFR 60, Appendix A, Method 29

[1] See NSPS Subpart Da (40 CFR §60.40a – 40 CFR §60.49a) for initial performance testing requirements.

[2] Compliance shall be measured continuously through the use of Continuous Emission Monitoring Systems (CEMS).

[3] The CO compliance tests shall be conducted under the same operating and combustion conditions as the NO_x compliance tests. Compliance with the NO_x BACT emission limit shall take preference if difficulties are encountered in achieving simultaneous compliance with these BACT emission limits. If such difficulties are encountered, the owner may subsequently request a revision of the CO BACT limit.

[4] Total Selected Metals (TSM) means the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel, and selenium.

If specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment. The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the DNR. Unless otherwise specified by the DNR, each test shall consist of three separate runs. The arithmetic mean of three acceptable test runs shall apply for compliance, unless otherwise indicated by the DNR. The test methods and run times to be used are those stated above unless otherwise approved by the DNR.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the DNR shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The DNR shall reserve the right to impose additional, different, or more detailed testing requirements.

13. NSPS, NESHAP, and Acid Rain Applicability

This emission unit is subject to Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, 40 CFR §60.40a – 40 CFR §60.49a) of the New Source Performance Standards (NSPS).

This emission unit is subject to Subparts A (General Provisions, 40 CFR §63.1 – 40 CFR §63.15) and B [Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j), 40 CFR §63.40 – 40 CFR §63.56] of the National Emission Standard for Hazardous Air Pollutants (NESHAP). Consistent with the requirements of 40 CFR §63.44, if the EPA Administrator promulgates an applicable emission standard under Section 112(d) or Section 112(h) of the Act, or if the permitting authority issues a determination under Section 112(j) of the Act, this permit will be modified as necessary to make the terms of this permit consistent with the applicable standard.

The facility (plant number 78-01-026) is considered an affected source under 40 CFR 72, 73, 75, 76, 77, and 78 definitions as emission units at this source are subject to the acid rain emission reduction requirements or the acid rain emission limitations, as adopted by the Department by reference (See 567 IAC 22.120 – 567 IAC 22.148). CBEC Boiler 4 will be subject to the SO_2 allowance allocation, NO_x emission limitations, and monitoring provisions of the federal acid rain program.

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14. Operating Limits

Operating limits for this permit shall be:

A. CBEC Boiler 4 shall be limited to firing on coal and #2 fuel oil (for light off, startup, and flame stabilization).

B. The sulfur (S) content of the fuel used shall not exceed 0.625 lbs of S/MMBTU.

C. Per 40 CFR §60.42a(a)(2), particulate matter (federal) emissions shall not exceed 1% of the potential combustion concentration (99% reduction) when combusting coal.

D. Per 40 CFR §60.43a(a)(1) and 40 CFR §60.43a(a)(2), sulfur dioxide emissions shall not exceed

(1) 520 ng/J (0.60 lb/MMBTU) heat input and 10% of the potential combustion concentration (90% reduction) when combusting coal, or

(2) 30% of the potential combustion concentration (70% reduction), when emissions are less than 260 ng/J (0.60 lb/MMBTU) heat input. Compliance with this standard is determined on a 30-day rolling average basis.

E. Per 40 CFR §60.46a(d), during emergency conditions an affected facility with a malfunctioning flue gas desulfurization system may be operated if sulfur dioxide emissions are minimized by:

(1) Operating all operable flue gas desulfurization system modules, and bringing back into operation any malfunctioned module as soon as repairs are completed,
(2) Bypassing flue gases around only those flue gas desulfurization system modules that have been taken out of operation because they were incapable of any sulfur dioxide emission reduction or which would have suffered significant physical damage if they had remained in operation, and

14. Operating Limits (Continued)

(3) Designing, constructing, and operating a spare flue gas desulfurization system module for an affected facility larger than 365 MW (1,250 million Btu/hr) heat input (approximately 125 MW electrical output capacity). The Administrator may at his discretion require the owner or operator within 60 days of notification to demonstrate spare module capability. To demonstrate this capability, the owner or operator must demonstrate compliance with the appropriate requirements under paragraph (a), (b), (d), (e), and (h) under 60 CFR §60.43a for any period of operation lasting from 24 hours to 30 days when:

(i) Any one flue gas desulfurization module is not operated,
(ii) The affected facility is operating at the maximum heat input rate,
(iii) The fuel fired during the 24-hour to 30-day period is representative of the type and average sulfur content of fuel used over a typical 30-day period, and
(iv) The owner or operator has given the Administrator at least 30 days notice of the date and period of time over which the demonstration will be performed.

F. The owner or operator shall submit the written reports required under NSPS Subparts A and Da to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.

G. The minimum sorbent feed rate of the Flue Gas Desulfurization System shall be 1.0 lbs of lime/lb of inlet SO_2 based on 90% available CaO in the lime.

H. The minimum ammonia feed rate of the Selective Catalytic Reduction (SCR) system shall be 0.43 lbs of urea/lb of inlet SCR NO_x.

I. The minimum activated carbon feed rate shall be 10 pounds per million cubic feet of exhaust gas or a rate specified for one of the trials of the optimization study required under condition M of this section. Deviation from the minimum 10 pounds per million cubic feet of exhaust gas shall only occur for the duration of a given trial. At the end of each trial, the injection rate must be returned to a minimum of 10 pounds per million cubic feet.

J. The following conditions (except Condition 4) are required on the haul roads at the facility (plant number 78-01-026) in order for the roads to meet the BACT emission rates:

(1) Haul truck loads shall be enclosed or covered.

(2) The maximum silt content shall not exceed 8.2 g/m^2. The silt content shall be tested once per month for the first year of operation of Unit 4. After the first year of testing the data shall be analyzed to determine whether or not further testing is required.

(3) The maximum number of trucks per day associated with Unit 4 shall not exceed 46 trucks per day.

(4) In order to protect the NAAQS the maximum number of trucks associated with Units 1, 2, and 3 shall not exceed 18 trucks per day.

(5) For paved roads:

(i) Fugitive emissions of paved haul roads shall be controlled to an effective control efficiency of 80% by water flushing followed by sweeping. Water flushing followed by sweeping and the record keeping requirements described Condition 15.T. shall begin at the same time as the startup of Boiler 4. The control efficiency of 80% shall be achieved by water flushing followed by sweeping of the paved haul roads once per day. The water spray rate shall be a minimum of 0.23 gallons per square yard.

(ii) If water flushing followed by sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35^0 F (1.7^0 C) or conditions due to weather, in combination with the application of the water, could create hazardous driving conditions, then the water flushing and sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the application have abated.

14. Operating Limits (Continued)

(iii) Water flushing and sweeping need not occur when a rain gage located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hr time period or the paved road(s) will not be used on a given day.

(6) For unpaved roads:

(i) Fugitive emissions from unpaved haul roads shall be controlled by applying a chemical dust suppressant. Applications of the selected chemical dust suppressant and the record keeping requirements described in Condition 15.T. shall begin at the same time as the startup of Boiler 4. A control efficiency of 95% shall be maintained on all haul roads. MidAmerican may elect to use any chemical dust suppressant that is capable of achieving the 95% control efficiency. In the event that the manufacturer or distributor of a chemical dust suppressant recommends different amounts of chemical dust suppressant or MidAmerican chooses to use a different chemical dust suppressant, MidAmerican shall notify DNR of the change in application rates and/or chemical dust suppressant and the manufacturer's/distributor's recommendations.

(ii) If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35^0 F (1.7^0 C) or conditions due to weather, in combination with the application of the chemical dust suppressant**,** could create hazardous driving conditions, then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date as the conditions preventing the application have abated.

K. The following conditions are required on the following volume source fugitive emissions at the facility (plant number 78-01-026) for this project in order for these sources of emissions to meet the BACT emission rates:

(1) Stacker conveyor:

(i) Fugitive emissions shall be controlled by applying a chemical dust suppressant. Applications of the selected chemical dust suppressant and the record keeping requirements described in Condition 15.U. shall begin at the same time as the startup of Boiler 4. A control efficiency of 95% shall be maintained. MidAmerican may elect to use any chemical dust suppressant that is capable of achieving the 95% control efficiency. In the event that the manufacturer or distributor of a chemical dust suppressant recommends different amounts of chemical dust suppressant or MidAmerican chooses to use a different chemical dust suppressant, MidAmerican shall notify DNR of the change in application rates and/or chemical dust suppressant and the manufacturer's/distributor's recommendations.

(ii) If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during operating hours) will be less than 35^0 F (1.7^0 C) or other conditions due to weather cause the chemical dust suppressant to not be applied then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date as the conditions preventing the application have abated.

14. Operating Limits (Continued)

(2) Transfer to active pile:

(i) Fugitive emissions shall be controlled by applying a chemical dust suppressant. Applications of the selected chemical dust suppressant and the record keeping requirements described in Condition 15.U. shall begin at the same time as the startup of Boiler 4. A control efficiency of 95% shall be maintained. MidAmerican may elect to use any chemical dust suppressant that is capable of achieving the 95% control efficiency. In the event that the manufacturer or distributor of a chemical dust suppressant recommends different amounts of chemical dust suppressant or MidAmerican chooses to use a different chemical dust suppressant, MidAmerican shall notify DNR of the change in application rates and/or chemical dust suppressant and the manufacturer's/distributor's recommendations.

(ii) If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during operating hours) will be less than 35^0 F (1.7^0 C) or other conditions due to weather cause the chemical dust suppressant to not be applied then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date as the conditions preventing the application have abated.

(3) Bucket reclaim:

(i) Fugitive emissions shall be controlled by applying a chemical dust suppressant. Applications of the selected chemical dust suppressant and the record keeping requirements described in Condition 15.U. shall begin at the same time as the startup of Boiler 4. A control efficiency of 95% shall be maintained. MidAmerican may elect to use any chemical dust suppressant that is capable of achieving the 95% control efficiency. In the event that the manufacturer or distributor of a chemical dust suppressant recommends different amounts of chemical dust suppressant or MidAmerican chooses to use a different chemical dust suppressant, MidAmerican shall notify DNR of the change in application rates and/or chemical dust suppressant and the manufacturer's/distributor's recommendations.

(ii) If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during operating hours) will be less than 35^0 F (1.7^0 C) or other conditions due to weather cause the chemical dust suppressant to not be applied then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date as the conditions preventing the application have abated.

(4) Rail unloading:

(i) Fugitive emissions shall be controlled by applying a chemical dust suppressant. Applications of the selected chemical dust suppressant and the record keeping requirements described in Condition 15.U. shall begin at the same time as the startup of Boiler 4. A control efficiency of 95% shall be maintained. MidAmerican may elect to use any chemical dust suppressant that is capable of achieving the 95% control efficiency. In the event that the manufacturer or distributor of a chemical dust suppressant recommends different amounts of chemical dust suppressant or MidAmerican chooses to use a different chemical dust suppressant, MidAmerican shall notify DNR of the change in application rates and/or chemical dust suppressant and the manufacturer's/distributor's recommendations.

(ii) If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during operating hours) will be less than 35^0 F (1.7^0 C) or other conditions due to weather cause the chemical dust suppressant to not be applied then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date as the conditions preventing the application have abated.

14. Operating Limits (Continued)

L. The following conditions are required on the following area source fugitive emissions at the facility (plant number 78-01-026) for this project in order for these sources to meet the BACT emission rate:

(1) Active coal pile:

(i) The size of the active coal pile shall not exceed 311,155 square feet.

(ii) Fugitive emissions shall be controlled by applying a chemical dust suppressant. Applications of the selected chemical dust suppressant and the record keeping requirements described in Condition 15.V. shall begin at the same time as the startup of Boiler 4. A control efficiency of 95% shall be maintained. MidAmerican may elect to use any chemical dust suppressant that is capable of achieving the required control efficiencies. In the event that the manufacturer or distributor of a chemical dust suppressant recommends different amounts of chemical dust suppressant or MidAmerican chooses to use a different chemical dust suppressant, MidAmerican shall notify DNR of the change in application rates and/or chemical dust suppressant and the manufacturer's/distributor's recommendations.

(iii) If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35^0 F (1.7^0 C) or other conditions due to weather cause the chemical dust suppressant to not be applied then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date as the conditions preventing the application have abated.

(2) Inactive coal storage pile:

(i) The size of the inactive coal storage pile shall not exceed 1,196,459 square feet.

(ii) Fugitive emissions shall be controlled by applying a chemical dust suppressant. Applications of the selected chemical dust suppressant and the record keeping requirements described in Condition 15.V. shall begin at the same time as the startup of Boiler 4. A control efficiency of 99% shall be maintained when the pile is inactive. A chemical dust suppressant shall be used to meet a control efficiency of 95% for maintenance of the inactive pile. MidAmerican may elect to use any chemical dust suppressant that is capable of achieving the required control efficiencies. In the event that the manufacturer or distributor of a chemical dust suppressant recommends different amounts of chemical dust suppressant or MidAmerican chooses to use a different chemical dust suppressant, MidAmerican shall notify DNR of the change in application rates and/or chemical dust suppressant and the manufacturer's/distributor's recommendations.

(iii) If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35^0 F (1.7^0 C) or other conditions due to weather cause the chemical dust suppressant to not be applied then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date as the conditions preventing the application have abated.

14. Operating Limits (Continued)

(3) Rail unloading coal stockout pile:

(i) The size of the inactive coal storage pile shall not exceed 28,224 square feet.

(ii) Fugitive emissions shall be controlled by applying a chemical dust suppressant. Applications of the selected chemical dust suppressant and the record keeping requirements described in Condition 15.V. shall begin at the same time as the startup of Boiler 4. A control efficiency of 95% shall be maintained. MidAmerican may elect to use any chemical dust suppressant that is capable of achieving the 95% control efficiency. In the event that the manufacturer or distributor of a chemical dust suppressant recommends different amounts of chemical dust suppressant or MidAmerican chooses to use a different chemical dust suppressant, MidAmerican shall notify DNR of the change in application rates and/or chemical dust suppressant and the manufacturer's/distributor's recommendations.

(iii) If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35^0 F (1.7^0 C) or other conditions due to weather cause the chemical dust suppressant to not be applied then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date as the conditions preventing the application have abated.

M. Optimization studies are required for the control of SO_2, NO_x, and Hg. These studies shall evaluate the affects of increased activated carbon injection, increased injection of slurry in the spray dryer absorber, and the optimization of the operation of the SCR unit. The following conditions shall be met for the studies:

(1) Prior to the initiation of the studies, a protocol for each study shall be developed and approved by the Department.

(2) During each trial, the emissions of the individual pollutant shall be measured.

(3) For the mercury study the following shall be collected:

(i) Data concerning the mercury content of the coal.

(ii) Data on the coal consumption rate.

(iii) The mercury content of the bottom ash.

(iv) The generation rate of the bottom ash shall be collected.

(4) The emission data during the trials shall be collected using either three (3) stack test runs or CEMS required by Condition 16 of this permit. All stack testing done for this optimization study shall be coordinated with the Department.

(5) The studies shall be conducted in a manner to collect a minimum amount of data representative of the variability of coal used by the facility. The studies shall be completed within nine (9) months of the completion of all initial compliance tests.

(6) A report summarizing the results of individual study shall be submitted to the Department within forty-five (45) days after the completion of the individual optimization study. This report shall include all data necessary to confirm the emission rates measured during each trial. This permit shall be reopened and the permit limits adjusted if the information in the report shows an amendment is necessary.

(7) Exceedances of any emission limit that occur during a trial of this optimization study is not a violation of the emission limit set forth in this permit as long as the owner or operator maintains and operates the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions. While not conducting a trial of this optimization study, the control equipment must be operated in a manner consistent with the operational limits outlined in this permit.

14. Operating Limits (Continued)

N. The facility (plant number 78-01-026) shall conduct preconstruction ambient monitoring for PM_{10}. The following conditions shall apply to these preconstruction monitoring requirements:

(1) The facility (plant number 78-01-026) shall submit to the Department a protocol for preconstruction monitoring for each PM_{10} ninety (90) days after the issuance of this permit. The protocols shall include:

(i) Monitor locations.

(ii) Number of monitors.

(iii) Duration of monitoring.

(iv) Other data collection specific considerations.

All of these requirements shall meet EPA's Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD).

(2) Preconstruction monitoring for PM_{10} shall start within ninety (90) days of the Department's acceptance of the protocol.

(3) Preconstruction monitoring for PM_{10} shall be conducted for a minimum of one (1) year.

O. The facility (plant number 78-01-026) shall conduct post construction ambient monitoring for PM_{10} and SO_2. The following conditions shall apply to these post construction monitoring requirements:

(4) The facility (plant number 78-01-026) shall submit to the Department a protocol for post construction monitoring for each pollutant (PM_{10} & SO_2) ninety (90) days prior to the completion of construction for CBEC Boiler 4. The protocols shall include:

(v) Monitor locations.

(vi) Number of monitors.

(vii) Duration of monitoring.

(viii) Other data collection specific considerations.

All of these requirements shall meet EPA's Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD).

(5) Post construction monitoring for both pollutants shall start within ninety (90) days of CBEC Boiler 4 reaching maximum capacity.

(6) Post construction monitoring for both pollutants shall be conducted for a minimum of one (1) year.

P. A compliance test for mercury must be conducted once annually.

(1) Stack test must be performed according to method outlined in section 12 of this permit.

(2) A test report must be submitted to the Department according to the schedule outlined in section 8 of this permit.

(3) Testing must be completed once every calendar year with a minimum of nine months between each test.

14. Operating Limits (Continued)

Q. A compliance test for hydrogen chloride must be conducted once annually.

(1) Stack test must be performed according to method outlined in section 12 of this permit.

(2) A test report must be submitted to the Department according to the schedule outlined in section 8 of this permit.

(3) Testing must be completed once every calendar year with a minimum of nine months between each test.

(4) During each compliance test, the sorbent injection rate to the spray dryer must be recorded every 15 minutes during the entire period of the three-run test.

(5) The average spray dryer sorbent injection rate for each of the three-run test must be computed by averaging all of the 15-minute readings taken during the test run.

R. A compliance test for federal particulate matter must be conducted once annually.

(1) Stack test must be performed according to method outlined in section 12 of this permit.

(2) A test report must be submitted to the Department according to the schedule outlined in section 8 of this permit.

(3) Testing must be completed once every calendar year with a minimum of nine months between each test.

S. The 3-hour block average spray dryer sorbent injection rate must be maintained at or above the 3-hour average observed during the most recent hydrogen chloride compliance test.

T. A bag leak detection system must be installed to meet the following criteria:

(1) At least one detector must be located in compartment of the baghouse.

(2) The bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in "Fabric Filter Bag Leak Detection Guidance," EPA-454/R-98-015, September 1997.

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensors.

(6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(7) The system's instrumentation and alarm may be shared among detectors.

(8) The system's alarm shall sound no more than 5% of the operating time during a 6-month period.

U. The facility (plant number 78-01-026) shall submit all final plans and specifications for this emission unit and its respective control equipment to the Department within thirty (30) days of the start of construction. These final plans and specifications will be made available in the Records Center of the Air Quality Bureau.

15. Operating Condition Monitoring

All records as required by this permit shall be kept for a minimum of five (5) years The most recent two (2) years shall be maintained on-site and shall be available for inspection by the DNR. The remaining three (3) years, the records may be maintained off site. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The date and an analysis showing the sulfur content and heat input representative of the coal burned for that day.

B. Per 40 CFR §60.49a(a), the performance test data from the initial performance test and from the performance evaluation of the continuous monitors (including the transmissometer) for NO_x, SO_2, and PM emissions shall be submitted to the Administrator.

C. Per 40 CFR §60.49a(b), the following information for NO_x and SO_2 shall be reported to the Administrator for each 24-hr period:

(1) Calendar date.
(2) The average sulfur dioxide and nitrogen oxide emission rates (ng/J or lb/million Btu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.
(3) Percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.
(4) Identification of the boiler operating days for which pollutant or dilutent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.
(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_x only), emergency conditions (SO_2 only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions.
(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
(7) Identification of times when hourly averages have been obtained based on manual sampling methods.
(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
(9) Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.

D. If the minimum quantity of emission data as required by 40 CFR §60.47a is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of 40 CFR §60.46a(h) shall be reported to the Administrator for that 30-day period:

(1) The number of hourly averages available for outlet emission rates (no) and inlet emission rates (n_i) as applicable.
(2) The standard deviation of hourly averages for outlet emission rates (so) and inlet emission rates (s_i) as applicable.
(3) The lower confidence limit for the mean outlet emission rate (E_o*) and the upper confidence limit for the mean inlet emission rate (E_i*) as applicable.
(4) The applicable potential combustion concentration.
(5) The ratio of the upper confidence limit for the mean outlet emission rate (E_o*) and the allowable emission rate (E_{std}) as applicable.

15. Operating Condition Monitoring (Continued)

E. If any standards under 40 CFR §60.43a are exceeded during emergency conditions because of control system malfunction, the owner or operator of the affected facility shall submit a signed statement:

(1) Indicating if emergency conditions existed and requirements under § 60.46a(d) were met during each period, and
(2) Listing the following information:

(i) Time periods the emergency condition existed;
(ii) Electrical output and demand on the owner or operator's electric utility system and the affected facility;
(iii) Amount of power purchased from interconnected neighboring utility companies during the emergency period;
(iv) Percent reduction in emissions achieved;
(v) Atmospheric emission rate (ng/J) of the pollutant discharged; and
(vi) Actions taken to correct control system malfunction.

F. If fuel pretreatment credit toward the sulfur dioxide emission standard under 40 CFR §60.43a is claimed, the owner or operator of the affected facility shall submit a signed statement:

(1) Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of 40 CFR §60.48a and Method 19 (appendix A); and
(2) Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter; the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the previous quarter.

G. For any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

H. The owner or operator of the affected facility shall submit a signed statement indicating whether:

(1) The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
(2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
(3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
(4) Compliance with the standards has or has not been achieved during the reporting period.

I. For the purposes of the reports required under 40 CFR §60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under 40 CFR §60.42a(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter.

15. Operating Condition Monitoring (Continued)

J. The owner or operator of an affected facility may submit electronic quarterly reports for SO_2 and/or NO_x and/or opacity in lieu of submitting the written reports required under 40 CFR §60.49a(b) and 40 CFR §60.49a(h). The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

K. The sorbent feed rate of the Flue Gas Desulfurization System (in lb/hr).

L. The urea feed rate of the SCR system (in lb/hr)

M. The following information must be kept concerning the activated carbon injection system.

1. A continuous record of the activated carbon feed rate in pounds per million cubic feet of exhaust gas.

2. A copy of the approved optimization protocol.

3. A record of the time each trial of the optimization study begins and ends and enough information to identify which trial is being undertaken during that period.

N. A copy of the final test results for each compliance test for hydrogen chloride shall be maintained.

O. A copy of the final test results for each compliance test for federal particulate matter shall be maintained.

P. A copy of the final test results for each compliance test for mercury shall be maintained.

Q. All correspondence from the Department accepting the test results for hydrogen chloride, federal particulate matter and/or mercury shall be maintained.

R. The following records must be maintained from the bag leak detection system:

(1) The date, time and duration of each system alarm.

(2) The time corrective action was initiated and completed.

(3) A brief description of the cause of the alarm and the corrective action.

(4) A record of the percent of operating time during each 6-month period that the alarm sounds. In calculating the operating time percentage,

(i) if an inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted

(ii) if corrective action is required, each alarm shall be counted as a minimum of 1 hour.

(iii) if it takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

S. At the end of each 3-hour block of time, the average spray dryer sorbent injection rate over the previous 3 hours shall be recorded.

15. Operating Condition Monitoring (Continued)

T. A log showing the following for haul roads:

(1) The silt content of the roads.

(2) The date and number of trucks associated with Unit 4.

(3) The date and number of trucks associated with Units 1, 2, and 3.

(4) Paved roads:

(i) Records of the applications shall be maintained and shall include

- The dates of each application,
- The amount of water applied,
- The areas treated, and
- The operator's initials.

(ii) If water is not applied when scheduled then the records should so indicate and provide and explanation.

(5) Unpaved roads:

(i) Records of the applications shall be maintained and shall include:

- The dates of each application,
- The chemical dust suppressant used,
- The application intensity (gal/yd^2),
- Dilution ratio,
- The operator's initials, and
- Documentation of road and weather conditions, if necessary.

(ii) If the selected chemical dust suppressant is not applied as planned, then the records should so indicate and provide an explanation.

U. A log showing the following for the volume sources in this project:

(1) Stacker conveyor:

(i) Records of the applications shall be maintained and shall include:

- The dates of each application,
- The chemical dust suppressant used,
- The application intensity (gal/yd^2),
- Dilution ratio,
- The operator's initials, and
- Documentation of weather conditions, if necessary.

(ii) If the selected chemical dust suppressant is not applied as planned, then the records should so indicate and provide an explanation.

15. Operating Condition Monitoring (Continued)

(2) Transfer to active pile:

(i) Records of the applications shall be maintained and shall include:

- The dates of each application,
- The chemical dust suppressant used,
- The application intensity (gal/yd^2),
- Dilution ratio,
- The operator's initials, and
- Documentation of weather conditions, if necessary.

(ii) If the selected chemical dust suppressant is not applied as planned, then the records should so indicate and provide an explanation.

(3) Bucket Reclaim:

(i) Records of the applications shall be maintained and shall include:

- The dates of each application,
- The chemical dust suppressant used,
- The application intensity (gal/yd^2),
- Dilution ratio,
- The operator's initials, and
- Documentation of weather conditions, if necessary.

(ii) If the selected chemical dust suppressant is not applied as planned, then the records should so indicate and provide an explanation.

(4) Rail unloading:

(i) Records of the applications shall be maintained and shall include:

- The dates of each application,
- The chemical dust suppressant used,
- The application intensity (gal/yd^2),
- Dilution ratio,
- The operator's initials, and
- Documentation of weather conditions, if necessary.

(ii) If the selected chemical dust suppressant is not applied as planned, then the records should so indicate and provide an explanation.

15. Operating Condition Monitoring (Continued)

V. A log showing the following for the area sources in this project:

(1) Active coal pile:

(i) The date and size of the pile

(ii) Records of the applications shall be maintained and shall include:

- The dates of each application,
- The chemical dust suppressant used,
- The application intensity (gal/yd^2),
- Dilution ratio,
- The operator's initials, and
- Documentation of weather conditions, if necessary.

(iii) If the selected chemical dust suppressant is not applied as planned, then the records should so indicate and provide an explanation.

(2) Inactive storage pile:

(i) The date and size of the pile

(ii) Records of the applications shall be maintained and shall include:

- The dates of each application,
- The chemical dust suppressant used,
- The application intensity (gal/yd^2),
- Dilution ratio,
- The operator's initials, and
- Documentation of weather conditions, if necessary.

(iii) If the selected chemical dust suppressant is not applied as planned, then the records should so indicate and provide an explanation.

(3) Rail unloading coal stockout pile:

(i) The date and size of the pile

(ii) Records of the applications shall be maintained and shall include:

- The dates of each application,
- The chemical dust suppressant used,
- The application intensity (gal/yd^2),
- Dilution ratio,
- The operator's initials, and
- Documentation of weather conditions, if necessary.

(iii) If the selected chemical dust suppressant is not applied as planned, then the records should so indicate and provide an explanation.

16. Continuous Emission Monitoring

In accordance with 40 CFR §60.47a(a), the facility (plant number 78-01-026) shall install, calibrate, maintain, and operate a continuous monitoring system (CEMS) on EP 141, and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere. If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Administrator). The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1).

In accordance with 40 CFR §60.47a(b), the facility (plant number 78-01-026) shall install, calibrate, maintain, and operate a continuous monitoring system (CEMS) on EP 141, and record the output of the system, for measuring sulfur dioxide (SO_2) emissions, except where natural gas is the only fuel combusted, as follows:

(1) SO_2 emissions are monitored at both the inlet and outlet of the SO_2 control device.
(2) For a facility, which qualifies under the provisions of 40 CFR §60.43a(d), SO_2 emissions are only monitored as discharged to the atmosphere.
(3) An "as fired" fuel monitoring system (upstream of coal pulverizers) meeting the requirements of Method 19 may be used to determine potential SO_2 emissions in place of a continuous SO_2 emission monitor at the inlet to the SO_2 control device as required under number (1) above.

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

In accordance with 40 CFR §60.47a(c), the facility (plant number 78-01-026) shall install, calibrate, maintain, and operate a CEMS on EP 141, and record the output of the system, for measuring nitrogen oxides (NO_x) emissions discharged to the atmosphere. Or if the owner or operator has installed a NO_x emission rate CEMS to meet the requirements of 40 CFR 75 and is continuing to meet the ongoing requirements of Part 75, that CEMS may be used to meet the requirements of 40 CFR §60.47a(c), except that the owner or operator shall also meet the requirements of 40 CFR §60.49a. Data reported to meet the requirements of 40 CFR §60.49a shall not include data substituted using the missing data procedures in subpart D of Part 75, nor shall the data have been bias adjusted according to the procedures of Part 75. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

In accordance with 40 CFR §60.47a(d), the facility (plant number 78-01-026) shall install, calibrate, maintain, and operate a CEMS on EP 141, and record the output of the system, for measuring the oxygen (O_2) or carbon dioxide (CO_2) content of the flue gases at each location where SO_2 or NO_x emissions are monitored.

In accordance with 40 CFR §60.47a(e), the CEMS required for SO_2, NO_x, and either O_2 or CO_2 shall be operated and data recorded during all periods of operation including periods of startup, shutdown, malfunction or emergency conditions, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments.

16. Continuous Emission Monitoring (Continued)

In accordance with 40 CFR §60.47a(f), the facility (plant number 78-01-026) shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a CEMS, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in 40 CFR §60.47a(h). When it becomes necessary to supplement continuous monitoring data requirements, the owner or operator shall use the following reference methods and procedures:

(1) Method 6 shall be used to determine the SO_2 concentration at the same location as the SO_2 monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Each sample represents a 1-hour average.
(2) Method 7 shall be used to determine the NO_x concentration at the same location as the NO_x monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.
(3) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the O_2 or CO_2 concentration at the same location as the O_2 or CO_2 monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.
(4) The procedures in Method 19 shall be used to compute each 1-hour average concentration in ng/J (1b/million Btu) heat input.

The owner or operator may use the following as alternatives to the reference methods and procedures specified:

(1) For Method 6, Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages.
(2) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be 1 hour.
(3) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.
(4) For Method 3B, Method 3A may be used.

The 1-hour averages required under 40 CFR §60.13(h) are expressed in ng/J (lb/million Btu) heat input and used to calculate the average emission rates under 40 CFR §60.46a. The 1-hour averages are calculated using the data points required under 40 CFR §60.13(b). At least two data points must be used to calculate the 1-hour averages.

Per 40 CFR §60.47(i), the owner or operator shall use the following methods and procedures to conduct monitoring system performance evaluations under 40 CFR §60.13(c) and calibration checks under 40 CFR §60.13(d):

(1) Methods 3B, 6, and 7 shall be used to determine O_2, SO_2, and NO_x concentrations, respectively.
(2) SO_2 or NO_x (NO), as applicable, shall be used for preparing the calibration gas mixtures (in N_2, as applicable) under Performance Specification 2 of appendix B of Part 60.
(3) For CBEC Boiler 4, the span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent and for a continuous monitoring system measuring NO_x is 1,000 ppm.
(4) The span value of the sulfur dioxide continuous monitoring system at the inlet to the sulfur dioxide control device is 125 percent of the maximum estimated hourly potential emissions of the fuel fired, and the outlet of the sulfur dioxide control device is 50 percent of maximum estimated hourly potential emissions of the fuel fired.

16. Continuous Emission Monitoring (Continued)

Acceptable alternative methods and procedures are:

(1) For Method 6, Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B is used under 40 CFR §60.47a(i), the conditions under 40 CFR §60.46(d)(1) apply; these conditions do not apply under 40 CFR §60.47a(h).
(2) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be 1 hour.
(3) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.
(4) For Method 3B, Method 3A may be used.

Per 40 CFR §60.47a(k), the owner or operator shall install, calibrate, maintain, and operate a wattmeter; measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor for demonstrating compliance with the output-based standard under 40 CFR §60.44a(d)(1).

Per 40 CFR §60.47a(l), the owner or operator demonstrating compliance with the output-based standard under 40 CFR §60.44a(d)(1) shall install, certify, operate, and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of Appendix B and Procedure 1 of Appendix F. In addition, the owner or operator shall record the output of the system, for measuring the flow of exhaust gases discharged to the atmosphere. Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR §75.20, meeting the applicable quality control and quality assurance requirements of 40 CFR §75.21, and validated according to 40 CFR §75.23, may be used.

Compliance with the carbon monoxide (CO) emission limits of this permit shall be continuously demonstrated by the owner or operator through the use of a CEMS. Therefore, the facility (plant number 78-01-026) shall install, calibrate, maintain, and operate a CEMS on EP 141 for measuring CO emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 4A (PS4A) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

Compliance with the non-NSPS opacity, SO_2, and NO_x emission standards of this permit shall be demonstrated through the use of the monitors required by NSPS Subpart Da. The following conditions shall apply to all CEMS for non-NSPS opacity, SO_2, NO_x, and CO emission standards:

(1) The CEMS required by this permit shall be operated and data recorded during all periods of operation of CBEC Boiler 4 except for CEM breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
(2) The 1-hour average SO_2, NO_x, and CO emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards of this permit. At least 2 data points must be used to calculate each 1-hour average.
(3) For each hour of missing emission data (NO_x, SO_2, or CO), the owner or operator shall substitute data by:
    A. If the monitor data availability is equal to or greater than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
        i) For the missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by an pollutant concentration monitor for the hour before and the hour after the missing data period.
        ii) For a missing data period greater than 24 hours, substitute the greater of:
            (a) The 90^{th} percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
            (b) The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

16. Continuous Emission Monitoring (Continued)

B. If the monitor data availability is at least 90.0% but less than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
   i) For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
   ii) For the missing data period of more than 8 hours, substitute the greater of:
      (a) The 95th percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
      (b) The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

C. If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.

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17. Notice of MACT Approval Information

Equipment Location:
2115 Navajo Road
Council Bluffs, IA 51501

Latitude - Longitude:
41° 10' 50" North
95° 50' 16" West

Description of project:
This project consists of the construction of a new electric utility steam-generating unit and the ancillary equipment including coal handling equipment, an auxiliary boiler, an emergency generator, and a fire pump.

Affected sources and source category:
CBEC Unit #4 - Electric Utility Steam Generating Unit
Auxiliary Boiler - Industrial/Commercial/Institutional Boilers and Process Heaters
Emergency Generator - Reciprocating Internal Combustion Engine
Fire Pump - Reciprocating Internal Combustion Engine

Sources not affected - rationale for exclusion
CBEC Unit #1 - existing unit, no reconstruction
CBEC Unit #2 - existing unit, no reconstruction
CBEC Unit #3 - existing unit, no reconstruction

Expected commencement date for construction:
June 2003

Expected completion date for construction:
October 2006

Anticipated date of start-up for constructed equipment:
October 2006

17. Notice of MACT Approval Information (Continued)

Hazardous Air Pollutants potentially emitted from this source:

Acid Gases:
- Hydrogen chloride
- Hydrogen Fluoride

Metals compounds:
- Antimony compounds
- Arsenic compounds
- Beryllium compounds
- Cadmium compounds
- Chromium compounds
- Cobalt compounds
- Lead compounds
- Mercury compounds
- Manganese compounds
- Nickel compounds
- Selenium compounds

Organic HAP:
- Acetaldehyde
- Acetophenone
- Acrolein
- Benzene
- Benzyl chloride
- Bis(2-ethylhexyl)phthalate (DEHP)
- Bromoform
- Carbon disulfide
- 2-Chloroacetophenone
- Chlorobenzene

Organic HAP (continued):
- Chloroform
- Cumene
- Cyanide
- 2,4-Dinitrotoluene
- Dimethyl sulfate
- Ethyl benzene
- Ethyl chloride
- Ethylene dichloride
- Ethylene dibromide
- Formaldehyde
- Hexane
- Isophorone

Methyl bromide
- Methyl chloride
- Methyl ethyl ketone
- Methyl hydrazine
- Methyl methacrylate
- Methyl tert butyl ether
- Methylene chloride
- Phenol
- Propionaldehyde
- Tetrachloroethylene
- Toluene
- 1,1,1 trichloroethane
- Styrene
- Xylene
- Vinyl acetate
- Dioxans/furans

18. Descriptions of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NO_X	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM_{10}	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
VOC	Volatile Organic Compound

END OF PERMIT CONDITIONS

EXHIBIT 54

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL

OF THE STATE OF WYOMING

DEPOSITION OF: KENNETH J. SNELL
EXAMINATION DATE: August 14, 2008

IN THE MATTER OF:	)
	)Docket No. 07-2801
BASIN ELECTRIC POWER	)Presiding Officer,
COOPERATIVE, DRY FORK STATION,	)F. David Searle
AIR PERMIT CT-4631	)

PURSUANT TO NOTICE, the deposition of KENNETH J. SNELL was taken at 1:01 p.m., on August 14, 2008, at 555 Seventeenth Street, Suite 3200, Denver, Colorado 80202, before Patricia S. Newton, Registered Professional Reporter and Notary Public in and for the State of Colorado, said deposition being taken pursuant to the Wyoming Rules of Civil Procedure.

Patricia S. Newton
Registered Professional Reporter

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I N D E X

EXAMINATION BY: PAGE

I N D E X O F E X H I B I T S

DEPOSITION EXHIBIT NO.	DESCRIPTION	PAGE FIRST APPEARS
1	Document titled "Attachment 4, Experience and Qualifications" for Kenneth J. Snell, William Rosenquist, and William DePriest	8
2	6/16/08 Expert Report of Kenneth J. Snell	12
3	11/1/05 Report titled "Coal Power Plant Technology Evaluation for Dry Fork Station"	40
4	1/06 Advanced Power Plant Using High Efficiency Boiler/Turbine document	86
5	7/12/06 Basin Electric Power Cooperative Dry Fork Station Response re Permit Application No. AP-3546 (Bates Nos. DEQ/AQD 001996-002001)	106
6	3/28/07 document titled "National Park Service Comments on the Basin Electric - Dry Fork Power Plant Prevention of Significant Deterioration Permit Application"(Bates Nos. DEQ/AQD 007748-007766)	116
7	6/07 Sargent & Lundy Dry Fork Station Performance Data	139

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8	Document titled "Basin Electric Power Cooperative, Dry Fork Unit 1 PSD Permit Application Response to Wyoming Department of Environmental Quality, Air Quality Division Permit Application No. AP-3546 Completeness Review Dated December 21, 2005" (Bates Nos. DEQ/AQD 000695-000724)	149

(Original exhibits are attached.)

I N F O R M A T I O N R E Q U E S T E D

ITEM REQUESTED	PAGE
Provide a copy of memos from William Rosenquist	15

the BACT analysis is to identify control technologies that may be available to reduce emissions from your facility.

So to the extent that technologies are developed during this intervening time period, I think BACT requires you to evaluate technologies as they become commercially available and as they're developed, yes.

Q You did not address PM2.5in your expert report; is that correct?

A That's right.

Q Do you plan to offer any testimony in this case on PM2.5?

A I don't know. I don't know if I plan to offer any testimony.

Q Well --

A I guess I don't understand the question. I don't understand the question.

Q I think the question is simple: Do you have any intentions of testifying about the issue of PM2.5 in this case?

MR. DAY: I'm going to object to the form of the question. I mean, we don't know what he's going to testify about until we get to the hearing.

If you want to ask him if he's formed any opinions other than those expressed in the report, maybe he can answer that question, or if he holds any other opinions.

A Can you repeat the question?

Q (BY MS. COOLEY) Sure. Do you at this point in time have any plans to testify on PM2.5 in this case?

MR. DAY: Same objection, calls for speculation.

A I'll say as far as I know, I don't plan on it. But if PM2.5comes up as a BACT issue, I could offer my opinions as to PM2.5 and BACT. So I -- I don't know if it will come up as an issue that is something that I will be asked to address.

Q (BY MS. COOLEY) Can you think of any circumstance where it would come up?

MR. DAY: Objection; calls for speculation.

A Only other than it does come up. You know, if it comes up as an issue that's related to BACT and PM2.5BACT, and it's an issue that I'm asked to address, then I would be willing to address it, yes.

Q (BY MS. COOLEY) And are you aware in this case that we had deadlines for preparing expert reports?

A Yes.

Q And that you submitted your report under that deadline?

A Yes.

Q And that your report did not cover the issue of PM2.5, correct?

A Right.

Q Let's go to your expert report, which I believe we marked as Exhibit 2.

If you would turn to page 9 for me, please. Could you read subparagraph A for me on that page.

MR. DAY: You want him to read it out loud?

MS. COOLEY: Please.

MR. DAY: The heading or the text that follows?

MS. COOLEY: The heading.

A Oh. On page 9, subpart A, "Subcritical Boiler Technology was the Only Practical Generating Technology Choice for the Dry Fork Station."

A Well, what you're referring to in my report is an excerpt from Dry Fork's permit, so -- I didn't write this. This is just excerpted from their permit.

It's a permit condition that requires Dry Fork to install mercury-specific control technologies and implement a mercury-control-optimization study, with the goal of achieving a controlled-mercury-emission rate of 20 x 10 to the negative 6 pounds per megawatt hour.

So I would characterize the target emission rate as the goal for the optimization study.

Q What's your understanding of what will happen if Basin doesn't achieve that goal?

A I believe I recall reading in the attachment that Wyoming DEQ published at the time that they published Basin's final permit, that depending on the results of the optimization study, the final permit limit for mercury could be higher or lower than the target emission rate that was listed in the permit.

Q Is there anything in the permit that requires DEQ to reconsider that rate? Sorry. The permit limit for mercury.

Q (BY MS. COOLEY) This table has a list of power plants that the Park Service indicates have emission limits for mercury.

We've already talked about Newmont, but with respect to the other permits on this list, did you review any of the applications or permits for these plants in preparation of your report?

A Not in preparation of this report, no.

Q At other times?

A I've reviewed some of these permits and permit applications in the course of my work at Sargent & Lundy, but I can't say that I specifically reviewed these as part of the Dry Fork permitting process.

Q Okay. In your opinion, will the Dry Fork Station be able to achieve the target emission rate of 20 x 10 in the negative 6?

A I think there's a lot of unknowns with the controlled mercury emission rate that the Dry Fork Station is going to be able to achieve. I think the fact that they're burning a low-chlorine subbituminous coal is a big question mark.

And I also think the fact that Basin is

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going to design their SO2 control technology as a circulating dry scrubber adds to that -- adds a lot of questions to what control efficiency they're going to be able to achieve with the mercury-control technologies that might be available for their unit.

So given the control technologies that Basin's proposing to meet the BACT limits, it's kind of a unique situation, and I think there's a lot of unknowns as to whether -- you know, what kind of mercury control they're going to achieve.

Based on my review of mercury studies that have been done for other facilities and pilot studies on other types of units, I think -- I think Basin will be able to achieve that. But I think there's a lot of unknowns at this point.

Q And referring back to your expert report at page 58 -- I couldn't find the sentence I was looking for, but let me just ask you: Did Basin, to your knowledge, contact any vendors regarding mercury-control technologies?

A I know that mercury control has been discussed with the -- the circulating dry scrubber vendor, but I don't know beyond that whether or not Basin has contacted mercury-

A F F I D A V I T

STATE OF COLORADO)
) ss.
COUNTY OF DENVER)

I have read my deposition, and the same is true and accurate, save and except for changes and/or corrections, if any, as indicated by me on the amendment sheet(s) attached hereto as indicated.

Amendment sheet(s) attached [ ]
No changes; no amendment sheet(s) attached [ ]

_____
KENNETH J. SNELL
(August 14, 2008)

SUBSCRIBED AND SWORN TO before me on this _____ day of _____, 2008.

My commission expires: _____.

_____
NOTARY PUBLIC
in and for the State of _____.

psn

C E R T I F I C A T E

STATE OF COLORADO)
) ss.
COUNTY OF DENVER)

I, Patricia S. Newton, Registered Professional Reporter and Notary Public in and for the State of Colorado, duly appointed to take the deposition of KENNETH J. SNELL, certify that prior to the examination, the deponent was duly sworn to testify to the truth in the matters in controversy between the parties herein; that the deposition was taken in shorthand by me at the time and place aforesaid and was thereafter reduced to typewritten form by me and processed under my supervision, the same consisting of 163 pages; and that the same is a full, true, and complete transcription of my machine shorthand notes. I further certify that I am not related to, employed by, nor counsel to any of the parties herein, nor otherwise interested in the events of the within cause.

A transcript review of this deposition was requested and is available to the deponent as notified by me.

IN WITNESS WHEREOF, I have affixed my notarial seal this 21st day of August, 2008. My commission expires December 6, 2008.

_____
Patricia S. Newton
Registered Professional Reporter

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