

BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

IN THE MATTER OF:)
NORTHERN MICHIGAN)
UNIVERSITY)
PSD PERMIT NUMBER: 60-07)

APPEAL NUMBER: PSD 08-02

INTERVENOR NORTHERN MICHIGAN UNIVERSITY'S
BRIEF IN RESPONSE TO PETITION

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PRELIMINARY STATEMENT

On June 13, 2008, Sierra Club ("Petitioner") petitioned the Environmental Appeals Board (the "EAB" or "Board") of the United States Environmental Protection Agency ("EPA") to review the Prevention of Significant Deterioration ("PSD") permit (the "Permit") issued by the Michigan Department of Environmental Quality Air Quality Division ("MDEQ") to Northern Michigan University ("NMU"). MDEQ filed its response brief on August 5, 2008. NMU supports the MDEQ brief and incorporates it by reference. NMU filed a motion to intervene on September 5, 2008 and it was granted on September 8, 2008. In accordance with the Order granting intervention, NMU files this brief to provide some additional information on certain issues.

The Permit meets the applicable legal requirements in all respects. Contrary to Petitioner's claim, (1) the Best Available Control Technology ("BACT") limits for particulate matter less than 2.5 microns in diameter ("PM_{2.5}") comply with EPA regulations and guidance under the Clean Air Act ("CAA"); (2) carbon dioxide ("CO₂") and nitrous oxide ("N₂O") BACT limits are not required because they are not "subject to regulation" under the CAA for PSD purposes; (3) the BACT limits in the permit were properly based on burning coal; (4) the coals evaluated in the permitting process are those available to NMU; (5) MDAQ properly accounted for increment consumption; (6) the Permit limits protect national ambient air quality standards ("NAAQS") and PSD Increment; and (7) MDAQ properly waived preconstruction monitoring.

NMU is a public rural university with 9500 students, located in Marquette, Michigan (population 20,000) on the northern coast of Michigan's Upper Peninsula. NMU is disappointed that the Sierra Club has sought to challenge the construction of this lawful renewable energy source that will provide essential heat and electrical services to the faculty, staff and students at NMU as well as the staff and patients at Marquette General Hospital. Sierra Club raises many

questions, but offers no solutions. And in the end, it merely disagrees with the decisions of MDEQ in issuing the permit. Sierra Club shows no clear error and raise no issues of policy that merit review by the Board. The Petition should be denied.

DESCRIPTION OF THE PROJECT

The Project would add a 10 megawatt (“MW”) circulating fluidized bed (“CFB”) biomass and coal-fired boiler and associated equipment to the existing Ripley Heating Plant at NMU which would house a combined heat and power cogeneration plant. This plant would create electrical power for NMU as well as steam for heating and cooling the NMU campus and Marquette General Hospital. The primary fuel is biomass — wood chips and by-products that are already available in the Upper Peninsula of Michigan — which are materials that are currently unused by the logging, paper mill and other wood-related industries as well as derived from newly developed renewable resources. This enhances the environmental and energy sustainability of NMU and the Upper Peninsula consistent with Michigan’s 21st Century Energy Plan and Governor Jennifer Granholm’s Renewable Energy Initiative. Moreover, NMU’s heating and power plant will facilitate scientific research, allowing hands-on study of current and future biofuel production. Other research possibilities include CO₂ sequestration, wood gasification and partnerships with other universities that may be interested in this technology.

In addition to the increased environmental efficiencies, the new facility would also help the University realize significant savings and cost avoidance in utilities expenditures now and well into the future. The NMU cogeneration plant is expected to be 20-25 percent more energy efficient than existing facilities. The project would provide greater redundancy of systems to increase the level of reliability for electricity and thermal energy not presently available at the University. It would also contribute to the creation of an estimated 90-120 jobs at NMU and for the wood and wood by-product processing industry in the future.

NMU's current dependency on natural gas has subjected the University to dramatic price fluctuations and interruptions in supply. The plant will allow NMU to be proactive in addressing projected heat and power cost increases in a way that protects the University, its students and Michigan taxpayers from shouldering this cost burden. This plant is designed to be a 100 percent wood-burning facility with the capability to burn alternative types of fuel in backup situations. These would include natural gas and coal. The multi-fuel capability leaves the University less vulnerable to supply and demand fluctuations. NMU expects to realize a cost avoidance of \$1 million or more annually in heating and electricity through the efficiencies of this cogeneration plant. The cost avoidance will pay for the construction of the plant and will have a positive long-term impact on helping to control student tuition and other institutional costs.

This plant, along with the other initiatives being developed and implemented, will make NMU a leader among Michigan's higher education institutions in the area of environmental sustainability. All these benefits are threatened by Sierra Club's efforts to impose unnecessary, inapplicable and costly requirements to the University.

RESPONSE TO PETITIONER'S SPECIFIC ISSUES

I. THE BACT LIMITS MEET APPLICABLE REQUIREMENTS.

A. The BACT Limit for PM_{2.5} Meets Applicable Requirements

In Section I.A. of its petition, Sierra Club claims that the NMU PSD Permit is legally invalid because MDEQ failed to conduct a proper BACT analysis and include a BACT limit for PM_{2.5}. As a matter of law, the proposed PSD permit complies with the PSD regulations. It is undisputed that MDEQ employed a surrogate analysis for PM_{2.5}. See Response to Comments at 18; Petition at 8. MDEQ used the BACT for particulate matter less than 10 microns in diameter ("PM₁₀") as a surrogate for PM_{2.5}. In guidance documents, EPA has long allowed agencies to

use PM₁₀ as a surrogate for PM_{2.5} BACT and modeling. On May 16, 2008, EPA codified this guidance in the new PM_{2.5} Rule, expressly allowing agencies to continue using PM₁₀ as a surrogate. 73 Fed. Reg. 28321 (May 16, 2008). Consequently, Petitioner has no legal basis for challenging MDEQ's use of PM₁₀ as a surrogate for PM_{2.5}, and its claims must fail as a matter of law.

EPA's guidance and rule are crystal clear on this point. Immediately following the September 16, 1997 effective date of the new NAAQS for PM_{2.5}, EPA issued a memorandum establishing policy for the interim use of PM₁₀ as a surrogate for PM_{2.5}. See Memorandum from John Seitz, Dir. of Office of Air Quality Planning & Standards, to Reg'l Air Dirs., "Interim Implementation of New Source Review Requirements in PM_{2.5}," at 4 (Oct. 21, 1997) ("Seitz memo") (Attach A to this Brief). According to the Seitz memo, at the time the PM_{2.5} NAAQS were promulgated, "significant technical difficulties [existed] with respect to PM_{2.5} monitoring, emissions estimation, and modeling." *Id.* at 1. For those reasons, EPA found it "administratively impracticable . . . to require sources to implement PSD permitting for PM_{2.5}" and that "meet[ing] PSD and NSR program requirements for controlling PM₁₀ emissions . . . and for analyzing impacts on PM₁₀ air quality [would] serve as a surrogate approach for reducing PM_{2.5} emissions and protecting air quality."¹ *Id.* at 2.

While EPA's PM_{2.5} Rule establishes the provisions (*e.g.*, significant emission rates, identification of precursors) for implementing the PSD permitting program for PM_{2.5}, it explicitly *requires* the use of PM₁₀ as a surrogate for PM_{2.5} for all complete PSD applications

¹ EPA confirmed in an April 5, 2005 memo that the policy of using PM₁₀ as a surrogate for PM_{2.5} was still in place. See Memorandum from Stephen Page, Dir., to Reg'l Air Dirs., "Implementation of New Source Review Requirements in PM_{2.5} Nonattainment Areas," at 4 (Apr. 5, 2005) ("[S]tates should continue to follow the October 23, 1997, guidance for PSD requirements.") (Attach. B to this Brief).

submitted prior to July 15, 2008. 73 Fed. Reg. at 28321; 40 C.F.R. § 52.21(i)(1)(xi) (2008). The regulations specifically state with respect to PM_{2.5} that when (1) a source was subject to the federal PSD regulations in effect before July 15, 2008, (2) the source submitted a PSD permit application consistent with the Seitz memo, and (3) the application was determined to be complete prior to July 15, 2008, then the PM_{2.5} requirements as interpreted in the Seitz memo (*i.e.*, use of PM₁₀ as a surrogate for PM_{2.5}) “shall apply to such source or modification.” 40 C.F.R. § 52.21(i)(1)(xi). NMU meets all three requirements of the rule. First, NMU was subject to the federal PSD regulations in effect before July 15, 2008. Second, NMU submitted a PSD permit application consistent with the Seitz memo. Finally, MDEQ obviously determined that the application was complete before July 15, 2008 because it issued the permit on May 12, 2008. Consequently, the PM_{2.5} Rule applies to NMU, and MDEQ’s use of the surrogate analysis is patently lawful.

MDEQ’s actions were inherently reasonable as illustrated by EPA’s decision to continue the use of PM₁₀ as a surrogate for PM_{2.5} for sources such as NMU in the new PM_{2.5} Rule. EPA has itself followed this approach in issuing PSD permits. *See, e.g.*, Deseret PSD Permit Statement of Basis at 24 (August 30, 2007) (“EPA considers all permit limits and analyses in this Statement of Basis that pertain to PM₁₀ to also satisfy the requirements for PM_{2.5} at Deseret Power’s proposed WCFU project.”) (relevant excerpts attached as Attach. C to this Brief).

B. No BACT Limits for CO₂ and N₂O are Required

Sierra Club asserts that both CO₂ and N₂O are “subject to regulation” under the CAA for purposes of the PSD program. Pet. at 4-11. As will be explained below, Sierra Club’s arguments are largely those they have already made in prior cases, one of which is still pending. In order to assist the Board in this matter, NMU will summarize what has been argued in these other cases, as well as address the few new issues Petitioner raises in this regard. It bears

mentioning at the outset, however, that EPA recently published an Advanced Notice of Proposed Rulemaking on Regulating Greenhouse Gases Under the Clean Air Act, (“ANPR”), 73 Fed. Reg. 44354 (July 30, 2008), which plainly reflects the fact that emissions of CO₂ and other greenhouse gases (“GHGs”), including N₂O, are not currently regulated under the CAA. Rather, in the ANPR, the Agency has set forth both ideas and questions for consideration regarding any future decision to regulate CO₂ and other GHGs.

1. There Are No BACT Requirements for CO₂ and N₂O

Sierra Club argues that a BACT analysis is required for CO₂ and N₂O emissions from NMU’s planned boiler. This claim is largely a repetition of arguments Sierra Club has already presented to this Board in a number of recent challenges, including most recently in Sierra Club’s supplemental briefing in *In Re Deseret Power Elec. Coop.*, PSD Appeal No. 07-3 (*Deseret*). Petitioners have argued in *Deseret* and elsewhere² that CO₂ — and now N₂O — are “subject to regulation” under the CAA for purposes of triggering PSD requirements (CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4)) and, hence, require BACT determinations because:

1. Section 821 of Pub. Law 101-549, which requires certain facilities to monitor and report CO₂ emissions, makes CO₂ “subject to regulation” under the CAA;
2. CO₂ emissions are “subject to regulation” because EPA promulgated regulations to implement Section 821 through 40 C.F.R. Part 75, and those regulations are enforceable under the CAA;
3. The plain language of the CAA shows that the term “regulation” as used in § 165(a)(4) encompasses monitoring and reporting;

² Sierra Club’s arguments that CO₂ is “subject to regulation” under the CAA were made in *In re Christian County Generation*, PSD Appeal No. 07-01, 2008 EPA App. LEXIS 4 (Jan. 28, 2008) and *In re ConocoPhillips Co.*, PSD Appeal No. 07-02, 2008 EPA App. LEXIS 29 (June 2, 2008) but were considered waived for purposes of appeal by the Board since these arguments were not first presented to the appropriate permitting authorities. *Christian County* at *21-*36; *ConocoPhillips* at *83-*96.

4. Certain State Implementation Plan (“SIP”) provisions relating to CO₂ and N₂O make these substances “subject to regulation” under the CAA; and
5. CO₂ is “subject to regulation” because of New Source Performance Standards (“NSPS”) promulgated under CAA § 111, 42 U.S.C. § 7411, for municipal solid waste (“MSW”) landfill gas emissions.³

Thus, with one exception,⁴ the issues raised by Sierra Club in this case have already been extensively briefed before the EAB and do not merit lengthy responses. Rather, as stated above and for the Board’s benefit, NMU will briefly address each of Sierra Club’s claims, and, where appropriate, it will cite to earlier briefs in these other cases.

Overall, Sierra Club tries to stitch together a number of disparate and ill-fitting pieces — isolated instances of state regulation, acknowledged EPA misstatements and programs having nothing to do with CO₂ emission reductions — to create a massive, far-reaching and completely unintended emissions control regime for all sources of CO₂ and N₂O over 100-250 tons/year (depending on the source). Such an effort cannot circumvent the clear congressional intent that CO₂ not be subject to any emission controls under the CAA, whether by virtue of Section 821 or any CAA program. Nor can the sum of their varied arguments contravene EPA’s reasonable and

³ Sierra Club raised the landfill gas emissions argument in its Reply Brief in *Deseret* but the argument was struck by the Board because it had not been alleged in Sierra Club’s petition for review or opening brief. Order Granting Motion to Strike, *In Re Deseret Power Electric Cooperative*, PSD Appeal No. 07-03 (May 20, 2008) at 4-5. The EAB should find that the landfill gas claim was not properly raised during the public comment period on NMU’s permit and is so waived. See *Christian County* at *21-*36; *ConocoPhillips* at *83-*96. Nor did Sierra Club raise the argument that monitoring requirements in Title V permits make CO₂ subject to regulation, either in its comments on the permit or its initial brief. Thus, this argument is waived as well. See, e.g. *In re BP Cherry Point*, 12 E.A.D. 209, 216 n. 18 (EAB 2005) (rejecting new legal argument petition sought to introduce for the first time in a reply brief).

⁴ The one new argument concerns N₂O, but it is only new as to the substance identified; Sierra Club has previously argued in *Deseret* that CO₂ is subject to regulation because of isolated SIP provisions concerning CO₂ monitoring, and more recently, emission limits. The N₂O argument appears identical as it is based on one Wisconsin SIP provision which allegedly requires N₂O emissions to be monitored and reported.

long-standing interpretation that CO₂ is not subject to regulation for PSD purposes. Ultimately, Sierra Club cannot demonstrate that MDEQ's decision to adopt EPA's position and decline to set BACT levels for CO₂ and N₂O is "clearly erroneous."

a. Section 821 is Not Part of the CAA

A key element of Sierra Club's argument is that Section 821 of Pub. Law 101-549 is part of the CAA, so that any regulation of CO₂ (assuming for the moment that section 821 "regulates" CO₂ for PSD purposes) under Section 821 makes CO₂ subject to regulation under the Act. MDEQ correctly concludes that this element is lacking, citing the language of Section 821 itself which distinguishes the CAA as a separate statute (as compared to other provision in Public Law 101-549 which refer to "this Act" or expressly amend the CAA)⁵ and otherwise indicates that Section 821 is not part of the CAA. In addition to these reasons, there is other strong evidence that Congress did not intend for Section 821 to be part of the CAA. As briefed in the *Deseret* case, these include Congress's contemporaneous and subsequent treatment of section 821.⁶ EPA

⁵ Compare, Section 412, 42 U.S.C. § 7651k (which amends the CAA and refers to it as "this Act"), 403(f), 42 U.S.C. § 7651b (refers to "this Act.").

⁶ See, e.g., Appendix B, "Provisions of the Clean Air Act Amendments of 1990 (Public Law 101-549) that Did Not Amend the Clean Air Act," H. Comm. on Energy & Commerce, 102nd Cong., Compilation of Selected Acts Within the Jurisdiction of the Comm. on Energy and Commerce (As Amended Through Dec. 31, 1990), *Env'tl. Law*, 431, 444-45 (Comm. Print 102-A 1991) and subsequent versions of this document published for the 103rd, 104th, 105th and 107th Congresses. See *Deseret Brief Amicus Curiae* of the Utility Air Regulatory Group In Support of Respondent U.S. EPA (*Deseret* UARG Amicus Brf.) at 8 & n. 5, Att. A-E. See also Letter from Hon. John D. Dingell, Ranking Member, House Energy and Commerce Committee to the Hon. David M. McIntosh, Oct. 5, 1999, published in *Is CO₂ a Pollutant and Does EPA Have the Power to Regulate It?*: Joint Hearing Before the Subcomm. on Nat'l Econ. Growth, Natural Resources, and Regulatory Affairs of the H. Comm. on Gov't Reform and the Subcomm. on Energy and Env't of the H. Comm. on Science, 105th Cong. 65 (1999). See *Deseret* UARG Amicus Brf. at 10-11 & n. 9, Att. F.

and *amicus curiae* supporting the agency have taken this very position in the *Deseret* case.⁷

b. Congress Did Not Intend to Create Comprehensive CO₂ or other GHG Controls

Even if Section 821 were part of the CAA, the existence of monitoring and reporting provisions for CO₂ would not make CO₂ subject to regulation for PSD purposes just as it would not do so for oxygen, moisture, heat input or other parameters that are monitored and measured under the CAA to determine emissions of nitrogen oxides (NO_x) or sulfur dioxide (SO₂). 40 C.F.R. §§ 75.10, 75.11, 75.12 (referencing the use of oxygen, moisture and heat input for monitoring and calculating NO_x and SO₂ emissions). Sierra Club's argument that monitoring and reporting are forms of "regulation" cannot overcome the express language in the legislative history of Section 821 that it was meant to be no more than an information gathering provision.⁸ Nor can it circumvent the very clear evidence that Congress considered and rejected establishing

⁷ See, e.g., *Deseret* Response of EPA Office of Air and Radiation and Region VIII to Briefs of Petitioner and Supporting Amici (*Deseret* EPA Brf.) at 45-50; UARG Amicus Brf. at 12-15. Sierra Club tries to argue that EPA has taken an opposite position in the past based on the Agency's statements in notice and comment rulemaking determinations that Section 821 is part of the CAA. EPA has acknowledged these were imprecise statements, and, in fact, has also correctly referred to section 821 as separate statutory authority. See *Deseret* Response of EPA Region VIII and Office of Air and Radiation to Board's Request for Supplemental Briefing at 21 (*Deseret* EPA Supp. Brf. at 21); see also *Deseret* UARG Amicus Brf. at 10 n. 8 (citing instances where EPA accurately distinguished between Section 821 and the CAA). In any event, such examples cannot overcome clear congressional intent that Section 821 is not part of the CAA and EPA's long-standing position that CO₂ is not regulated under the CAA.

⁸ The sponsors of the amendment that became Section 821 were very explicit that the purposes of that section were to gather scientific evidence of U.S. contributions to global warming; establish a baseline to allow utilities to seek credit for reductions in any future regulatory program; and inform the U.S. position in international negotiations. See, e.g., A Legislative History of the Clean Air Act Amendments of 1990, 103rd Cong., 1st Sess., S. Print 103-38 at 2612, 2652, 2987 (1993) (Legis. Hist.). The provision was expressly referred to as a "simple data collection" amendment and was not intended to "force any reductions" of CO₂. Legis. Hist. at 26512, 2653, 2985. See also *Deseret* UARG Amicus Brf. at 12-15.

emission controls on CO₂ and other GHGs in the CAA,⁹ and only included provisions related to those substances that it expressly deemed “non-regulatory.”¹⁰ Indeed, recent energy-related legislation shows Congress still has not determined whether to regulate CO₂ or other GHGs under the CAA.¹¹

c. MDEQ’s Interpretation of “Subject to Regulation” is Consistent with EPA’s Reasonable, Long Standing Interpretation and is Subject to Deference

MDEQ interprets “subject to regulation” in the same manner as EPA — that is, a pollutant must be subject to applicable emission standards of performance under the CAA. EPA

⁹ The legislative history of the 1990 Clean Air Act Amendments shows that Congress specifically declined to approve proposals that would have required or specifically authorized regulatory limits on CO₂ or other GHG emissions for global climate change purposes. *See* S. Rep. No. 101-228, at 98-100, 644-45 (1989), *Legis. Hist.* at 8338, 8438-405 (setting out text of provision requiring regulation of CO₂ emissions from motor vehicles); *id.* at 5410 (Senator Lieberman expressing concern that this section was eliminated from the committee bill without substitute); *id.* at 5189-90 (Senator Chafee noting that he “gave up something” in “connection with carbon dioxide emissions”); *id.* at 5849 (Senator Gore expressing concern that his efforts to include CO₂ measures were rejected); *id.* at 5942 (Senator Baucus describing how the Senate compromised by agreeing “there should be no carbon dioxide [provision],” which would be “a deal-breaker.”); H.R. Rep. No. 101-952 at 262-87, *Legis. Hist.* at 1449, 1712-37 (references to CO₂ removed from provision on stratospheric ozone). *See also Deseret UARG Amicus Brf.* at 15-20.

¹⁰ *See, e.g.,* Section 103(g), 42 U.S.C. § 7403(g) (creating research program to address emissions of pollutants, including CO₂, and deeming the provision to be “nonregulatory” in nature); Section 602(e), 42 U.S.C. § 7671a (requiring publication of the global warming potential of listed substances and expressly stating the provision shall not be construed to be the basis for regulation under the CAA). *See also Deseret UARG Amicus Brf.* at 18-19.

¹¹ *See* the Energy Independence and Security Act of 2007, Pub. L. No. 110-140, 121 Stat. 1492 (2007). Section 210(b) of that statute, 121 Stat. 1532, amends the CAA to add section 211(o)(12), which provides that “[n]othing in this subsection, or regulations issued pursuant to this subsection, shall affect or be construed to affect the regulatory status of carbon dioxide or any other greenhouse gas, or to expand or limit regulatory authority regarding carbon dioxide or any other greenhouse gas, for purposes of other provisions (including section 165) of this Act.” If, as Sierra Club argues, CO₂ is clearly subject, and has been subject for many years, to regulation for purposes of section 165 of the CAA, there would have been no need for Congress to enact such a provision, and in particular no need for its reference to section 165.

argued in the *Deseret* proceeding that the word “regulation” is ambiguous and susceptible of different interpretations. EPA has long interpreted the term, for PSD purposes, to mean pollutants for which emission controls are established pursuant to other CAA programs such as National Ambient Air Quality Standards, NSPS and Stratospheric Ozone, *i.e.*, a “regulated NSR pollutant.” 40 C.F.R. §§ 52.21(b)(5), 52.21(b)(50).¹² This is a reasonable interpretation given the fact that subjecting unregulated pollutants to PSD BACT determinations would quickly overwhelm the program. *See infra* at I.B.2.¹³

EPA has never taken the position that CO₂ (or, for that matter, N₂O) is subject to regulation under the Act, even when it asserted it had the authority to regulate it.¹⁴ EPA has consistently stated that, for it to regulate CO₂, it would need to make the necessary findings and proactively establish regulations.¹⁵ EPA continues to take this position, as is made clear in its

¹² *See Deseret* EPA Brf. at 11-19, 30-44 (describing 30-year history of EPA’s interpretation of “subject to regulation”); *Deseret* UARG Amicus Brf. at 20-33.

¹³ This concern was further underscored by the Supreme Court’s recent sweeping definition of “air pollutant” under CAA Section 302(g), 42 U.S.C. § 7602(g), as including “all airborne compounds of whatever stripe.” *Massachusetts v. EPA*, 127 S. Ct. 1438, 1460 (2007). If all air pollutants were considered NSR pollutants, EPA presumably would need to permit sources of water vapor and other airborne compounds.

¹⁴ *Massachusetts v. EPA* does not require a different result. While the Court found that EPA has *authority* to regulate CO₂ emissions from new motor vehicles and engines, the question whether a sufficient basis exists to make an endangerment finding and regulate those emissions was expressly left to the Agency to resolve. 127 S. Ct at 1460-61. The question remains open. *See In re Christian County* *13 at 7 n.12, *32 (observing that “[w]hether CO₂ is a pollutant ‘subject to regulation’ under the Clean Air Act remains a matter of considerable dispute” and was not decided by *Massachusetts*); *accord, In re ConocoPhillips* at *92-*93.

¹⁵ EPA General Counsel Opinions under past Democratic and Republican administrations have clearly stated that EPA has not regulated CO₂. The opinions differed, though, in whether EPA had the authority to regulate, with EPA General Counsels under President Clinton believing the Agency had the authority and the General Counsel under President Bush withdrawing that conclusion. *See* Memorandum, *EPA’s Authority to Regulate Pollutants Emitted by Electric Power Generation* (Apr. 10, 1998); *Deseret* UARG Amicus Brf. at 26, Attach. F; Memorandum from R. Fabricant, General Counsel, EPA to M. Horinko, Acting Administrator, EPA, *EPA’s*

recently published ANPR on possible regulation of CO₂ emissions under the CAA, 73 Fed. Reg. 44354.¹⁶ EPA further acknowledges in the ANPR that the CAA is not the best vehicle for such regulation and that regulating CO₂ under various CAA provisions would make CO₂ “subject to regulation” for PSD purposes for the first time and have a dramatic impact on the economy. *See id.* at 44420, 44498-500.¹⁷

Given the clear and consistent interpretation by EPA, MDEQ reasonably relied on this interpretation and acted consistently with it to determine that neither CO₂ or N₂O is subject to regulation under the CAA. The EAB should defer to that interpretation. It is certainly not clearly erroneous. *See In re Howmet Corp.*, PSD Appeal No. 05-04, slip op. at 14 (EAB May 24, 2007); *In re Tondu Energy co.*, 9 E.A.D. 710, 719 (EAB 2001); *In re AES Puerto Rico, L.P.*, 8 E.A.D. 324, 340 (EAB 1999); *see also Env'tl. Defense v. Duke Energy Corp.*, 127 S. Ct. 1423, 1433-34 (2007) (holding that EPA had discretion in defining relevant CAA terms, in the context of implementing the PSD program, “by looking to the surroundings of the defined term”).

Authority to Impose Mandatory Controls to Address Global Climate Change Under the Clean Air Act (Aug. 28, 2003). *Id.* at 27, Attach. G. Further, EPA officials specifically distinguished Section 821's monitoring and reporting provisions from CAA provisions which subjected pollutants to regulatory control for purposes of PSD and Title V. *See* EPA Memorandum, Lydia N. Wegman, Deputy Director of the Office of Air Quality Planning and Standards, *Definition of Regulated Air Pollutants for Purposes of Title V* (Apr. 26, 1993). *See also* *Deseret* EPA Brf. at 35-42; *Deseret* UARG Amicus Brf. at 24-29, Att. H.

¹⁶ In the ANPR, EPA states that it “has historically interpreted the phrase ‘subject to regulation under the Act’ to describe air pollutants subject to CAA statutory provisions or regulations that require actual control of emissions of that pollutant. PSD permits have not been required to contain BACT emissions limit [sic] for [greenhouse gases] because [these gases] (and CO₂ in particular) have not been subject to any CAA provisions or EPA regulations issued under the Act that require actual control of emissions.” *Id.* at 44420 (footnote omitted).

¹⁷ EPA states that making CO₂ subject to regulation for PSD purposes through regulation under other CAA provisions would create “an unprecedented expansion of EPA authority that would have a profound effect on virtually every sector of the economy and touch every household in the land.” *Id.* at 44355.

d. MDEQ's Interpretation is Supported by Case Law

MDEQ's interpretation of "subject to regulation" as pertaining only to pollutants subject to applicable emissions standards is fully consistent with precedent from federal and state courts and the EAB. For example, the D.C. Circuit in *Alabama Power v. Costle*, 636 F.2d 323 (D.C. Cir. 1979), a case cited repeatedly by Sierra Club and briefed by parties in the *Deseret* case,¹⁸ clearly recognized that only those pollutants subject to actual controls under the CAA fit within the PSD program. *Id.* at 370 n. 134 ("Once a standard of performance has been promulgated for [certain particulates], those pollutants become 'subject to regulation' within the meaning of section 165(a)(4), 42 U.S.C. § 7475(a)(4) (1978), the provision requiring BACT prior to PSD approval."). See also *In re Otter Tail Power Co.*, 744 N.W.2d 594, 603 (S.D. 2008) (court upholds public utility commission finding that CO₂ emissions do not constitute a serious threat to public health because, among other things, "[t]o date, no CO₂ emission standards have been enacted by our political leaders."). Similarly, parties in prior EAB cases have cited a number of cases where the Board either determined that CO₂ is not a regulated pollutant under the CAA,¹⁹ or that, generally, unregulated pollutants need not be considered in a PSD BACT determination.²⁰

¹⁸ See *Deseret* EPA Brf. at 27-30; *Deseret* UARG Amicus Brf. at 38-39.

¹⁹ See, e.g., *In re Kawaihae Cogeneration Plant*, 7 E.A.D. 107 (EAB 1997) (upholding a PSD permitting decision in which the permitting authority found that CO₂ is not "a regulated air pollutant for permitting purposes" because there were "no regulations or standards prohibiting, limiting or controlling the emission of greenhouse gases from stationary sources." (quoting State of Hawaii Department of Health Response to Comments on Draft Permit); *In re Inter-Power of New York*, 5 E.A.D. 130, 151 & n. 36 (EAB 1994) (noting that CO₂ is an "unregulated pollutant[]") and that EPA "was not required to examine control technologies aimed at controlling these pollutants."). See *Deseret* EPA Brf. at 38-40; *Deseret* UARG Amicus Brf. at 34-35.

²⁰ *In re Knauf Fiber Glass*, 8 E.A.D. 121, 163-64 (EAB 1999) ("[n]ot all air pollutants are covered by the federal PSD requirements"; those that are not included are "so-called 'unregulated pollutants.'"); *In the Matter of Genesee Power Station*, 4 E.A.D. 832, 848 (EAB

To date, only one court that has ruled specifically on the CO₂ BACT issue has found that CO₂ is subject to regulation under the CAA. *Friends of the Chattahoochee, Inc. v. Georgia Dep't of Natural Res.*, No. 2008CV146398 (Ga. Super. Ct. June 30, 2008). The case is hardly persuasive, especially since the parties only litigated one argument — that the definition of “NSR regulated pollutant” was broad enough to encompass CO₂. 40 C.F.R. § 52.21(b)(50). Neither party litigated — and the court did not examine — the question of whether Section 821 is part of the CAA or whether Congress intended to control CO₂ emissions by way of section 821 or the CAA. There was also no discussion of past EPA interpretations or practice or relevant case law. Further, appeal was granted by the Georgia Court of Appeals on August 20, 2008, and that appeal is now pending.²¹ On the other hand, a number of state agencies which have recently examined this issue have generally held that CO₂ need not be considered in a BACT determination for PSD purposes.²²

1993) (“unregulated pollutants generally do not form part of the BACT analysis, since by statute and regulation BACT is defined as an emissions limitation for a regulated pollutant”); *In the Matter of North Country Resource Recovery Associates*, 2 E.A.D. 229, 230 (Adm’r 1986) (“EPA lacks the authority to impose [PSD permit] limitations or other restrictions directly on the emission of unregulated pollutants.”). See *Deseret* EPA Brf. at 27; *Deseret* UARG Amicus Brf. at 35-36.

²¹ *Longleaf Energy v. Friends of the Chattahoochee*, Georgia Ct. App., No. A08D0472 (Discretionary Application Granted, Aug. 20, 2008), available at http://www.gaappeals.us/docket/results-one-record.php?docr_case_num=A08D0472.

²² Some of these cases have been appealed to state court. See, e.g., *In the Matter of Proposed Title V Air Quality Permit and Acid Rain Permit No. 28-0801-29 for the Big Stone Facility and In the Matter of Proposed PSD Permit No. 28-0803-PSD for the Big Stone II Facility* (S.D. Bd. of Minerals and Env’t, Dep’t of Env’t & Natural Res.) (CO₂ challenge denied orally at July 17, 2008 hearing); *In the Matter of the Appeal by S. Mont. Elec. Regarding Its Air Quality Permit No. 3423-00 for the Highwood Generation Station*, No. BER 2007-07-AQ, available at <http://www.deq.mt.gov/ber/> (on appeal to the 8th Judicial Dist. Court of Cascade County, Mont., No. DDV08-820, petition filed June 27, 2008); *In the Matter of Sevier Power Co. Power Plant, Sevier County, Utah, DAQE-AN2529001-04* (Utah Air Quality Bd., Jan. 9, 2008), available at <http://www.airquality.utah.gov/Air-Quality-Board/packets/2008/January/january.htm> (on appeal to Utah Ct. App., No. 20080113-CA). *In*

e. Implementation of Section 821 under 40 C.F.R. Part 75 Does Not Make CO₂ Subject to Regulation

Sierra Club argues that EPA's decision to promulgate regulations implementing Section 821 within Part 75 of the 40 C.F.R. somehow makes CO₂ subject to regulation under the CAA despite overwhelming evidence that Congress did not intend CO₂ to be subject to emission controls — and EPA's interpretation that such controls are indeed necessary to bring a pollutant within the scope of the PSD program. It is more likely, and consistent with Congressional intent and EPA's interpretation, that the Agency chose to promulgate the regulations under Part 75 for reasons of regulatory efficiency since measurement of CO₂ is conducted through methods that are also used for monitoring the amounts of NO_x and SO₂ emissions from power plants. *See* 40 C.F.R. § 75.10(a)(2). As EPA noted in *Deseret*, the Agency clearly recognized in promulgating section 821 regulations that it was doing so under authority of Section 821 separately and independently from the CAA. *See* 56 Fed. Reg. 63002, 63062 (Dec. 3, 1991) (noting that there was "statutory authority" under Section 821 "to monitor CO₂ emissions" and that CAA Section 412, 42 U.S. C. § 7651k, provided authority for promulgating monitoring and reporting requirements "for SO₂, NO_x, opacity, and volumetric flow"). *See Deseret* EPA Brf. at 50-53 (explaining how promulgation of Section 821 obligations in regulations did not make CO₂ subject to regulation under the Act.)

f. Enforcement of Section 821 Does Not Make CO₂ Subject to Regulation

Sierra Club repeats the assertion it made in the *Deseret* case that because Section 821 references the CAA for enforcement purposes, the Section 821 regulations are enforceable under

the Matter of: Basin Elec. Power Coop., Dry Fork Station, Air Permit CT-4631, EQC No. 07-2801 (Wyo. EQC, Aug. 21, 2008), Order Granting Respondent Dep't of Env'tl. Quality's Motion to Dismiss at 8-10, available at <http://deq.state.wy.us/eqc/Docket/07-2801%20Dry%20Fork%20Station/07-2801%20Dry%20Fork%20Station.htm>.

the CAA and that this fact makes CO₂ subject to regulation under the Act. The parties in *Deseret* have recently briefed this very issue, and the Board is directed to those briefs filed by EPA and *amicus* supporting it, which explain in greater detail why Sierra Club's argument has no merit. See *Deseret* EPA Supp. Brf. at 10-24; *Deseret API et al.* Suppl. Brf. at ; *Deseret* UARG Supp. Brf. at 3-10.

g. SIP Provisions Do Not Make CO₂ or N₂O Subject to Regulation under the CAA

Sierra Club further argues that the fact that Michigan and Wisconsin have adopted rules in their SIPs which incorporate Section 821 monitoring provisions makes CO₂ subject to regulation for all sources across the United States under federal law. Sierra Club makes the same argument for N₂O based on a Wisconsin rule. These arguments fail for several reasons. First, as demonstrated above, monitoring and reporting obligations do not constitute the necessary controls to make a pollutant subject to regulation for PSD purposes, so the fact that state programs adopt section 821's requirements do not change this conclusion.²³ Second, with respect to Sierra Club's Wisconsin-based arguments, one state's SIP provisions cannot impose on EPA an obligation to regulate all other states the same way. See *Vermont v. Thomas*, 850 F.2d 99, 102-104 (2d Cir. 1988) (Vermont cannot, through inclusion of a state ambient air quality standard in a revision to a SIP, impose that standard on upwind states).²⁴ Rather, EPA

²³ Although not justiciable in this matter, *see supra* footnote 3, Sierra Club's claims that Title V permit provisions regarding monitoring under 40 C.F.R. Part 75 make CO₂ subject to regulation under the CAA would fail for the same reason -- these permits merely incorporate the section 821 monitoring requirements for certain stationary sources.

²⁴ Sierra Club's citation to *Sweat v. Hull*, 200 F. Supp. 2d 1162 (D. Ariz. 2001), Pet. Reply Brf. at 10, is inapposite as the case merely holds that an EPA-approved state SIP provision is binding federal law during the time a revision proposal is pending with EPA. *Id.* at 1169-70. It does not hold that EPA SIP approval thereby renders the SIP provisions binding on all states and the EPA.

establishes the rules, based on the CAA, that states then implement through their SIPs. Moreover, only those portions of EPA-approved state regulations that “implement[]” CAA requirements, and that are therefore federally enforceable, can be part of an applicable implementation plan under the CAA. *See* CAA § 302(q), 42 U.S.C. § 7602(q) (defining the “applicable implementation plan” as “the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 110 of this Act, . . . and which implements the relevant requirements of this Act”) (emphasis added). Because CO₂ and N₂O emission controls have not been established as relevant requirements of the Act, any state regulation that purports to impose emission controls on these substances -- whatever that provision’s enforceability under state law -- would not be an applicable implementation plan under the CAA.

For these same reasons, Sierra Club’s invocation of a recent EPA Region 3 action involving Delaware regulations is unavailing. The CO₂ controls in the Delaware SIP were aimed at meeting CAA requirements for conventional pollutants, namely emissions of precursors to ozone and fine particulates.²⁵ In its submittal information to EPA, Delaware also made clear it had included CO₂ provisions solely as a matter of state law and those provisions were not within the scope of the state’s implementation of the CAA.²⁶ Accordingly, when EPA Region 3 later

²⁵ *See* September 9, 2008 letter to the Clerk of the Board approving what Delaware described to EPA as a “revision to the State of Delaware State Implementation Plan (SIP) for the Attainment and Maintenance of the National Ambient Air Quality Standards for Ozone.” Letter from John A. Hughes, Sec’y, Del. Dep’t of Natural Res. and Envtl. Control, to Donald S. Welsh, Reg’l Adm’r, EPA Region 3, Nov. 1, 2007, available at www.regulations.gov as Doc. No. EPA-R03-OAR-2007-1188-0002. *Deseret* UARG Supp. Brf. at 2 n.2 and Attach. A.

²⁶ The relevant Delaware materials state that “[i]t is correct that CO₂ is *not a federally regulated pollutant*, but the *Environmental Protection Agency’s (EPA) decision to not regulate CO₂* does not prohibit Delaware from regulating its [CO₂] emissions. . . . The broad definition of “air contaminants” in the Delaware statute allows the Department to control pollutants *which may not be controlled federally, such as CO₂*, which, in this singular incidence, makes Delaware

proposed and took final action on the regulation submitted, it never referred to CO₂ emission limitations. 73 Fed. Reg. 11845 (Mar. 5, 2008), *see Deseret* UARG Supp. Brf., Att. C; 73 Fed. Reg. 23101 (Apr. 29, 2008), *see Deseret* UARG Supp. Brf., Att. D. Notably, EPA received “[n]o public comments” at all, *id.* at 23102; and the Agency explained that its action “is not a ‘significant regulatory action’” and “will not have a significant economic impact on a substantial number of small entities.” 73 Fed. Reg. at 11846; *accord* 73 Fed. Reg. at 23102. Thus, consistent with the CAA, and as the state and Region 3 rulemaking records make clear, Region 3’s action did not and could not make Delaware’s state-law-only CO₂ provisions part of the CAA.²⁷

h. Landfill Gas Provisions Do Not Make CO₂ Subject to Regulation under the CAA

Sierra Club raises for the first time in its petition the argument that CO₂ is subject to regulation for PSD purposes because CO₂ is one of the constituents of MSW landfill emissions which are regulated under CAA § 111 and 40 C.F.R. §§ 60.33c and 60.751. Since Sierra Club did not raise this issue in its comments to the NMU permit, it is waived. *Christian County* at *21-*36; *ConocoPhillips* at *83-*96. However, even if properly asserted in this case, the argument has no merit. Both the regulatory text²⁸ and the preamble to the proposed and final

laws more stringent than federal laws. *The fact that EPA has not chosen to address CO₂, does not impact the Delaware statute.*” AQM [Delaware Air Quality Management] Response Document to Comments Submitted on the Proposed Adoption of Regulation No. 1144 and the Proposed Amendment to Regulation No. 1102, at 3, Doc. No. EPA-R03-OAR-2007-1188-0002.7 (Dec. 6, 2005) (emphases added). *See Deseret* UARG Supp. Brief, Att. B.

²⁷ A September 9, 2008 letter from EPA’s Office of General Counsel to the EAB further indicated that EPA’s Office of Air and Radiation is “considering whether Region 3’s approval of the SIP submission was appropriate.”

²⁸ 40 C.F.R. § 60.30c and 60.33c(a) state that regulations contain guidelines for control of “certain designated pollutants” and identifies “MSW landfill emissions” as the pollutant to be controlled by State plans. *See also* 40 C.F.R. § 60.751 (requiring affected sources to collect and

rules²⁹ explicitly address the issue and clarify that “MSW landfill emissions” refers to a single designated composite pollutant, not its various constituents, and that MSW landfill emissions is the only pollutant subject to regulation. EPA, indeed, acknowledged that MSW landfill emissions are:

a complex aggregate of pollutants which together pose a threat to public health and welfare based on the combined adverse effects of the various components....Although the types of compounds are typically the same, the complex nature cannot be characterized quantitatively in terms of single pollutants. The EPA thus views the complex air emission mixture from landfills to constitute a single designated pollutant.

56 Fed. Reg. at 24474-75. *See Deseret* Surrey Brief of EPA Office of Air and Radiation and Region VIII at 1-6.

Moreover, the specific control options in the MSW landfill regulations focus on control of NMOC emissions, which is used as a surrogate for the designated pollutant, MSW landfill emissions. *Id.* at 24475. EPA identified NMOCs and methane as the “emissions of concern.”

61 Fed. Reg. 9905 (Mar 12, 1996). Significantly, EPA recognizes that control options identified as reducing overall MSW landfill emissions may actually *increase* the secondary emissions of individual components. 56 Fed. Reg. at 24472 . Indeed, the MSW landfill regulations were not even intended to address climate change considerations, but rather ambient ozone problems, air

control MSW landfill emissions, which are defined as “gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.”)

²⁹ *See* 56 Fed. Reg. 24468, 24470 (May 30, 1991) (“The pollutant to be regulated under the proposed standards and guidelines is ‘MSW landfill emissions.’ Municipal solid waste landfill emissions, also commonly referred to as ‘landfill gas,’ is a collection of air pollutants, including methane and NMOC’s [non-methane organic compounds], some of which are toxic. *The composite pollutant is proposed to be regulated under section 111(b), for new facilities, and is proposed to be the designated pollutant under section 111(d) for existing facilities.*”) (emphasis added)

toxic concerns and potential explosion hazards. *Id.* Reduction of greenhouse gases, primarily methane, was considered to be only “[a]n ancillary benefit from regulating air emissions from MSW landfills.” 61 Fed. Reg. at 9917; *see* 56 Fed. Reg. at 24469, 24472.

Therefore, EPA’s MSW landfill gas emission regulations focus on a specific pollutant and do not establish emission controls for CO₂ or other GHGs. It defies logic that such a program was intended by EPA to make CO₂ subject to regulation for PSD purposes, especially when EPA carefully clarified that it was not regulating individual components of landfill gas emissions.³⁰

2. This Board Should Refrain In This Permit Proceeding From Taking The Momentous Step Of Creating National Regulatory Policy On CO₂ or N₂O Emissions

The Board should resist any temptation to require BACT for CO₂ or N₂O in the University permit. The issue of whether these or other GHG can and should be subject to emission controls under the CAA or new legislation is extremely controversial. It is the subject of ongoing public debate and a voluminous ANPR. The question whether GHG emissions should be part of a PSD permitting program or subject to BACT analysis necessarily raises a number of important policy and technical issues. For example, what level of GHG emissions should be considered significant for PSD regulations? *See, e.g., In re Otter Tail Power Co.*, 744 N.W.2d at 603 (“More significantly, the Intervenor suggest no standards by which the PUC may assess what amount of CO₂ emissions are tolerable.”) GHG is emitted from many sources, including private homes, hospitals, office buildings, and shopping centers in addition to larger

³⁰ EPA specifically addressed the applicability of CAA permitting programs to MSW landfill emissions and established a PSD significant emission rate for “municipal solid waste landfill emissions” which are to be “measured as non-methane organic compounds.” 40 C.F.R. § 52.21(b)(23); 61 Fed. Reg. at 9918.

stationary sources, so the implications for the U.S. economy could be enormous.³¹ EPA may have few or no options if the Agency and states are forced to permit an exponentially larger number of new sources under PSD as well as Title V.³² Further, if GHGs were subject to BACT, what would be the appropriate emission limits and control technology?

Because these questions have national and global implications, *see, e.g.*, EPA's recently published ANPR, it makes no sense to address them in the context of an isolated permit for a single 10 MW plant. The United States Congress, EPA, and/or Michigan will need to answer these and other questions, including those raised by the ANPR, through careful scientific and technical review, and, based on this analysis, either enact legislation or consider promulgation of possible regulations through a notice and comment rulemaking process. The PSD permitting process, by contrast, is a case-by-case approach, and individual facility permitting determinations do not have the effect of nationwide regulatory decisions. Thus, it is completely inappropriate for Sierra Club to ask the Board to establish GHG regulation through a "back door" approach. Doing so could lead to different emission levels and determinations on control technology plant-

³¹ *See, e.g., A Regulatory Burden: The Compliance Dimension of Regulating CO₂ as a Pollutant*, U.S. Chamber of Commerce (Sept. 2008), at 3 (available at http://www.uschamber.com/publications/reports/0809_co2report.htm) (concluding that over one million mid-sized to large commercial buildings in the industrial, commercial and agricultural sectors could potentially become subject to costly permitting under PSD for the first time under a 250 ton/year CO₂ emissions threshold) (Attach. D to this Brief).

³² Sierra Club has asserted in the *Deseret* proceeding its belief that EPA may be able to take administrative action to modify the application of PSD requirements to such a broad universe of sources. *See Deseret* Transcript of Oral Argument at 16 (May 29, 2008); *Deseret* Response of Petitioner Sierra Club to EPA's Supplemental Brief at 18 (suggesting that EPA can address the issue administratively, citing the ANPR). It is at best doubtful that EPA could use administrative means to forestall the dramatic impacts of such a new interpretation by somehow evading the statutory "major source" thresholds of 100 and 250 tons of potential emissions per year. Given the plain statutory language in CAA section 169(1), 42 U.S.C. § 7479(1), establishing those thresholds, there is at the very least strong reason to question EPA's administrative authority to adjust or circumvent those thresholds to avoid treating an enormous number of small facilities of every description as "major emitting facilities" subject to PSD.

by-plant, and would be influenced by specific local factors as well as the comments of those local interests commenting on the permits. Such an “ad hoc” method is no way to approach a regulatory issue of such complexity and significance to the regional and national economy and power supply.

II. IT WAS APPROPRIATE FOR MDEQ TO SET BACT LIMITS BASED ON COAL

Sierra Club claims that it was improper for MADQ to set the BACT limits based on the worst-case fuel -- coal. Petition at 19. Because the plant is authorized to operate on 100% coal, it was appropriate and lawful to base its BACT limits on that scenario. Petitioner claims that there is no basis to set limitations based on the worst case situation are contrary to previous decisions of this Board and the courts. In its *Newmont* decision, the Board made clear that BACT limits are to be achievable on a consistent basis. *In re Newmont Nev. Energy Inv., LLC*, 12 E.A.D. 429, 442 (EAB 2005). Establishing a BACT limit based on the best case scenario when emissions are known to fluctuate because of the fuel flexibility would make violations of the permit unavoidable. Such an outcome is not required by BACT. *See, e.g., In re Masonite Corp.*, 5 E.A.D. 551, 560 (EAB 1994). The D.C. Circuit has also considered what it means for an emission limit to be “achievable” and decided differently than Petitioner. The court concluded that a limit is achievable only if it can be met under “reasonably foreseeable worst case conditions.” *Sierra Club v. EPA*, 167 F.3d 658, 665 (D.C. Cir. 1999) (considering “achievable” in the context of setting MACT limits) quoting *National Lime Ass’n v. EPA*, 627 F.2d 416, 431 n. 46 (D.C. Cir. 1980). MDEQ’s decision to establish BACT for NMU based on burning 100% coal is consistent with the requirements of BACT and the petition for review should be denied.

III. CONSIDERATION OF OTHER COALS WOULD IMPERMISSIBLY REDEFINE THE SOURCE.

While NMU plans to burn 100% biomass as the primary fuel, it must also be prepared for the likely, if not certain event that sufficient biomass will not be available. This is most likely to occur in winter. Recognizing the potential need to burn coal, Petitioner nevertheless contends that the sulfur content of the coal assumed by MDEQ in establishing the BACT limit is too high and that other, lower-sulfur coal should have been considered. This contention ignores the limitations inherent at the Ripley Heating Plant, as explained in the MDAQ brief and the record.

As explained in the record, the Ripley Heating Plant is space limited and it does not have facilities for coal unloading or for more than three days of coal storage. As coal is not the primary fuel of choice, it does not make sense to construct coal unloading facilities on site, even if there were no space limitations. To address these limitations, NMU has arranged to have coal delivered from nearby utilities on a "just in time" inventory basis. In determining BACT for the facility, MDEQ correctly took into consideration these site specific limitations and the characteristics of the coal (maximum of 1.5% sulfur) that would be available to NMU when biomass is unavailable, particularly in the winter time. Because the coal would be delivered from nearby facilities, the transport concerns for biomass deliveries during the winter are not applicable to coal deliveries.

Use of coal from its neighbors as a backup fuel when biomass is unavailable is part of NMU's business plan for constructing this boiler, and is an inherent aspect of the proposed project independent of air quality permitting. Requiring the use of coal other than that available from the nearby facilities would make the project infeasible. As the Board articulated in *Prairie State*, such aspects of a project may be beyond the scope of the BACT analysis to change as they

would redefine the source. *In re Prairie State Generating Co.*, PSD Appeal No. 05-05, 2006 EPA App. LEXIS 38 at *47 (EAB Aug. 24, 2006).

IV. MDEQ'S ACCOUNTING FOR INCREMENT CONSUMING EMISSIONS FROM THE NEARBY PRESQUE ISLE PLANT COMPLIES WITH APPLICABLE REGULATIONS.

Contrary to Sierra Club's argument, MDEQ's analysis of increment-consuming emissions from the Presque Isle facility conformed to the statutory and regulatory requirements. MDEQ determined that Presque Isle was an existing major source before the major source baseline date of January 6, 1975. There is no dispute over that. The dispute arises over how modifications to the facility since that time should be addressed in the PSD increment analysis. MDEQ concluded that only the change in emissions from Presque Isle as a result of the modifications commenced after the major source baseline date should be included in the analysis as the other emissions are included in the baseline concentration. Sierra Club, however, contends that all emissions from Presque Isle consume increment. That contention ignores the concept of increment expansion and is inconsistent with the statutory and regulatory requirement as well as longstanding EPA guidance.

MDEQ's determination that only the change in emissions consume increment is consistent with 40 C.F.R. § 52.21(b)(13)(ii) and EPA's guidance. *See, e.g.*, 72 Fed. Reg. 31372, 31380 (June 6, 2007) (interpreting 40 C.F.R. § 52.21(b)(13)(ii) to mean that increases in actual emissions from major sources as a result of changes since the baseline dates consume increment). As EPA recently explained: "For each source that was in existence on the relevant baseline date (major source or minor source), the inventory includes the source's actual emissions on the baseline date and its current actual emissions. The change in emissions over these time periods represents the emissions that consume increment." *Id.* at 31377. In the Draft NSR Manual, EPA explained what emissions consume increment as follows:

Emissions increases that consume a portion of the applicable increments are, in general, all those not accounted for in the baseline concentration and specifically include:

actual emissions increases occurring after the major source baseline date, which are associated with physical changes or changes in the method of operation (i.e., construction) at a major stationary source; and

actual emissions increases at any stationary source, area source, or mobile source occurring after the minor source baseline date.

EPA, New Source Review Workshop Manual: Prevention of Significant Deterioration and Nonattainment Area Permitting (Oct. Draft) (1990) at C.10 (emphasis in original) (relevant portions included in Attach. E to this Brief). MDEQ determined the actual increase in emissions consistent with the regulations and EPA guidance and included those increases in the modeling.

Sierra Club, on the other hand, ignores 40 C.F.R. § 52.21(b)(13)(ii) and EPA's longstanding guidance and argues that none of the emissions from Presque Isle should be included in the baseline concentration because there were modifications at the facility after the baseline date. According to Sierra Club, all of the actual emissions from Presque Isle should have been modeled. Sierra Club is correct about one thing; it is the "actual" emissions that should be included in the modeling. Where they err is in ignoring that some of the "actual" emissions are included in the baseline concentration and only the "increases in actual" emissions as a result of the modifications consume increment. Interpreting the statute and regulations as Sierra Club would have it is contrary to Congress' express intent that certain emissions be included in the baseline concentrations. CAA § 169(4), 42 U.S.C. § 7479(4). It is also inconsistent with EPA's reasonable interpretation of the CAA and its own regulations discussed above. For these reasons, review of this issue should be denied.

V. PERMIT LIMITS ARE APPROPRIATE FOR ENSURING COMPLIANCE WITH NAAQS AND INCREMENT.

Sierra Club's argument in Section VI of its Petition that permit limits with shorter averaging periods are needed to protect the short-term SO₂ (3-hour) and PM₁₀ (24-hour) NAAQS and increment is without merit. The permit provides that the averaging period for PM₁₀ is based on the test protocol, which in turn is based on approved test methods such as Method 5. Permit Special Condition 1.9 (relevant portions included in Attach. F to this Brief). *See also* 40 C.F.R. § 60.50Da(b)(2)(i) (specifying run time for Method 5 of at least 120 minutes which is less than 24-hours). For SO₂, the permit includes a 24-hour limit. Permit Special Condition 1.1d. As the modeling results reflect, it is the 24-hour NAAQS and increment that are limiting, not the three-hour standards. The 24-hour increment modeling result is 67% of the standard compared to the 3-hour modeling result which is only 23% of the standard. The NAAQS modeling results are closer, but the 24-hour standard is still limiting. The 24-hour modeled result is 63% of the 24-hour NAAQS versus 43% for the 3-hour NAAQS. Because the 24-hour NAAQS and increment are limiting and the plant meets the 24-hour permit rule, even with fluctuation in emissions, the 3-hour SO₂ NAAQS and increment will be protected. Additionally, contrary to the assertion by Petitioner on pages 43-44 of the Petition for Review, the maximum hourly emission rates are identical to the modeled emission rate when they are converted and presented on the same unit basis (*i.e.*, comparing pounds per hour to pounds per hour versus comparing pounds per hour to grams per second, which is the metric used in the modeling).³³ For the above reason, Count VI of the Petition should be denied.

³³ For example, consider SO₂ emissions for the new boiler, 87.8 pounds per hour is equivalent to 11.06 grams per second. As reflected in the chart on p. 44 of the Pet.

VI. MDEQ APPROPRIATELY WAIVED PRECONSTRUCTION MONITORING.

Sierra Club's argument in Section VII of its Petition that the permit should be remanded because MDEQ did not require NMU to collect preconstruction monitoring data is legally and factually flawed. Sierra Club appears to be contending that NMU should have collected preconstruction monitoring data for all pollutants for which there is a NAAQS. Petition for Review at 50. That contention ignores 40 C.F.R. § 52.21(i)(6)(i) which establishes thresholds for triggering preconstruction monitoring known as significant monitoring concentrations ("SMCs"). If modeled concentrations as a result of emissions from the source are below the SMCs, sources may be exempted from the preconstruction monitoring requirements. As indicated in the Application, emissions from NMU result in concentrations less than the SMCs for all pollutants except SO₂. NMU PSD Application Section 6.5 (relevant portions included as Attach. G to this Brief) (indicating the NMU emissions result in concentrations less than the CO, PM₁₀ and NO_x significant impact levels, which are lower than the SMCs). Thus, it was appropriate for MDEQ to exempt NMU from collecting preconstruction data for those pollutants and to allow the use of available data. With respect to SO₂, MDEQ reasonably found that available monitoring data was representative as explained in MDEQ's Response to Petition at 22-23. For the reasons above and those in MDEQ's brief, the Board should deny review of this claim.

CONCLUSION

For the foregoing reasons, NMU respectfully requests that the Board deny review of the
Petition.

Respectfully submitted,

Handwritten signature of Kevin J. Finto in black ink, appearing as "Kevin Finto / JWR".

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Dated this 22nd day of September, 2008.

CERTIFICATE OF SERVICE

I hereby certify that on the 22nd day of September, 2008, copies of the foregoing Intervenor Northern Michigan University's Brief in Response to Petition were served by hand delivery to:

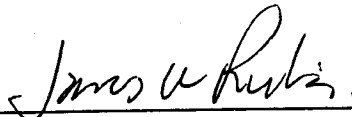
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and by first class mail, postage prepaid, to the following:

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