

Sierra Club Petition

Exhibit 2



August 13, 2008

VIA OVERNIGHT MAIL AND EMAIL

Annet Godiksen
Hearing Officer
Illinois Environmental Protection Agency
1021 N. Grand Ave. E.
P.O. Box 19276
Springfield, IL 62794-9276

Re: Comments on Draft Prevention of Significant Deterioration Construction Permit for MGP Ingredients of Illinois, Inc.

Dear Ms. Godiksen:

These comments are submitted on behalf of the Sierra Club and its 800,000 members, including 26,000 members in Illinois. MGP Ingredients of Illinois, Inc. ("MGP") is proposing to construct a solid fuel-fired boiler that will principally burn coal to generate high-pressure steam and will also be used to cogenerate electricity for the plant. While we strongly support cogeneration as an efficient and low-polluting option for meeting MGP's steam and electricity needs, it is not apparent that MGP has considered the environmental impacts of using coal from Illinois mines as a fuel source or the global warming and other air pollution impacts of using coal as a fuel source.

The Nobel Peace Prize winning International Panel on Climate Change has urged urgent action to achieve global warming pollution reductions in the range of 25-40 percent by 2020 and 80-90 percent by 2050. Any long-term decisions about how MGP meets its energy needs, such as building a new coal-fired boiler, must be consistent with these reduction targets. Before

investing \$100 million on a new coal-fired boiler is an opportune time to assess how such reductions can be achieved and for MGP to demonstrate its commitment to environmental stewardship.

MGP currently receives steam and electricity from a natural gas-fired boiler under a contractual arrangement and will continue to receive steam and electricity from a new natural gas-fired boiler until its proposed coal-fired boiler becomes operational. Even after MGP's proposed coal-fired boiler is constructed (if it is constructed), MGP proposes to receive steam and electricity from the proposed new natural gas boiler from time to time when the coal boiler is not available.

Natural gas is a fossil fuel. However, but is significantly cleaner than coal. Natural gas contains virtually no sulfur, no mercury or other heavy metal, emits no sulfuric acid mist and emits a fraction of the carbon monoxide and carbon dioxide emissions as coal. Switching from natural gas to coal would be a major step in the wrong direction in terms of global warming and air quality issues.

Because of these concerns we urge MGP to pull back its application for this draft permit and, at a minimum, reassess the potential for continuing to use natural gas rather than coal to generate its steam and electricity.

SPECIFIC COMMENTS

The Illinois Environmental Protection Agency ("IEPA") proposes to issue a permit to MGP Ingredients of Illinois, Inc. ("MGP") for a new solid fuel-fired boiler and associated equipment to be constructed at MGP's facility located at 1301 South Front Street in Pekin, Illinois. The boiler would be designed to principally burn coal. MGP is also requesting permission to construct a natural gas-fired boiler that will service the plant until the coal fired-boiler is operational. The natural gas boiler would then be used as a backup boiler.

Congress intended to ensure that major sources of air pollution do not degrade air quality for people who live and work in the areas where the sources are located. Congress recognized that generic national ambient air quality standards (“NAAQS”) do not adequately protect people. NAAQS “do not adequately protect against genetic mutations, birth defects, cancer, or diseases caused by long-term chronic exposures or periodic short-term peak concentrations, and hazards due to derivative pollutants and to cumulative or synergistic impacts of various pollutants; and they do not adequately protect against crop damage and acid rain.” *Hawaiian Elec. Co. v. U.S. Evt’l Protection Agency*, 723 F.2d 1440, 1447 (9th Cir. 1984). NAAQS also do not prevent the deterioration of otherwise cleaner air regions from deteriorating to the NAAQS “floor.” For these reasons, Congress enacted the prevention of Significant Deterioration (“PSD”) provisions of the Clean Air Act. 42 U.S.C. §§ 7470, *et seq.* EPA, IEPA, and the applicant rely upon the EPA’s New Source Review Workshop Manual (“NSR Manual”) in implementing the PSD program.

I. IEPA HAS NOT PROVIDED A SUFFICIENT ANALYSIS OF THE IMPACTS FROM THE PROPOSED PLANT.

An application for a PSD permit must include, among other information, “a description of the nature, location and typical operating schedule . . .” of the plant. 40 C.F.R. § 52.21(n)(1)(i). Additionally, the applicant must provide an analysis of impacts of the proposed plant on soils and vegetation, as well as commercial and industrial growth associated with the proposed modification. 40 C.F.R. § 52.21(o). We note that there is little information provided for this source, especially as to the impacts of the fuel acquisition, including impacts on endangered species of vegetation.

MGP plans to use Illinois coal as the fuel source for the proposed boiler. Application at 1-3. But there is no information in the materials provided by the state or the applicant disclosing the environmental impacts, including soil and vegetation impacts, associated with mining,

transporting, and burning such coal. The impacts from long-wall mining (increasingly pursued in Illinois) include the destruction of high-quality farmland, drying up of streams and springs, and the loss of life-sustaining soil. The analysis of these impacts must be done and provided to the public prior to the closing of the public comment period.

II. THE DRAFT PERMIT DOES NOT INCLUDE SUFFICIENT BACT LIMITS.

The new boiler and associated equipment is subject to stringent air pollution control requirements under the Clean Air Act's Prevention of Significant Deterioration ("PSD") program, 42 U.S.C. § 7470, *et seq.* IEPA has been delegated the authority to issue PSD permits on behalf of the United States Environmental Protection Agency ("EPA") and is required to follow the policy and regulations of EPA. Specifically, IEPA must ensure that all new and modified emission sources at MGP's plant are subject to emission limits that are to be based on the "best available control technology" or "BACT" and that the facility does not exceed ambient air quality standards or maximum increase over baseline (*i.e.*, "increment") during worst-case conditions. 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52.21(j).

BACT is "one of the most critical elements of the PSD permitting process." *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 131 (EAB 1999) ("Knauf I"). BACT is defined as:

an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

40 C.F.R. § 52.21(b)(12). To ensure that the BACT determination is "reasonably moored" to the Clean Air Act's statutory requirement that BACT represent the maximum achievable reduction through the use of various pollution control techniques, EPA established a top-down analysis

process outlined in the NSR Manual. *Alaska Dept. of Env't'l Conservation v. Env't'l Protection Agency*, 540 U.S. 461, 485 (2004). This process must be followed. *Alaska v. US EPA*, 298 F.3d 814 (9th Cir. 2002).

To ensure that the limits in the final PSD permit ensure “maximum degree of reduction,” based on applicable production processes, fuel cleaning, clean fuels, and other pollution control techniques, the permit applicant is required to propose a permit limit that constitutes BACT and to supply sufficient information on the control option used to achieve that limit. Specifically, the applicant must provide a detailed description of the system of continuous emissions reduction planned for the source or modification, emission estimates, and any other information necessary to ensure a detailed analysis leading to a limit ensuring maximum achievable pollution reduction. Each step of the BACT analysis and especially a decision to reject an effective pollution reduction option in favor of a less effective option when establishing a BACT limit must be adequately explained and justified.

Although the BACT selection process can be complicated, its purpose is simple: to promote the use of the best control technologies. Congress chose to require an emission limit based on the “maximum degree of reduction . . . achievable for such source” at the time the source is constructed. 42 U.S.C. §§ 7475(a)(4) (new sources are subject to BACT), 7479(3) (BACT definition). A BACT analysis should always default to the best pollution control option available. Therefore, by design, BACT results in increasingly stringent limits as technology advances and improves the ability to reduce or capture pollutants.

The Draft Permit fails to comply with the requirement that all regulated pollutants be subject to a BACT limit that represents the maximum degree of reduction achievable with available control options. Therefore, the permit must either be denied or the permit limits must be revised, supplemented, and significantly lowered so that the limits represent BACT.

A. IEPA Failed To Conduct A BACT Analysis for PM_{2.5}.

The controlling law requires a BACT limit “for each pollutant subject to regulation under the Act that it would have the potential to emit in significant amounts.” 40 C.F.R. § 52.21(j)(2). PM_{2.5} is “a pollutant subject to regulation under the Act” because EPA established a NAAQS for PM_{2.5} in 1997. 62 Fed. Reg. 38,652, 38,711 (July 18, 1997); 40 C.F.R. § 50.7. PM_{2.5} will be emitted from the new and modified emission sources at the MGP plant in a “significant” amount.¹ Therefore, a PM_{2.5} BACT limit should be required. 70 Fed. Reg. 66,042 (“[t]he requirements applicable to NSR SIPs for and the obligation to subject sources to NSR permitting for PM_{2.5} direct emissions are codified in the existing federal regulations and can be implemented without specific regulatory changes.”).

On May 16, 2008, EPA promulgated regulations to implement the PSD program for PM_{2.5}. 73 Fed. Reg. 28,321 (May 16, 2008). Those regulations established a “significant increase” value of 10 tons per year (or 40 tons of SO₂ or NO_x, which are precursors of PM_{2.5}). *Id.* at 28,349 (to be codified at 40 C.F.R. § 52.21(b)(23)(i)). Those regulations also purport to substitute PM₁₀ for PM_{2.5} for permit applications submitted prior to July 15, 2008. 73 Fed. Reg. at 28,349. These regulations are illegal and invalid. Sierra Club reserves its right to petition for review of this permit for lack of a BACT limit for PM_{2.5} when the illegal May 16, 2008, rule is vacated or stayed by the courts.

The provision in the May 16, 2008 rulemaking that purports to waive the requirement to implement PM_{2.5} BACT by substituting PM₁₀ BACT is unlawful for a number of reasons and, therefore, is expected to be overturned in the review currently pending in the United States Court of Appeals for the District of Columbia. *Natural Res. Defense Council, et al v. EPA*, Case No. 08-1250 (D.C.Cir.). Among the reasons that the rule is invalid and will be vacated are: (1) the

¹ If the Court of Appeals for the District of Columbia vacates or stays the May 16th final rule, 73 Fed. Reg. 28321, this project would continue to be a major modification because it would result in an increase of “any emission rate.” 40 C.F.R. § 52.21(b)(23)(ii) (2007).

EPA has no authority to waive applicable requirements of the Clean Air Act, which the “transition” provision substituting PM₁₀ for PM_{2.5} does for plants with applications pre-dating July 15, 2008; and (2) that the Federal Register notice itself states that the basis for the very October 23, 1997, guidance memo incorporated into the regulation (“practical difficulties” in measuring PM_{2.5}) has been resolved, so there is no basis for the attempted waiver by EPA. 73 Fed. Reg. at 28,340; *see also* 72 Fed. Reg. 54,112 (Sept 12, 2007); 70 Fed. Reg. at 66,043 (recognizing that the “practical difficulties” identified in the Seitz memo “have been resolved in most respects”).

Further, substituting PM₁₀ for PM_{2.5} is arbitrary. PM₁₀ is simply not the same as PM_{2.5}. They have different health impacts and PM_{2.5} is more dangerous at lower concentrations. *In re So. Montana Elec. Generation and Transmission Coop., Highwood Generating Station*, Case No. BER 2007-07 AQ, Slip Op. at 26 (Mont.Bd.Env'tl.Rev. May 30, 2008) (“*Highwood*”).² According to EPA, decreasing PM_{2.5} in the ambient air by only 0.5 ug/m³ can prevent as many as 25-50 premature deaths each year.” 70 Fed. Reg. at 66,006. Indeed, the entire premise for EPA promulgating PM_{2.5} standards was a determination that the existing PM₁₀ standards were not sufficient to protect health. 62 Fed. Reg. 38,652, 38,655-58, 38,665-67 (July 18, 1997). IEPA and EPA cannot pretend, for expediency in permitting, that these pollutants are the same.

There are significant additional differences between PM_{2.5} and PM₁₀ that make substitution of PM₁₀ limits for PM_{2.5} limits arbitrary. Condensable fraction PM comprises a much larger fraction of PM_{2.5} than of larger PM. 73 Fed. Reg. at 28,334. Additionally, controls for PM₁₀ are not necessarily controls for PM_{2.5} and, more importantly for BACT determinations, top-ranked controls for PM₁₀ are not necessarily top-ranked controls for PM_{2.5}. *Highwood* at 9, 25 (“[t]he Seitz memo’s guidance to rely on BACT analysis for PM₁₀ does not ensure maximum

² Available at <http://www.deq.mt.gov/ber/2008Agendas/SME/Order.pdf>.

achievable reductions in emissions of PM_{2.5}.”), 30 (finding that the vendor instructed applicant that it could deal with PM_{2.5} BACT limits by installing more efficient bags, but that the applicant should avoid tipping off the state agency “to avoid any tighter restrictions being placed upon us.”). Additionally, common control technologies, such as the fabric filters proposed for the new MGP boiler, are highly effective at controlling PM and PM₁₀, but less effective at capturing finer-grain PM_{2.5}; PM_{2.5} emissions are more aggressively controlled by controlling the pollutant’s precursors.

Because PM_{2.5} is a pollutant subject to regulation and which will be emitted at a significant amount, a top-down BACT analysis is required. In the Project Summary, IEPA stated that the BACT limit for PM₁₀ “also serves to control particulate matter as PM_{2.5}.” But that limit corresponds to the PM₁₀ limit and is not the result of an independent, top-down (or equivalent) BACT determination for PM_{2.5}. IEPA’s failure to include a sufficient PM_{2.5} BACT limit is erroneous as a matter of law. This is a deficiency that must be corrected before a PSD permit can issue. Additionally, any proposed PM_{2.5} BACT limit must be subject to public review and comment before IEPA issues a final PSD permit.

B. The Draft Permit Lacks BACT Limits For CO₂ and N₂O.

The Clean Air Act prohibits the construction of a new major stationary source of air pollutants in areas designated as in attainment of the National Ambient Air Quality Standards except in accordance with a prevention of significant deterioration (“PSD”) construction permit. 42 U.S.C. § 7475(a); 40 C.F.R. § 52.21(a)(2)(iii). One of the requirements, contained in Section 165 of the Act, is that every PSD permit must include a BACT emission limit “for each pollutant subject to regulation under this chapter emitted from, or which results from” the facility. 42 U.S.C. § 7475(a)(4). EPA repeated that requirement in the implementing regulations controlling here: BACT is required for “any pollutant that otherwise is subject to regulation under the Act.”

40 C.F.R. § 52.21(b)(50)(iv). CO₂ and N₂O are subject to regulation under the Act, but the Draft Permit contains no BACT limits for these pollutants.

1. CO₂ is Currently Regulated.

Carbon dioxide (CO₂) has been regulated under the Clean Air Act since 1993. *See* 58 Fed. Reg. 3590 (Jan. 11, 1993) (final rule for monitoring and reporting CO₂ emissions); 40 C.F.R. Part 75. In 2007, the Supreme Court held that carbon dioxide and other greenhouse gases are “pollutants” under the Clean Air Act. *Massachusetts v. EPA*, 127 S.Ct. 1438, 1460 (2007). And just recently a Georgia court clarified that carbon dioxide is, indeed, “subject to regulation” under the Clean Air Act. *Friends of the Chattahoochee, Inc., et al. v. Couch, et al.* (“Longleaf”), Docket No. 2008CV146398, Superior Court of Fulton County, Georgia, (Final Order, June 30, 2008) (copy attached as Appendix A).

Section 821(a) of the Act provides:

Monitoring. – The Administrator of the Environmental Protection Agency shall promulgate regulations within 18 months after the enactment of the Clean Air Act Amendments of 1990 to require that all affected sources subject to the Title V of the Clean Air Act shall also monitor carbon dioxide emissions according to the same timetable as in Sections 511(b) and (c). The regulations shall require that such data shall be reported to the Administrator. The provisions of Section 511(e) of Title V of the Clean Air Act shall apply for purposes of this section in the same manner and to the same extent as such provision applies to the monitoring and data referred to in Section 511.

42 U.S.C. § 7651k note; Pub.L. 101-549; 104 Stat. 2399 (emphasis added). In short, Congress specifically ordered EPA “to promulgate regulations” requiring that facilities covered by Title IV of the Act monitor and report their CO₂ emissions in § 821.³ The most basic canon of statutory

³ EPA’s § 821 regulations, which were finalized on January 11, 1993, require CO₂ emissions monitoring (40 CFR §§ 75.1(b), 75.10(a)(3)); preparing and maintaining monitoring plans (40 CFR § 75.33); maintaining records (40 CFR § 75.57); and reporting such information to EPA, (40 CFR §§ 75.60-64). 40 CFR § 75.5 prohibits operation in violation of these requirements and provides that a violation of any Part 75 requirement is a violation of the Act. These requirements, including the requirement to monitor CO₂, are also included in various state implementation plans. *See* Wis. Admin. Code § NR 438.03(1)(a) (requiring reporting of pollutants listed in Table I, including CO₂), adopted under the Act at 40 C.F.R. § 52.2570(c)(70)(i); Wis. Admin. Code § NR 439.095(1)(f)

interpretation provides that words, like “subject to regulation” should be given their plain meaning, which is controlling over other agency interpretations. *Lamie v. United States Tr.*, 540 U.S. 526, 534 (2004); *Chevron v. NRDC*, 467 U.S. 837, 842-843 (1984). The Supreme Court has already pointed out that information gathering, record keeping, and data publication rules are indisputably within the conventional understanding of “regulation.” *Buckley v. Valeo*, 424 U.S. 1, 66-68 (1976) (record keeping and reporting requirements are regulation of political speech).

Furthermore, the structure of the Act reaffirms that Congress intended BACT to apply to the broadest category of pollutants. Congress expressly required a BACT limit for “any pollutant subject to regulation” under the Act. 42 U.S.C. § 7475(a)(4). “Regulation,” within Section 165(a)(4), is presumed to mean the same thing as “regulation” in Section 821, where Congress specifically required EPA to issue regulations for monitoring and reporting CO₂ emissions. *Commissioner of Internal Rev. v. Lundy*, 516 U.S. 235, 249-50 (1996) (holding that where Congress uses the same word in two sections of the same act, it is presumed to mean the same thing both times).

In contrast, where Congress intended to mean a limit on the quantity, rate, or concentration of emissions, Congress knew how to do so and did so explicitly, rather than using “subject to regulation.” 42 U.S.C. § 7602(k) (defining “emission limitation” and “emission standard”)⁴; *Alabama Power Co. v. Costle*, 636 F.2d 323, 403-06 (D.C. Cir. 1979) (holding that EPA applies BACT to any pollutant “subject to regulation,” which is broader than the pollutants for which ambient air quality standards are set and broader than the category covered by an “applicable emission standard or standard of performance under the Act”); *see also e.g.*, 73 Fed. Reg. at 28,333 (recognizing that ammonia is subject to regulation). Moreover, there is nothing in

(Phase I and phase II acid rain units... shall be monitored for... carbon dioxide...”), adopted under the Act at 40 C.F.R. § 52.2570(c)(73)(i)(I).

⁴ Where Congress meant “emission limit” or “emission standard,” it used those terms rather than “subject to regulation.” E.g., 42 U.S.C. §§ 7412(f)(5), 7521(f)(5), 7617(a)(7), 7651d(a)(1).

Section 165, unlike Sections 108, 111 and 202, that requires EPA to make a finding that a pollutant endangers public health or welfare before a BACT limit is required. *Compare* 42 U.S.C. § 7408(a)(1)(A) (requiring EPA to find that a pollutant “may reasonably be anticipated to endanger public health or welfare”), § 7411(b)(1)(A) (requiring a finding that the source is “anticipated to endanger public health or welfare”), *and* § 7521(a)(1) (requiring EPA to determine that a pollutant “may reasonably be anticipated to endanger public health or welfare”) *with* 42 U.S.C. § 7475(a)(4) (requiring BACT for “each pollutant subject to regulation” and not requiring a finding of endangerment to health or welfare). In short, BACT is required even for “pollutants determined not to present substantial public health or welfare concerns.” *Alabama Power Co. v. Costle*, 636 F.2d at 370 n.134.

Furthermore, EPA has consistently interpreted Section 821 of the Act to constitute regulation under the Clean Air Act by promulgating regulations requiring monitoring and reporting of CO₂ emissions that are enforceable pursuant to Clean Air Act sections 113 and 304, 42 U.S.C. §§ 7413 and 7604. 42 U.S.C. §§ 7651k, note (requiring EPA to promulgate rules), 7651k(e) (“It shall be unlawful for the owner or operator of any source subject to this subchapter to operate a source without complying with the requirements of this section, and any regulations implementing this section.”); 40 C.F.R. §§ 75.1(a) (“The purpose of this part is to establish requirements for the monitoring, recordkeeping, and reporting of... carbon dioxide (CO₂) emissions... pursuant to Sections 412 and 821 of the CAA, 42 U.S.C.7401-7671q, as amended by Public Law 101-549 (November 15, 1990).”), 75.5(a) (providing that a violation of the monitoring and reporting requirements in part 75 are violations of “the Act.”); 56 Fed. Reg. 63,002, 63,291 (Dec. 3, 1991) (providing that the requirements in part 75 are “pursuant to 821 of the Act”); 60 Fed. Reg. 26,510 (May 17, 1995) (referring to the monitoring requirements in part 75 as “authorized under Sections 412 and 821 of the Act”); 59 Fed. Reg. 42,509 (Aug. 18, 1994).

In addition to the regulations requiring monitoring and reporting of CO₂ in 40 C.F.R. pt. 75, CO₂ is also regulated in EPA-adopted State Implementation Plans and in the landfill emission regulations promulgated under section 111 of the Clean Air Act.⁵

EPA has recently confirmed that the CO₂ monitoring and reporting requirements in 40 C.F.R. part 75 are enforceable through the Clean Air Act. Resp. of EPA Region 8 and Office of Air and Radiation to Bd.'s Request for Suppl. Briefing, *In Re Deseret Elec. Power Coop.*, PSD Appeal No. 07-03 at 6, 11-18 (Aug. 8, 2008). There is no reasonable interpretation of "subject to regulation" in 42 U.S.C. § 7475(a)(4) that would exclude regulations that are enforceable by EPA through the administrative, civil and criminal enforcement provisions of the Clean Air Act. Therefore, CO₂ must be subject to a BACT limit in the permit.

Illinois (like most other states) has adopted CO₂ monitoring and reporting requirements into operating permits issues to pollution sources. Environmental Protection Act, Sections 39.5(7)(b) and 17(m); see e.g., Permit for Prairie State Generating Company, LLC, ID No. 189808AAB § 3 pp. 58-59, and Attachment 3 (April 28, 2005) (requiring that the facility comply with all applicable requirements in 40 C.F.R. part 75) (copy attached as Appendix B).. This incorporation of the CO₂ monitoring, recordkeeping and reporting requirements in 40 C.F.R. pt. 75 into Illinois Title V permits is consistent with the Title V program, 40 C.F.R. § 70.2 (defining "applicable requirement" to include requirements in regulations promulgated under Title IV). The incorporation of these requirements into the Title V permit further makes the CO₂ monitoring recordkeeping and reporting requirements enforceable pursuant to the Clean Air Act.

⁵ Wis. Admin. Code §§ NR 438.03(1)(a) (requiring reporting of pollutants listed in Table 1, including CO₂), adopted under the Act at 40 C.F.R § 52.2570(c)(70)(i), NR 439.095(1)(f) (Phase I and phase II acid rain units "shall be monitored for . . . carbon dioxide . . ."), adopted under the Act at 40 C.F.R. §§ 52.2570 (c)(73)(i)(l); 40 C.F.R. §§ 60.33c (requiring control of "MSW landfill emissions), 60.751 (defining "landfill emissions"); 63 Fed. Reg. 2154-01 (Jan. 14, 1998) (approving state plan for implementing landfill gas guidelines); Office of Air Quality Planning & Standards, U.S. EPA, Publ'n No. EPA-453/R-94-021, *Air Emissions from Municipal Solid Waste Landfills—Background Information for Final Standards and Guidelines* (December 1995) (identifying landfill emissions as including methane and CO₂).

42 U.S.C. §§ 7413(a)(1) (providing enforcement authority for violations of any permit), (a)(3) (providing for enforcement of any requirement of a Title V permit), (b) (providing for civil enforcement of any requirement in a permit and any requirement pursuant to Title V), (c)(1) (providing criminal enforcement for any violation of any requirement of a Title V permit), (d)(1)(B) (providing for administrative penalties for violating any requirement of Title V), 7604(f)(4) (providing for citizen suit enforcement of any standard, limitation, or schedule established under any Title V permit).

Furthermore, on April 29, 2008, the EPA approved and promulgated a state implementation plan revision submitted by the State of Delaware after notice and comment rulemaking. That SIP provision establishes CO₂ emission limits and operating requirements, CO₂ record keeping and reporting requirements, and CO₂ emissions certification, compliance and enforcement obligations for new and existing stationary electric generators. 73 Fed. Reg. 23,101 (April 29, 2008). Among other regulatory provisions, EPA approved emission standards for the pollutant carbon dioxide. Regulation 1144, which has now been adopted into federal law under the Clean Air Act at 40 C.F.R. § 52.420, provides that its purpose is to “ensure that emissions of... carbon dioxide (CO₂) from *stationary generators* in the State of Delaware do not adversely impact public health, safety, and welfare.” Del. Regulation No. 1144 § 1.1. The provisions incorporated into federal law prohibit emissions of CO₂ greater than 1900 lbs/MWh for existing distributed generators, 1900 lbs/MWh for new distributed generators, and 1,650 lb/MWh for new distributed generators installed on or after January 1, 2012. Regulation No. 1144: Control of *Stationary Generator* Emissions, §3.2. Once incorporated into federal law, these CO₂ limits are enforceable under the Clean Air Act. 42 U.S.C. §§ 7413(a) (providing for EPA enforcement of any requirement of any SIP), (b)(1) (providing for civil action for violating any requirement of a SIP), (c)(1) (providing for criminal prosecution for violation of any SIP

requirement), (d)(1)(A) (providing for administrative penalties for violating any SIP requirement), 7604(a)(1), (f)(3); *General Motors Corp. v. U.S.*, 496 U.S. 530, 540 (1990) (“The language of the Clean Air Act plainly states that EPA may bring an action for penalties or injunctive relief whenever a person is in violation of any requirement of an “applicable implementation plan.” § 113(b)(2), 42 U.S.C. § 7413(b)(2) (1982 ed.)”). In determining to approve the CO₂ limits into federal law under the Clean Air Act, EPA Region 3 stated in a memo:

Regulation No. 1144 contains provisions to control the emissions of nitrogen oxides (NO_x), nonmethane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), and carbon dioxide (CO₂) from stationary generators in the State of Delaware.

Regulation No. 1144 establishes emission standards in pounds per megawatt-hour (lbs/MWh) of electricity output under full load design conditions or at the total load conditions specified by the applicable testing methods.

...

CONCLUSIONS AND RECOMMENDED AGENCY ACTION:

Regulation No. 1144 adopted by the State of Delaware will result in the control of NO_x, NMHC, PM, SO₂, CO, and CO₂ emissions from stationary generators and will help the State in attaining compliance with the 8-hour ozone NAAQS. EPA approval of the SIP revision is recommended.

Memorandum from Rose Quinto, Environmental Engineer Air Quality Planning Branch, U.S.

EPA Region 3, Re: Technical Support Document - Delaware; Regulation No. 1144 – Control of Stationary Generator Emissions (January 25, 2008). There was no question that EPA was approving CO₂ emission limits into regulations under the Clean Air Act.

Lastly, CO₂ is also regulated in the landfill emission regulations promulgated under section 111 of the Clean Air Act. 40 C.F.R. §§ 60.33c (requiring control of “MSW landfill emissions). Landfill gas emissions include CO₂. 40 C.F.R. § 60.751 (defining “landfill

emissions” as all “gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.”); 63 Fed. Reg. 2154-01 (Jan. 14, 1998) (approving state plan for implementing landfill gas guidelines); Office of Air Quality Planning & Standards, U.S. EPA, Publ’n No. EPA-453/R-94-021, *Air Emissions from Municipal Solid Waste Landfills—Background Information for Final Standards and Guidelines* (December 1995) (identifying landfill emissions as including methane and CO₂). In other words, landfill gases are regulated, and CO₂ is a landfill gas—therefore, CO₂ is regulated.

The plain language and structure of the Act, regulations adopted under the Act, as well as EPA’s prior interpretations, confirm that the monitoring and reporting requirements applicable to CO₂ emissions constitute “regulation” within the meaning of Section 165. IEPA’s failure to include a BACT limit for CO₂ is clearly erroneous.

2. N₂O is Currently Regulated.

As noted above, pollutants regulated by approved state implementation plans are regulated under the Clean Air Act. While the serious threats posed by CO₂ emissions, due to its contribution to the damage occurring to the climate and storm patterns, it is also important that nitrous oxide (N₂O) emissions be controlled as they are 296 times as potent as CO₂ in their contribution to the climate crisis.⁶

N₂O is regulated in at least one State Implementation Plan approved by EPA, and therefore, is not only subject to, but is regulated under the Act. *See* Wis. Stat. §§ 285.60 (requiring air permits for all sources not otherwise exempted), 285.62(1); Wis. Admin. Code § NR 407.05, Table 3 (requiring permit application to include Nitrous Oxides if greater than 2,000 lbs/year). Moreover, nitrous oxide is also regulated under Wis. Admin. Code § NR 438.03(1)(a)

⁶ *See* Climate Change 2001: Working Group I: The Scientific Basis, available at http://www.grida.no/climate/ipcc_tar/wg1/248.htm.

and Table 1, adopted under the Act at 40 C.F.R. § 52.2570(c)(70)(i). Once a regulation is adopted as a component of the federally enforceable SIP, it is subject to regulation under the Clean Air Act. *General Motors Corp. v. U.S.*, 496 U.S. 530, 540 (1990) (“The language of the Clean Air Act plainly states that EPA may bring an action for penalties or injunctive relief whenever a person is in violation of any requirement of an “applicable implementation plan.” § 113(b)(2), 42 U.S.C. § 7413(b)(2) (1982 ed.)”). Therefore, a BACT limit is also required for N₂O.

C. The BACT Determinations for the Boiler Did Not Include a Sufficient Analysis of Cleaner Fuels and Production Processes.

A BACT analysis for a coal fired power plant must include consideration of cleaner production processes and innovative fuel combustion techniques. 42 U.S.C. § 7479(3) (BACT “means an emission limitation based on the maximum degree of reduction of each pollutant . . . through application of production processes. . . clean fuels . . .” (emphasis added)); 40 C.F.R. § 52.21(b)(12).

The phrase “clean fuels” was added to the definition of BACT in the 1990 Clean Air Act amendments. EPA described the amendment to add “clean fuels” to the definition of BACT at the time the Act passed, “as * * * codifying its present practice, which holds that clean fuels are an available means of reducing emissions to be considered along with other approaches to identifying BACT level controls.” EPA policy with regard to BACT has for a long time required that the permit writer examine the inherent cleanliness of the fuel.

In re Inter-Power of New York, 5 E.A.D. 130, 134 (EAB 1994) (emphasis added, internal citations omitted); *Knauf*, 8 E.A.D. at 136; *In re Old Dominion Electric Cooperative*, 3 E.A.D. 779, 794 n.39 (EAB 1992) (“BACT analysis should include consideration of cleaner forms of the fuel proposed by the source.”); *In re Hibbing Taconite Co.*, 2 E.A.D. 838, 842-43, PSD Appeal No. 87-3, Slip Op. 8-10 (EAB 1989) (remanding a permit because the permitting agency failed to consider burning natural gas as a viable pollution control strategy).

In the Project Summary, IEPA states that, “[w]hile natural gas has been used in recent years to supply MGP with steam, the cost of natural gas has risen significantly and MGP finds it desirable to switch to a fuel for its steam supply that is less expensive.” The Project Summary goes on to state that “MGP has made a business decision” to eliminate natural gas as an option that “does not necessarily need to be revisited by the Illinois EPA.” This is not a correct interpretation of the BACT requirement.

BACT is applicable regardless of an applicant’s business decision or desires. In fact, this issue was decided in *In re Hibbing Taconite Company*, 2 E.A.D. 838 (Adm’r 1989). In that case an applicant taconite processor sought a permit to modify its furnaces to burn petroleum coke, rather than the natural gas and fuel oil the plant was burning at the time of the application. *Id.* at 838-39. The EPA Administrator rejected the applicant’s argument that the permitting agency must accept the applicant’s business decision to burn natural gas “due to the depressed economic situation in the steel industry [and that] natural gas is now too costly.” *Id.* at 842. The Administrator reversed the permitting agency’s decision because: (1) the fact that the plant burned gas at the time of its application “creates a presumption that natural gas is a financially achievable alternative,” *Id.* at 842; (2) that the BACT analysis’ conclusion that burning natural gas would cost \$1310 per ton of SO₂ removed was not a “serious discussion of cost effectiveness”; and that the applicant must be required to “show that the natural gas alternative is not economically feasible.” *Id.*

In the *Hibbing* case, the EPA Administrator specifically rejected the argument that MGP might be tempted to make here: that burning clean fuel gas would “redefine the source.” *Id.* at 843. As the Administrator held:

Traditionally, EPA has not required a PSD applicant to redefine the fundamental scope of its project. However, this argument has not been made, and in any event, the argument has no merit in this case.

EPA regulations define major stationary sources by their product or purpose (e.g., “steel mill,” “municipal incinerator,” “taconite ore processing plant,” etc.), not by fuel choice. Here, Hibbing will continue to manufacture the same product (i.e., taconite pellets) regardless of whether it burns natural gas or petroleum coke. Likewise, the PSD guidelines state that in choosing alternatives to be considered in a BACT analysis, the applicant must look to what types of pollution controls other facilities in the industry are using. The record here indicates that there are other taconite plants that burn natural gas, or a combination of natural gas and other fuels. Thus, it is reasonable for Hibbing to consider natural gas as an alternative in its BACT analysis. Moreover, because Hibbing is already equipped to burn natural gas, this alternative would not require a fundamental change to the facility.

Id. at 843. This discussion applies equally in this case. The plant currently burns gas. It also intends to construct a gas boiler that is capable of meeting the plant’s needs (and will until the coal-boiler is constructed later). A number of similar plants, with the same SIC classification, rely on natural gas boilers, including, for example, a Cargill plant in Shelby County, Tennessee, the Didion Milling plant in Cambria, Columbia County, Wisconsin, and many others across the United States. It is our understanding that approximately 60 ethanol plants are either existing or being proposed in Illinois and over 90 percent (all but two) are served by gas-fired boilers, rather than coal boilers. Burning natural gas will not redefine the source—as it will continue to produce the same product from the same general production process regardless of what fuel is used to create steam. Therefore, it is reasonable to assume that the plant can continue to rely upon natural gas as a clean fuel, or alternatively to rely on running its gas boiler rather than coal boiler as a cleaner production process. Both options are required under a BACT analysis.

Natural gas is a fossil fuel, but is significantly cleaner than coal. It contains no sulfur, no mercury, and emits a fraction of the carbon dioxide emissions. Natural gas is an available fuel—it is currently the fuel that powers the existing source for MGP’s steam, the fuel that MGP is planning to use until the coal-fired boiler is operational, and the fuel that MGP plans to use from time to time when its coal boiler is off-line. Thus, using natural gas would not require the “plant

to be redesigned from the ground up” or “that the plant undergo significant modifications.”

Sierra Club v. U.S. E.P.A., 499 F.3d 653, 655 (7th Cir. 2007). Rather, MGP is currently set-up for natural gas. Additionally, even under MGP’s proposed construction plan, it will be set up to burn natural gas with the proposed new natural gas boiler . It will rely entirely on gas generated steam unless and until the proposed coal boiler is built. The top-down BACT analysis must therefore consider the use of natural gas generated steam as clean fuel, clean production process, or both. Ideally, the plant would rely on a high-efficiency combined cycle natural-gas fired cogeneration plant to a coal-fired boiler. Such a boiler would be more efficient, *i.e.* less fuel, and would emit a fraction of the emissions.

“Where the applicant proposes to eliminate the most stringent control alternative on the grounds that it is not ‘economically’ achievable, EPA guidance provides that the record must show that the option is not cost-effective.” *Inter-Power*, 5 E.A.D. at 134; see also NSR Manual at B.31. Indeed,

[An] applicant should demonstrate to the satisfaction of the permitting agency that costs of pollutant removal for the control alternative are disproportionately high when compared to the cost of control for that particular pollutant and source in recent BACT determinations.

NSR Manual at B.32. See also *Hibbing Taconite*, 2 E.A.D. at 842 (requiring applicant to “provide a detailed consideration of objective economic data, noting that there “was no serious discussion of cost effectiveness,” and concluding that “[g]reater efforts must be made by the applicant to show that the natural gas alternative is not economically feasible”). This was not done here.

Here, it appears that IEPA’s statement that “the calculated cost-effectiveness of using gas . . . as a means to control SO₂ emissions is on the order of \$50,000 per ton” is based on a single paragraph contained in December 2007 letter from MGP’s consultants. That paragraph

contains no citations or explanation for how the figures were generated. We did not find back-up documentation in the materials provided in response to our request for all documents pertaining to the permit application. This makes it impossible for the public to comment on MGP's calculations and to evaluate whether the various costs of the fuels were added or removed appropriately (such as capital costs, financing, emission rates, waste handling, pollution control, etc.). Clearly, this is not the "serious discussion of cost effectiveness" required to justify rejecting a higher ranked pollution reduction option. *See Hibbing*, 2 E.A.D. at 842.

If a more robust analysis was done and made public, Sierra Club would have an opportunity to comment on it. In fact, that opportunity is required if IEPA is to concur with the applicant's rejection of clean fuels and clean processes, as IEPA purports to do in the draft permit. The deficient analysis in the record and available for public comment prevents a meaningful public analysis. For example, one obvious issue is that the price of Illinois coal has roughly doubled over the past year. MGP assumes a \$30 per ton figure in its December 2007 letter, but Illinois basin coal has risen to a current figure of \$71 per ton.⁷ Another example is the relative cost of a new coal boiler vs. relying instead on the steam supply already being provided, or relying on the proposed new gas boiler alone. It is not clear what costs were included or excluded for the truncated "cost effectiveness" analysis IEPA did. A transparent cost effectiveness analysis is especially necessary here because the construction prices for coal handling equipment, boilers, and other similar equipment has experienced drastic increases, it is unlikely that the capital cost of an additional coal boiler and associated equipment is cost-effective in terms of dollars per ton of additional air pollution. The public must be given an opportunity to review and comment on such analysis before the permit is issued. At a minimum, IEPA should require a robust cost effectiveness analysis that follow's the guidance in the

⁷ Energy Information Administration, Official Energy Statistics from the U.S. Government, Coal News and Markets Report dated August 4, 2008 (available at <http://www.eia.doe.gov/cneaf/coal/page/coalnews/coalmar.html>).

OAQPS Cost of Control manual, and provide that documentation to the public in a new 30-day notice and comment period.

Further, to the extent IEPA relies on MGP's cursory discussion, that analysis is not sufficient to demonstrate that the price of using natural gas is not "cost effective." NSR Manual at B.31; *Hibbing*, 2 E.A.D. at 842. Most pollution controls will cost money; but, Congress did not permit pollution sources to escape pollution control merely because it might cost money. "BACT is required by law. Its costs are integral to the overall cost of doing business and are not to be considered an afterthought." *Id.* at B.31 ("In the economical impacts analysis, primary consideration should be given to quantifying the cost of control and not the economic situation of the individual source."); *see also Alaska Dep't of Environmental Conservation v. EPA*, 124 S.Ct. 983, 1005 (2004) (upholding EPA's order rejecting a BACT analysis that eliminated a pollution control option on claims of economic infeasibility without an adequate record); *Hibbing Taconite*, Slip Op. at 8 ("Mere generalizations about the economic woes of the steel industry are not enough."). Here, there was no demonstration by the applicant nor the agency that would justify ignoring the lower emissions achievable with cleaner fuel.

IEPA's discussion of lower sulfur coal is also deficient and is not supported by any evidence in the permit record that we reviewed. In its analysis, IEPA rejects cleaner coal for the following purported reasons:

- Undefined "concerns about cost" because low sulfur coal is used nationally;
- Undefined "concerns about... operational issues that would be posed for delivery of lowsulfur coal to the plant" because IEPA appears to assume that low sulfur coal must be PRB coal, and such coal must be delivered by unit trains, and IEPA's conclusion that unit trains cannot deliver to MGP

This is an insufficient “analysis.” Lower sulfur coal seams are available in Illinois. First, there is no discussion about limiting coal sulfur content to lower sulfur coals available in Illinois. Second, there is no basis for assuming that delivery of low sulfur coal is any different than for Illinois coal. Some plants burning low sulfur coal receive delivery by truck or small train deliveries, and some plants burning Illinois coal receive delivery by large trains. Third, even if certain changes to the fuel receiving portions of the plant would need to be redesigned to accommodate cleaner fuels, such changes must be considered in a top-down BACT analysis. See e.g., *In re East Kentucky Power Cooperative, Inc., Hugh L. Spurlock Generating Station*, Title V Petition No. V-06-007, Order Responding to Petitioner’s Request that the Administrator Object at 30 (Adm’r Aug. 30, 2007) (finding that the state permitting agency failed to justify an SO₂ BACT limit and “needs to provide additional analysis and/or a justification for its determination that use of lower sulfur coal was not can achievable option for Spurlock Unit 4.”) (available at http://www.epa.gov/region07/programs/artd/air/title5/petitiondb/petitions/east_kentucky_spurlock_response2006.pdf); *NSR Manual* at B.32.

Additionally, the Seventh Circuit specifically warned that the *Prairie State* decision should not be read as broadly allowing the “redefining” policy to trump the “clean fuels” provision in the Act, merely because some changes may be necessary to the plant in order to burn cleaner fuel.

Suppose this were not to be a mine-mouth plant but *Prairie State* had a contract to buy high-sulfur coal from a remote mine yet could burn low-sulfur coal as the fuel source instead. *Some adjustment in the design of the plant would be necessary in order to change the fuel source from high-sulfur to low-sulfur coal... but if it were no more than would be necessary whenever a plant switched from a dirtier to a cleaner fuel the change would be the adoption of a “control technology.” Otherwise “clean fuels” would be read out of the definition of such technology.*

[Some passages in the Board’s *Prairie State* decision] might be read as merging two separate issues: the difference between low-sulfur (clean) and high-sulfur (dirty) coal as a fuel source for a power plant, and the difference between a plant co-located with a coal mine and a plant that obtains its coal from afar. The former is a difference in control technology, the latter a difference in design (or so the EPA can conclude). We think it is sufficiently clear... that the Board did not confuse the two issues; that it granted the permit not because it thinks that *burning* low-sulfur coal would require the redesign of Prairie State’s plant (it would not), but because *receiving* coal from a distant mine would require Prairie State to reconfigure the plant as one that is not co-located with a mine, and this reconfiguration would constitute a redesign.

Sierra Club v. E.P.A., 499 F.3d 653, 656 (7th Cir. 2007) (emphasis added in first paragraph, original in second paragraph). In other words, plant design changes necessary to burn cleaner fuel, as well as changes to the applicant’s preferences or expectations must be considered so that Congress’ command to based BACT limits on clean fuels is given effect. Here, the MGP facility is no co-located at a mine mouth and will receive coal through delivery—whether high sulfur or low sulfur fuels. To the extent that IEPA claims that the design changes necessary to receive lower sulfur coal are not cost-effective, there is no documentation or discussion in the background materials sufficient to meet MGP and IEPA’s burden to demonstrate that higher-ranked clean fuels should be rejected as BACT.

IEPA should require MGP to provide a comprehensive analysis of the economic feasibility of using natural gas as fuel. This analysis should be made available to the public for comment before any permit issues.⁸

III. THE PERMIT UNLAWFULLY ALLOWS THE FACILITY TO BURN FUELS OTHER THAN THOSE REVIEWED FOR THE PERMIT ISSUANCE.

In the Project Summary. IEPA states that:

While other solid fuels could be used to “supplement” or take the place of some of the Illinois coal, MGP would not be required by the permit to use specific quantities of such supplemental fuels in the boiler. The use of such supplemental fuels would be at the

⁸ Sierra Club reserves the right to comment on or challenge such an analysis if and when it is provided.

discretion of MGP, subject to the general obligation that the boiler continue to comply with applicable requirements and limits when using such supplemental fuels and that any requirements associated with use of particular supplemental fuels were satisfied.

Project Summary at n.1. This is unlawful to the extent it purports to allow MGP to burn fuels that were not reviewed by IEPA. First, it conflicts with 40 C.F.R. § 52.21(r), which requires construction and operation according to the application or, if inconsistent, with the terms of the permit. Second, it allows off-permit changes to project scope and properties that were not subject to public notice and comment. Moreover, IEPA appears to be conceding that other fuels are available and cost effective. If such available supplemental fuels produce less air pollution, they must be reviewed in a top-down BACT analysis and BACT limits must be based on these cleaner fuels, unless MGP can demonstrate that there is a valid cost, environmental, or energy collateral impact that justifies rejection in favor of the dirtier Illinois coal. In other words, IEPA and MGP cannot have it both ways by setting BACT limits based on dirty Illinois coal and refusing to consider other fuels, but then allow the permittee at its sole discretion to burn anything else.

IV. THE NO_x BACT LIMIT IS NOT BASED ON MAXIMUM DEGREE OF REDUCTION FROM THE TOP-RANKED CONTROL OPTION.

MGP does not explain how it derived a 0.1 lb/MMBtu NO_x limit. The Draft Permit states that “emissions from the affected boiler will be controlled by low-NO_x burners, a selective catalytic reduction (SCR) system, a scrubber system and a baghouse.” Conservatively assuming a high boiler outlet NO_x rate of 0.4 lb/MMBtu, an SCR can achieve a 90% reduction, resulting in a BACT limit of 0.04 lb/MMBtu. This is much lower than the 0.1 lb/MMBtu limit proposed for MGP. The only explanation appears to be the following statement from MGP’s consultants: “Due to the fact that the MGP operations requires [sic] frequent load changes, the requested BACT NO_x emissions limit is 0.10 lb/MMBtu” December 21, 2007 Letter at 9. This is an

inadequate explanation for why the BACT limit was set at 0.1 lb/MMBtu— certainly it is not consistent with a top-down analysis. Furthermore, a BACT analysis must consider transfer technology and such technology's demonstrated effectiveness at other facilities. Low NOx burners and SCR technology is typically used at coal fired electric generating units and has been the basis for BACT limits at 0.05 lb/MMBtu over short averaging periods (i.e., 24 hours). Moreover, numerous existing plants are achieving NOx emissions much lower than the 0.10 lb/MMBtu proposed as BACT for MGP.

Table 1. Achieved NOx Emissions (lb/MMBtu)

YEAR-ROUND

Facility Name	Unit	Highest 30-Day Rolling Average	Period of Operation
W A Parish	WAP5	0.059	4/2003 - 6/2006
W A Parish	WAP6	0.048	4/2003 - 6/2006
W A Parish	WAP7	0.054	3/2004 - 6/2006
W A Parish	WAP8	0.048	11/2003 - 6/2006

OZONE SEASON

Facility Name	Unit	Highest 30-Day Ozone Season Rolling Average			SCR Start Date
		2003	2004	2005	
Ghent	CS02	NA	0.063	0.031	May 2004
Trimble County	1	0.097	0.045	0.034	2002
Havana	9	NA	NA	0.035	May 2005
Chesapeake	3	0.086	0.048	0.036	June-July
Chesterfield	6	0.382	0.054	0.037	2003
Chesterfield	5	0.100	0.046	0.044	May 2003
Cardinal	3	0.121	0.054	0.044	May 2003
Pleasants	2	0.076	0.046	0.045	May 2003
Cardinal	1	0.627	0.088	0.045	2003
Colbert	5	NA	0.050	0.047	May 2004
John E Amos	CS012	NA	NA	0.047	May 2005
Mountaineer	1	0.064	0.060	0.048	2002
Pleasants	1	0.141	0.057	0.050	May 2003
Petersburg	3	NA	0.078	0.050	May 2004
Mill Creek	3	0.393	0.046	0.051	2003
Keystone	1	0.048	0.137	0.051	May 2003
Ghent	1	NA	0.071	0.052	May 2004
Cardinal	2	0.102	0.072	0.052	May 2003
Mill Creek	4	0.350	0.049	0.055	2003
Bowen	1BLR	0.068	0.066	0.058	2001
Bowen	2BLR	0.060	0.061	0.061	2001
Bowen	4BLR	0.060	0.058	0.062	2003
Bowen	3BLR	0.067	0.055	0.065	2003
Hammond	4	0.059	0.062	0.066	2002
James H Miller Jr	3	0.069	0.065	0.068	May 2003
Dan E Karn	2	0.097	0.047	0.070	May 2003

There is no basis to believe that the same technology cannot achieve at least as stringent BACT limit for the MGP boiler merely because the steam will be used in an industrial process in addition to electric generation. IEPA should require MGP to further discuss the reasoning for this limit, including why MGP cannot achieve the same BACT limit as other coal boilers using

the same technology, and must make that analysis available for public comments before any permit issues.

V. THE PERMIT MUST CONTAIN A REQUIREMENT THAT THE APPLICANT OBTAIN A NEW BACT AND MODELING ANALYSIS FOR ANY EMISSION SOURCE THAT DOES NOT COMMENCE CONSTRUCTION WITHIN 18 MONTHS.

The Draft Permit states that it “shall become invalid if construction of the affected boiler is not commenced within 18 months” after the effective date of the permit. Draft Permit, Project Condition 1.8(b)(i). This requirement must clarify that a new BACT determination and modeling analysis must be obtained for any emission source that does not commence construction within 18 months. Because this project will be a staged construction project, including two boilers to be constructed and brought online at different times, the permit must provide for revisiting the BACT limits for any unit that does not commence construction within 18 months, or that has a gap in the construction schedule of 18 months.

Additionally, as written, the provision could be misinterpreted to mean that the same BACT determinations and modeling analyses could be reused in a new permit application. If 18 months passes, a new BACT analysis must be done. Also, the current provision refers only to “construction of the affected boiler” when it should refer to construction of any emission source.

VI. FAILURE TO INCLUDE SHORT TERM SO2 LIMITS.

Unlike limits for other pollutants, that are subject to short-term limits corresponding to the applicable NAAQS averaging time, there are no short-term SO₂ limits. See e.g., Proposed Permit § 2.1.2.b. Instead, SO₂ is limited only to a 30-day average and only in a pound-per-heat-input basis, which does not limit hourly emissions without a corresponding hourly heat input limit. Moreover, the SO₂ limit does not apply for the first 18 months of operation. This is insufficient to demonstrate compliance with short term NAAQS. When no hourly permit emission limits are required (or short-term emission limits that correspond to the air quality

standard or increment periods, i.e., a 3-hour limit for 3-hour SO₂ NAAQS), the emissions from the plant are only limited by the physical limits of the plant (i.e., maximum theoretical emissions). This represents the worst-case scenario for emissions, which must be used to model air impacts.

For both NAAQS and PSD increment compliance demonstrations, the **emissions rate** for the proposed new source or modification must reflect the maximum allowable operating conditions as expressed by the federally enforceable **emissions limit, operating level, and operating factor** for each applicable pollutant and averaging time.

NSR Manual at C.45 (emphasis original); 70 Fed. Reg. 68,218, 68,240 (Nov. 9, 2005) (“At a minimum, the source should be modeled using the design capacity (100 percent load)”).

VII. FAILURE TO INCLUDE MACT LIMITS.

The permit does not include case-by-case MACT limits. The existing facility with the proposed additional emission sources is a major source for hazardous air pollutants. The proposed addition of two boilers and associated equipment is a “modification” within the meaning in 42 U.S.C. § 7412(g)(2)(A) because it is a “physical change in, or change in the method of operation of, a major source which increases the actual emission of any hazardous air pollutant emitted by such source by more than a de minimus amount or which results in the emission of any hazardous air pollutant not previously emitted by more than a de minimus amount.” 42 U.S.C. § 7412(a)(5). In other words, the project will both increase HAP emissions and will result in emissions of HAPs that were not previously emitted. While the project may not constitute a construction or reconstruction under § 7412(g)(2)(B), it is nevertheless a modification under the plain statutory language of § 7412(g)(2)(B). Therefore, the facility must be subject to a case-by-case MACT limit determined before construction can start.

VIII. FAILURE TO CONSULT REGARDING ENDANGERED SPECIES.

PSD permits are actions subject to the section 7 endangered species act consultation requirements. In a letter dated March 12, 2007, MGP's consultants requested that EPA consult with the U.S. Fish and Wildlife Service concerning the project and threatened and endangered species. We did not receive any information in the documentation provided to us that this consultation occurred. Consultation must be conducted and its results made available to the public prior to the close of the comment period, particularly if the consultation involves consideration of endangered plant species. Any consultation must consider endangered species that may be impacted by the proposed source, as well as the areas impacted by the proposed fuel source.

CONCLUSION

For the foregoing reasons, Sierra Club respectfully requests that the permit be denied until significant additional analyses and modifications are made and the public has had another opportunity to review and comment on a revised draft permit. Thank you for considering these comments.

Respectfully submitted,

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