BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the matter of:

SIERRA CLUB, Complainant, v. AMEREN ENERGY MEDINA VALLEY COGEN, LLC and FUTUREGEN INDUSTRIAL ALLIANCE INC., Respondents.	)	PCB No. 2014-134 (Enforcement)

NOTICE OF FILING

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PLEASE TAKE NOTICE that on this date I filed with the Clerk of the Pollution Control

Board of the State of Illinois Sierra Club's: (1) MEMORANDUM IN OPPOSITION TO RESPONDENTS' MOTION FOR SUMMARY JUDGMENT; (2) MEMORANDUM IN OPPOSITION TO FUTUREGEN'S MOTION TO EXPEDITE; (3) DECLARATION OF KRISTIN HENRY; (4) MOTION FOR EXTENSION OF TIME AND A CONTINUANCE TO ALLOW FOR DISCOVERY NECESSARY TO RESPOND TO SUMMARY JUDGMENT AND INCORPORATED MEMORANDUM IN SUPPORT; (5) MOTION TO STRIKE AND INCORPORATED MEMORANDUM IN SUPPORT, and (6) CERTIFICATE OF SERVICE. Pursuant to the Board's procedural rules, the documents referenced above are served upon Respondents addressed as set forth above by Federal Express. 35 Ill. Adm. Code 101.302(c).

Respectfully submitted,

DATED: August 25, 2014

/s/ Eric Schwing (by consent)

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In the matter of:

SIERRA CLUB,	)	
	)	
Complainant,	)	
	)	
vs.	)	
	)	PCB No. 2014-134
AMERENENERGY MEDINA VALLEY COGEN, LLC	)	(Enforcement)
	)	
and	)	
	)	
FUTUREGEN INDUSTRIAL ALLIANCE INC.,	)	
	)	
Respondents.	)	

SIERRA CLUB'S MEMORANDUM IN OPPOSITION TO RESPONDENTS' MOTION FOR SUMMARY JUDGMENT

Complainant Sierra Club respectfully submits its memorandum in opposition to Respondents' Motion for Summary Judgment.

I. INTRODUCTION

On June 11, 2014, Sierra Club filed this citizen enforcement action with the Illinois Pollution Control Board ("IPCB" or "Board") pursuant to the Illinois Environmental Protection Act § 31(d), 415 ILCS 5/31(d), against Respondents, AmerenEnergy Medina Valley Cogen, LLC and FutureGen Industrial Alliance Inc. (collectively "Respondents"), alleging that Respondents'

proposal to construct a new boiler (Unit No. 7) at the Meredosia Energy Center in Meredosia, Illinois (the "FutureGen project") without obtaining a Prevention of Significant Deterioration ("PSD") permit violates Section 9.1(d) of the Illinois Environmental Protection Act. 415 ILCS 5/9.1(d). Section 9.1(d) incorporates by reference Section 165 of the Clean Air Act, 42 U.S.C. § 7475, and all federal PSD-related regulations, and requires limits reflecting the best available control technology ("BACT"). Such limits should pose no significant hurdle to the FutureGen project, which has been repeatedly touted as a state-of-the-art "near zero emissions" project.

In response, Respondents filed a motion for summary judgment on July 15, 2014. Without citing to any pertinent legal authority, Respondents broadly contend that Sierra Club's action must be dismissed on summary judgment because the FutureGen project has received a minor source construction permit from the Illinois Environmental Protection Agency ("IEPA") issued pursuant to 35 Ill. Adm. Code § 201.142, which was based in part on IEPA's conclusion that the FutureGen project was not subject to PSD.

As explained below, Respondents' unsupported legal arguments lack merit. Sierra Club's Complaint sets forth a valid claim for relief pursuant to 415 ILCS 5/31.1(d) and 415 ILCS 5/9.1(d) and there is no legitimate grounds for contending that Sierra Club's claim pursuant to Illinois state law is barred simply because the IEPA issued the FutureGen project a minor source permit and disagrees with Sierra Club's legal analysis on PSD issues. *See Weiler v. Chatham Forest Products, Inc.*, 392 F.3d 532, 546 (2d Cir. 2004) ("a state determination that a prospective source of air pollution is not a major emitting facility does not prevent a private plaintiff from bringing a suit seeking to enjoin the construction of the facility pursuant to . . . § 7604(a)(3)."); *NRDC v. BP Prods. N. Am., Inc.*, 2009 U.S. Dist. LEXIS 54363, at *17-23 (N.D. Ind. June 26,

2009) (Ex. 1); *United States v. Louisiana-Pacific Corp.*, 682 F. Supp. 1122, 1129-1134 (D. Colo. 1987); *Ogden Projects, Inc. v. New Morgan Landfill Co., Inc.*, 911 F. Supp. 863, 866-68 (E.D. Pa. 1996); *Citizens for Pennsylvania's Future v. Ultra Res., Inc.*, 898 F. Supp. 2d 741, 745-49 (M.D. Pa. 2012).

Furthermore, as set forth in Sierra Club's Motion for Extension of Time and a Continuance to Allow for Discovery Necessary to Respond to Summary Judgment and Incorporated Memorandum in Support ("Motion for Continuance"), which is hereby incorporated by reference, summary judgment should be denied because Respondents' motion is premature or, at a minimum, Sierra Club must be afforded an opportunity to engage in reasonable discovery prior to having to provide a full response to Respondents' motion. *See, e.g., Jiotis v. Burr Ridge Park Dist.*, 2014 IL App (2d) 121293, at 24-30, 44-50 (Ill. App. Ct. 2d Dist. 2014); *Williams v. Covenant Med. Ctr.*, 316 Ill. App. 3d 682, 688 (Ill. App. Ct. 4th Dist. 2000).

Finally, Respondents' legal contentions and evidentiary support fail to present a case which "precludes all possibility of liability," *Malone v. Am. Cyanamid Co.*, 271 Ill. App. 3d 843, 845-46 (Ill. Ct. App. 4th Dist. 1995) (citing *Motz v. Central National Bank*, 119 Ill.App.3d 601, 604-05 (Ill. App. Ct. 1st Dist. 1983)), since, as a matter of law, Sierra Club may pursue and prevail on its claim regardless of whether the FutureGen project has obtained a minor source construction permit. *See, e.g.*, *Weiler*, 392 F.3d at 546. Consequently, Sierra Club may rely solely upon its Complaint to establish material questions of fact. *Malone*, 271 Ill. App. 3d at 845-46 (citing *Motz*, 119 Ill.App.3d at 604-05)). In this instance, Sierra Club's Complaint states a viable claim which can be proven under multiple legal theories. Each of the exemplary, but by

no means exclusive, theories discussed below are fairly encompassed by the allegations of Sierra Club's Complaint, provide a sound legal basis for Sierra Club to prevail on its claim, and are laden with disputed issues of fact that preclude summary judgment.

For all these reasons, the Board should deny Respondents' motion for summary judgment.

II. FACTUAL, PROCEDURAL AND REGULATORY BACKGROUND

As stated above, this case involves Respondents' unlawful proposal to construct a new boiler (Unit No. 7) at the Meredosia Energy Center in Meredosia, Illinois without obtaining a Clean Air Act PSD permit which is required as a matter of state law pursuant to Section 9.1(d) of the Illinois Environmental Protection Act for the construction, installation, modification and operation of the proposed new unit. 415 ILCS 5/9.1(d) (incorporating by reference Section 165 of the Clean Air Act, 42 U.S.C. § 7475, and all associated implementing regulations). Although this action involves the application of state law, it is premised on the requirements of the Clean Air Act's PSD program. Despite that fact, Respondents' motion to dismiss focuses on IEPA's minor source permitting action for the FutureGen project.

Pursuant to Illinois's minor source permitting rules set forth at 35 Ill. Adm. Code § 201.142, Respondents applied for a minor source construction permit for the FutureGen project, and tIEPA issued a draft construction permit on approximately August 13, 2013. From August 24, 2013 through November 8, 2013, IEPA received public comment on the draft minor source construction permit. On October 9, 2013, IEPA held a public hearing, during which Sierra Club submitted public comments. Subsequently, on December 13, 2013, IEPA issued a final minor source construction permit for the FutureGen project. And in the process of issuing that final

minor source permit, IEPA concluded that a PSD permit was not required for the FutureGen project.

FutureGen's minor source permit was not issued pursuant to Illinois' delegated PSD permitting authority. On the contrary, despite Respondents' citation to 46 Fed. Reg. 9582 in their Memorandum in Support of the Motion for Summary Judgment ("MSJ") at 4-5, the minor source permit was issued pursuant to an Illinois state program under 35 Ill. Adm. Code § 201.142. *Cf.* 46 Fed. Reg. 9582 (Jan. 29, 1981)(delegating the U. S. Environmental Protection Agency's ("EPA") PSD permitting authority to Illinois). This distinction is important here.

In 1977, Congress amended the Clean Air Act ("CAA" or "Act"), 42 U.S.C. § 7401 *et seq.*, and created the PSD program. *Alaska Department of Environmental Conservation v. Environmental Protection Agency*, 540 U.S. 461, 470-71 (2004). The PSD program was designed to ensure that air quality in areas attaining air quality standards[1] established by EPA will not degrade. *Id.* To accomplish this goal, the Act provides, among other things, that a newly constructed or modified "major emitting facilit[y]," 42 U.S.C. § 7479(1), may not be "constructed" unless it has obtained a permit "setting forth emission limitations for such facility" consistent with the elements of the program. 42 U.S.C. § 7475(a)(1). These emission limitations, known as BACT, 42 U.S.C. § 7479(3), are an essential component of the PSD program.

Unlike most states, Illinois does not have a PSD program which has been approved as part of Illinois state implementation plan ("SIP"). 40 C.F.R. § 52.738(a); *see also* EPA's Graphic of Each States' "Prevention of Significant Deterioration (PSD) Permit Program Status as of April 2013" (http://www.epa.gov/nsr/where.html). Instead, Illinois is a delegated state, meaning that EPA has delegated to Illinois the responsibility to issue PSD permits on EPA's

[1] These are referred to as National Ambient Air Quality Standards ("NAAQS").

behalf. *See* 46 Fed. Reg. 9580 (Jan. 29, 1981); 40 C.F.R. § 52.738(c); *see also In re Power Holdings of Illinois, LLC*, 14 E.A.D. 723, 728 and n. 8 (EAB 2010);[2] *In Re Indeck-Elwood, LLC*, 13 E.A.D. 126, 128 (EAB 2006). Accordingly, the federal PSD regulations implement the Clean Air Act's PSD program in Illinois and the agency ultimately responsible for this program is the EPA. 40 C.F.R. § 52.738(b); *Power Holdings*, 14 E.A.D. at 728. And when Illinois issues PSD permits, those permits are deemed "federal" permits issued by EPA. *Indeck-Elwood*, 13 E.A.D. at 128. As a consequence of this arrangement, third parties like Sierra Club may appeal PSD permits issued by Illinois to EPA's Environmental Appeals Board ("EAB"), *Power Holdings*, 14 E.A.D. at 728 (citing 40 C.F.R. § 124.19.8), and third parties may in turn appeal EAB decisions to an appropriate U.S. Courts of Appeal. *See generally Sierra Club v. EPA*, 499 F.3d 653, 654 (7th Cir. 2007).

On the other hand, minor source construction permits like the one issued for FutureGen are not subject to any appeal by third parties such as Sierra Club and only applicants may challenge such permits. *See* 415 ILCS 5/40. And, contrary to the assertion in Respondents' MSJ at 7 (alleging, without evidentiary support, that EPA rejected Sierra Club's legal analysis submitted in comments in the permitting process),[3] EPA has no formal role in the issuance of permits under the Illinois minor source permitting program. Minor source construction permits are issued pursuant to authority afforded under state, not federal law, and pursuant to Illinois' minor source air permitting rules, 35 Ill. Adm. Code § 201.142 and Illinois' statutory and

[2] U.S. EPA's Environmental Appeals Board decisions are available here: http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/Board+Decisions?OpenPage.

[3] Respondents claim that EPA has rejected Sierra Club's contentions made in it comments on the Draft FutureGen minor source construction permit but has failed to supply any evidence to support that allegation. 35 Ill. Adm. Code 101.504 (citing Section 1-109 of the Code of Civil Procedure, 735 ILCS 5/1-109). Based on the record, Sierra Club disputes that unsubstantiated allegation.

administrative procedures. EPA has no right to approve or object to any minor source permit and no legal obligation to do so. Accordingly, any statements made by EPA in the minor source permitting process involving the FutureGen project have no greater significance than any other public comment and do not constitute final agency action. In addition, because the EAB only has jurisdiction over actually issued PSD permits, the EAB does not have jurisdiction to hear appeals of minor source permits issued under state law, even when those permits are improperly issued to major emitting facilities which propose to construct without a required PSD permit. *See In re: Carlton, Inc. North Shore Power Plant*, 9 EAB 690, 692-693 (EAB 2001) (dismissing for lack of jurisdiction citizen groups' challenge to a minor source permit issued by Illinois based on a claim that the source is actually a major source).[4] Because Sierra Club has had no opportunity to challenge the issuance of FutureGen's minor source construction permit in any forum, no collateral estoppel or res judicata claims are justified. *See generally Ford Motor Credit Co. v. Cornfield*, 395 Ill. App. 3d 896, 907-911 (Ill. App. Ct. 2d Dist. 2009).

To be clear – Sierra Club is not challenging the issuance of the FutureGen minor source permit. Sierra Club is pursuing a claim that the proposal to construct the FutureGen project, as configured and permitted, violates Section 9.1(d) of the Illinois Environmental Protection Act, 415 ILCS 5/9.1(d) because the project lacks a PSD permit that imposes BACT limits. The lack of an opportunity to challenge the minor source permitting action is thus of little moment, except to the extent that it undermines any collateral attack arguments or any contentions that this action

[4] The EAB also stated that plaintiffs "presumably have a right to challenge those calculations under the state system of review." *Id.* The EAB likely presumed this because most states do provide administrative and judicial review for minor source permits. *See, e.g., NRDC*, 2009 U.S. Dist. LEXIS 54363, at *2-4 (Indiana provides an opportunity to challenge minor source permits in an administrative forum with discovery and a de novo, trial-type hearing) (Ex. 1). Those decisions are then appealable to Indiana state courts. *Id.* at *10. However, Illinois does not provide a state system of review, so the EAB's presumption was incorrect.

is duplicative. *Sierra Club v. Midwest Generation*, LLC, PCB 13-15, Slip Op. at 21-23 (October 3, 2013) ("other forum" means another adjudicatory proceeding before an administrative or judicial tribunal with jurisdiction to resolve the merits of the same dispute with parties as participants).[5]

In this context, Sierra Club had two potential avenues for addressing its PSD-related claims against Respondents. The most straight forward approach was to file a federal citizen suit pursuant to Clean Air Act § 304(a)(3), 42 U.S.C. § 7604(a)(3), against the Respondents in federal court based on their unlawful proposal to construct a modified major emitting facility without a required PSD permit in violation of Section 165(a) of the Clean Air Act, 42 U.S.C. § 7475(a). On December 9, 2013, Sierra Club did that. However, that action was dismissed on June 9, 2014. *Sierra Club, Inc. v. FutureGen Indus. Alliance*, 2014 U.S. Dist. LEXIS 77902, at *7-8, (C.D. Ill. June 9, 2014) (Ex. 2). Respondents' MSJ at 1 notes the dismissal but fails to mention that the district court refrained from addressing the merits of Sierra Club's claims. Instead, the Court dismissed the case without prejudice based on the *Burford* abstention doctrine, finding, after careful study of the procedures available through the IEPA, IPCB and "Chapter I of Title 35 of the Illinois Administrative Code . . . [that] it is evident that Illinois offers a clear and impartial forum, through the IPCB, where Plaintiff's claims may be litigated." *FutureGen Indus. Alliance*, 2014 U.S. Dist. LEXIS 77902, at *13.

In that federal litigation, Respondents submitted a reply brief to their motion for judgment on the pleadings, which asserted that Sierra Club had the right pursuant to 415 ILCS 5/31(d)(1) and 415 ILCS 5/9.1(d) to pursue a claim before the Board based on an alleged

[5] The Respondents' motion for summary judgment does not assert that Sierra Club's Complaint is frivolous or duplicative, nor could it.

violation of the PSD permitting requirements of Section 165 of the Clean Air Act, 42 U.S.C. § 7475. *See* Defendants' Reply in Support of Their Motion to Dismiss Under Rule 12(B)(1) and for Judgment on the Pleadings Under Rule 12(C) at 2-3 (Ex. 3) ("Illinois law allows any person to bring . . . challenges based on violations of CAA §165 before the Illinois Pollution Control Board."). Respondents also submitted a supplemental memorandum elaborating on the discovery procedures which would be available to Sierra Club in such proceedings. Defendants' Supplemental Briefing in Support of Their Motion to Dismiss and Motion for Judgment on the Pleadings at 1-4 (Ex. 4).

Following the federal court's dismissal without prejudice, Sierra Club filed this action with the Board on June 11, 2014, alleging that the FutureGen project violates state law due to its failure to obtain a required PSD permit. Respondents now argue that the Board should dismiss Sierra Club's complaint on summary judgment without any opportunity for discovery, suggesting that Respondents' assertions in federal court were disingenuous.

III. THE SUMMMARY JUDGMENT STANDARD

The standard that is applicable to Respondents' motion in this proceeding is set forth at 35 Ill. Adm. Code § 101.516(b). That rule provides that "'[i]f the record, including pleadings, depositions and admissions on file, together with any affidavits, shows that there is no genuine issue of material fact, and that the moving party is entitled to judgment as a matter of law, the Board will enter summary judgment.'" *Des Plaines River Watershed Alliance v. IEPA*, PCB 04-88, slip op. at 7 (Nov. 17, 2005) (quoting 35 Ill. Adm. Code § 101.516(b)). This is the same summary judgment standard applied in Illinois trial courts pursuant to section 2-1005 of the Illinois Code of Civil Procedure, 735 ILCS 5/2-1005, *see Ill. EPA v. Ill. Pollution Control Bd.*,

386 Ill. App. 3d 375, 390-391 (Ill. App. Ct. 3d Dist. 2008). Thus, Illinois state court case law is relevant and persuasive authority in regards to summary judgment determinations made by the Board. *See also* 35 Adm. Code 101.500(a) (permitting motions under Illinois rules of civil procedure).

"'Summary judgment is a drastic means of disposing of litigation,'" which should only be granted "when the movant's right to the relief 'is clear and free from doubt.'" *Des Plaines*, PCB 04-88, slip op. at 7 (quoting *Dowd & Dowd, Ltd. v. Gleason*, 181 Ill. 2d 460, 483 (Ill. 1998) (quoting *Purtill v. Hess*, 111 Ill. 2d 229, 240 (Ill. 1986))). In ruling on such a motion, all facts "must be viewed in a light most favorable to the nonmoving party," *Steinbach v. CSX Transp., Inc.*, 393 Ill. App. 3d 490, 516 (Ill. App. Ct. 3d Dist. 2009) (citing *Ramirez v. Smart Corp.*, 371 Ill. App. 3d 797, 801 (Ill. 2007)), and "the Board 'must consider the pleadings, depositions, and affidavits strictly against the movant and in favor of the opposing party.'" *Des Plaines*, PCB 04-88, slip op. at 7 (quoting *Dowd* 181 Ill. 2d at 483) (quoting *Kolakowski v. Voris*, 83 Ill. 2d 388, 398 (Ill. 1980)). Accordingly, summary judgment may only be granted "'when 'the pleadings, depositions, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law.'" *Des Plaines*, PCB 04-88, slip op. at 7 (quoting *Dowd*, 181 Ill. 2d at 483 (citing 735 ILCS 5/2-1005(c))). And where reasonable persons may draw different inferences from the same undisputed facts, a material issue of disputed fact exists which precludes summary judgment. *Steinbach*, 393 Ill. App. 3d at 516 (citing *Outboard Marine Corp. v. Liberty Mutual Insurance Co.*, 154 Ill. 2d 90, 102 (Ill. 1992); *Adams v. N. Illinois Gas Co.*, 211 Ill. 2d 32, 42-43, (Ill. 2004).

With regard to a summary judgment motion, the moving party has the initial burden of production, *i.e.*, the obligation to "introduce competent evidence that, if uncontradicted, entitles him or her to judgment as a matter of law," *Willett v. Cessna Aircraft Co.*, 366 Ill. App. 3d 360, 369 (Ill. App. Ct. 1st Dist. 2006), and the ultimate burden of persuasion, *i.e.*, a demonstration that the motion is due to be granted, despite any response. *See generally Williams*, 316 Ill. App. 3d at 689-690. There are two types of summary judgment motions, *Willett*, 366 Ill. App. 3d at 368-369, and, in appropriate circumstances, a defendant moving for summary judgment may meet its burden of production by relying on either of them. *Williams*, 316 Ill. App. 3d at 688-689.

The most common type of summary judgment motion is a "traditional" one, which endeavors to "affirmatively disprove[e] the plaintiff's case by introducing evidence that, if uncontroverted, would entitle the movant to judgment as a matter of law. . . ." *Id.* at 688 (citing *Purtill*, 111 Ill. 2d at 240-41). In other words, these motions seek to demonstrate "that some element of the case must be resolved in the defendant's favor, requiring the defendant to prove something that it would not be required to prove at a trial . . . ." *Willett*, 366 Ill. App. 3d at 368.

The other type of summary judgment motion recognized by Illinois courts is a *Celotex*-type motion, which relies on the burden shifting mechanism of the summary judgment procedure to "establish[] that the nonmovant lacks sufficient evidence to prove an essential element of the cause of action . . . . *Williams*, 316 Ill. App. 3d at 688-89 (citing *Rice v. AAA Aerostar, Inc.*, 294 Ill. App. 3d 801, 805 (Ill. App. Ct. 4th Dist. 1998) (citing *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986))). In other words, a *Celotex* summary judgment motion "points out the absence of evidence supporting plaintiff's position." *Willett*, 366 Ill. App. 3d at 368-369.

Despite submitting some ancillary minor source permitting documents and a declaration attempting to authenticate the same, Respondents' motion is clearly a *Celotex*-type motion. It asserts that "IEPA has issued a Minor Source Construction Permit for the Project[,] . . . Defendants' construction of the Project is pursuant to the terms of this Permit and is lawful, and ***Sierra Club presents no arguments to the contrary***," Respondents' Motion for Summary Judgment at 2 (emphasis added), and Respondents' memorandum in support also argues that "***there is no factual or legal basis to conclude that Defendants are in violation of state or federal law***," MSJ at 8 (emphasis added). In essence, these are contentions that Sierra Club cannot possibly prevail on its claim and, when construed broadly, they purport to put Sierra Club to its proof on every conceivable fact and legal theory implicated by the litigation. *See generally Williams*, 316 Ill. App. 3d at 688; *Jiotis*, 2014 IL App (2d) 121293 at 24-30.

As explained in *Willett*, 366 Ill. App. 3d at 368-69:

> "A defendant does not meet its burden of production [under a *Celotex*-type motion] by merely asserting that the plaintiff lacks evidence. ***Rather, the defendant must show that the plaintiff cannot acquire sufficient evidence to make its case.***" *Kleiss v. Bozdech*, 349 Ill. App. 3d 336, 350, 811 N.E.2d 330, 285 Ill. Dec. 89 (2004). Because the movant in a *Celotex*-type motion is relying on alleged flaws or shortcomings in the affidavits and evidence introduced by the nonmovant, such a motion may be filed without supporting affidavits or similar evidence.

(emphasis added). *See also Pecora v. County of Cook*, 323 Ill. App. 3d 917, 934-935 (Ill. App. Ct. 1st Dist. 2001). Accordingly, in regard to the pending motion, the burden is on Respondents to conclusively demonstrate that Sierra Club cannot acquire sufficient evidence to prove its case.

Regardless of which type of summary judgment motion is filed, to satisfy the moving party's burden of production with the use of affidavits or other comparable evidence, Supreme

Court Rule 191(a) requires that the affidavits (or other comparable evidence) relied upon contain facts that are admissible in evidence and not "mere conclusions." *Motz,* 119 Ill. App. 3d at 605. And, generally, in response to a motion for summary judgment premised on the submission of admissible factual evidence, the burden shifts to the non-moving party to controvert those facts by presenting "some factual basis that would arguably entitle him to judgment." *Malone,* 271 Ill. App. 3d at 846; *Kleiss v. Bozdech*, 349 Ill. App. 3d 336, 350 (Ill. App. Ct. 4th Dist. 2004) (citing *Kane v. Motorola, Inc.*, 335 Ill. App. 3d 214, 224 (Ill. App. Ct. 1st Dist. 2002)); *Des Plaines*, PCB 04-88, slip op. at 7 (Nov. 17, 2005) (quoting *Gauthier v. Westfall*, 266 Ill. App. 3d 213, 219 (Ill. App. Ct. 2nd Dist. 1994); *Des Plaines*, PCB 04-88, slip op. at 7-8 (quoting 35 Ill. Adm. Code § 101.516(b)).

Where the moving party's motion fails to present evidence or a legal theory that would necessarily "preclude any possible liability" and that "would clearly entitle [the non-moving party] to judgment as a matter of law," the Board should deny or delay summary judgment. *See Malone,* 271 Ill. App. 3d at 845-46 (citing *Motz* , 119 Ill. App. 3d at 604-05); *Marquette Nat'l Bank v. Heritage Pullman Bank & Trust Co.*, 109 Ill. App. 3d 532, 535 (Ill. App. Ct. 1st Dist. 1982) ("even though the party opposing the motion for summary judgment fails to file counteraffidavits, the moving party should not be awarded summary judgment unless the affidavits filed in support of the motion establish the judgment as a matter of law");*Malone,* 271 Ill. App. 3d at 846 (stating that under such circumstances the non-moving party must be allowed to "rely solely upon his pleadings to create a material question of fact . . . ."); *Motz*, 119 Ill. App.

3d at 605 (citing *Cohen v. Washington Manufacturing Co.*, 80 Ill. App. 3d 1, 3 (Ill. Ct. App. 1st Dist. 1979).[6]

In this case, Sierra Club's claims and the defense advanced by Respondents in their motion for summary judgment are legally incongruent. Liability will not be precluded by the purported defense, even if the factual predicate for the asserted defense is conclusively established. Summary judgment should therefore be denied because the Respondents have failed to satisfy their initial burden of production. *Marquette*, 109 Ill. App. 3d at 535. Because a *Celotex*-type summary judgment motion has been filed which does not conclusively negate all possibility of liability, Sierra Club may rely on its Complaint alone to create material issue of fact, *Malone*, 271 Ill. App. 3d at 846; *Motz*, 119 Ill. App. 3d at 605, and all that that pleading need demonstrate to defeat Respondents' motion is that Sierra Club can "acquire sufficient evidence" to "arguably entitle [Sierra Club] to judgment." *Willett*, 366 Ill. App. 3d at 368-69; *Malone*, 271 Ill. App. 3d at 846; *Kleiss*, 349 Ill. App. 3d at 350 (citing *Kane*, 335 Ill. App. 3d at 224); *Pecora*, 323 Ill. App. 3d at 934-935.

Finally, as explained more fully in Sierra Club's Motion for Continuance, although 35 Ill. Adm. Code § 101.516(a) generally allows summary judgment motions to be filed at any time up until the last thirty (30) days before a hearing, Illinois courts treat *Celotex*-type summary judgment motions very differently so far as the timing of filing is concerned. Because such motions essentially contend that a non-moving party is incapable of acquiring the evidence

[6] *See also Marquette*, 109 Ill. App. 3d at 535 (citing Ohio Oil Co. v. Yacktman, 36 Ill. App. 3d 255, 261 (Ill. App. Ct. 1st Dist. 1976)); *Williams*, 316 Ill. App. 3d at 689 ("A party opposing summary judgment may rely solely upon the pleadings to create a question of material fact until the movant supplies facts that would clearly entitle it to judgment as a matter of law."); *Kleiss*, 349 Ill. App. 3d at 350; *Pecora*, 323 Ill. App. 3d at 934-935 (county failed to meet burden of production and plaintiffs were therefore entitled to rely on allegations in pleadings to create an issue of fact); *Fillmore v. Walker*, 2013 IL App (4th) 120533, at 51 (Ill. App. Ct. 4th Dist. 2013).

necessary to prove their claims, concepts of fundamental fairness dictate that these motions cannot be pursued prematurely, without first giving plaintiffs a full and fair opportunity to conduct discovery and endeavor to substantiate their claims. *Willett*, 366 Ill. App. 3d at 369; *Williams*, 316 Ill. App. 3d at 691 (citing *Hansbrough*, 141 Ill. App. 3d at 549); *Jiotis*, 2014 IL App (2d) at 27-30, *see also* Due Process Clause of the Illinois Constitution, Ill. Const. 1970, art. I, § 2.

For all of the foregoing reasons, the Board should deny Respondents' premature summary judgment motion and allow Sierra Club to complete the needed discovery. *Williams*, 316 Ill. App. 3d at 692; *Jiotis*, 2014 IL App (2d) at 23, 27-30; *Hansbrough*, 141 Ill. App. 3d at 549; *Lamkin*, 246 Ill. App. 3d at 208-209.

IV. SIERRA CLUB'S CAUSE OF ACTION AND THE RELEVANT PSD REQUIREMENTS

To properly evaluate Respondents' summary judgment motion, it is important to understand the fundamental scope of Sierra Club's claims. As described above, this is a citizen enforcement action brought pursuant to Section 31(d) of the Illinois Environmental Protection Act, 415 ILCS 5/31.1(d). The allegations in Sierra Club's Complaint demonstrate that the Respondents' proposal to construct the FutureGen Project threatens to cause air pollution and violates Section 9.1(d) of the Illinois Environmental Protection Act. The core violation alleged is Respondents' failure to obtain a PSD permit as required under those legal provisions. Sierra Club Complaint at 2-8.

Specifically, Section 9.1(d) provides in pertinent part that:

No person shall:

> (1) violate any provisions of Section[]. . .165 . . . of the Clean Air Act, as now or hereafter amended, or federal regulations adopted pursuant thereto; or
> (2) construct, install, modify or operate any equipment, building, facility, source or installation which is subject to regulation under Section[] . . . 165 . . . of the Clean Air Act, as now or hereafter amended, except in compliance with the requirements of such Sections and federal regulations adopted pursuant thereto, and no such action shall be undertaken (A) without a permit granted by the Agency whenever a permit is required pursuant to (i) this Act or Board regulations or (ii) Section . . . 165 . . . of the Clean Air Act or federal regulations adopted pursuant thereto or (B) in violation of any conditions imposed by such permit.

In turn, Section 165 of the Clean Air Act, 42 U.S.C. § 7475(a)(1), mandates that "major emitting facilities," which are also referred to as "major sources," 40 C.F.R. § 52.21(b)(1), must obtain a PSD permit prior to commencing construction. *See also Alaska DEC v. EPA*, 540 U.S. 461, 472 (2004). The FutureGen project is unquestionably a major emitting facility and major source. 42 U.S.C. § 7475(a)(1); 40 C.F.R. § 52.21(b)(1).

Pursuant to 40 C.F.R. § 52.21(a)(2)(iii) of the PSD regulations, commencing construction includes making a "major modification," which is defined as any physical change in or change in the method of operation of a major stationary source that would result in two types of emissions increases: (1) a "significant emissions increase" and (2) a "significant net emissions increase." *See* 40 C.F.R. §§ 52.21(a)(2)(iv)(a) and 52.21(b)(2). When this occurs, PSD is triggered. Accordingly, a PSD applicability analysis involves, among other things, a two-step process to determine, first, if there is a "significant emissions increase" from the proposed project and, second, if there is "significant net emissions increase" from the proposed project considering all creditable emissions increases and decreases at the source. For both steps in this process, increases are deemed "significant" when they equal or exceed the specified tons per year significance thresholds provided in 40 C.F.R. § 52.21(b)(23), which, by way of example,

are 40 tons per year ("tpy") for sulfur dioxide (SO2) and nitrogen oxides (NOx) and 7 tpy for sulfuric acid mist (SAM). *See* 40 C.F.R. § 52.21(b)(40).

A "significant net emissions increase" is simply a "net emissions increase" that is "significant." 40 C.F.R. §§ 52.21(b)(3) and (23). A "net emissions increase (which is assessed in a "netting analysis") is an arithmetic determination of whether a project will result in an emissions increase by adding all the emissions increases that will result from a project and then adding and/or subtracting all contemporaneous, creditable emission increases and emission decreases. 40 C.F.R. § 52.21(b)(3). Significantly, the definition of "net emissions increase" includes several critical limitations on the emission reductions which can be credited. *Id.*

For example, contemporaneous decreases in emissions may only be credited in a netting analysis to the extent that they are "enforceable as a practical matter at and after the time that actual construction on the particular change begins." 40 C.F.R. § 52.21(b)(3)(vi)(b). Further, only such decreases can be credited that have "approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change . . . ." 40 C.F.R. § 52.21(b)(3) (vi)(c). And consistent with applicable PSD regulations and EPA policy which Illinois is bound to follow as a delegated state, 46 Fed. Reg. 9582 (Jan. 29, 1981), netting is only allowed within a "major stationary source" which, among other things, is defined to include only those pollutant-emitting activities that are "under the control of the same person (or persons under common control)" at the time that actual construction commences. *See* 40 C.F.R. §52.21(b)(3)(i)) (definition of "net emission increase"); 40 C.F.R. § 52.21(b)(1)(i)(a) (definition of "major stationary source"); 40 C.F.R. § 52.21(b)(5) (definition of "stationary source"); 40 C.F.R. § 52.21(b)(6) (definition of "building, structure, facility, or installation"); 5/19/99 Letter

from EPA Region 4's W. Smith, Director, Air, Pesticides and Toxics Management Division, to Mecklenburg County Department of Environmental Protection's R. Poole at 7 (netting not allowed between two separate sources) (http://www.epa.gov/Region7/air/nsr/nsrindex.htm); IEPA's "Part I - NSR Q & A, Answers to Frequently Asked Questions Regarding NSR and PSD" ("The NSR rules provide that plants should be considered a single stationary source if they meet all of the following three criteria: . . . c. Are under common ownership or control.") (http://www.epa.state.il.us/air/new-source-review/new-source-review-part-1.html); *see also* 8/11/89 Letter from EPA's John Calcagni, Director Air Quality Management Division, to EPA's Irwin L. Dickstein, Director Air and Toxics Division, Regarding Prevention of Significant Deterioration (PSD) Applicability Determination for Multiple Owner/Operator Point Sources Within a Single Facility PSD at 2 ("When PSD applicability involves a determination of 'control,' the determination should be based on control at the time construction would commence on the proposed source. Control at this stage of a project would most often rest with the source owner.") (http://www.epa.gov/ Region7/air/nsr/nsrindex.htm); 3/13/98 EPA Region V's C. Newton to IEPA's D. Sutton Regarding Proposed Re-Permitting of Acme Steel Company at 2-3 (refusing to divide the activities of the steel mill into two sources because netting analysis depended on entire facility being one source) (http://www.epa.gov/Region7/air/nsr/nsrindex.htm); 10/1/99 Letter from EPA Region 8's R. Long to Colorado Department of Public Health and Environment's M. Perkins Regarding "Source Definition Issue for KN Power/Front Range Energy Associates, LLC/PSCo Generating Facility at 1-6 (address fact intensive inquiry regarding issue of common ownership) (http://www.epa.gov/Region7/air/nsr/nsrindex.htm).

When PSD applicability is triggered, the owner or operator of the proposed source or modification must obtain a PSD permit and emission limits must be imposed that comport with BACT. 42 U.S.C. § 7475(a)(4); *see also* 42 U.S.C. § 7479(2)(C); 40 C. F.R. § 52.21(a)(2)(iii). Additionally, to obtain such a permit, the owner and operator of a source that triggers PSD must also provide a demonstration using approved air modeling analyses "that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation" of any NAAQS and PSD increments. *See* 40 C.F.R. § 52.21(k) and (l).

Consistent with these requirements, Sierra Club's fundamental claim alleged in its Complaint is that the proposed construction of the FutureGen project, as configured and permitted, constitutes a violation of Illinois Environmental Protection Act Section 9.1(d), because the project lacks a PSD permit that is required for the construction, installation, modification and operation of the proposed new unit. *See generally* 415 ILCS 5/9.1(d); *see also* 42 U.S.C. § 7475(a)(4); 42 U.S.C. § 7479(2)(C); 40 C. F.R. § 52.21(a)(2)(iii); *see also* Complaint at 2-8.

V. LEGAL ARGUMENT

A. Sierra Club's PSD-Derived Claims Are Not Barred By the Issuance of a Minor Source Permit

Respondents' motion appears to be based solely on the legal contention that since IEPA issued the FutureGen project a minor source construction permit pursuant to 35 Ill. Adm. Code § 201.142, which was premised in part on IEPA's conclusion that the FutureGen project would result in a less than significant net emissions increase (in other words, that the project "net out"

of PSD), Sierra Club is barred from pursuing an independent claim under Section 9.1(d). *See* Respondents' Memorandum in Support of Summary Judgment Motion at 4-5 (designating two paragraphs Respondents claim are undisputed material facts),[7] and 6-8 (setting forth Respondents' sparse argument that no PSD permit is required because IEPA concluded that, with the issuance of the minor source permit, no PSD permit was not required and, consequently, no legal or factual issue exists precluding summary judgment). This argument lacks merit. The issuance of a minor source permit in this context does not bar or impede Sierra Club's claims in any manner.

As a threshold matter, there is no dispute about the type of air permit that has been issued for the FutureGen project. The FutureGen project does not have a Clean Air Act Title V operating permit, 415 ILCS 5/39.5 *et seq*.,[8] or a PSD permit. 42 U.S.C. § 7475(a); 40 C.F.R. § 52.21 *et seq*. It has obtained a minor source air permit issued pursuant to a state law program. 35 Ill. Adm. Code § 201.142; *Carlton,* 9 EAB at 692-93 (dismissing for lack of jurisdiction challenge to Illinois minor source permit based on a claim that the source was actually a major source subject to PSD requirements).

Unlike Title V operating permits, minor source air permits cannot create permit shields. *Contrast* 415 ILCS 5/39.5(7)(j); 42 U.S.C. § 7661c(f); *United States v. E. Ky. Power Coop., Inc.*, 498 F. Supp. 2d 1010, 1013, 1016-1018 (E.D. Ky. 2007) (discussion scope of permit shield defense in Title V context), with 35 Ill. Adm. Code § 201.142. Therefore, compliance with a

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[7] As addressed in Sierra Club's Motion to Strike and Memorandum in Support, which is hereby incorporated by reference, the IEPA Responsiveness Summary upon which this statement of undisputed material facts is based, constitutes hearsay and is filled with legal conclusions and technical and legal opinion testimony which are all inadmissible.

[8] Illinois refers to these permits as Clean Air Act Program Permits ("CAAPP") permits. 415 ILCS 5/39.5(1).

minor source permit does not insulate a source from enforcement of other requirements not referenced in the permit, including PSD requirements. Consistent with this principle, the FutureGen minor source permit explicitly provides that it "does not relieve the Permittee of the responsibility to comply with all local, state and federal regulations that are part of the applicable Illinois' State Implementation Plan, as well as all other applicable federal, state and local requirements." 12/13/13 FutureGen Minor Source Air Permit, Condition 1.1(a), at 4, attached as Ex. 1 to the Declaration of Renee Cipriano in support of Respondents' Motion for Summary Judgment (hereinafter "MSJ Ex. 1"). It also states that the issuance of the minor source permit "[d]oes not release the Permittee from compliance with other applicable statutes and regulations of the United States…." *Id.* at Attachment 2, Standard Permit Condition 5.c, at 2-2. Accordingly, Sierra Club's Complaint is entirely consistent with the terms of the FutureGen project's minor source permit.

Although Sierra Club is not aware of any Illinois state court or Pollution Control Board decisions addressing a situation analogous to the one at hand, the pertinent federal case law demonstrates that the issuance of a state law minor source air permit cannot bar a federal citizen suit based on a failure to obtain a required PSD permit. This is true even where the minor source permit is explicitly premised on a determination that PSD is inapplicable. Because no unique provisions of Illinois law exist that could otherwise bar this action, that same principle holds true for purposes of Illinois' law. A discussion of the pertinent federal case law is thus instructive.

In *Weiler*, 392 F.3d at 542-46, the defendant had obtained a synthetic minor source permit issued by the New York State Department of Environmental Conservation ("NYDEC") pursuant to the New York State Implementation Plan ("New York SIP"), 6 N.Y. Comp. Codes R.

& Regs. §§ 201-7.1 and 201-7.2, which purported to cap emissions of the source in question below major source levels as defined in the New York SIP so that the source would not have to obtain a major source (PSD) permit. *Id*. at 534-536. Despite the NYDEC's conclusion that the synthetic minor source permit it issued effectively restricted emissions below major source levels that would trigger the application of the PSD requirements, the plaintiffs brought a Clean Air Act citizen suit pursuant to Section 304(a)(3) of the Clean Air Act, 42 U.S.C. § 7604(a)(3). *Id*. Plaintiffs alleged, *inter alia*,[9] that the defendant was unlawfully proposing to construct a source without a required PSD permit. According to the plaintiffs in *Weiler*, the subject source was a "major source" under the New York SIP rules due to a lack of practically effective and enforceable terms in its synthetic minor source permit to ensure that emissions would actually be held below major source levels. *Id*. at 535. The district court dismissed the action due to a perceived failure to state a cause of action under the Clean Air Act.

On appeal, the defendant argued that in issuing a synthetic minor permit to the subject source, the NYDEC conclusively determined that a major source permit was not required, and that the structure of the Clean Air Act barred citizen suits brought pursuant to § 304(a)(3) that would undermine a state's prior determination that a major source permit was not required. *Id*. at 536-39. To support this contention, the defendant relied on three arguments: (1) there were other avenues for enforcement, rendering citizen suits unnecessary; (2) states were afforded a major role in implementing the Clean Air Act which would be undermined by allowing judicial oversight of state permitting decisions; and (3) the New York SIP precluded a challenge to the adequacy of the enforcement mechanisms imposed by the NYDEC pursuant to the New York

[9] The plaintiffs also alleged that the area where the source was located was a non-attainment area and thus the synthetic minor permit was legally insufficient to comport with the non-attainment NSR permitting rules set forth at 42 U.S.C. §§ 7501-7515. *Id*. at 342.

SIP. *Id*. The Second Circuit rejected all of these arguments and vacated the district court's decision. *Id.*. Based on the plain language of the Clean Air Act, the court of appeals concluded that:

> a state determination that a prospective source of air pollution is not a major emitting facility does not prevent a private plaintiff from bringing a suit seeking to enjoin the construction of the facility pursuant to section 304(a)(3) of the Act, 42 U.S.C. §7604(a)(3).

Id. at 539.

NRDC v. BP Prods. N. Am., Inc., 2009 U.S. Dist. LEXIS 54363, at *17-23 (N.D. Ind. June 26, 2009) (Ex. 1), addressed the same issue. The defendant in *NRDC* had obtained a minor source air permit from the Indiana Department of Environmental Management ("IDEM") for its refinery which IDEM concluded was sufficient to restrict emissions from the refinery below levels that would require a PSD and non-attainment NSR permit. *See generally id*. at *1-2, *11-12. After the issuance of this permit, plaintiff filed a citizen suit pursuant to the Section 304(a)(3) of the Clean Air Act, 42 U.S.C. § 7604(a)(3), alleging that the defendant had commenced construction without obtaining required PSD and non-attainment NSR permits for a refinery. *Id*. at *2-3, *13-14, *18-19. In response, the defendant argued, *inter alia*, that the issuance of the minor source permit barred plaintiff's action because it deprived the court of jurisdiction. *Id*. at *3, *17-22. The court ultimately dismissed the most of plaintiff's claims on abstention grounds. *Id*. at *23-52. Before doing so, however, it ruled that jurisdiction existed to address plaintiff's claims. *Id.* at *17-22. In reaching this conclusion, the court rejected defendant's contention that the issuance of "any permit – even . . . [a] state-law minor source permit" was sufficient to bar plaintiff's claims that PSD and non-attainment NSR permits were required. *Id*. at *20. Because the plain language of Section 304(b)(3) provides for citizen suits for

constructing without a permit required under Part C (PSD) and Part D (non-attainment NSR) of the Act and the refinery lacked such permits, the court concluded that the issuance of a state law minor source permit did not preclude plaintiff's action . *Id*. at 20-23.

Louisiana-Pacific, 682 F. Supp. at 1129-1134, also involved the interaction between minor source air permits and PSD permits. There, the defendant had commenced construction on several waferboard plants and then subsequently obtained synthetic minor permits from the Colorado Air Pollution Control Division ("CAPCD") purporting to restrict the potential to emit of these sources below major source levels. *Id*. After the initiation of construction and the issuance of these state-issued minor source permits, EPA issued notices of violation for these plants and an administrative order requiring the facilities in question obtain PSD permits because EPA considered these facilities to be major sources subject to the PSD permitting requirements. *Id*. at 1125-26. Ultimately, the United States brought a federal enforcement action against defendant based in part on the failure to obtain PSD permits for these plants.

In response to the government's enforcement action, the defendant filed a motion for summary judgment which contended that the sources in question could not be deemed major stationary sources because the state-issued permits limited each plant's potential to emit below the major source threshold. *Id*. at 1129. The district court rejected this argument, finding that the critical tons per year emission limits in minor source permits issued by the CAPCD, which purported to serve as restraints on the relevant sources' potential to emit, were "blanket restrictions on actual emissions" that were "virtually impossible to verify or enforce," and were not appropriate to consider in a PSD applicability analysis. *Id*. at 1133. It went on to find that the government had presented material evidence showing the potential to emit of the relevant

sources exceeded the major source threshold and, therefore, denied the defendant's motion. *Id*. at 1134. In making this ruling, the district court necessarily rejected any notion that the existence of a minor source permit could preclude a Clean Air Act enforcement action based on the allegation that a source is constructing without a required PSD permit.

For the same basic reasons, defendants have largely been unsuccessful in arguing that state permits other than minor source air permits bar citizen suits based on a failure to obtain a required PSD or non-attainment NSR permit. For instance, in *Ogden Projects, Inc.*, 911 F. Supp. at 866-67, a district court rejected the contention that state agency's determination to issue a solid waste permit without requiring an non-attainment NSR permit or Clean Air Act Part D permit, *see* 42 U.S.C. §§ 7501-7515, could not be challenged through a federal Clean Air Act citizen suit and could only brought in state court. As the court in *Ogden* explained:

> Defendant contends that because in 1992 [the state agency] issued the solid waste permit without requiring a CAA Part D permit, Plaintiffs may only challenge [the state's] decision in Pennsylvania state courts, not through a collateral attack in federal court. ...Defendant's argument fails under the plain meaning of the CAA's citizen suit provision. … This provision [] expressly authorizes citizen suits against persons who propose to construct or who do construct major facilities without the proper Part D permit.

Id.

Similarly, in *Citizens for Pennsylvania's Future*, 898 F. Supp. 2d at 745-49, a federal district court rejected the contention that it lacked subject matter jurisdiction to address a federal Clean Air Act citizen suit alleging a failure to obtain a non-attainment NSR permit because less stringent state construction permits had previously been issued by a state agency based on a determination that non-attainment NSR did not apply. In that case, the Pennsylvania Department of Environmental Protection ("PADER") had evaluated permit applications for several natural

gas compressor stations owned by the same company and determined that it was not appropriate to aggregate them and treat them as a single source, which allegedly would have triggered the non-attainment NSR permitting requirements. *Id*. at 742. Instead, PADER issued each of these compressor stations general state construction permits called "GP-5 permits," which were designed for natural gas production sources which were not subject non-attainment NSR permitting requirements. *Id*. at 742, 744-45. Thus, in the context of that permitting action, PADER expressly concluded that the state law permits were the only required permits for the compressor stations in question. *Id*. at 745 n. 11 (noting PADER had "expressly determined that GP-5s -- not covered by Section 304 -- are sufficient."). Plaintiff disagreed and filed a citizen suit enforcement action for constructing the compressor stations without a non-attainment NSR permit. *Id*. at 742.

The defendant filed a motion to dismiss, arguing that the federal suit was barred due to a lack of subject matter jurisdiction and the only available forum to challenge the state construction permits was before the Pennsylvania Environmental Hearing Board. *Id*.[10] Based on the plain language of Section 304 of the Clean Air Act "and the reasoning in *Ogden* and *Weiler*," the district court concluded that it had subject matter jurisdiction to hear plaintiff's claims, even though plaintiffs in that instance had not exhausted their state law administrative remedies. *Id*. at 745-749. In doing so, the court necessarily rejected the proposition that the prior issuance of the state construction permits in question or the determinations underlying them, relating to aggregation or non-attainment NSR applicability, were sufficient in themselves to bar plaintiff's action.

[10] The defendant also claimed that permitting the federal action to proceed would "'allow citizens' groups to circumvent the established process and procedures under Pennsylvania law for challenging PADER's permitting decisions.'" *Id*.

The federal cases discussed above demonstrate that the issuance of a minor source air permit is not the equivalent of the issuance of a PSD permit, even where there is some overlap of technical issues and law. And, more significantly, they clearly establish that the failure to obtain a required PSD permit is actionable under the Clean Air Act, regardless of whether a minor source air permit (or any other state permit) has been issued based on a determination that a PSD permit is not required. *See generally Ellis v. Gallatin Steel Co.*, 390 F.3d 461, 481 (6th Cir. 2004) (42 U.S.C. §7604(a)(3) provides district courts with jurisdiction when person proposes to construct a major source while having only obtained a minor source permit); *United States v. Campbell Soup Co.*, 1997 U.S. Dist. LEXIS 3211, at *15-20 (E.D. Cal. Mar. 11, 1997) (holding in context of a federal government enforcement action brought pursuant to Section 113 of the CAA that there "there is no categorical bar" to an action seeking to enforce PSD requirements incorporated into the California SIP and "no safe harbor" created by the issuance of a state law minor source permit) (Ex. 5); *WildEarth Guardians v. Public Service Co. of Colorado, d/b/a XCEL Energy*, 698 F. Supp. 2d 1259, 1264 (D. Colo. 2010) (citizen suit against source for failure to obtain a case-by-case MACT determination not was not an impermissible collateral attack on a state permit which failed to include such a determination); *see also Carlton*, 9 EAB at 692-693 (proper way to challenge a minor source permits is through a citizen suit action or "under the state system of review."); *Franklin County*, 546 F.3d at 922; *Grand Canyon Trust*, 382 F.3d at 1021.

Though many of the pertinent federal decisions discussed above turn on the language of the citizen suit provision of the Clean Air Act, 42 U.S.C. § 7604(a), and the case at hand is brought pursuant Illinois state law, that fact does not make the federal case law any less

persuasive. Section 9.1 of the Illinois Environmental Protection Act lacks many of the jurisdictional restrictions and other limitations that are imposed on citizen suits under Section 304 of the Clean Air Act. Therefore, a much broader range of claims may be pursued under Section 9.1 than under CAA Section 304. Despite the inherent restrictions on jurisdiction and the like in Section 304, federal courts have almost uniformly allowed citizen suits based on an failure to obtain a required PSD permit to proceed, even where minor source air permits or other types of state permits were issued based on contrary determinations. In light of this compelling precedent, it is abundantly clear that the issuance of the FutureGen project's minor source permit does not bar or impede Sierra Club's claims.

Notwithstanding the persuasive precedent discussed above, federal courts have ruled that in some circumstances, a lawfully issued Clean Air Act Title V or PSD permit may bar citizen suit enforcement actions alleging a failure to obtain a PSD permit or a failure to obtain a PSD permit which satisfies all the requirements of the Clean Air Act. However, due to the substantial differences between Title V and PSD permits and state law minor source air permits issued in Illinois, those cases are entirely irrelevant.

Unlike Clean Air Act Title V operating permits, which are subject to appeals by third parties pursuant to state law[11] and pursuant to petitions to EPA, which can in turn be challenged in a federal court of appeal,[12] Illinois law does not provide any avenue for third parties to seek administrative or judicial review of minor source permits. *See* 415 ILCS 5/41 (restricting judicial review to exclude third parties under these circumstances); *see also City of Dekalb v.*

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[11] *See* 35 Ill. Adm. Code § 105.302(c); 42 U.S.C. § 7661a(b)(6).

[12] *See* 415 ILCS 5/39.5(9)(e); 42 U.S.C. § 7661d(b)(2); *Citizens Against Ruining the Environment v. EPA*, 535 F.3d 670, 672-73 (7th Cir. 2008) (citing 42 U.S.C. §§ 7607(b)(1) and 7661d(b)(2)).

IEPA, PCB No. 96-246 (Aug. 1, 1996) (holding that Board lacks authority to grant intervention to third parties where the statute does not expressly provide such intervention). Consistent with this restriction on third party challenges to minor source permits, all that Sierra Club has done in regard to the FutureGen minor source permit is submit public comments to IEPA, which were necessarily prepared on a short deadline and without the benefit of discovery. Consequently, the handful of federal decisions that have dismissed Clean Air Act citizen suits as collateral challenges to Title V permits on jurisdictional grounds pursuant to Section 307(b)(2) of the Clean Air Act, 42 U.S.C. § 7607(b)(2), are irrelevant here because the prerequisite for imposing a jurisdictional bar -- the ability to obtain review in a federal court of appeals – simply does not exist. *See, e.g., Sierra Club v. Otter Tail Power Co.*, 615 F.3d 1008, 1020-1023 (8th Cir. 2010); *Romoland School District v. Inland Empire Energy Center, LLC*, 548 F.3d 738, 751-56 (9th Cir. 2008).

Furthermore, because the FutureGen permit is not a PSD permit, there is no basis for claiming that this action constitutes an unlawful collateral attack seeking to revoke or otherwise unwind a duly issued PSD permit.[13] Accordingly, the cases which have dismissed federal citizen suits challenging PSD permits as inadequate or as failing to comport with all applicable PSD requirements are equally irrelevant. *See, e.g., CleanCOAlition v. TXU Power*, 536 F.3d 469, 470, 478-479 (5th Cir. 2008) (dismissing citizen challenging a state-issued PSD permit's compliance with the Act based on lack of jurisdiction under Clean Air Act Section 304(a)(3)); *United States v. Solar Turbines, Inc.*, 732 F. Supp. 535, 538-40 (M.D. Pa. 1989) (prohibiting

[13] Unlike minor source permits, PSD permits are subject to appeals by third parties to the EPA's Environmental Appeals Board ("EAB") and may ultimately be challenged in a federal court of appeals. *Sierra Club*, 499 F.3d at 654; *Indeck-Elwood*, 13 E.A.D. at 128 (citing 40 C.F.R. § 124.19).

EPA from issuing administrative order collaterally attacking lawfully issued PSD permit that allegedly failed to comport with Clean Air Act Section 165(a)(4), 42 U.S.C.S. § 7475(a)(4));[14] *but see Franklin County*, 546 F.3d at 922-23 (pending challenge to Illinois Pollution Control Board of IEPA determination that PSD permit had expired did not preclude federal Clean Air Act citizen suit based on allegation that project lacked a required PSD permit); *Grand Canyon Trust v. Tucson Electric Power Company*, 382 F.3d 1016, 1021 (9th Cir. 2004) (finding jurisdiction to hear a claim that a major source was operating without a PSD permit based on claim that the PSD permit had expired).

B. Because Respondents Have Failed to Present a Case Which Precludes All Possibility of Liability, Sierra Club is Entitled to Rely on its Pleadings to Create a Genuine Issue of Material Fact

Respondents' summary judgment motion is based on the theory that the issuance of the FutureGen Project's minor source permit bars Sierra Club from prevailing on its claim that the FutureGen Project is required to have a PSD permit. However, as discussed above, that legal premise, along with any facts proffered in support, does not preclude the potential imposition of liability on Respondents. Respondents have thus failed to meet their required burden of production. *Willett*, 366 Ill. App. 3d at 368-69; *Pecora*, 323 Ill. App. 3d at 934-935. For that reason alone, Respondents' premature motion should be denied. *Marquette*, 109 Ill. App. 3d at 535.

[14] Since there is no avenue for third parties to challenge minor source air permits under Illinois law, Sierra Club cannot be deemed to have failed to exhaust its administrative remedies, particularly when it did submit comments on the FutureGen minor source permit. *See United States v. Murphy Oil USA, Inc.*, 143 F. Supp. 2d 1054, 1097-1102 (W.D. 2001) (citing *United States v. AM General Corp.*, 34 F.3d 472, 474-475 (7th Cir. 1994)). Similarly, there clearly has not been any adjudication of any claims on the merits relating to that permit that could give give rise to a collateral estoppel or res judicata defense under Illinois law. *See generally Ford Motor Credit*, 395 Ill. App. 3d at 907-911.

If the motion is not denied on that ground alone, Sierra Club should be allowed to demonstrate that genuine issues of material fact exist precluding summary judgment by relying solely on the allegations in the pleadings. *Malone,* 271 Ill. App. 3d at 846; *Motz,* 119 Ill. App. 3d at 605; *Williams*, 316 Ill. App. 3d at 689; *Kleiss*, 349 Ill. App. 3d at 350; *Pecora*, 323 Ill. App. 3d at 934-935; *Fillmore,* 2013 IL App (4th) 120533, at 51. And since Respondents have filed a *Celotex*-type summary judgment motion, all that Sierra Club's pleadings must demonstrate to overcome Respondents' motion is that Sierra Club can "acquire sufficient evidence" to "arguably entitle [Sierra Club] to judgment." *Willett,* 366 Ill. App. 3d at 368-69; *Malone,* 271 Ill. App. 3d at 846; *Kleiss,* 349 Ill. App. 3d at 350 (citing *Kane*, 335 Ill. App. 3d at 224); *Pecora,* 323 Ill. App. 3d at 934-935.

Sierra Club's Complaint alleges that the FutureGen project triggers the obligation to obtain a PSD permit because the project will result in a significant emissions increase and a significant net emissions increase for several pollutants regulated under the PSD program and, therefore, is a major modification. Complaint at 2-8. This claim may be proven under several different legal theories. For the purposes of this motion, Sierra Club outlines three exemplary but by no means exclusive, legal theories that provide Sierra Club with viable avenues for prevailing on its claim. Each theory is encompassed by the allegations in Sierra Club's Complaint, provides a sound basis for Sierra Club to prevail on its claim, and inherently involves disputed issues of fact that preclude summary judgment.

Sierra Club's first theory of liability relates to the ownership and control of the Meredosia Energy Center and the FutureGen project. As explained above, the netting of emissions is only allowed within a major stationary source, between emissions units under common ownership and

control. 40 C.F.R. § 52.21(b)(3)(i)); 40 C.F.R. § 52.21(b)(1)(i)(a)); 40 C.F.R. § 52.21(b)(5); 40 C.F.R. § 52.21(b)(6). Unless it is allowed to take advantage of significant netting credits associated with the retirement of the existing units at the Meredosia Energy Center, the FutureGen project's emissions are sufficient to trigger PSD for many pollutants. Discovery is necessary to confirm whether or not the FutureGen project and all the retired Meredosia Energy Center emissions units are under common ownership and control and will be under common ownership or control at the time construction commences. However, the publicly available information suggests that common ownership and control may be lacking in several instances. The emission reductions from any retired Meredosia Energy Center emissions unit that Sierra Club proves is not part of the same major stationary source as the FutureGen project due to a lack of common ownership or control cannot be used in determining the net emissions increase from the FutureGen project. Therefore, by proving a lack of common ownership and control between the retired Meredosia Energy Center emissions units and the FutureGen project, Sierra Club intends to demonstrate that the FutureGen project, as configured and permitted, cannot lawfully net out of PSD and is required to obtain a PSD permit.

Sierra Club has not been privy to specific documentation reflecting the details of the sales agreement between the two Respondents and will need to obtain that information in the discovery phase of this action. However, Sierra Club understands that AmerenEnergy Medina Valley Cogen LLC ("AmerenEnergy") is the owner of the currently shuttered Meredosia units (Unit No. 1-6) but is not part of the FutureGen Alliance and will not become an owner of the new FutureGen unit (also referred to as Meredosia Unit 7). Statements from FutureGen Alliance's website, "Community Corner March 2013" (http://futuregenalliance.org/community-

corner/2013/03/),[15] and from the U.S. Department of Energy's FutureGen 2.0 Project Draft Environmental Impact Statement DOE/EIS-0460D (April 2013) ("Draft EIS"), Summary, at S-7[16] (http://energy.gov/nepa/downloads/eis-0460-draft-environmental-impact-statement), suggest that only a portion of the Meredosia Energy Center will be sold to the FutureGen Alliance and that AmerenEnergy will retain ownership and control over most of the retired units and other equipment. Moreover, the Draft EIS, Vol. 1, at 2-14 and 2-17 (http://energy.gov/nepa/downloads/eis-0460-draft-environmental-impact-statement)[17] indicates that potentially the only complete unit being sold to the FutureGen Alliance was Unit No. 6, which is an oil fired

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[15] Specifically, the FutureGen Alliance's website states:

> In late 2011, the Meredosia Energy Center (MEC) closed its doors. At the time, Ameren Energy Resources pledged to work with the Alliance to make portions of the MEC available to the FutureGen 2.0 project. Ameren Energy Resources fulfilled that pledge when a contract was executed for the sale of a portion of the MEC to the Alliance in January 2013. Under the agreement, Ameren Energy Resources will continue maintenance at the energy center to keep it in a condition suitable for future retrofitting. In 2014, immediately prior to the start of construction and when all conditions are met, ownership of the pertinent part of MEC will formally transfer to the Alliance.

[16] The Draft EIS for the FutureGen project provides:

> For the FutureGen 2.0 Project, ***the Alliance would purchase from Ameren the assets of the Meredosia Energy Center that would be needed for the Oxy-Combustion Large Scale Test component of the proposed project***. Ameren suspended plant operations at the end of 2011 but has retained the permits associated with the facility and will maintain the facilities to be available for the FutureGen 2.0 Project. ***All equipment remains in operable condition, which would enable Ameren to operate the generating facilities if the resumption of operations were to fit Ameren's requirements.*** If the FutureGen 2.0 Project is implemented, Ameren would permanently terminate operations of the existing boilers and related power generation infrastructure."

(emphasis added).

[17] The Draft EIS provides: "To incorporate the oxy-combustion process, Boiler 6 would be demolished and a new oxy-combustion boiler (Boiler 7) would be constructed. This new boiler would repower the existing Unit 4 steam turbine. *Id.*

electrical generating unit.[18] These documents suggest that now and at the time of actual construction of the FutureGen project, the FutureGen Alliance will not own or have control over most of the emissions units at the Meredosia Energy Center.

One of Sierra Club's claims is thus based on the theory that the FutureGen project cannot lawfully net out of PSD due to a lack of common ownership and control between the FutureGen project and the retired Meredosia Energy Center units.[19] The FutureGen project thus triggers PSD and is required to obtain a PSD permit. The allegations in Sierra Club's Complaint encompass this method of proving Sierra Club's claims and establish a genuine issue of disputed fact, particularly when coupled with the available information suggesting that common ownership and control does not exist over the retired Meredosia Energy Center units and the FutureGen project.

Sierra Club's second theory of liability is based on the contention that the FutureGen project, as configured and permitted, cannot net out of PSD because the emission decreases from the pre-existing Meredosia Energy Center units are not "creditable" as they lack "approximately the same qualitative significance for public health and welfare as that attributed to the increase"

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[18] Sierra Club expects to confirm through discovery that the emissions of most pollutants from this oil-fired unit were less than the other coal-fired units at the Meredosia Energy Center. Thus, the retirement of this unit probably made only a small contribution to the netting credit relied on in the FutureGen PSD netting analysis.

[19] Sierra Club contends that substantial discovery regarding the pertinent sales agreement will be necessary to prove this claim, particularly since all the relevant documentation appears to be exclusively under the possession and control of the Respondents. Additionally, the details of the sales agreement may also reveal other related issues, such as enforceability problems relating to the credited decreases from the retirements of the Meredosia Energy Center units. *See generally* EPA's 1990 NSR Workshop Manual at A.38 ("the reviewing agency must ensure that the source has maintained any contemporaneous decrease which the source claims has occurred in the past. The source must either demonstrate that the decrease was federally-enforceable at the time the source claims it occurred, or it must otherwise demonstrate that the decrease was maintained until the present time and will continue until it becomes federally enforceable.") (http://www.epa.gov/region07/air/nsr/nsrmemos/1990wman.pdf).

from the FutureGen project. *See* 40 C.F.R. § 52.21(b)(3)(vi)(c). As EPA explained to the Minnesota Department of Air Quality Management in 1992:

> The PSD regulations restrict the creditability of some decreases in emissions for the purpose of emissions netting. ***In particular, one provision allows credit for a reduction only to the extent that it has approximately the same qualitative significance for public health and welfare as the increase from the proposed change [see 52.21(b)(3)(vi)(c)]***. Where there is reason to believe that the reduction in ambient concentrations from the decrease will not be sufficient to prevent the proposed emissions increase from causing or contributing to a violation of any NAAQS or PSD increment, ***this provision requires an applicant to demonstrate that the proposed netting transaction (despite the absence of a significant net increase in emissions) will not cause or contribute to such a violation*** (see 54 FR 27298). Even if EPA found the proffered reductions otherwise quantitatively acceptable in this case . . . Cyprus would have to perform sufficient air quality modeling to demonstrate that the emissions increase from the new units would not violate the applicable NAAQS and PSD increments before the reductions could be credited.

8/11/92 Memorandum from John Calcagni to David Kee, re: Proposed Netting for Modifications at Cyprus Northshore Mining Corporation, Silver Bay Minnesota at 6 (http://www.epa.gov/NSR/ttnnsr01/gen/ cyprus.html) (citing 54 Fed. Reg. 27298 (June 28, 1989) (emphasis added).

Similarly, EPA's Draft 1990 NSR Workshop Manual at A.38-39 provides in pertinent part that "[r]eductions . . . must be qualitatively equivalent in their effects on public health and welfare to the effects attributable to the proposed increase." Although EPA's policy, at least as of 1990, was to assume that increases and decreases of the same pollutant were qualitatively equivalent, this was only true in the absence of a "reason to believe that the reduction in ambient concentrations from the emissions decrease will not be sufficient to prevent the proposed emissions increase from causing or contributing to a violation of any NAAQS or PSD increment." *Id.* at A.39. In cases such as the one at

hand, where air modeling indicates that the FutureGen project will result in exceedances of the NAAQS, EPA has always required that "the applicant . . . demonstrate that the proposed netting transaction will not cause or contribute to an air quality violation before [any] emissions reduction[s] may be credited." *Id*.

Through legal and expert analysis of existing air modeling demonstrations, adjustments to that available modeling, and, potentially, by conducting new air modeling, Sierra Club intends to prove that the increases in emissions from the FutureGen project, as configured and permitted, will cause or contribute to a NAAQS violation for sulfur dioxide (SO2), nitrogen oxides (NOx), and fine particulate matter (PM-2.5). Once that is established, the FutureGen project will be prohibited, pursuant to 40 C.F.R. § 52.21(b)(3)(vi)(c), from relying on prior reductions in emissions from the retired units at the Meredosia Energy Center in the PSD netting analysis. Without those emissions credits, the FutureGen project will trigger PSD permitting requirements for multiple pollutants.

In seeking to establish that the increases in emissions from the FutureGen project will cause or contribute to NAAQS violations, Sierra Club intends to take a holistic approach. Sierra Club has not yet been permitted the opportunity to obtain any of the electronic modeling files used by the IEPA or others to assess the impacts of emissions from the FutureGen project or any other relevant sources, much less any chance to engage in discovery relating to the input assumptions, meteorological data, and emissions inputs that formed the basis for this modeling. Sierra Club requires access to those files, and all the relevant data upon which the available modeling analyses are based, to identify the errors in the modeling.

Moreover, the air modeling that has already been conducted for the FutureGen project is legally flawed in that it relies on "significant impact levels" or "SILs," to determine that FutureGen's emissions will not cause or contribute to modeled NAAQS exceedances. SILs were relied on by IEPA in the context of the minor source air permitting process to determine that the SO2 and NOx emissions from the proposed FutureGen project would not cause or contribute to 1-hr. SO2 and NO2 NAAQS exceedances. IEPA's Responses at 39-40 (Dec. of Renee Cipriano in support of Resp. MSJ at Ex. 3). And in the Final EIS, DOE relied on a vacated PM-2.5 SIL as justification for ignoring modeled PM-2.5 NAAQS exceedances. Final EIS, Vol. 1, at 3.1-21 (http://energy.gov/nepa/ downloads/eis-0460-final-environmental-impact-statement).

The use of SILs, which are not recognized by the pertinent PSD regulations, was largely discredited in *Sierra Club v. EPA*, 705 F.3d 458, 461 (D.C. Cir. 2013). In that case, a SIL for PM-2.5 emissions was first proposed for incorporation into the federal PSD regulations and was challenged by Sierra Club on the grounds that EPA lacked the statutory authority to create a *de minimis* exception with SILs and that, in any event, SILS were not sufficiently trivial to be treated as *de minimis* since even a tiny contribution of emissions could push an area just under the NAAQS or increment threshold into a violation. *Id.* at 463. In response to Sierra Club's arguments, EPA conceded that the PM-2.5 SILs rule was "flawed," and requested that the SIL rule be vacated and remanded. *Id.* After considering the arguments, the D.C. Circuit vacated and remanded the challenged portion of the PM-2.5 SILs rule which exempted sources from a cumulative PM2.5 impacts analysis, 40 C.F.R. §§ 51.166(k)(2) and 52.21(k)(2), "based on the EPA's lack of authority to exempt sources from the requirements of the Act." *Id.* at 466.

Since that decision, EPA has not promulgated a new SILs regulation and, although it did issue a final guidance document in May 2014 called "Guidance for PM2.5 Permit Modeling" (http://www.epa.gov/ttn/scram/guidance/guide/Guidance_for_PM25_Permit_Modeling.pdf), EPA expressly stated that its guidance did not constitute "a rule or regulation," "does not change or substitute for any law, regulation, or any other legally binding requirement[,] and is not legally enforceable." *Id*. at iii. Therefore, that guidance is irrelevant to this action. *See Nat'l Mining Ass'n v. McCarthy*, No. 12-5310, 2014 U.S. App. LEXIS 13156, at *21-22 (D.C. Cir. July 11, 2013) (a general statement of policy relating to how an agency will exercise its enforcement or permitting discretion with regard to the application or enforcement of a regulation generally "has no legal impact" and may be ignored). In light of the D. C. Circuit's decision vacating the PM-2.5 SILs rule and EPA's failure to successfully promulgate any applicable regulation sanctioning the use of SILs, Sierra Club contends that any reliance on SILs to determine that a source does not cause or contribute to a NAAQS exceedance or otherwise is erroneous and unlawful. And when SILs are removed from the equation, IEPA's and DOE's previous air modeling analysis should reveal that NAAQS exceedances are likely to occur as a result of the construction of the FutureGen project.

In sum, Sierra Club contends that the FutureGen project cannot net out of PSD because, *inter alia*, the emission decreases from the Meredosia Energy Center units are not "creditable" as they lack "approximately the same qualitative significance for public health and welfare as that attributed to the increase" from the FutureGen project. Sierra Club intends to prove this through the use of expert testimony relating to air modeling issues. This is another valid legal

mechanism for prevailing on Sierra Club's claim that the FutureGen project will trigger PSD and is required to obtain a PSD permit..

Sierra Club's third theory of liability is based on the contention that the FutureGen project, as configured and permitted, cannot net out of PSD because its net emissions increase of sulfuric acid mist (SAM), and potentially several other pollutants, will exceed the significance threshold of 7 tpy due primarily to ineffective limitations on emissions of SAM. Sierra Club intends to prove this in several ways. For starters, the PSD significance threshold for SAM is 7 tpy and it has already been determined by IEPA that the net increase in emissions of SAM from the FutureGen project is expected to be 6.949 ton/yr. MSJ Ex. 1, Attachment 1 at 1-2 (Table 1B). As a matter of law, policy and sound engineering, Sierra Club will contend that the expected increase should be rounded up to the same number of significant figures as in the threshold, or one and, thus, the net increase in SAM emissions is 7 ton/yr. *See generally* E.A. Avallone and T. Baumeister III (Eds.), Marks' Standard Handbook for Mechanical Engineers, 10th Ed., McGraw-Hill, New York, 1996, at 2-4. Philip R. Bevington, *Data Reduction and Error Analysis for the Physical Sciences*, McGraw-Hill, Inc., 1969, pp. 4, 9; Lothar Sachs, *Applied Statistics. A Handbook of Techniques*, 2nd Ed., Springer-Verlag, New York, 1984, at 21; *see also* EPA's AP-42 (http://www.epa.gov/ttnchie1 /ap42/). Since 7 ton/yr equals the PSD significance threshold for SAM, the FutureGen project should be deemed subject to PSD based solely on proper rounding.

Additionally, the FutureGen project, as configured and permitted, lacks limitations on SAM emissions which are enforceable as a practical matter on several critical operating parameters, including adequate testing, recordkeeping, and reporting for the short term SAM

limits in the permit, coal composition, flue gas conditions, and operating load. These are all key factors influencing the SAM emitted by the FutureGen facility which could serve to limit the potential to emit for SAM below 7 tpy. *See generally Louisiana-Pacific*, 682 F. Supp. at 1129-1134. According to the June 18, 2013 FutureGen 2.0 Project Supplemental Application for Permit or Construction Approval at 1 (Ex.6), Unit No. 7 is designed to burn a wide variety of different coals, "ranging from bituminous coals to blends of bituminous and sub-bituminous coals." Without a limitation on the coal composition or sulfur content of the coal, the FutureGen project has a potential to emit SAM, and potentially other pollutants, in excess of PSD significance levels, and Sierra Club intends to prove this with the benefit of discovery and the development of expert testimony.

Finally, the FutureGen project's expected emissions were evaluated under the assumption that Unit No. 7 would be restricted to no more that 45% load. 6/18/13 FutureGen 2.0 Project Application for Permit or Construction Approval at 9. However, the FutureGen project lacks a limit reflecting that assumption, which was presumably the basis for determining that the project's net emissions increase for SAM was just barely under the PSD significance threshold. Consequently, with the benefit of discovery and the subsequent development of expert testimony, Sierra Club intends to prove that the FutureGen project has a net emissions increase of SAM in excess of PSD significance levels.

Accordingly, Sierra Club contends that the FutureGen project, as configured and permitted, cannot lawfully net out of PSD because the net emissions increase of SAM resulting from the project exceeds the significance threshold of 7 tpy (and the net emissions increases from other pollutants may likewise exceed their significant thresholds). Sierra Club intends to

prove this with expert testimony following discovery, addressing rounding errors and the lack of practically enforceable emission limits and other operational requirements which are necessary to ensure that the FutureGen project's potential to emit does not exceed pertinent significance levels and thereby trigger PSD. Like the two legal theories discussed above, this is also a valid legal mechanism for prevailing on Sierra Club's claim that the FutureGen project will trigger PSD and is required to obtain a PSD permit.

VI. CONCLUSION

For all the forgoing reasons, Sierra Club respectfully requests that Respondents' premature motion for summary judgment be denied.

Respectfully submitted,

DATED: August 25, 2014

/s/ Eric Schwing (by consent)

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EXHIBIT LIST

1. *NRDC v. BP Prods. N. Am., Inc.*, 2009 U.S. Dist. LEXIS 54363 (N.D. Ind. June 26, 2009)

2. *Sierra Club, Inc. v. FutureGen Indus. Alliance*, 2014 U.S. Dist. LEXIS 77902 (C.D. Ill. June 9, 2014)

3. Defendants' Reply in Support of Their Motion to Dismiss Under Rule 12(B)(1) and for Judgment on the Pleadings Under Rule 12(C)

4. Defendants' Supplemental Briefing in Support of Their Motion to Dismiss and Motion for Judgment on the Pleadings

5. *United States v. Campbell Soup Co.*, 1997 U.S. Dist. LEXIS 3211 (E.D. Cal. Mar. 11, 1997)

6. 6/18/13 FutureGen 2.0 Project Supplemental Application for Permit or Construction Approval

Exhibit 1

NRDC v. BP Prods. N. Am., Inc.

United States District Court for the Northern District of Indiana, Hammond Division
June 26, 2009, Decided; June 26, 2009, Filed
No.: 2:08-CV-204 PS

Reporter: 2009 U.S. Dist. LEXIS 54363; 2009 WL 1854527

NATURAL RESOURCES DEFENSE COUNCIL, INC., Plaintiff, v. BP PRODUCTS NORTH AMERICA, INC., Defendant.

Counsel: [*1] For Natural Resources Defense Council Inc, Plaintiff: Ann Alexander PHV, Thomas J Cmar PHV, LEAD ATTORNEYS, PRO HAC VICE, Natural Resources Defense Council, Chicago, IL; Kim Elaine Ferraro, LEAD ATTORNEY, Legal Environmental Aid Foundation of IN Inc, Valparaiso, IN.

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Judges: PHILIP P. SIMON, UNITED STATES DISTRICT JUDGE.

Opinion by: PHILIP P. SIMON

Opinion

MEMORANDUM OPINION AND ORDER

Defendant BP Products North America, Inc. wants to modify its oil refinery in Whiting, Indiana, in order to process Canadian extra heavy crude oil. So it asked the Indiana Department of Environmental Management (IDEM) for a permit. BP requested what Indiana law calls a ″minor source″ permit because it claimed its modifications would not trigger the more rigorous restrictions of the Clean Air Act. Plaintiff, an environmental group called the Natural Resources Defense Council (NRDC), [*2] told the IDEM that it shouldn't grant BP the permit because it believed that BP's modifications would actually cause far more air pollution than BP let on. The NRDC wasn't alone. Several other individuals and groups also raised the same concerns. But the IDEM was satisfied that BP's modifications would not trigger the Clean Air Act's ″major source″ permit requirements. So it granted BP the minor source permit.

The NRDC's companions filed a petition to review the IDEM's decision in the Office of Environmental Adjudication (OEA), Indiana's agency that handles appeals of that sort. But the NRDC took a different tack. Instead of joining in the appeal to the OEA, the NRDC brought this citizen suit, which alleges that BP is violating the Clean Air Act. The complaint claims that BP deceived the IDEM as to the actual levels of emissions that will result from its modifications. It also claims that BP actually began modifying the Whiting facility in 2005, well before it obtained *any* permit, which is an independent theory as to how BP is violating the Clean Air Act. The NRDC asks this Court to find that BP violated the Clean Air Act, enjoin BP from making its modifications, require it to go back [*3] to the IDEM to get the permits the NRDC thinks BP needs, and to impose civil penalties.

Perhaps not surprisingly, much of the ground covered in the NRDC's complaint is also covered by the petition for review in the OEA. Like the NRDC, the OEA petitioners also claim that BP deceived the IDEM and that consequently the IDEM's decision was erroneous. And they also seek to send BP back to the IDEM to get the more stringent major source permit. That case is now in the home stretch. Discovery has concluded, and the OEA is set to have a *de novo* hearing in August. In this case, by contrast, discovery has not even begun.

BP first contends that I do not have jurisdiction to decide this case. As a backup argument, it contends that I should abstain from hearing the case given that the issues are well along in the parallel state proceeding. While I am satisfied that the Court has jurisdiction, I nevertheless think this case really presents a call to be made by the expert environmental agencies that Indiana has selected for the job. I therefore conclude it is proper for this Court to abstain from exercising its jurisdiction with respect to two of the three counts in the NRDC's complaint. It is, however, [*4] appropriate for the Court to hear the NRDC's claims about BP's conduct in 2005, which are the subject of count II. Other than that, though, BP's motion to dismiss is granted.

STATUTORY AND REGULATORY BACKGROUND

The Clean Air Act is a complex statute designed to control air pollution throughout the nation. After early stumbles, the Act was amended in 1970 to force states to take stronger action to improve air quality. In response to those amendments, the states crafted their own regulatory

schemes to meet the requirements of the Act. The resulting system is a tangled web of interconnected federal law, federal regulations, state law, and state regulations, with, for good measure, a case law gloss on top of it all. The briefing in this matter was excellent, but as with most cases interpreting complex regulatory schemes, it was rife with technical jargon, and an abundance of pesky acronyms. I have done my best to simplify the issues. To that end, before I get into the who, what, where, and when of this case, it is probably best to set the scene by briefly describing the regulatory mechanisms that provide the backdrop. I will start with the federal Clean Air Act and then turn to the Indiana [*5] system.

The Clean Air Act is intended to protect and enhance the quality of the nation's air. *See*42 U.S.C. § 7401(b)(1). Originally enacted in 1963, it was part of the federal government's gradual increase in supervision over air quality. *See Train v. NRDC*, 421 U.S. 60, 63-64, 95 S. Ct. 1470, 43 L. Ed. 2d 731 (1975). Originally, the federal government maintained a relatively hands-off approach, and the states were left with "wide latitude to determine both the air quality standards which they would meet and the period of time in which they would do so." *Id.* at 64.

That changed with the 1970 amendments, which Congress passed due to dissatisfaction with the progression of existing air pollution programs. *See Alaska Dep't of Envtl. Conservation v. EPA*, 540 U.S. 461, 469, 124 S. Ct. 983, 157 L. Ed. 2d 967 (2004). The 1970 amendments were a reaction by Congress to what it perceived as the serious problem of air pollution and the individual states' inability or unwillingness to address the problem. *Union Elec. Co. v. EPA*, 427 U.S. 246, 256, 96 S. Ct. 2518, 49 L. Ed. 2d 474 (1976). Under the amended Act, the EPA established National Ambient Air Quality Standards (NAAQS) to provide a framework for evaluating the air quality in various locations around the county. *See*42 U.S.C. § 7409. *See also* [*6] 40 C.F.R. §50.2. After the EPA defines the standard, each state must then designate those areas within its boundaries where the air quality is better or worse than that standard for each type of pollutant, or where the air quality cannot be classified because of insufficient data. *See*42 U.S.C. § 7407(d). Areas that meet the standards for a particular pollutant are classified as "attainment" areas for that pollutant; areas that do not, are classified as "nonattainment." *Id.*

Part C of subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-92, sets forth requirements for the prevention of significant deterioration of air quality in attainment areas. The goal of course is to ensure that areas that have "clean" air will continue to have it. So part C, among other things, prohibits the construction of a "major emitting facility" in an attainment area unless a permit has been issued that complies with certain requirements of part C, including the use of the best available control technology for each regulated pollutant that is emitted from the facility. *See*42 U.S.C. § 7475(a). *See also40 C.F.R. §§ 52.21* & 51.166. Not surprisingly, refineries such as BP's Whiting facility are "major emitting [*7] facilities." 42 U.S.C. § 7479(1). Furthermore, the Act provides that once a source passes the specified threshold for emission of a particular pollutant, the source must obtain what is commonly called a "major source permit." *See*42 U.S.C. § 7475(a). *See also40 C.F.R. §§ 52.21* & 51.166.

Part D of the Act attempts to improve the air quality in nonattainment areas -- that is, areas where the air quality is already poor as judged by the standards set by the EPA. *See*42 U.S.C. §§ 7501-15. As with part C, part D also requires major emitting facilities to obtain permits before undertaking certain modifications. *See*42 U.S.C. § 7503. And, like part C, part D also provides thresholds for various pollutants, beyond which a modification is considered to be "major." *See*40 C.F.R. § 51.165(a)(1)(x). Prior to commencing a major modification that triggers part D, one generally must first obtain a major source permit. *See*42 U.S.C. § 7503. *See also40 C.F.R. 52.21* & 51.165.

Under the Act, states retain "the primary responsibility for formulating pollution control strategies." *Union Elec.*, 427 U.S. at 256. *See also*42 U.S.C. § 7410(a). But the Act subjects "the States [*8] to strict minimum compliance requirements." *Union Elec.*, 427 U.S. at 256-57. In particular, states are responsible for carrying out the Act's provisions through what are called State Implementation Plans (SIPs). *Id. See also Alaska DEC*, 540 U.S. at 472-73. Each SIP must satisfy the requirements of the Clean Air Act before they are approved by the EPA. *See*42 U.S.C. § 7410(k). *See also*40 C.F.R. §§ 51.165-51.166. States are given wide latitude in formulating their plans and the EPA must approve them if they have been adopted after public notice and hearing and if they meet eight specified criteria. *Union Elec.*, 427 U.S. at 249-50. The federal regulations are only applicable in the absence of an EPA-approved SIP. *See, e.g.*, 42 U.S.C. § 7410; *40 C.F.R. 52.21(a)*.

Indiana has complied with the Clean Air Act by creating a detailed statutory and regulatory scheme to implement the Act, as well as various other state and federal environmental programs. *See*Ind. Code § 13-11-1-1 *et seq*. Indiana's General Assembly expressly noted its intent to continue a policy of "cooperation with the federal and local governments and other concerned public and private organizations," to, among other things, "[f]ulfill [*9] the social, economic, and other requirements of present and future generations of Indiana citizens." Ind. Code § 13-12-4-3. In other words, Indiana's environmental laws

are not only designed to comply with federal requirements, but also to address issues that are of particular importance to the State itself.

Indiana's regulatory system starts with the IDEM, which is the air pollution control agency for Indiana with respect to matters related to the Clean Air Act. *See*Ind. Code § 13-13-5-1. The State has entrusted the IDEM with the power to grant permits and licenses under the Clean Air Act, *see*Ind. Code § 13-14-1-1 *et seq*., but has also circumscribed the IDEM's freedom to do so by creating a detailed framework for its analysis of permits, *see*Ind. Code § 13-15-3-1 *et seq*. In particular, the State provides for public hearing and comment prior to the IDEM deciding on a permit, *see*Ind. Code § 13-15-3-3 & § 13-15-5-1, specifies the criteria for deciding whether to grant a permit, *see*Ind. Code § 13-15-3-5, gives the IDEM a time frame for deciding on permit applications, *see*Ind. Code § 13-15-4-1(a)(7), and requires the IDEM provide notice of its decision to the parties involved in the [*10] application, *see*Ind. Code § 13-15-5-3.

After the IDEM disposes of a permit application, its decisions can be appealed to another administrative agency, the OEA. *See*Ind. Code § 13-15-6-1 *et seq*. *See also*Ind. Code § 4-21.5-7-3. The OEA then applies its own expertise in evaluating the petition *de novo*. *See*Ind. Code §§ 13-15-6-3 & 13-15-7-1 *et seq*. The OEA's decision can then be reviewed in the Indiana state courts. *See*Ind. Code § 4-21.5-5-16. *See also*Ind. Code § 13-15-6-5. Under the Indiana system, any trial court of general jurisdiction can review the OEA's decisions, *see*Ind. Code § 4-21.5-5-6, and the review is conducted under a deferential standard, *see* *Huffman v. OEA*, 811 N.E.2d 806, 809 (Ind. 2004); *Ind.-Ky. Elec. Corp. v. Comm'r, IDEM*, 820 N.E.2d 771, 776 & 781 (Ind. Ct. App. 2005).

Substantively, Indiana's regulatory regime copies the Clean Air Act's part C and part D restrictions, *see, e.g.*, 326 Ind. Admin. Code 2-3-1 *et seq*., including the pollutant thresholds, *see*326 Ind. Admin. Code 2-2-1 (xx) & (yy); 326 Ind. Admin. Code 2-3-1(qq) & (rr), and the concomitant permit requirements, *see*326 Ind. Admin. Code 2-2-2 & 2-2-3. In addition, for sources that can demonstrate that [*11] their emissions will be below the thresholds, Indiana law allows for the source to obtain what is known as a "minor source permit." *See*326 Ind. Admin. Code 2-7-10.5. Minor source permits do not require the source to use the best available control technology or achieve the lowest emissions rate which are requirements attached to the permits that are necessary when a source triggers parts C and D.

The EPA has approved Indiana's SIP with respect to its implementation of parts C and D of the Clean Air Act. That approval was codified on June 18, 2007. *See* 72 Fed. Reg. 33.395. In addition, the EPA has approved Indiana's minor new source review rules. *See* 62 Fed. Reg. 38.919 (July 21, 1997). As a result, Indiana's state regime controls the analysis of whether to grant BP's permit in this case.

FACTUAL BACKGROUND

According to the Amended Complaint, which I accept as true at this point, the NRDC is a not-for-profit corporation whose missions is environmental protection. (*See* DE 38 P7.) They have thousands members nationwide and several hundred who reside in Lake County, Indiana. (*Id*.) BP operates the refinery in Whiting and, when BP applied for a minor source permit from IDEM to expand the plant, [*12] NRDC was one of a number of environmental groups that fought the request. (*Id*. P9.)

Because the present motion concerns relatively narrow questions of law, there is no need to delve into the details of the NRDC's factual allegations. Its enough to say that the NRDC contends that BP's modifications will result in increased emissions of a variety of hazardous pollutants. (*Id*. P1.) The NRDC believes that IDEM was duped into giving BP the minor source permit because BP's application contained incorrect statements regarding the extent of the emissions from the expanded refinery. (*Id*.) Relying on that minor source permit, BP has begun construction of a $ 4 billion expansion to its facility. (*Id*.) The NRDC says that the changes BP is making to the Whiting facility trigger the requirements of parts C and D, which would require a major source permit. (*Id*.) The NRDC says this violates the Clean Air Act because it is modifying the refinery without the required major source permits. (*Id*.)

The NRDC also contends that BP actually began the modifications to its refinery in 2005, and that it did so without any permits whatsoever. (*Id*. P2.) BP's 2005 work involved its expansion of a fluidized cracking [*13] unit, which the NRDC contends was really the beginning of modification of the refinery to process the Canadian heavy crude oil. (*Id*.) Evidently, the EPA also has concerns that BP jumped the gun because in November 2007 it issued a notice of violation (NOV) finding that BP's 2005 fluidized cracking unit modifications were unlawfully commenced without a permit. (*Id*.) Then on October 1, 2008, the EPA amended its NOV to state that BP's 2005 modifications were actually the initial phase of its overall modifications to facilitate the processing of the Canadian extra heavy crude. (*Id*.) Thus, the amended NOV alleges that BP's 2005 modifications -- and indeed its entire modification project -- required a major source permit. (*Id*.) As a result, the NRDC says that BP should be liable for civil damages stemming from the period in which it was modifying its facility without a permit.

The NRDC's complaint contains three counts against BP. Counts I and III concern the NRDC's claims that BP failed to obtain major source permits (under both parts C and D, depending on the particular pollutant) for its Canadian extra heavy crude project. (*See* DE 38 PP50-80 & 88-96.) The NRDC seeks a declaratory judgment [*14] that BP has violated the Clean Air Act and an injunction preventing BP from carrying out its modifications until it has obtained the appropriate major source permits. The third claim (Count II) alleges that BP's 2005 modifications were also major modifications that required parts C and D permits, but were commenced without any permit at all. (*See id*. PP81-87.) The NRDC seeks a civil penalty from BP for this violation. (*Id*., Prayer for Relief P3.)

As noted above, there are other concerned citizens and environmental groups currently challenging the IDEM's decision before the OEA. (*See* DE 45-3 PP1-5.) The OEA petitioners include the Sierra Club Inc., which is, like the NRDC, a national environmental organization whose ″purpose is to protect the natural environment and promote the responsible use of the earth's ecosystems and resources. . . .″ (*Id*. P2.) Although the NRDC advocated against BP getting the permit from IDEM, for one reason or another, the NRDC decided not to sign on to the petition appealing IDEM's decision to the OEA. A cynic might conclude that the NRDC and its colleagues at the Sierra Club were trying to fight the war on two fronts. The Sierra Club's petition before the [*15] OEA is a nearly identical to the NRDC's complaint in this Court. Indeed, other than the NRDC's claims in count II, the OEA petition covers the exact same ground. (*Compare* DE 38 *with* DE 45-3.) [1] What is more, even though the NRDC did not sign on to the OEA petition, it's attorneys represent the petitioners in that proceeding. (*See* DE 45-3 at 52-53.) So it's not at all surprising that large chunks of the OEA petition and the NRDC's complaint are identical -- right down to the italics.

BP has moved to dismiss the complaint, arguing that 42 U.S.C. § 7604(a)(3) does not give the Court jurisdiction, and that even if it did, the Court should abstain from exercising that jurisdiction pursuant to the Supreme Court's decisions in *Burford v. Sun Oil Co*., 319 U.S. 315, 63 S. Ct. 1098, 87 L. Ed. 1424 (1943), and/or *Colorado River Water Conservation Dist. v. U.S*., 424 U.S. 800, 96 S. Ct. 1236, 47 L. Ed. 2d 483 (1976). (*See* DE 44 & 45.) I conclude that the Court has jurisdiction, but that it should not exercise that jurisdiction, at least in part.

DISCUSSION

I. The Civil Penalty Claim -- Count II

Before plunging into the heart of this case, I will first dispose of the easiest issue. The NRDC brings this action under the citizen suit provision of the Clean Air Act, 42 U.S.C. § 7604(a)(3). As discussed below, that provision provides for suits by private individuals against parties that construct a major modification without a required permit. *See id*. Furthermore, the statute specifically allows for suits seeking ″appropriate civil penalties.″ 42 U.S.C. § 7604(a). The NRDC alleges that BP commenced a major modification in 2005, and that it did so without any permit whatsoever. (*See* DE 38 PP81-87.) The NRDC therefore seeks [*17] civil penalties against BP for this alleged violation of the Clean Air Act. To the extent the NRDC seeks civil penalties for the discrete period between 2005 and 2008 when BP obtained a permit from the IDEM, the Court clearly has jurisdiction. And the action presently pending before the OEA is not a bar to this Court exercising that jurisdiction. Even BP agrees with this. (*See* DE 57 at 15-17 (acknowledging that the Court has jurisdiction over count II and that it would not be improper to exercise it).) Therefore, even though I am dismissing counts I and III, I see no reason to dismiss the civil penalty claim in count II, and it survives this Order.

II. Jurisdiction for Counts I and III

With respect to counts I and III, I must first assure myself that I have jurisdiction to decide the case. BP says I don't. (*See* DE 45 at 6-13.) It argues that, because it has a minor source permit, the NRDC's claims do not fit within § 7604(a)(3).

The Clean Air Act's citizen suit provision states, in pertinent part, that any person may bring a civil action on his own behalf

> against any person who proposes to construct or constructs any new or modified major emitting facility without a permit required under [*18] part C of subchapter I of this chapter (relating to significant deterioration of air quality) or part D of subchapter I of this chapter (relating to nonattainment) or who is alleged to have violated (if there is evidence that the alleged violation has been repeated) or

[1] The petition before the OEA also includes several allegations that the NRDC does not raise in this Court. (*See* DE 45-3 PP70-72 (regarding BP's analysis for mercury and beryllium); PP105-109 (regarding greenhouse gas emissions); PP122-126 (regarding whether BP met all applicable requirements); PP127-131 (regarding whether the IDEM permit is practically enforceable).) In other words, putting count II to the side, the OEA petition covers everything the NRDC raises in this case and then some. But even those factual allegations are included in the OEA petition. (*See* DE 45-3 PP77-86 (alleging that the minor source permit was inappropriate because the EPA had already concluded that BP's 2005 actions constituted **[*16]** a major modification).)

> to be in violation of any condition of such permit.

42 U.S.C. § 7604(a)(3). The provision is intended to encourage citizen participation in the enforcement of the Clean Air Act. *See Pa. v. Del. Valley Citizens' Council for Clean Air*, 478 U.S. 546, 560, 106 S. Ct. 3088, 92 L. Ed. 2d 439 (1986). The section is clear: federal district courts have jurisdiction to hear citizen suits against parties that either construct or propose to construct an emission source that will emit pollutants beyond the specified thresholds under parts C or D, whichever is applicable, unless the party has first obtained the necessary permit.

According to the complaint, BP has both proposed to modify, and is in fact modifying, a major emitting facility. (*See* DE 38 PP1-2, 42-49.) The complaint alleges that BP's modifications began in 2005, and that BP did not receive any permit whatsoever (part C, part D, or an Indiana minor source permit) for those changes. (*See id.* PP42-43.) Although [*19] in May 2008, the IDEM issued BP a minor source permit for its modifications, BP still does not have a permit that satisfies parts C or D. (*See id.* PP46-49.)

Based on the allegations in the complaint, this case falls squarely within the plain language of § 7604(a)(3). Assuming the allegations are true, BP's modifications to its refinery trigger parts C and D, but BP has not obtained the necessary major source permits to make those modifications.

BP's reliance on the Fifth Circuit's decision in *CleanCOALition v. TXU Power*, 536 F.3d 469 (5th Cir. 2008), is not persuasive. In that case, TXU proposed to construct a coal-fired power plant and applied for a permit to do so. *Id.* at 470. The Texas agency charged with evaluating permit applications granted TXU a draft part C permit, and the citizen group sued to prevent the construction. *Id.* at 470-71. After the suit was filed, but before the Fifth Circuit's decision, the agency actually granted TXU the part C permit. *Id.* at 471 n.2. In affirming the district court's dismissal for lack of subject matter jurisdiction, the Fifth Circuit held that "§ 7604(a)(3) does not authorize preconstruction citizen suits against facilities that have either obtained [*20] a permit or are in the process of doing so." *Id.* at 479. The Fifth Circuit noted that

> Appellants interpret the phrase [in § 7604(a)(3)] "without a permit" to mean "without a permit that complies with the CAA." However, we decline to rewrite the plain language of the statute. Here, not only has TXU applied for a permit, it has since successfully obtained one, though still subject to state judicial review. Thus, it can hardly be said - as Appellants must in order for § 7604(a)(3) to apply - that TXU is proposing to construct or constructing a facility "without a permit."

Id. at 478-79 (footnote omitted).

While this language can be construed to support the broad interpretation of § 7604(a)(3) that *any* permit - even BP's state-law minor source permit - is sufficient to prevent an action, I do not think that is what the Fifth Circuit intended. Part of the plaintiff's theory in *TXU* was that the application contained faulty emissions information and therefore the part C permit that TXU obtained did not *actually* comply with part C because it was based on an incorrect analysis. *See Cleancoalition & Robertson County v. TXU Power*, No. 6:06-cv-355-WSS, Docket Entry 26 at 17-21, 2007 U.S. Dist. LEXIS 98658 (W.D. Tex. May 21, 2007) (attached to [*21] BP's memorandum in support of its motion to dismiss [DE 45-5]). In essence, the *TXU* parties were arguing about whether the state agency was correct in the *type* of part C permit it granted. And the Fifth Circuit held the statute leaves that to the State to decide.

But if the broader interpretation is what the Fifth Circuit intended, I simply disagree. Section 7604(a)(3) does not say that a citizen suit lies when a party proposes a major modification "without a permit." Rather, the action lies when a party proposes a major modification "without a permit required under part C . . . or part D." Here, the NRDC says that's precisely what BP proposes to do here: to construct a major modification triggering parts C and D without the required permit under those parts. Thus, § 7604(a)(3) applies.

The fact that BP only has a state law minor permit, and not one required under part C or D, is what makes this case more like the Second Circuit's decision in *Weiler v. Chatham Forest Products, Inc.*, 392 F.3d 532 (2d Cir. 2004). There the court addressed a situation similar to what we have here: the plaintiff claimed that the defendant proposed to construct a major source of emissions, but it only received [*22] a state-law minor source permit. *Id.* at 534-35. The Second Circuit essentially reviewed the allegations of the complaint and determined that they claimed the defendant proposed to construct a major emissions facility without a permit under parts C or D. *Id.* at 536. That was enough for jurisdiction. *Id.* "[A] state determination that a prospective source of air pollution is not a major emitting facility does not prevent a private plaintiff from bringing a suit seeking to enjoin the construction of the facility pursuant to . . . § 7604(a)(3)." *Id.* at 539. *See also Ogden Projects, Inc. v. New Morgan*

Landfill Co., Inc., 911 F. Supp. 863, 866-67 (E.D. Pa. 1996). [2]

In sum, I find that § 7604(a)(3) is clear, and the NRDC's allegations fall squarely within it. But just because there is jurisdiction to hear the case does not mean that I *should* hear it. That is where the NRDC hits an insurmountable hurdle.

III. Abstention

Various abstention doctrines allow a court, in limited circumstances, to refrain from exercising jurisdiction. As a general rule, ″federal courts have a strict duty to exercise the jurisdiction that is conferred upon them by Congress.″ *Quackenbush v. Allstate Ins. Co.*, 517 U.S. 706, 716, 116 S. Ct. 1712, 135 L. Ed. 2d 1 (1996). *See also New Orleans Pub. Serv., Inc. v. Council of the City of New Orleans*, 491 U.S. 350, 358, 109 S. Ct. 2506, 105 L. Ed. 2d 298 (1989) (*NOPSI*). But the duty is not ″absolute.″ *Quackenbush*, 517 U.S. at 716. The Supreme Court has ″held that federal courts may decline to exercise their jurisdiction, in otherwise exceptional circumstances, where denying a federal forum would clearly serve an important [*24] countervailing interest.″ *Id.* (quotation marks omitted). *See also Colo. River*, 424 U.S. at 816-18. Such interests include ″considerations of proper constitutional adjudication, regard for federal-state relations, or wise judicial administration.″ *Quackenbush*, 517 U.S. at 716 (quotation marks omitted). Often ″[f]ederal courts abstain out of deference to the paramount interests of another sovereign, and the concern is with principles of comity and federalism.″ *Id.* at 723.

BP asserts that two types of abstention militate in favor of deferring to the Indiana state process in this case. (*See* DE 45 at 13-21.) The first is based upon federalism concerns, and arises out of the Supreme Court's decision *Burford*. The second is based on considerations of judicial economy as outlined in *Colorado River*. While *Burford* and *Colorado River* provide distinct frameworks for abstention decisions, the lines between them often blur. This is why the Supreme Court has acknowledged, ″the various types of abstention are not rigid pigeonholes into which federal courts must try to fit cases.″ *NOPSI*, 491 U.S. at 359 (quotation marks omitted). Whether considered individually or in conjunction with one another, I think [*25] both types of abstention apply here.

A. *Burford* Abstention

Burford abstention grew out of the Supreme Court's 1943 decision, and is grounded in federalism, rather than concerns about the rights of the parties. *See Int'l Coll. of Surgeons v. City of Chi.*, 153 F.3d 356, 361 (7th Cir. 1998). In *Burford* the Court declined to exercise its jurisdiction to hear a challenge to a Texas Railroad Commission permit allowing the defendant to drill for oil on its land. 319 U.S. at 316-17. The Court noted that Texas had established the Commission in part to address issues related to oil extraction in the State. *See Id.* at 318-20. The Commission evaluated permit applications in the first instance, and its decisions were subject to review by the state district court in Travis County, as well as by the Court of Civil Appeals and the Texas Supreme Court. *Id.* at 325-26. Texas channeled judicial review through one county to assure uniformity. *Id.* at 326-27. In the judicial review procedure, the trial court determined whether the Commission acted reasonably, but also had authority to Order a trial *de novo*. *Id.* at 326. The Supreme Court concluded that abstention was necessary because ″[t]he very 'confusion' [*26] which the Texas legislature and Supreme Court feared might result from review by many state courts of the Railroad Commission's orders has resulted from the exercise of federal equity jurisdiction.″ *Id.* at 327.

What motivated the Court to abstain in *Burford* was the complexity of the issue, its importance to the State, the need for uniform regulation, the state procedures designed to prevent confusion, and the detrimental impact of ongoing federal review of the agency's orders. *Quackenbush*, 517 U.S. at 725. The Court made a similar point in *Colorado River* when it noted that *Burford* was concerned with the ″disruptive effect″ on state management of oil and gas fields that federal review would have. *Colo. River*, 424 U.S. at 815.

Although there is no ″formulaic test,″ *Quackenbush*, 517 U.S. at 727, the basic analysis for determining when abstention under *Burford* is proper has been refined by the Supreme Court as follows:

> Where timely and adequate state-court review is available, a federal court sitting in equity must decline to interfere with the proceedings or orders of state administrative agencies: (1) when there are difficult questions of state law

[2] BP thinks *TXU* and *Weiler* represent a circuit split with respect to jurisdiction. (*See* DE 45 at 9-10.) I disagree. As noted above, the issue in *TXU* was whether § 7604(a)(3) provided jurisdiction for a citizen suit when the applicant had obtained a part C permit, but the citizens group was unhappy with what the permit actually required. *Weiler*, on the other hand, dealt with an agency that simply said that no part C or D permit was required at all and instead granted a minor source permit under state law. The two do not conflict: **[*23]** in one there is a permit under part C and/or D, and in the other there is not. Nor does it not appear that the Fifth Circuit thought it was creating a split in deciding *TXU*. It cited *Weiler* approvingly, *see* 536 F.3d at 474, and declined to mention it in its analysis of § 7604(a)(3).

> bearing on policy problems of substantial [*27] public import whose importance transcends the result in the case then at bar; or (2) where the exercise of federal review of the question in a case and in similar cases would be disruptive of state efforts to establish a coherent policy with respect to a matter of substantial public concern.

NOPSI, 491 U.S. at 361 (quotation marks and citations omitted). *See also* *Quackenbush*, 517 U.S. at 726-27; *Ill. Bell Tel. Co., Inc. v. Global NAPs Ill., Inc.*, 551 F.3d 587, 595 (7th Cir. 2008). [3]

The first type of *Burford* abstention is not applicable here, because there are no "difficult questions of state law." The law is clear, and the thresholds for the respective permit requirements are plain. The question here is simply whether BP's plans surpass those thresholds. The second type of *Burford* abstention, however, may apply. The key question is whether the potential for conflict is so great "as to impair impermissibly the State's effort to effect its policy." *Colo. River*, 424 U.S. at 816.

Here, [*28] Indiana has acted to achieve its own environmental goals. While it was no doubt motivated to create its regime by the federal government's passage of the Clean Air Act, that does not take away the pressing state interests Indiana seeks to advance. At the federal government's request, Indiana developed its own plan and then sought, and obtained, the EPA's approval. *See* 72 Fed. Reg. 33.395. Furthermore, the Indiana General Assembly has made its goals explicit; it designed its regulatory regime to provide for "comprehensive environmental development and control [policies] on a statewide basis," and "to unify, coordinate, and implement programs to provide for the most beneficial use of the resources of Indiana," as well as to preserve the environment for future generations of Indiana citizens. *See*Ind. Code § 13-12-3-1. In other words, in creating environmental regulations, Indiana has come up with a unique balance of economic, environmental, and natural resource allocation interests to best serve the people of Indiana. It thus exercised its "wide discretion in formulating its plan." *Union Elec.*, 427 U.S. at 250. Unlike the states' role as an "ancillary enforcers" or a "deputized federal [*29] regulators" in, for instance the Telecommunications Act, *see* *Global NAPs*, 551 F.3d at 595 (quotation marks and brackets omitted), here Indiana is truly pursuing a local interest.

Indiana concentrates its technical evaluation of pollution permit applications in an expert agency. The IDEM is vested with significant power, but is also reined in with detailed restrictions on the use of that power. *See*Ind. Code § 13-11-1-1 *et seq.* *See also*Ind. Code § 13-14-1-1 *et seq*. The agency conducts its own expert analysis on the applications, and presumably does so seeking to achieve Indiana's environmental goals. The IDEM's decisions can then be reviewed by another expert tribunal, the OEA. *See*Ind. Code § 13-15-6-1 *et seq*. Like the IDEM, the OEA utilizes its own expertise in evaluating appeals of the IDEM decisions. This agency appellate review adds a layer of protection against erroneous IDEM decisions and helps maintain uniformity in the system. Indiana then provides for review of OEA decisions in the state courts, including the Indiana Supreme Court. *See*Ind. Code §§ 4-21.5-5-16 & 13-15-6-5. In sum, Indiana has devised a complex agency and judicial framework for evaluating permit applications [*30] that is designed to both provide expert analysis of the applications and maintain uniformity.

Finally, the substantive law applied within the Indiana regulatory regime is *state* - not *federal* - law. Indiana uses its own thresholds for its permitting regime. *See, e.g.*, 326 Ind. Admin. Code 2-2-1; 326 Ind. Admin. Code 2-2-3; 326 Ind. Admin. Code 2-3-1. It even has its own type of permit: the minor source permit, which is entirely a creature of state law. *See*326 Ind. Admin Code 2-7-10.5. It is these regulations, not the federal regulations, that apply to permit applicants in Indiana. *See**40 C.F.R. 52.21*; 72 Fed. Reg. 33.395; 62 Fed. Reg. 38.919. *See also* *Ellis v. Gallatin Steel Co.*, 390 F.3d 461, 480-81 (6th Cir. 2004); *Sugarloaf Citizens Ass'n v. Montgomery County.*, No. 93-2475, 33 F.3d 52, 1994 WL 447442, at *4-7 (4th Cir. Aug. 17, 1994). *See also* *Jamison v. Longview Power, LLC*, 493 F. Supp. 2d 786, 791 (N.D. W.Va. 2007).

In the end, the NRDC wants me to second-guess the IDEM's expert application of Indiana law with respect to BP's permit request. This is nothing more than a collateral attack on the IDEM's permit decision. To allow it would be to gut the carefully crafted system that [*31] Indiana has put in place. What is the point of having an expert agency appeals process - or a state court appeals process - if litigants can simply side-step it by turning to the federal courts? Take this case. There are multiple environmental groups fighting BP's permit tooth and nail. While the some of them tussle with BP in the state system, the NRDC is trying to take BP to federal court. But this gives the opponents of the permit multiple bites of the apple by allowing them to fight the battle on two fronts. This strikes me as terribly inefficient. And if for some reason this matter goes astray in the state system, the Clean Air Act provides for oversight by the EPA. *See*42 U.S.C. § 7413(a)(5). *See also* *Alaska DEC*, 540 U.S. at 473-74.

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[3] While abstention has its origins in equity, the Supreme Court has noted that abstention can be appropriate in any case "in which the court has discretion to grant or deny relief." *Quackenbush*, 517 U.S. at 718.

The bottom line is this: the NRDC thinks the IDEM got the call wrong. It may have. But the proper remedy is through the Indiana regulatory and state court process; otherwise there is an impermissible risk of disrupting the Indiana's attempt to ensure uniformity. *See NOPSI*, 491 U.S. at 362 (holding that abstention was inappropriate because the case was ″[u]nlike a claim that a state agency has misapplied its lawful authority or has failed to take into [*32] consideration or properly weigh relevant state-law factors″). And while the issues may ultimately wind up in federal court again, if they do, then at least the federal court will have the benefit of the full state analysis. But any attempt to litigate those issues here and now would smother the delicate federalism concerns that underlie *Burford*. So I believe the best course is to restrain from exercising my jurisdiction.

My decision to abstain finds support in at least two appellate courts that have confronted the issue of abstention in the context of a challenge to a Clean Air Act permit that is simultaneously being challenged in the state agency process. *See Ellis*, 390 F.3d at 480-81; *Sugarloaf*, No. 93-2475, 33 F.3d 52, 1994 WL 447442, at *4-7. *Accord Jamison*, 493 F. Supp. 2d at 791. The NRDC has not pointed me to a federal circuit court decision to the contrary. These cases hold that *Burford* abstention is necessary where a plaintiff is attempting to collaterally attack a state-issued permit.

In *Ellis*, for example, the court noted that the claims ″boil down to allegations that the Kentucky agency failed to apply or misapplied its lawful authority under Kentucky law and under the Clean [*33] Air Act by issuing [a] PSD permit. . . .″ 390 F.3d at 481 (quotation marks and brackets omitted). The court found that *Burford* abstention was not only appropriate in such circumstances, but that the case offered ″a classic explanation for applying *Burford* abstention″ because allowing federal review would be disruptive to Kentucky's efforts to establish a coherent policy. *Id.* at 480-81.

Likewise, the claims in *Sugarloaf* were described as a ″collateral attack″ on the state agency's permitting decision. *See 33 F.3d 52, 1994 WL 447442, at *4*. The complaint in that case was ″dressed in the raiments of federal claims,″ but did ″nothing more than resurrect in a different forum objections . . . that have already been litigated before a state ALJ and the Secretary of [the state agency].″ *33 F.3d 52*, *Id.* WL at *6. The Fourth Circuit concluded that the citizens ″cannot launch a grapeshot collateral attack on the permitting decisions of an agency [under the Clean Air Act] . . . and hope that [its shot] will land them in a federal district court.″ *Id.* (quotation marks and brackets omitted). Consequently, the Fourth Circuit concluded that abstention was ″mandatory″ because the exercise of federal jurisdiction over [*34] the State agency's permitting decisions ″would disrupt Maryland's complex statutory scheme and frustrate the State's efforts to establish a coherent environmental policy.″ *33 F.3d 52*, *Id.* WL at *4-7 (quotation marks and citations omitted).

The parallels between these cases and the case before me are striking. Here, as in *Ellis*, BP's permit is being challenged both in the concentrated and comprehensive state process on the exact same grounds that the NRDC pursues in this Court. And, just like in *Sugarloaf*, the NRDC's actual beef is cloaked in federal claims in the hopes of providing a federal forum for litigation. But, as the Sixth Circuit said, the ultimate question posed here is not whether BP can ignore the Clean Air Act requirements, but rather whether the Clean Air Act requirements are even triggered by BP's proposed changes - i.e., whether a part C or part D permit is even required at all. I would also add to the Sixth Circuit's articulation of the issues this additional question: who in this context gets to decide? I conclude, as the Sixth Circuit did, that the state gets to answer that question first.

None of the cases that the NRDC points to command a different result. (*See* DE 47 at 19.) The [*35] first, *PMC, Inc. v. Sherwin-Williams Co.*, presented a fight over which of two private parties should pay for clean-up costs for past pollution under CERCLA, 42 U.S.C. §§ 9607(a) & 9613(f)(3), RCRA, 42 U.S.C. § 6900 *et seq.*, and the Illinois Contribution Act. *See*151 F.3d 610, 613 (7th Cir. 1998). Crucial to the outcome of that case was the fact that Illinois had not initiated a ″formal″ proceeding, but had merely carried out informal actions to address the alleged violations. *See id.* at 618-19. Indeed, the Seventh Circuit even stated that where there is a parallel formal proceeding, ″there may be room for applying the doctrines of abstention . . . in cases in which . . . the citizens' suit would disrupt″ that proceeding. *Id.* at 619. Thus, because there is a formal state proceeding here, if anything the Seventh Circuit's decision in *PMC* supports abstention, not the other way around.

In the second case relied on by the NRDC, *Oregon State Public Interest Research Group, Inc. v. Pacific Coast Seafoods Co.* (*OSPIRG*), the court refused to abstain in a Clean Water Act claim on summary judgment. 341 F. Supp. 2d 1170, 1172 (D. Or. 2004). But as with *PMC*, there was no parallel state proceeding. [*36] Thus, the same concerns that I have here - interfering with Indiana's prescribed process - just weren't present in *OSPIRG*.

The last, *White & Brewer Trucking, Inc. v. Donley*, also does very little to advance the ball for the NRDC. 952 F. Supp. 1306 (C.D. Ill. 1997). There, the court declined to abstain in a RCRA case predominately for two reasons, neither of which apply here. *See id.* at 1312-13. First, the court specifically noted that ″[i]t is because the RCRA

citizen suit is exclusively a federal cause of action that this court finds *Burford* abstention to be inappropriate . . . [because] there can be no timely and adequate state court review of [the] RCRA claim." *Id.* at 1312. Here, in contrast, the exact same issues the NRDC presses here are also being pressed in the OEA, and therefore timely and adequate review is available via the state process. Second, the court concluded that there would be no need "to delve into the intricacies of Illinois environmental law" because there was no dispute that permit violations had occurred. *Id.* at 1313. The court reasoned that its case was different than those its defendants relied on because in those cases "had the court not abstained, it would [*37] have been required to review the state's environmental permit process." *Id.* Because I view this case as really a collateral attack on the IDEM decision, it poses the precise problem that was absent in *White & Brewer*.

There is one last point that I need to address before leaving the topic of *Burford* abstention. There is a line of Seventh Circuit cases which hold that, for a federal court to abstain, the state forum "must be special - it must stand in a special relationship of technical oversight or concentrated review to the evaluation of those claims." *Int'l Coll. of Surgeons*, 153 F.3d at 363 (quotation marks omitted). This channeling of review through a special forum allows the forum "to acquire a specialized knowledge of the administrative regulations and the . . . industry." *Prop. & Cas. Ins. Ltd. v. Cent. Nat'l Ins. Co. Of Omaha*, 936 F.2d 319, 322 (7th Cir. 1991). Furthermore, "[t]he ability to point to a specialized proceeding *is a prerequisite of, not a factor in*, the second type of *Burford* abstention." *Int'l Coll. of Surgeons*, 153 F.3d at 363-64. (quotation marks omitted; emphasis added). [4]

In *International College of Surgeons*, the defendants sought to demolish two buildings, but the City of Chicago denied their permit requests. 153 F.3d at 359. The defendants sought review of the City's decision in state court, and the actions were removed to federal court. *Id.* The defendants then asserted that the federal court should abstain from deciding the case and remand it back to the state court. *Id.* at 360. The Seventh Circuit concluded that abstention was inappropriate under the second prong of *Burford* for two reasons. *Id.* at 364. First, unlike in *Burford* where review of the agency decision was channeled through a specific state trial court, review of the Landmarks Commission's decisions could be conducted by any court of general jurisdiction under [*39] Illinois Administrative Review Act. *Id.* Second, the trial court reviewed the decision with a deferential standard of review, rather than the *de novo* review made by the Texas trial court in *Burford*. *Id.* at 364-65. "Therefore, unlike the situation in *Burford*, the administrative scheme at issue in this case does not recognize any specialized expertise in the Circuit Court of Cook County; instead, it is the Landmarks Commission whose expertise on the law and the facts deserves deference." *Id.* at 365.

The NRDC did not raise the specialized forum aspect of *Burford* abstention in its brief as a basis for denying BP's motion. (*See* DE 47 at 16-22. *See also* DE 53.) Nor did the NRDC raise this point at the oral argument. (*See* DE 57.) Because the NRDC did not raise the issue of whether or not there is a specialized forum to adjudicate this claim in Indiana, the argument is waived. *Williams v. REP Corp.*, 302 F.3d 660, 666 (7th Cir. 2002) ("A party waives any argument that it does not raise before the district court.") (quotation marks omitted); *see also Local 15, Int'l Bhd. of Elec. Workers, AFL-CIO v. Exelon Corp.*, 495 F.3d 779, 783 (7th Cir. 2007).

In any event, I believe that Indiana has sufficiently [*40] indicated its desire to create a special forum to regulate and adjudicate its air pollution permit requests. It has created a special administrative agency, the IDEM, with expertise in the field. It then channels appeals of the IDEM decisions to the OEA, who again applies its own expertise in evaluating the application in a *de novo* review. *See* Ind. Code §§ 13-15-6-3 & 13-15-7-1 *et seq*. So unlike *International College of Surgeons*, the IDEM's initial decision is not immediately reviewable by any state court. *See* 153 F.3d at 365. It first must go to the OEA for a *de novo* review. The OEA's review therefore "stand[s] in a special relationship of technical oversight or concentrated review," and consequently is the specialized proceeding necessary for *Burford* abstention under the Seventh Circuit. *Id.* at 364.

What is clear from the case law is that abstention is appropriate when the "federal forum threaten[s] to frustrate the purpose of the complex administrative system" established by a State. *Quackenbush*, 517 U.S. at 725. Inserting this Court into the current fray creates precisely that risk. And the risk is intensified here, where the NRDC raises the exact same issues in this Court that [*41] are presently before the OEA. In the end, when I conduct my "careful consideration of the federal interests in retaining jurisdiction over the dispute and the competing concern for the independence of state action,"

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[4] The presence of a specialized forum has been considered by other circuits to be merely **[*38]** "a factor" in determining whether *Burford* abstention is appropriate. *See, e.g., Grimes v. Crown Life Ins. Co.*, 857 F.2d 699, 704-05 (10th Cir. 1988). Until *Property & Casualty*, the Seventh Circuit also viewed the presence of a specialized forum as "a factor." *See, e.g., Gen. Ry. Signal Co. v. Corcoran*, 921 F.2d 700, 708-09 (7th Cir. 1991); *Hartford Cas. Ins. Co. v. Borg-Warner Corp.*, 913 F.2d 419, 425 (7th Cir. 1990) (citing *Grimes*).

id. at 728 (quotation marks omitted), I am convinced that this is a prime case for *Burford* abstention.

B. *Colorado River* Abstention

Abstention under the *Colorado River* doctrine is also appropriate. Unlike *Burford* abstention, *Colorado River* is based upon "principles unrelated to considerations of proper constitutional adjudication and regard for federal-state relations which govern in situations involving the contemporaneous exercise of concurrent jurisdictions." *Colo. River*, 424 U.S. at 817. It is instead based upon "considerations of wise judicial administration" and a concern for the "comprehensive disposition of litigation." *Id.* (quotation marks and parentheses omitted). *See also Clark v. Lacy*, 376 F.3d 682, 685 (7th Cir. 2004). The circumstances permitting this type of abstention are very limited. *See Colo. River*, 424 U.S. at 817-18. And so abstention is the exception. *See Clark*, 376 F.3d at 685.

The abstention analysis under the *Colorado River* doctrine is a two-part inquiry. [*42] *See Tyrer v. City of S. Beloit, Ill.*, 456 F.3d 744, 751 (7th Cir. 2006). "First, the court must determine whether the concurrent state and federal actions are actually parallel." *Id.* at 751 (quotation marks omitted). If they are, "the court must consider a number of non-exclusive factors that might demonstrate the existence of exceptional circumstances." *Id.* (quotation marks omitted).

Two suits are parallel for *Colorado River* purposes when "substantially the same parties are contemporaneously litigating substantially the same issues." *Id.* at 752 (quotation marks omitted). "[I]t is not necessary that there be formal symmetry between the two actions." *Id.* (quotation marks omitted). Therefore, "[a]mong other things, to determine whether two suits are parallel, a district court should examine whether the suits involve the same parties, arise out of the same facts and raise similar factual and legal issues." *Id.* In essence, the question is whether there is a "substantial likelihood that the state litigation will dispose of all claims presented in the federal case." *Clark*, 376 F.3d at 686 (quotation marks omitted).

Based on that framework, the NRDC's federal case against BP is parallel to [*43] the petition presently pending in the OEA. First, the parties in the two cases are substantially the same. Although the NRDC is not named in the OEA action, that is not necessary. *See id.* The NRDC rests its *entire* opposition to *Colorado River* abstention on the fact that it is not a party in the OEA litigation. But the NRDC is simply wrong that "[t]he relevant fact - and determining factor - is that NRDC is not a party to that OEA proceeding." (DE 47 at 24.) Instead, "[p]arties with nearly identical interests are considered substantially the same for *Colorado River* purposes." *Clark*, 376 F.3d at 686. (quotation marks omitted). Focusing, as I must, "on the parties' litigation interests" in this suit and the OEA action, *id.*, I conclude that they are substantially the same.

The petitioners in the OEA action are a mix of non-profit environmental groups and concerned citizens. (*See* DE 45-3 PP1-5.) As discussed above, one of the petitioners, the Sierra Club Inc., is a national environmental group very much like the NRDC. (*See id.* P2.) What is more, the petitioners in the OEA action are even represented by the NRDC's counsel in this Court. (*See id.* at 52-53.) Given the similarities between the [*44] petitioners in the OEA action and the NRDC here, I have no difficulty finding that they have the same "litigation interests," and therefore are "*substantially* the same." *Clark*, 376 F.3d at 686 (emphasis in original).

Second, the two cases arise out of the same facts. Both actions challenge BP's proposed modifications to its Whiting refinery. (*Compare* DE 38 P1 *with* DE 45-3 at 2-3.) In particular, both allege that the IDEM erroneously concluded that BP's project required only a minor source permit. In fact, a paragraph-by-paragraph review of the NRDC's complaint and the petition in the OEA reveals that even the particular omissions that BP is alleged to have made in each case is nearly the same, if not word-for-word identical. (*Compare* DE 38 PP53-67 *with* DE 45-3 PP25-50 (regarding flaring emissions); DE 38 PP68-72 *with* DE 45-3 PP51-52 (regarding certain other omitted emissions); DE 38 PP73-75 *with* DE 45-3 PP59-62 (regarding the use of baseline emissions); DE 38 PP76-77 *with* DE 45-3 PP63-69 (regarding the emissions related to the feedstock); DE 38 PP78-80 *with* DE 45-3 PP73-76 (regarding BP's use of years in which it was allegedly operating in violation of the Clean Air Act); DE 38 PP88-96 [*45] *with* DE 45-3 PP87-98 (regarding BP's use of PM10 data as a surrogate for PM2.5 in its NNSR analysis).) Unquestionably, these two cases arise out of the same facts.

Finally, the two cases raise almost identical legal issues over whether BP's proposed modifications trigger the major modification permit requirements. While the NRDC complaint is cloaked in federal claims, the Seventh Circuit has repeatedly "held that two actions are parallel where the underlying issues are the same, even if they have been repackaged under different causes of action." *Tyrer*, 456 F.3d at 753 (quotation marks, brackets, and ellipses omitted). *See also Clark*, 376 F.3d at 686-87. As I see it, the NRDC's case would have me examine precisely the matters in question in the state suit. *See Tyrer*, 456 F.3d at 754. And it should come as no surprise that the relief sought in both cases is essentially the same: to reject the minor source permit that IDEM granted and force BP to obtain a major source permit instead. As a result, there is

"a substantial likelihood that the state litigation will dispose of all claims presented in the federal case." *See Clark*, 376 F.3d at 686.

Having determined that the NRDC's complaint [*46] and the OEA petition are parallel, I must now evaluate whether there are "exceptional circumstances" that justify abstention. *See Tyrer*, 456 F.3d at 751. The case law has provided a non-exhaustive list of ten factors to consider in that determination. *See id.* at 754. Those factors are:

> 1) whether the state has assumed jurisdiction over property; 2) the inconvenience of the federal forum; 3) the desirability of avoiding piecemeal litigation; 4) the order in which jurisdiction was obtained by the concurrent forums; 5) the source of governing law, state or federal; 6) the adequacy of state-court action to protect the federal plaintiff's rights; 7) the relative progress of state and federal proceedings; 8) the presence or absence of concurrent jurisdiction; 9) the availability of removal; and 10) the vexatious or contrived nature of the federal claim.

Id. "[N]o single factor is necessarily determinative." *Id.* (quotation marks omitted). The factors are "to be applied in a pragmatic, flexible manner with a view to the realities of the case." *Moses H. Cone Mem'l Hosp. v. Mercury Constr. Corp.*, 460 U.S. 1, 21, 103 S. Ct. 927, 74 L. Ed. 2d 765 (1983). Nevertheless, the evaluation must be made "with the balance heavily weighted [*47] in favor of the exercise of jurisdiction." *Id.* at 16. When a district court decides to dismiss or stay under *Colorado River*, it presumably concludes that the parallel state-court litigation will be an adequate vehicle for the complete and prompt resolution of the issues between the parties. *Id.* at 28.

My evaluation of the factors leads me to conclude that *Colorado River* abstention applies here. At the outset, four of the factors, whether the state has assumed jurisdiction over property; the inconvenience of the federal forum; the existence of concurrent jurisdiction; and the availability of removal do not weigh in favor of a stay and therefore counsel against it. But those factors are overwhelmed by the remaining factors.

First, there is a very real threat of piecemeal litigation. This factor was "[b]y far the most important" to the Court in *Colorado River*. *See Moses H. Cone*, 460 U.S. at 16. As should be clear from my discussion of the parallel nature of these two actions, the two cases present nearly identical issues. While "the danger of piecemeal litigation does not turn on formal identity of issues," *Tyrer*, 456 F.3d at 756, even the formal identity of the issues here is close. Moreover, [*48] the threat of piecemeal litigation poses three distinct problems: it duplicates the amount of judicial resources necessary to resolve the dispute, *see Clark*, 376 F.3d at 687; it creates incentives for the parties to game the respective proceedings, *see Tyrer*, 456 F.3d at 756; and it presents the possibility of inconsistent or conflicting results, *see id*. The latter two create questions about "[t]he legitimacy of the court system in the eyes of the public and fairness to the individual litigants." *Id.* at 756. All three of these problems exist here, and as a result this factor weighs heavily in favor of abstaining.

Second, the order in which jurisdiction was obtained and the relative progress of the two actions also weigh heavily in favor of abstaining. While "priority should not be measured exclusively by which complaint was filed first, but rather in terms of how much progress has been made in the two actions," *Moses H. Cone*, 460 U.S. at 21, it should be noted that the original OEA petition was filed before the first complaint was filed here. (*Compare* DE 10-6 P11 (listing May 19, 2008, as the filing date of the petition) *with* DE 1 (the original complaint filed in this Court, filed on [*49] July 9, 2008).) More importantly, the OEA action is significantly further along than the NRDC's action here. (*See* DE 45 at 19-20.) Discovery in the OEA action has long since closed, BP has produced a substantial amount of discovery materials, and the OEA has set the matter for a hearing in August. (*See id.*) By contrast, we haven't even gotten out of the starting gate. BP hasn't answered the complaint. Discovery hasn't even started, let alone concluded. In short, this case is likely a long, long way from over. Thus, the relative progress of the two cases weighs strongly in favor of abstaining.

Furthermore, the OEA is also fully capable of providing an adequate remedy. It has the power to vacate or modify BP's permit. It can make BP go back to the IDEM to seek a major source permit, as the NRDC thinks it should. In short, aside from the civil fines for the claims in Count II, the OEA can provide an adequate remedy in this case. And "[i]f there is merit to [the NRDC's claim] . . . there is not only substantial likelihood that the state litigation will dispose of all claims presented in the federal case, but virtual certainty." *Caminiti & Iatarola, Ltd. v. Behnke Warehousing, Inc.*, 962 F.2d 698, 702 (7th Cir. 1992) [*50] (quotation marks omitted)..

The remaining two factors also weigh in favor of abstaining. While the NRDC argues that federal law governs the outcome of this case, (*see* DE 47 at 18-19), that is not really the situation. As noted above, even though federal law requires Indiana to adopt a plan to effectuate the Clean Air Act, that state-law plan has been

approved by the EPA and now governs the issuance of air pollution permits in Indiana. Evaluation of the NRDC's claims, including what should and should not be included in an application for a permit from the IDEM, must be made by reference to Indiana law. And the OEA and the Indiana courts are far better suited to make that evaluation. *See, e.g.*, *Clark*, 376 F.3d at 687-88.

I am also inclined to view the last factor - the vexatious or contrived nature of the federal claim - as weighing in favor of abstention. It seems clear to me that the NRDC and the OEA petitioners are essentially carrying out a divide and conquer strategy with respect to BP's proposed modifications. As noted above, the OEA petition and the NRDC's complaint are strikingly similar - even down to their italics. The NRDC's counsel in this case represents the petitioners before [*51] the OEA, and, according to BP, even told the media it was pursuing the OEA appeal, (*see* DE 49 at 9 n.11). But perhaps in an attempt to maximize their chances of success, the NRDC, who was active at the IDEM stage of the permitting process, (*see* DE 10-5), broke off from the other parties and decided not to put its name on the petition in the OEA. It instead brought this action. Yet it seems to me that given the NRDC's strategy of challenging BP's permit at every step -- it is even pursuing its claims in the EPA while all of this is going on, *see* DE 45 at 20 n.14 -- it is a stretch that it would refrain from appealing to the OEA (but still have its counsel on the case), and then come to this Court and say that *Colorado River* doesn't apply *only* because the "NRDC is not a party to that OEA proceeding." (DE 47 at 24.) The convenience of that argument seems contrived, and it smells fishy to me. So this factor also weighs in favor of abstention.

In sum, the NRDC's suit and the OEA action are parallel proceedings. And my evaluation of the relevant factors leads me to the strong belief that extraordinary circumstances exist here. Despite the starting balance being "heavily weighted in favor [*52] of the exercise of jurisdiction," *Moses H. Cone*, 460 U.S. at 16, I believe abstention under the *Colorado River* doctrine is appropriate.

CONCLUSION

Unfortunately, abstention under *Burford* and *Colorado River* do not result in the same procedural conclusion. Whereas under *Burford* dismissal is appropriate, in *Colorado River* abstention cases the court is to stay the proceedings, *see* *Selmon v. Portsmouth Dr. Condo. Ass'n*, 89 F.3d 406, 409-10 (7th Cir. 1996). Because I conclude that both forms of abstention are appropriate here, I will dismiss counts I and III rather than stay them.

Thus, for the foregoing reasons, Defendant BP Products North America, Inc.'s Motion to Dismiss Amended Complaint or in the Alternative for a Stay of Proceedings [DE 44] is **GRANTED IN PART AND DENIED IN PART**. As detailed in above, counts I and III are **DISMISSED**.

SO ORDERED.

ENTERED: June 26, 2009

/s/ Philip P. Simon

PHILIP P. SIMON, JUDGE

UNITED STATES DISTRICT COURT

Exhibit 2

Sierra Club, Inc. v. Futuregen Indus. Alliance

United States District Court for the Central District of Illinois, Urbana Division
June 9, 2014, Decided; June 9, 2014, Filed
Case No. 13-CV-3408

Reporter: 2014 U.S. Dist. LEXIS 77902; 44 ELR 20131

SIERRA CLUB INC., Plaintiff, v. FUTUREGEN INDUSTRIAL ALLIANCE INC., et al., Defendants.

Counsel: [*1] For Sierra Club Inc, Plaintiff: Eric M Schwing, LEAD ATTORNEY, Attorney at Law, Springfield, IL; Robert Ukeiley, LEAD ATTORNEY, LAW OFFICE OF ROBERT UKEILEY, Berea, KY; Eva Schueller, SIERRA CLUB, San Francisco, CA.

For Futuregen Industrial Alliance Inc, Defendant: Dale N Johnson, VAN NESS FELDMAN LLP, Seattle, WA.

For AmerenEnergy Medina Valley Cogen LLC, Defendant: James Michael Showalter, LEAD ATTORNEY, Ashley L Thompson, Renee Cipriano, SCHIFF HARDIN LLP, Chicago, IL.

Judges: COLIN S. BRUCE, U.S. DISTRICT JUDGE.

Opinion by: COLIN S. BRUCE

Opinion

Plaintiff, Sierra Club Inc., filed a Complaint (#1) against Defendants, Futuregen Industrial Alliance Inc. and AmerenEnergy Medina Valley Cogen LLC, on December 9, 2013. The complaint alleged that Defendants were attempting to construct a major modification without a PSD permit in violation of the Clean Air Act. On February 21, 2014, Defendants filed a Motion for Judgment on the Pleadings and a Joint Motion to Dismiss (#13). This court held a hearing on Defendants' motion on May 16, 2014. Following arguments, the parties were asked to brief the issue of review before the Illinois Pollution Control Board (IPCB). Plaintiff and Defendants filed briefs in accordance with [*2] this court's request on May 30, 2014. After a careful review and consideration of the arguments of the parties and the documents they have submitted, this court concludes that Defendants' Motion for Judgment on the Pleadings and Joint Motion to Dismiss (#13) should be GRANTED.

BACKGROUND

In September 2010, Defendant Futuregen Industrial Alliance Inc. signed a Cooperative Agreement with the United States Department of Energy to develop the FutureGen 2.0 Project (Project). Defendant AmerenEnergy Medina Valley Cogen LLC was a partner to the Project. The Project is a full-scale coal-fired oxy-combustion power plant at the existing Meredosia Energy Center (Center) in Meredosia, Illinois. The Project will physically replace an existing boiler at the Center with a new oxy-combustion capable boiler that will use the existing Turbine 4 and other auxiliary equipment. Other existing boilers at the Center have been shut down and will not be restarted.

On February 9, 2012, Defendants submitted an initial application to authorize construction of the Project to the Illinois Environmental Protection Agency (IEPA). Defendants then submitted a revised permit application on June 18, 2013. The IEPA issued [*3] a draft construction permit in August 2013 and held a public comment period regarding the draft permit from August 24, 2013 through November 8, 2013. Plaintiff participated in the process by providing written comments to the IEPA discussing their concerns with the draft permit. Specifically, Plaintiff expressed its concern that the Project would cause a significant net emission increase which would necessitate a PSD permit. Plaintiff was able to orally challenge the Project at a hearing before the IEPA. Again, Plaintiff argued that the Project required a PSD permit.

On December 9, 2013, Plaintiff filed its Complaint (#1) with this court, alleging that Defendants were attempting to construct a major modification to the Center without a PSD permit. The complaint stated that the claim was being brought under the citizen suit provision of the Clean Air Act. An Amended Complaint (#21) was filed on March 14, 2014.

On December 13, 2013, the IEPA issued an air pollution control construction permit to Defendants for construction of the Project. The decision noted Plaintiff's concerns and explicitly rejected its argument that a PSD permit is required for the Project. The IEPA stated that ″the [*4] proposed facility is not a major project under the federal PSD rules.″ It further noted that there were ″contemporaneous decreases in emissions from the permanent shutdown of the existing boilers at the Meredosia Energy Center such that the net increases in emissions of regulated NSR pollutants from this project will not be significant.″

INSTANT MOTION

On February 2, 2014, Defendants filed a Motion for Judgment on the Pleadings and a Joint Motion to Dismiss (#13). In the motion, Defendants argued that this court: (1) lacks subject matter jurisdiction under 42 U.S.C. § 7604(a)(3) because Defendants had the proper permit; and (2) should abstain from hearing the case because Plaintiff's complaint is simply a collateral attack on the IEPA's decision. On March 10, 2014, Plaintiff filed a Memorandum in Opposition (#17) to Defendants' motion. Defendants' Reply (#28) to Plaintiff's memorandum was filed on April 7, 2014.

This court held oral arguments with reference to Defendant's Motion (#13) on May 16, 2014. During the arguments, Defendants' attorney stated that abstention is appropriate because the federal government has delegated its authority to determine which projects in Illinois require [*5] a PSD permit to the IEPA. Further, Illinois has established a procedure, through the IPCB, where any party, including Plaintiff, can challenge the IEPA's decision not to grant Defendants a PSD permit. Therefore, Defendants' attorney argued that because Plaintiff has an available state forum in which to challenge the IEPA's decision, this court should abstain.

Plaintiff's attorney argued that abstention was not appropriate because the IEPA works as a contractor for the United States Environmental Protection Agency, therefore, they are simply applying federal law and regulations. Further, Plaintiff's counsel stated that he simply did not "know the procedure in front of the Illinois Pollution Control Board" and that it was difficult for Plaintiff to find and hire an Illinois attorney that could appeal the IEPAs decision before the IPCB. He speculated that an appeal before the IPCB would not allow Plaintiff the discovery it required.

At the conclusion of the hearing, this court asked the parties to submit briefs detailing the discovery available from the IPCB and how that would impact both sides' ability to present their case. Plaintiff's brief acknowledged that the IPCB would accept a citizen's [*6] enforcement complaint, however, it argued that the Illinois forum was not convenient. Plaintiff claimed that the IPCB was not an acceptable forum because: (1) Plaintiff is not certain whether it can pursue its claim in front of the IPCB; (2) Plaintiff believes that discovery may be more limited than under the federal rules; (3) Plaintiff believes the IPCB cannot issue subpoenas to out of state entities and personnel; and (4) no attorney's fees are available to Plaintiff for any action before the IPCB. Defendants' brief argued that the same methods of discovery under the Federal Rules are available before the IPCB with regard to document production requests, requests to admit, interrogatories, and depositions. Further, Defendants outlined how the IPCB could issue subpoenas to out of state third parties.

ANALYSIS

Jurisdiction

Defendants first contend that the case should be dismissed pursuant to *Rule 12(b)(1)* for lack of subject matter jurisdiction. Plaintiff's Complaint (#1) states that this court has jurisdiction under 42 U.S.C. § 7604(a). § 7604(a)(3) states that any person may commence a civil action on his own behalf "against any person who proposes to construct or constructs any new [*7] or modified major emitting facility without a permit required under part C of subchapter I of this chapter (relating to significant deterioration of air quality) or part D of subchapter I of this chapter (relating to nonattainment)."

Defendants point to the IEPA's decision granting them an air pollution control construction permit and argue that jurisdiction under § 7604(a)(3) is improper because, based on that decision, they have the required permit. Plaintiff argues that the proposed modification is major and requires a PSD permit. Therefore, because Defendants do not have a PSD permit, jurisdiction is proper under § 7604(a)(3).

When ruling on a motion to dismiss a complaint for lack of jurisdiction, this court must take all of the complaint's well pled factual allegations as true and draw reasonable inferences from those allegations in the plaintiff's favor. *Rueth v. EPA*, 13 F.3d 227, 229 (7th Cir. 1993). Here, Plaintiff claims that Defendants plan to construct a major modification to their plant, and therefore, a PSD permit is required. Assuming that fact is true, Defendants' lack of a PSD permit would confer jurisdiction on this court under § 7604(a)(3).

A finding of jurisdiction [*8] in this case is supported by *Weiler v. Chatham Forest Products, Inc.*, 392 F.3d 532 (2nd Cir. 2004). In *Weiler*, the Second Circuit found that "a state determination that a prospective source of air pollution is not a major emitting facility does not prevent a private plaintiff from bringing a suit seeking to enjoin the construction of the facility pursuant to section 304(a)(3) of the Act, 42 U.S.C. § 7604(a)(3)." Therefore, based on the reasoning in *Weiler* and the fact that the complaint alleges that Defendant is constructing a major modification without a PSD permit, this court finds that it has jurisdiction under § 7604(a)(3).

Abstention

Defendants next argue that this court should abstain from hearing this case. Under the *Burford* abstention doctrine,

federal courts are counseled to decline to interfere with proceedings or orders of state administrative agencies where timely and adequate state court review is available, if (1) there are difficult questions of state law bearing on policy problems of substantial public import whose importance transcends the result in the case; or (2) the exercise of federal review of the question in a case and in similar cases would be disruptive of state [*9] efforts to establish a coherent policy with respect to a matter of substantial public concern. *Burford v. Sun Oil Co.*, 319 U.S. 315, 63 S. Ct. 1098, 87 L. Ed. 1424 (1943); *New Orleans Public Service, Inc. v. Council of City of New Orleans*, 491 U.S. 350, 361, 109 S. Ct. 2506, 105 L. Ed. 2d 298 (1989).

In this case, Plaintiff argues that its claim arose under the citizen suit provision of the Clean Air Act, and therefore it is a purely federal question. As such, Plaintiff argues that abstention is not appropriate. However, after a careful examination of the claim, this court has determined that the suit merely resurrects objections to the decision made by the IEPA that Defendants do not need a PSD permit. Therefore, the complaint actually asserts a collateral attack on the decision made by the IEPA under state regulatory laws.[1] See *Sugarloaf Citizens Ass'n v. Montgomery County, Md.*, 33 F.3d 52 (4th Cir. 1994); *Jamison v. Longview Power, LLC*, 493 F.Supp. 2d 786, 791 (N.D.W.VA. 2007).

Defendants argue that abstention is appropriate because intervention will be disruptive of Illinois' effort to establish a coherent policy with respect to the issuance of permits by the IEPA. The Seventh Circuit has held that abstention for this reason is appropriate if (1) the state offers some forum in which claims may be litigated; and (2) the forum stands in a special relationship of technical oversight or concentrated review to the evaluation of those claims. *International College of Surgeons v. City of Chicago*, 153 F.3d 356, 363 (7th Cir. 1998). Therefore, in order to determine if abstention is appropriate in this case, this court must determine whether Illinois has a timely and adequate system [*11] of administrative and judicial review for the state permitting decision at issue in this case.

The United States Environmental Protection Agency (EPA) has the authority to issue PSD permits. However, the EPA has delegated its authority to issue PSD permits within the State of Illinois to the government of the State through the IEPA. See 46 Fed. Reg. 9580, 9582 (Jan. 29, 1981). The IEPA also has the authority to issue permits for those stationary sources that are not subject to the PSD permitting requirements. See 35 Ill. Adm. Code § 201.142. The IEPA has a clear system in place for the issuance of permits within the State of Illinois.

After the IEPA has made a determination regarding the issuance of a permit, review may be had before the IPCB. Any person may file a complaint with the IPCB attacking any permit or term or condition of a permit. 415 ILCS 5/31(d)(1) (West 2014). As the case proceeds before the IPCB, the assigned hearing officer sets time deadlines for discovery. 35 Ill. Adm. Code § 101.616. ″All relevant information and information calculated to lead to relevant information is discoverable, excluding those materials that would be protected from disclosure in the courts of [*12] this State pursuant to statute, Supreme Court Rules or common law, and materials protected from disclosure under 35 Ill. Adm. Code 130.″ 35 Ill. Adm. Code § 101.616(a).

In this case, Defendants submitted an application for a permit to the IEPA. Both Defendants and Plaintiff participated in the permit process. At the conclusion of the process, the IEPA granted Defendants a permit, but found that a PSD permit was not necessary. At oral arguments, Plaintiff admitted that it has not sought review of the decision before the IPCB. In explaining its decision to bring the case before this court instead of the IPCB, Plaintiff's attorney stated that he did not ″know the procedure in front of the Illinois Pollution Control Board.″ While the lack of an appropriate state forum may prevent abstention, an attorney's ignorance of the procedures before the state agency has never been found to be a bar to abstention by a federal court.

This court has carefully reviewed the procedures before the IEPA and the IPCB, including an in depth study of Chapter I of Title 35 of the Illinois Administrative Code. Following this review, it is evident that Illinois offers a clear and impartial forum, through the IPCB, [*13] where Plaintiff's claims may be litigated. Further, this court believes that Illinois cannot be expected to effectively control air pollution if it must contend with a federal district court, not as familiar with its regulatory law, second guessing its decisions under the state's regulatory

---

[1] Plaintiff's argument that the claim is purely federal also ignores the fact that the federal government has delegated its authority to issue PSD permits to the State of Illinois and that the issuance of a permit within the state includes consideration of state policies. See **[*10]** *Union Elec. Co. v. E.P.A.*, 427 U.S. 246, 256-57, 96 S. Ct. 2518, 49 L. Ed. 2d 474 (1976) (under the 1970 Amendments to the Clean Air Act, states retain the primary responsibility for formulating pollution control strategies); 42 U.S.C. § 7401(a)(3) (air pollution prevention and air pollution control at its source is the primary responsibility of states and local governments). Therefore, although Illinois' authority comes from the federal government, the issuance of permits within the state includes state specific concerns.

scheme. Based on these findings, this court believes that dismissal is appropriate pursuant to the *Burford* doctrine because Illinois offers an appropriate forum and the exercise of federal review in this case would be disruptive of Illinois' efforts to establish a coherent policy with respect to pollution control within the state. See *Burford*, 319 U.S. 315, 63 S. Ct. 1098, 87 L. Ed. 1424; *New Orleans Public Service, Inc.*, 491 U.S. at 361. Therefore, this case presents a classic situation for applying *Burford* abstention. See *Ellis v. Gallatin Steel Co.*, 390 F.3d 461, 481 (6th Cir. 2004); *Coalition for Health Concern v. LWD, Inc.*, 60 F.3d 1188 (6th Cir. 1995); *New Orleans Public Service, Inc. v. Council of City of New Orleans*, 491 U.S. 350, 362, 109 S. Ct. 2506, 105 L. Ed. 2d 298 (1989).

Based on the foregoing, this court finds that abstention is appropriate. Therefore, Defendant's Motion for Judgment on the Pleadings and Joint Motion to Dismiss (#13) is GRANTED.

IT [*14] IS THEREFORE ORDERED THAT:

(1) Defendants' Motion for Judgment on the Pleadings and Joint Motion to Dismiss (#13) is GRANTED.

(2) Plaintiff's complaint is dismissed without prejudice.

(3) This case is terminated.

ENTERED this 9th day of June, 2014.

/s/ Colin S. Bruce

COLIN S. BRUCE

U.S. DISTRICT JUDGE

Exhibit 3

E-FILED
Monday, 07 April, 2014 03:43:06 PM
Clerk, U.S. District Court, ILCD

IN THE UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF ILLINOIS

SIERRA CLUB, Plaintiff, vs AMEREN ENERGY RESOURCES COMPANY, et al., Defendants.	)	Case No. 3:13-cv-3408-CSB-BGC

DEFENDANTS' REPLY IN SUPPORT OF THEIR MOTION TO DISMISS UNDER RULE 12(B)(1) AND FOR JUDGMENT ON THE PLEADINGS UNDER RULE 12(C)

Sierra Club asserts that "State judicial and administrative remedies are not available to Sierra Club regarding Ameren's minor source permit." (ECF No. 21 at ¶ 20.) On that basis, Sierra Club argues that its only recourse is to this Court. Sierra Club is wrong. Not only do judicial and administrative avenues exist through the state court and Illinois Pollution Control Board (and thereafter through the Illinois Court of Appeals), Sierra Club has, in fact, already availed itself of the first stage of the state administrative process that it now claims does not exist. Sierra Club's decision to bypass the Illinois agency officials, administrative body and courts best equipped to assess whether it has a claim should not compel this Court to intervene.

Sierra Club's position here is that third parties are permitted to file citizen suits whenever they have identified what they believe to be "grave" problems with a permitting decision which it believes are not being appropriately addressed by governmental agencies. (*See* ECF No. 17 at 25.) Sierra Club ignores the fact that a state agency has already decided the very issue Sierra Club has presented to this Court: whether defendants must obtain a PSD permit for the Project. Sierra Club believes it is entitled to pursue this claim in federal court without any

reference to the past decision of this state agency.[1] As was discussed at length in Defendants' Motion, *see* ECF No. 13-1 at 4-6,[2] Sierra Club is avoiding the proper course for review of its claim.

More specifically, Sierra Club invites this Court to ignore the extensive air-related construction permitting process that resulted in IEPA's determination that a state permit and not a PSD permit is required for the FutureGen 2.0 Project. Notably, the IEPA is the agency entrusted and charged with, based on subject matter expertise, evaluating whether a PSD permit is required in the first instance and then making the permitting decisions based on whether to issue such PSD permits. Sierra Club's claim that this cause of action is properly before this Court fails for two primary reasons.

First, the Illinois General Assembly created an administrative avenue for "any person" to file a complaint before the Illinois Pollution Control Board alleging violations of the Illinois Environmental Protection Act, any rule or regulation adopted under the Act, any permit or term or condition of a permit or any Board order. *See* 415 ILCS 5/31(d)(1). Here, Sierra Club claims that the Defendants are in violation of the PSD permitting requirements set forth at 42 U.S.C. § 7475 [CAA § 165]—in essence a challenge to the lawfulness of both the Defendants' construction of the Project without a PSD permit and IEPA's determination that only a state

[1] Sierra Club has filed a First Amended Complaint to incorporate the fact that Defendants have received a construction permit for the Project. (*See* ECF No. 21.) The facts included in the First Amended Complaint do not change the Defendants' basis for relief in its Motion to Dismiss and Motion for Judgment on the Pleadings. Accordingly, re-starting the briefing process based on the filing of the Amended Complaint would only serve to delay adjudication of the legal issues that are at the heart of this case.

[2] Sierra Club feigns confusion at Defendants' packaging of a Rule 12(b)(1) motion with a Rule 12(c) motion, *see* ECF No. 17 at 23. The distinction in this context is in a sense academic; what is important is that various courts over the years have used each mechanism to preclude actions such as Sierra Club seeks to pursue here.

construction permit (and not a PSD permit) is required for the construction of the Project.[3] Illinois law allows any person to bring one or both such challenges based on violations of CAA §165 before the Illinois Pollution Control Board. 415 ILCS 5/31(d)(1);[4] 415 ILCS 5/9.1(d).[5] As noted, the Board's decisions are further subject to review by the Illinois Court of Appeals. 415 ILCS 5/41. Sierra Club's decision to forgo this process does not and should not prevent this Court from abstaining from review of Sierra Club's claim.[6]

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[3] For purposes of its argument that it has no recourse beyond this citizen suit, Sierra Club fashions its claim as a challenge to the IEPA permit issued in this case. By making this claim, Sierra Club argues that it has no other mode of challenging IEPA's decision to issue the permit because it cannot directly appeal the permit as a third party. (ECF No. 17 at 11.) Sierra Club ignores, however, that the State of Illinois has provided other avenues for enforcement of environmental laws through its administrative bodies and court system and that this recourse is not limited to permit applicants under Illinois law. Indeed, the State is not required to provide an opportunity for direct appeal of every environmental permit. *See, e.g., Letter from Stephen Rothblatt, U.S. EPA Region 5 Director of Air and Radiation Division, to Dr. Keith Harley*, August 20, 2007 (concluding that U.S. EPA cannot require IEPA to allow a third party appeal of a state-issued permit).

[4] "Any person may file with the Board a complaint, meeting the requirements of subsection (c) of this Section, against any person allegedly violating this Act."

[5] "No person shall: (1) violate any provisions of Sections 111, 112, 165 or 173 of the Clean Air Act, as now or hereafter amended, or federal regulations adopted pursuant thereto; or (2) construct, install, modify or operate any equipment, building, facility, source or installation which is subject to regulation under Sections 111, 112, 165 or 173 of the Clean Air Act, as now or hereafter amended, except in compliance with the requirements of such Sections and federal regulations adopted pursuant thereto, and no such action shall be undertaken (A) without a permit granted by the Agency whenever a permit is required pursuant to (i) this Act or Board regulations or (ii) Section 111, 112, 165, or 173 of the Clean Air Act or federal regulations adopted pursuant thereto or (B) in violation of any conditions imposed by such permit. Any denial of such a permit or any conditions imposed in such a permit shall be reviewable by the Board in accordance with Section 40 of this Act."

[6] The fact that Sierra Club has not taken advantage of the state court procedures for review of IEPA's permit decision should not prevent the Court from applying *res judicata* to IEPA's permit decision. Sierra Club had the opportunity to seek review through state court proceedings; Defendants should not be punished for Sierra Club's failure to pursue those challenges. Without subsequent review, IEPA's permitting decision, which is documented exhaustively in the various unchallenged documents Defendants attached to their Motion, is final.

Further, exhaustion of all state administrative and judicial remedies is a prerequisite to any federal challenge, as even the court decision most explicitly favoring Sierra Club's position correctly acknowledges. *Weiler v. Chatham Forest Prods., Inc.*, 392 F.3d 532, 538 n.8 (2d Cir. 2004). Moreover, if Sierra Club wished to challenge IEPA's determination that no PSD permit is required, it should have challenged IEPA directly. Without the agency being present, its actions cannot here be challenged.[7] *See, e.g., Ecological Rights Found. v. Pac. Gas & Elec. Co.*, Case No. 10-0121 RS, 2013 WL 1124089, at *6 (N.D. Cal. Mar. 1, 2013) (the citizen suit mechanism "does not authorize a court to compel regulators to implement the Act differently without their participation in the suit.").[8]

Second, as Sierra Club necessarily acknowledges, a permitting process which was in fact overseen by U.S. EPA existed by which the Defendants were awarded the appropriate state construction permit for this Project. Sierra Club took full advantage of all the opportunities for input as provided by the regulating agency, the Illinois Environmental Protection Agency. Sierra Club has participated in the permitting process, IEPA has issued the appropriate permit, and now Defendants are entitled to a measure of finality that allows them to proceed with the Project.

---

[7] Even if Sierra Club did challenge IEPA's method of determining that a construction permit was required for this Project, IEPA's interpretation of its own administrative rules and regulations are entitled to "great weight." *Dean Foods Co. v. IPCB*, 143 Ill.App.3d 322, 329 (Ill. App. 2d 1986) ("[C]ourts will give great weight to an agency's construction and actual application of its own rule.").

[8] Given that the U.S. Department of Energy has allocated *one billion dollars* to this project, one can perhaps infer that the executive branch, including U.S. EPA, supports the construction of the Project on the timeline previously imposed. U.S. EPA was clearly copied on the draft and final permit for the Project and participated in discussions leading up to its issuance. U.S. EPA also had the opportunity to object to Illinois' permit decision—such objection did not occur. Furthermore, the Illinois Commerce Commission recently approved rate funding that authorizes the purchase of power from the facility at issue in this Project. *See, e.g. Illinois Power Agency*, Docket 12-0544 (ICC Jan. 29, 2013) (noting in Amendatory Order that the "Commission granted approval of the inclusion of the FutureGen 2.0 clean coal project in the Procurement Plan").

Because the U.S. EPA has delegated the authority to making PSD determinations to IEPA and IEPA has made a final determination that a PSD permit is not required, IEPA's determinations merit the same deference as would be afforded to U.S. EPA. *See, e.g., Mississippi Hospital Ass'n, Inc. v. Heckler*, 701 F.2d 511, 516 (5th Cir. 1983) (state agency that is administering a federal program is entitled to the same deference due to the federal agency). U.S. EPA's PSD determination would clearly be entitled to *Chevron* deference; thus, IEPA's determination that no PSD permit is required for this Project is also afforded the same deference. *Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 844 (1984) ("We have long recognized that considerable weight should be accorded to an executive department's construction of a statutory scheme it is entrusted to administer, and the principle of deference to administrative interpretations.").

Citizen suits exist to assist the government in enforcing laws, and not to collaterally attack decisions that have already been made by regulators through a thorough and legally adequate process. *See, e.g., Goodman v. Pa. Dep't Envtl. Prot.*, No. 07-4779, 2008 WL 2682698, *2 (E.D. Pa. Jun. 30, 2008) (granting defendants' motion to dismiss a CAA citizen suit action against both the agency and the permit-holder because the lawsuit was a "collateral attack[] to a facially valid permit[]."))[9]; *Ecological Rights Found.*, 2013 WL 1124089 at *5 ("This action has been brought as a citizen's suit to *enforce* the regulations, not to alter them or how the agencies apply them." (emphasis in original)). Because it is apparent that Sierra Club intends to use this

[9] In *Goodman*, the plaintiff challenged the permittee's state-issued permit by bringing a citizen suit against both the permitting agency – the Pennsylvania Department of Environmental Protection – and the permittee. (ECF No. 17 at 19.) *Goodman* by no means provides license for Sierra Club's quixotic choice to mount a challenge to an administrative decision without the presence of the administrative agency.

lawsuit as a means of collaterally attacking the factual determinations made by IEPA,[10] administrative regularity demands that the Court should abstain from exercising its jurisdiction and allow the state courts to review this issue first. *Natural Res. Def. Council, Inc. v. BP Prods.*, No. 2:08-cv-204, 2009 WL 1854527, *9-12 (N.D. Ind. Jun. 26, 2009).

In what appears to be the most factually analogous case, the Northern District of Indiana abstained from reviewing the state agency's permitting decision where the plaintiff brought a federal citizen suit alleging that the defendant "failed to obtain major source permits." *BP Prods.*, 2009 WL 1854527 at *5, 11. Abstention was compelled because of the potential to "impair . . . the State's effort to effects its policy." *Id.* at *10 (internal quotation omitted). The court explained that if the state agency was wrong, "the proper remedy is through the [state] regulatory and state court process; otherwise there is an impermissible risk of disrupting the [state's] attempt to ensure uniformity." *Id.* at *11. As in *BP Products*, to allow federal court review in this case would be "to gut the carefully crafted system that [the state] has put in place." *Id.* at *11.

For the reasons set forth herein and for other such reasons as may be apparent to the Court, Sierra Club's claims against defendants should be dismissed with prejudice so that Defendants can go about constructing their Project as regulators have previously permitted them to do.

---

[10] Despite touting carbon capture and storage ("CCS") as the Best Available Control Technology for the control of carbon dioxide, *see, e.g.*, Sierra Club Comments, http://www.epa.gov/region04/air/permits/ghgpermits/tecopolkpower/SierraClubComments_102513.pdf (arguing that CCS is the Best Available Control Technology); Sierra Club opposes CCS projects like this one as part of its nation-wide campaign to completely end the use of coal as an energy source, *see, e.g.*, Sierra Club Coal Questions & Answers, http://www.sierraclub.org/coal/coal101/faq.aspx (explaining Sierra Club's position that CCS is not yet a proven technology). The Court should not be used by the Sierra Club to further its personal mission.

Respectfully submitted this 18th day of March, 2014.

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Exhibit 4

E-FILED
Friday, 30 May, 2014 09:53:38 PM
Clerk, U.S. District Court, ILCD

IN THE UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF ILLINOIS

SIERRA CLUB,	)	
	)	
Plaintiff,	)	
	)	
vs	)	**Case No. 3:13-cv-3408-CSB-BGC**
	)	
AMERENENERGY MEDINA VALLEY COGEN, LLC, et al.,	)	
	)	
	)	
Defendants.	)	

DEFENDANTS' SUPPLEMENTAL BRIEFING IN SUPPORT OF THEIR MOTION TO DISMISS AND MOTION FOR JUDGMENT ON THE PLEADINGS

At the Court's hearing on May 16, 2014, Sierra Club indicated that it was unfamiliar with practice before the Illinois Pollution Control Board ("IPCB") and that it generally did not participate in state administrative proceedings.[1] (Hr'g Tr. 26:7-20, May 16, 2014) The Court directed the parties to file simultaneous briefs discussing discovery permissible before the IPCB.[2]

The IPCB "decides cases and establishes regulations to restore and protect the environment."[3] The members of the Board have "verifiable experience in the field of pollution

[1] Counsel for Sierra Club was mistaken in this regard. A review of the IPCB docket shows that Sierra Club has participated in at least 24 matters before the IPCB since 1981; nine of which were filed in either 2013 or 2014; and five of which were enforcement actions brought by Sierra Club. One of them, *Sierra Club, et al. v. Midwest Generation*, PCB 2013-015, is an ongoing enforcement action against a different utility and Sierra Club filed an amended proposed discovery schedule on May 12, 2014, just four days before oral argument in this case.

[2] By submitting this supplemental briefing, Defendants do not concede that discovery is necessary, whether this matter proceeds in a federal district court or before the IPCB.

[3] http://www.ipcb.state.il.us/AboutTheBoard/CitizensGuidetotheBoard.asp?Section=Letter

control" and in deciding cases, the IPCB acts like a "science court."[4] *See also* 415 ILCS 5/5(a) ("Members shall have verifiable technical, academic, or actual experience in the field of pollution control or environmental law and regulation."); 415 ILCS 5/5(d) ("The Board shall have authority to conduct proceedings upon complaints charging violations of this Act, any rule or regulation adopted under this Act, any permit or term or condition of a permit, or any Board order. . .").

In general, practice before the IPCB is straightforward. The IPCB's website provides plain-English summaries of IPCB practice for constituents on a variety of topics including "Citizens Guide to the IPCB"[5] and "Enforcement Actions."[6] The Illinois Attorney General, on behalf of the People of the State of Illinois, regularly brings environmental enforcement actions before the Board.[7] The Illinois Environmental Protection Act and the General Rules for IPCB proceedings (located in Part 101 of the Illinois Administrative Code) allow for broad discovery

[4] http://www.ipcb.state.il.us/AboutTheBoard/CitizensGuidetotheBoard.asp?Section=Act

[5] http://www.ipcb.state.il.us/AboutTheBoard/CitizensGuidetotheBoard.asp

[6] http://www.ipcb.state.il.us/AboutTheBoard/CitizensGuidetotheBoard.asp?Section=Enforcement

[7] *See* enforcement actions filed before IPCB, available on IPCB website at http://www.ipcb.state.il.us/cool/external/cases.aspx

not dissimilar to discovery permissible under the Federal Rules of Civil Procedure.[8] 415 ILCS 5/5(e); 35 Ill. Admin. Code Part 101. Key provisions include:

Subjects of Discovery.

As a general matter, information that is "relevant" is discoverable before the IPCB. Unless the information is otherwise protected from disclosure, "[a]ll relevant information and information calculated to lead to relevant information is discoverable." 35 IAC § 101.616(a).

Methods of Discovery.

The same methods of discovery that are available under the Federal Rules are available at the IPCB, *see, e.g.*:

- Document production requests, 35 IAC § 101.614;
- Requests to admit, 35 IAC § 101.618;
- Interrogatories, 35 IAC § 101.620(a); and
- Depositions, 35 IAC § 101.622.

Subpoena Power.

Further, the IPCB has the power to issue subpoenas to third parties, *see* 415 ILCS 5/5(e), and these subpoenas can be enforceable against third parties out-of-state.[9] Accordingly, Sierra Club would have an ability equivalent to that allowed by the Federal Rules of Civil Procedure to

[8] In addition, Sierra Club may utilize Illinois state law to advocate for additional discovery that would be available in state court. 35 IAC § 101.100(b); 35 IAC § 101.616. *See, e.g.*, Ill. S. Ct. R. 201(a) (identifying the methods of discovery available under state law).

[9] The first step for enforcing a subpoena on a third party out-of-state is to request judicial enforcement of the IPCB's subpoena. 35 IAC § 101.622(g) ("The Board may, upon proper motion by the party requesting the subpoena, request the Attorney General to pursue judicial enforcement of the subpoena on behalf of the Board."). On behalf of the IPCB, the Illinois Attorney General seeks enforcement of the IPCB's subpoena in circuit court. Next, the state court subpoena is used to issue a subpoena in the state where the third party resides. Many states have adopted the Uniform Interstate Depositions and Discovery Act which provides standardized procedures for enforcing a subpoena out-of-state.

compel out-of-state third parties to produce evidence. This negates Sierra Club's argument that it prefers to challenge IEPA's permit in federal court in order to access documents from third parties. (Hr'g Tr. 34:14-35:6, May 16, 2014) The Clerk of the IPCB "will issue subpoenas for the attendance of witnesses at a hearing or deposition." 35 IAC § 101.622(a). And "[s]ubpoenas may include a command to produce books, papers, documents, or other tangible things designated therein and relevant to the matter under consideration." 35 IAC § 101.622(c). A subpoena may be quashed or modified only "if it is unreasonable or irrelevant." 35 IAC § 101.622(d).

Dated: May 30, 2014

Respectfully submitted,

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IN THE UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF ILLINOIS

SIERRA CLUB,	)	
	)	
Plaintiff,	)	
	)	
vs	)	**Case No. 3:13-cv-3408-CSB-BGC**
	)	
AMERENENERGY MEDINA VALLEY COGEN, LLC, et al.,	)	
	)	
	)	
Defendants.	)	

CERTIFICATE OF SERVICE

I hereby certify that on May 30, 2014, I filed the foregoing **Defendants' Supplemental Briefing in Support of Their Motion to Dismiss and Motion for Judgment on the Pleadings** with the Clerk of the U.S. District Court, Central Division, using the CM/ECF system, which will send notification of such filing to all registered counsel of record.

s/ Ashley L. Thompson

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26787-0060

CH2\14755863.1

Exhibit 5

UNITED STATES OF AMERICA, Plaintiff, v. CAMPBELL SOUP COMPANY, Defendant.

CIV-S-95-1854 DFL

UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF CALIFORNIA

1997 U.S. Dist. LEXIS 3211

March 11, 1997, Decided
March 11, 1997, FILED

DISPOSITION: [*1] Campbell's motion for summary judgment granted as to any civil penalty claim concerning the modifications at issue. In all other respects, the motion denied.

COUNSEL: For UNITED STATES OF AMERICA, plaintiff: Edmund F Brennan, United States Attorney, Sacramento, CA. J Michael Rockett, United States Department of Justice, Environmental Enforcement Section, Washington, DC.

For CAMPBELL SOUP COMPANY, defendant: David D Cooke, Beveridge and Diamond, San Francisco, CA. Faith R Greenfield, Campbell Soup Company, Legal Department-Campbell Place, Camden, NJ. Forrest A Hainline, III, Law Offices of Forrest A Hainline III, Washington, DC.

JUDGES: DAVID F. LEVI, United States District Judge

OPINION BY: DAVID F. LEVI

OPINION

MEMORANDUM OF OPINION AND ORDER

Between 1983 and 1988, Campbell Soup Company modified certain can manufacturing machines at its Sacramento plant. In 1995, seven years after the modifications were completed, the United States brought this suit, alleging that Campbell failed to comply with local Clean Air Act regulations [1] that require a permit--an "Authority To Construct" or "ATC"--before construction or modification of such machines. The United States also contends that Campbell has [*2] operated these machines in violation of the regulations requiring the "best available control technology" ("BACT") and "offsets" for net emissions increases above a certain floor. [2]

1 Under the Clean Air Act's scheme of "cooperative federalism," state entities, including the Sacramento Metropolitan Air Quality Management District ("SMAQMD"), promulgate regulations (subject to federal approval) designed to achieve the goals of the Act. The violation of these state regulations, known as a "state implementation plan" or "SIP," can be the basis of a federal enforcement action such as this one. *See 42 U.S.C. § 7413(b)(1)* ("The Administrator . . . may . . . commence a civil action for an . . . injunction, or to assess and recover a civil penalty . . . [where there is or has been a] violation of any requirement or prohibition of an applicable implementation plan or permit.").

2 The EPA's notice of violation ("NOV") alleges three separate violations of the local Clean Air

Act regulations:

> Campbell Soup violated SMAQMD Rules 50, Section a., and 201 Section 301 by constructing the UV coating line and bodymakers # 9 through # 14 without first obtaining the required ATCs from SMAQMD.
>
> SMAQMD Rule 202, Section 301 requires an applicant to apply BACT when a modification of an existing stationary source will result in a cumulative ROC emissions increase, since January 1, 1977, in excess of 150 lb/day. Campbell Soup violated SMAQMD Rule 202, Section 301 by failing to apply to endpress # 14, the UV coating line, and bodymakers # 9 through # 14 applicable BACT requirements at the time of ATC permit issuance in 1992, because the permitted cumulative ROC emissions increase associated with these modifications exceeded 150 lb/day.
>
> Rule 202, Section 302 requires offsets for any modification to an existing stationary source that results in a net emissions increase of ROC exceeding 250 lb/day. Campbell Soup violated SMAQMD Rule 201, Section 302 because Campbell Soup did not offset its net emission increases of ROC after its net emission increases exceeded 250 lb/day.

Finding and Notice of Violation dated June 10, 1994 ("June '94 FNOV"), 5, PP 17, 19, 20. The government seeks civil penalties for each of these three violations. Complaint, 6, PP 27-29.

[*3] Campbell moves for summary judgment on two grounds. First, it argues that the government's claim that Campbell failed to obtain proper permits to construct or modify is barred by the five year statute of limitations in *28 U.S.C. § 2462* [3] as applied to actions by the Administrator under the Clean Air Act at *42 U.S.C. § 7413(a)(1)*. [4] The government responds by arguing that the violation is a "continuing violation," and that the five year bar of *§ 2462* does not apply to claims for injunctive relief. Second, Campbell argues that the government's BACT and offset claims are barred by the permits issued in 1992 by the Sacramento Metropolitan Air Quality Management District. The government contends that under the dual enforcement scheme of the Clean Air Act, it is not bound by the State regulatory agency's permitting decisions and may seek civil penalties for violations of a SIP, even if the violations are allowed by the permit issued by the State agency. Both of the questions raised by Campbell on this motion are unsettled in the law.

3 "Except as otherwise provided by Act of Congress, an action, suit or proceeding for the enforcement of any civil fine, penalty, or forfeiture, pecuniary or otherwise, shall not be entertained unless commenced within five years from the date when the claim first accrued . . ."

[*4]

4 *Section 7413(a)(1)* provides that upon learning of a violation, the Administrator shall notify the person responsible and the State. "At any time after the expiration of 30 days following the date on which such notice of a violation is issued, the Administrator may, without regard to the period of violation (subject to *section 2462* of Title 28) --

> (A) issue an order requiring such person to comply with the requirements or prohibitions of such plan or permit,
>
> (B) issue an administrative penalty order in accordance with subsection (d) of this section, or
>
> (C) bring a civil action in accordance with subsection (b) of this section."

I. The Statute of Limitations

SMAQMD Rule 201, § 301 requires an ATC before "building erecting, altering or replacing" any machines. The government concedes that the UV coating line and bodymakers # 9 through # 14 were constructed between 1980 and 1987. June 1994 FNOC, P 16; Complaint, P 24. With this concession, and given that the complaint was filed more than five years after the last construction activity, the government must give up its claim for civil

penalties [*5] based on Campbell's alleged failure to obtain an ATC.

The government argues that it may still seek penalties on a continuing violation theory because Campbell continues to operate the machines that were built without permission. The government points out that in the provisions of the Clean Air Act governing new sources, the statute refers to "permits to construct and operate." Section 7502(c)(5), for example, requires the state implementation plan to "require permits for the construction and operation of new or modified major stationary sources . . ." Section 7503(a) governs the criteria for issuing "permits to construct and operate." From this language, the government reasons that the operation of a source constructed without a permit is a continuing violation of the preconstruction permit requirement. However, the state implementation plan here, with EPA's approval, distinguishes between building a machine and operating it. The first of these violates SMAQMD Rule 201, § 301; the second violates § 302. Section 301 addresses authority to construct and § 302 addresses permits to operate. They are distinct rules and violations, and the claim that Campbell did not obtain an ATC is [*6] not tantamount to a claim that Campbell failed to obtain an operating permit. The government has not charged Campbell with violating § 302 in the "notice of violation"--presumably because Campbell did obtain permits to operate--and therefore cannot proceed on this theory now. *See 42 U.S.C. § 7413(a)(1)* (requiring notice of violation as prerequisite to suit under *§ 7413(b)*); *U.S. v. Ford Motor Co., 736 F. Supp. 1539, 1551 (W.D.Mo. 1990)* (holding that where notice of violation is clear, EPA cannot bring suit for a violation not included in notice). The government's attempt to draw out of the statutory language a legislative command that failures to obtain an ATC be treated as violations of a permit to operate is baffling and unpersuasive.

The Ninth Circuit has recently rejected a similar claim by the government in *United States v. Trident Seafoods Corp., 60 F.3d 556, 559 (9th Cir. 1995)*. In *Trident Seafoods*, the defendants violated a provision requiring them to give notice to the EPA before removing asbestos from a building. The court found that there was only one day of violation: the day before asbestos removal on which no notice was given. *Id.* Although the [*7] government argued that there was a continuing duty to notify, the court rejected the argument, explaining that "when violation of a regulation subjects private parties to criminal or civil sanctions, a regulation cannot be construed to mean what an agency intended but did not adequately express." *Id.* Here, Rule 201, § 301 is quite clear that building or altering a machine without a permit is a violation. But even if the underlying intent behind the regulation is to assure continuing air quality, the regulation cannot reasonably be construed to mean that building or altering a machine without a permit is a violation that continues as long as the machine still exists or is operated. This is particularly the case because Rule 201, § 302 addresses permits to operate as a separate matter. *Cf. Ogden Projects v. New Morgan Landfill, 911 F. Supp. 863, 876 (E.D.Pa. 1996)* ("We agree that a violation of the Part D permitting requirement occurs at the time of construction as the statute requires a preconstruction permit.") (citing *U.S. v. Louisiana-Pacific Corp., 682 F. Supp. 1122, 1130-31 (D.Colo. 1987))*. Since the alleged violation of Rule 201, § 301 did not continue into the [*8] five-year limitations period of *28 U.S.C. § 2462*, the claim for civil penalties concerning the construction of the UV coating line and bodymakers # 9 through # 14 is dismissed.

The government argues that even if it may not pursue penalties it may yet seek injunctive relief for actions that occurred more than five years prior to the filing of the complaint. On its face, *28 U.S.C. § 2462* applies only to "any civil fine, penalty, or forfeiture," and does not address equitable relief. There is a split in the district courts on the question of whether equitable relief will also be barred when the remedy at law is barred. *See FEC v. NRSC, 877 F. Supp. 15, 20 (D.D.C. 1995)*; *United States v. Telluride Co., 884 F. Supp. 404, 409-10 (D. Colo. 1995)*; *United States v. Windward Properties, Inc., 821 F. Supp. 690, 693 (N.D. Ga. 1993)*; *United States v. Hobbs, 736 F. Supp. 1406, 1410 (E.D. Va. 1990)*.

In finding that "equity will withhold its relief . . . where the applicable statute of limitations would bar the concurrent legal remedy," *United States v. Windward Properties, supra, 821 F. Supp. at 693*, the courts in *Windward Properties* and *Telluride* rely on language [*9] from two United States Supreme Court cases, *Cope v. Anderson, 331 U.S. 461, 464, 91 L. Ed. 1602, 67 S. Ct. 1340 (1947)*, and *Russell v. Todd, 309 U.S. 280, 84 L. Ed. 754, 60 S. Ct. 527 (1940)*. In *Cope* and *Russell* creditors of national banks sued the shareholders of the banks, and the Court applied the statute of limitations of the state through the equitable doctrine of laches. The cases were

viewed as equitable because the relief was sought against all of the shareholders and would adjust their obligations as among one another.

One should hesitate to apply the holdings in *Cope* and *Russell* to the situation presented here. Although plaintiffs in those two actions sought a species of equitable relief, neither case is remotely similar to an action for injunctive relief by a federal agency. Moreover, neither case addresses the particular statutory language at issue here. The Clean Water Act expressly provides that the "Administrator may, *without regard to the period of violation,* (subject to *section 2462* of Title 28) . . . bring a civil action" (emphasis added), *Section 2462* sets a five year time limit for penalty actions only. Given the express statutory language [*10] that gives the Administrator power to bring an action "without regard to the period of violation," constrained only by *section 2462* which does not address injunctive relief, the court finds that the government may seek equitable relief beyond the five year statute of limitations for penalty actions.

Nonetheless, the lapse of time will surely be relevant to the court's decision whether or not to grant any injunctive or other equitable relief. On the current state of the record, it seems unlikely that the government could show that the violation of the preconstruction permit rule, if any, has any effect separate and apart from the operation of the machines. Thus, if the machines are now properly operated, under a valid permit and in conformity with the SIP, it is unlikely that any injunctive relief would issue because some seven years ago the machines were constructed without a permit. [5]

5 Campbell's claim of laches raises contested issues of fact that cannot be resolved on this motion.

In sum, as to the government's [*11] claim concerning the construction of the UV coating line and bodymakers # 9 through # 14, the court holds that the claim may go forward for equitable relief only.

II. Effect of State Permits

Campbell was issued permits on September 8, 1992, by the Sacramento Metropolitan Air Quality Management District. [6] The government claims that these permits should not have been issued because they are inconsistent with the SIP in two respects: first, Campbell did not comply with Rule 202 § 301 requiring the applicant to apply BACT; and, second, Campbell did not comply with Rule 202, § 302, requiring offsets when the emissions increase exceeds a certain amount. Campbell disagrees with the government's reason for challenging the permits: Unlike the government, Campbell asserts that its permit applications were complete in the 1980's, and that under Rule 202, §§ 301 & 302, only the BACT and offset requirements in effect in the 1980's, rather than the more stringent requirements in effect in 1992, should apply. But this dispute is not before the court on this motion. Campbell instead argues that the government cannot sue for civil penalties until the permits have been declared invalid, regardless [*12] of whether the permits should not have been issued for failure to comply with the SIP. Thus, Campbell presents the "unsettled question" of

> whether operating under a duly issued permit, albeit one that should not have been issued because it failed to impose requirements found in a state implementation plan, violates that plan.

U.S. v. AM General, 34 F.3d 472, 474 (7th Cir. 1994).

6 Campbell refers to the permits issued by the SMAQMD as "ATC/PTOs." The SMAQMD, however, has always referred to the permits as "Authorities to Construct." Perhaps Campbell is correct that the permits should be styled as "Permits to Operate," since at the time they were issued the construction was complete. In any event, these are the permits that the government challenges in the June 1994 FNOV, and under which Campbell seeks shelter by the present motion.

Resolution of this unresolved question turns on the language of *§§ 7413 (a)* & *(b)(1)* of the Clean Air Act. In these sections, Congress gives the Administrator [*13] of the EPA the authority to bring a civil action when the Administrator finds that any person "has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit." Two other sections of the Act also help frame the question of whether the Administrator is restricted by a state permit. At *§ 7413(a)(2)* the Act permits the Administrator to take over enforcement of the State implementation plan or permit program if the Administrator finds and gives notice to the State and public "that violations of an applicable implementation plan or an approved permit

program . . . are so widespread" that the State has failed to enforce the plan or permit program. *Id.* Similarly, if the Administrator finds "that a State is not acting in compliance with any requirement or prohibition of the chapter relating to the construction of new sources or the modification of existing sources, the Administrator" may, among other actions, bring a civil action under *§ 7413(b)*. At §§ 7661a-d the Act provides a process by which the Administrator may object to and revoke the State's issuance of a permit as inconsistent with "the requirements of an applicable implementation [*14] plan." § 7661d(b). A permit approved by the EPA under these sections provides a safe harbor from suit to a person in compliance with the permit. § 7661c(f). Although it is useful to consider these sections when evaluating the structure of the Act, sections 7661a-d are not directly applicable to this case because they only apply to the Title V permit program and the permits here were not issued under Title V. [7]

> 7 According to the government, SMAQMD only became eligible to issue Title V permits in September of 1995, *60 Fed. Reg. 39,862* (Aug. 4, 1995), and has yet to issue any such permits.

The arguments on either side of this issue can be simply stated. The government argues that the literal language of *§ 7413* permits the Administrator to bring a civil action when there is a violation of *either* a permit *or* an implementation plan, and thus that the Administrator is not barred from bringing suit by the fact of a permit if the permit violates the implementation plan. The government stresses that the [*15] Clean Water Act incorporates a "dual enforcement scheme" of federal and state regulation, and that the Administrator consistently has interpreted *§ 7413* to allow enforcement actions even in the face of a state permit. Campbell argues that such an interpretation of the statute places companies such as Campbell in an untenable position in which compliance with a duly issued permit from the relevant state authority may subject them to suit by the EPA. In Campbell's view, if the Administrator would challenge the permits issued by the State, the Administrator may only do so under *42 U.S.C. § 7413(a)(2)* by making a finding, based on widespread violations, that the State is failing to enforce its SIP.

There is no clear answer in the case law to the question of whether compliance with a state permit bars the Administrator from suit. In *United States v. AM General Corp., 34 F.3d 472*, the court discussed the issue, identified it as unresolved, and decided the case on the basis of other statutory language not relevant here. [8] The court's dicta as to the general question has something for everyone. The United States points to language in the opinion that seems to endorse its interpretation [*16] of the statutory language: "it is an unsettled question whether operating under a duly issued permit, albeit one that should not have been Issued because it failed to impose requirements found in a state implementation plan, violates that plan. The statutory language implies 'yes' . . ." *Id. at 474*. Campbell points to the robust language later in the opinion that "we cannot find in the text of the Clean Air Act, or elsewhere, any indication that Congress expressly or by implication meant to authorize the EPA to mount a collateral attack on a permit by bringing a civil penalty action as many as five years after the permit had been granted the modification implemented." *Id. at 475*. *AM General* leaves the open question open as does *Allsteel, Inc. v. EPA, 25 F.3d 312 (6th Cir. 1994)*.

> 8 In *AM General* the United States relied solely on *42 U.S.C. § 7413(b)(3)* which provides for a remedy against a person who attempts to construct or modify a stationary source after a finding of violation by EPA. The court found that suit by the Administrator was authorized by this section only where a finding of violation *"has* been made, implying that the finding precedes the attempt, not as here follows it." In the remainder of the opinion, however, the court discussed whether the EPA could have gone forward under *§ 7413(b)(1)*, which is the issue here.

[*17] The decision most on point is *United States v. Solar Turbines, Inc., 732 F. Supp. 535 (M.D. Pa. 1989)*. In *Solar Turbines*, the court held that an action by the Administrator under *42 U.S.C. § 7477*, for injunctive relief to prevent Solar Turbine from constructing certain turbines, could not go forward because the responsible state agency had issued a permit to Solar Turbines for the very construction the Administrator sought to halt. The court found that the Administrator's interpretation of the statute was unreasonable because the "thrust" of the statute is to limit enforcement by the Administrator to violations "assessed against objective standards, namely the source's failure to apply for a permit or receive a permit prior to construction; failure to supply information requested of it by the issuing authority, or failure to

comply with specific quantifiable air quality standards or restrictions on emission levels." *Id. at 539*. Stressing the unfairness of placing the source between two warring governmental agencies, the court found it unreasonable to believe that "Congress would have so nonchalantly and vaguely provided for a drastic expansion of EPA enforcement action [*18] without explicitly setting forth this expansion and defining its scope." *Id. at 539*. Perhaps because the action originally was brought only under *§ 7477*, the court in *Solar Turbines* never came to grips with the "plan or permit" statutory language in *§§ 7413(a)* and *(b)(1)*.

There is much in *Solar Turbines* that may make sense from the point of view of sound policy. Perhaps a state issued permit should be a safe harbor. Otherwise vast economic consequences potentially may befall a company that has attempted to comply in good faith with a state permit. But there is another side to the policy coin. As the Administrator points out in the memorandum issued July 15, 1988, the EPA may not learn about a proposed permit in sufficient time to object. Also there may be instances in which although the state is diligently enforcing its SIP as a general matter--such that a finding under *§ 7413(a)(2)* could not be made--a particular permit may not conform to the SIP and may be of sufficient consequence that the public health is placed at risk. Indeed, in the 1990 amendments, there are statements in the legislative history suggesting that some legislators endorsed the EPA'S view that its [*19] enforcement powers are unconstrained by the issuance of a state permit that is itself in violation of the SIP. *See* Brief of the United States, 46. These are complicated policy issues that are best considered in the legislative process by Congress drawing on the expertise of the EPA, state regulatory authorities, and affected private interests.

The language of *§ 7413* is most readily understood as the United States suggests: the Administrator may bring an enforcement action when a person is in violation *either* of a permit *or* the state implementation plan. In sweeping language, the Act provides for a compliance action by the Administrator "whenever" the Administrator finds that "any person" has violated or is in violation of "any requirement or prohibition" of "an applicable implementation plan or permit." The "plan or permit" formulation is used throughout *§ 7413*. At no point in any of this language is there ever the suggestion that the Administrator may not bring an action if the person has been in compliance with a valid permit. albeit one that conflicts with the SIP. Even if the language were deemed ambiguous, the Administrator's longstanding interpretation would be [*20] entitled to deference. This interpretation is not fairly viewed as unreasonable, nor must it unavoidably lead to unduly harsh results. Any harshness is properly ameliorated by the court at the remedial stage.

In sum, the court holds that there is no categorical bar to the action by the United States against Campbell for alleged violations of BACT and the offset requirements, as provided for by the SIP, simply because Campbell holds a state permit. There is no safe harbor. Yet equitable considerations surely will play an important part in the consideration of any remedy.

For the reasons stated above, Campbell's motion for summary judgment is granted as to any civil penalty claim concerning the modifications at issue. In all other respects, the motion is denied.

IT IS SO ORDERED.

Dated: *11 March 1997*.

DAVID F. LEVI

United States District Judge

Exhibit 6

Michael L. Menne
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June 18, 2013

Mr. Bob Bernoteit
Acting Manager, Permit Section
Division of Air Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62702

RE: Construction Permit Application
FutureGen 2.0 Repowering Project at the Meredosia Energy Center
Facility I. D. No. 137805AAA

Dear Mr. Bernoteit:

Ameren Services, as affiliated agent for Ameren Energy Generating Company and Ameren Energy Resources, submits two copies of an application supplement for a construction permit for the FutureGen 2.0 repowering project at the Meredosia Energy Center, Facility I. D. No. 137805AAA. This submission supplements an application submitted February 6, 2012 and the forms and discussion herein supercede the same forms and discussion pieces in the original submission.

Ameren Energy Resources and the FutureGen Industrial Alliance are applying as owner and operator respectively for an air quality construction permit for the FutureGen 2.0 project. The FutureGen 2.0 project is a United States Department of Energy funded demonstration project to implement and operate a large scale integrated oxy-combustion advance coal power generation facility with carbon capture and sequestration. The FutureGen 2.0 Program is being funded through cooperative agreements between the Department of Energy, Ameren and the Alliance. Ameren and the Alliance are negotiating an agreement for the Alliance to purchase the Meredosia facility and, subject to approval by the Department of Energy; the Alliance intends to implement the generating plant component of the program at the Meredosia Energy Center.

Please contact Mike Hutcheson (314) 554-2319 if you have any questions concerning this submittal or if you need additional information.

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete and that I am a responsible official for the source, as defined by Section 39.5(1) of the Environmental Protection Act.

Sincerely,

Michael L. Menne

Attachments

CC: Ken Humphreys – FutureGen Industrial Alliance (w/ attachments)

FUTUREGEN 2.0 PROJECT

APPLICATION FOR PERMIT OR CONSTRUCTION APPROVAL

Prepared for

Ameren Energy Resources

and

FutureGen Industrial Alliance, Inc.

June 18, 2013

URS Corporation
1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
(314) 429-0100
PROJECT 21562864

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ACRONYMS AND ABBREVIATIONS

AER	Ameren Energy Resources
Alliance	FutureGen Industrial Alliance, Inc.
ALPC	AirLiquide Process and Construction
Ameren	Ameren Energy Resources
AP-42	Compilation of Air Pollutant Emission Factors
ASU	Air Separation Unit
B&W PGG	Babcock & Wilcox Power Generation Group
CDS	Circulating Dry Scrubber
CEM	Continuous Emission Monitor
CO	Carbon monoxide
COM	Continuous Opacity Monitor
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CPU	Compression and Purification Unit
DCCPS	Direct Contact Cooler – Polishing System
DOE	Department of Energy
EGU	Electric Generating Unit
GEP	Good Engineering Practice
GHG	Greenhouse Gas
gpm	Gallons per Minute
GQCS	Gas Quality Control System
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
lb/day	Pounds per Day
NCG	Non-Condensable Gas
NO_2	Nitrogen Dioxide
NOx	Nitrogen Oxide
mg/L	Milligrams per Liter
Micron	Micrometer (µm)
NAD	North America Datum
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standards
PM	Particulate Matter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
SIL	Significant Impact Level
SO_2	Sulfur Dioxide
SO_3	Sulfur Trioxide
TDS	Total Dissolved Solids
tpy	tons per year
URS	URS Corporation
US EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
VOM	Volatile Organic Matter

EXECUTIVE SUMMARY

Ameren Energy Resources and the FutureGen Industrial Alliance, Inc. are herein applying for an air quality construction permit for the FutureGen 2.0 Project at Meredosia Energy Center. FutureGen 2.0 is a US Department of Energy funded demonstration project intended to develop a new pulverized coal-fired oxy-combustion boiler in combination with an Air Separation Unit and a Compression and Purification Unit for the concentration and storage of carbon dioxide.

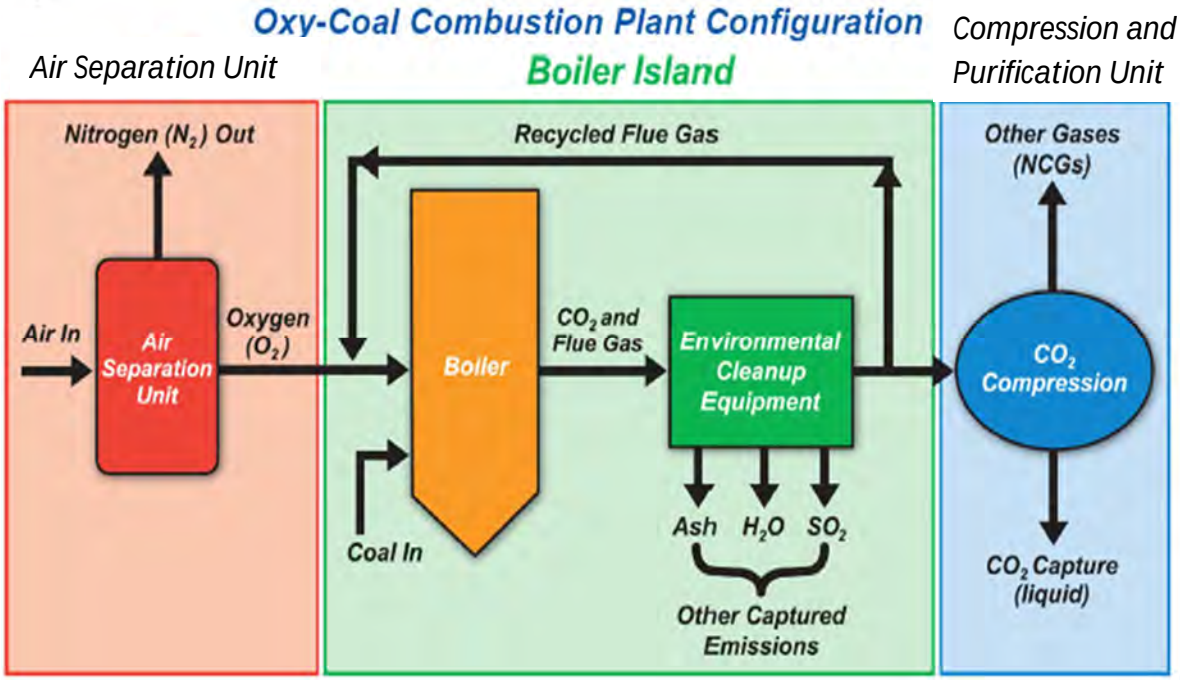
Most modern coal-fired power plants use a boiler technology commonly referred to as pulverized coal firing where coal is brought into the plant, crushed into tiny particles and blown into a furnace box using ambient air. The ambient air provides the oxygen necessary to support coal combustion. Additional air can be blown in at other locations to maintain proper combustion, producing the heat which is used to produce steam. Flue gases leaving the boiler have depleted oxygen levels and an increased carbon dioxide concentration of about 11 to 13 percent. Oxy-combustion is a newer process where instead of ambient air being blown into the boiler and used to supply oxygen for combustion, flue gas is recycled back into the boiler after being mixed with oxygen produced at the plant using air separation technology. By recycling the flue gas, an oxy-combustion boiler increases the concentration of carbon dioxide in the flue gas. The high carbon dioxide concentration facilitates separation and compression of the carbon dioxide so it can be captured and stored.

Figure ES-1 is a flow diagram of the oxy-combustion boiler process showing the relationship between the major systems necessary to maintain oxy-combustion and for normal processing of flue gas in preparation for carbon dioxide storage. Oxygen for the oxy-combustion boiler is supplied by the air separation unit where it is separated from ambient air by processes developed by Air Liquide. The oxygen is mixed with recycled flue gas and blown into the boiler. Flue gas from the boiler is directed to a circulating dry scrubber and a pulse jet fabric filter baghouse before it is either directed to the stack, recycled or directed to a direct contact cooler polishing system before it is recycled or processed in the Compression and Purification Unit.

The Compression and Purification Unit separates the carbon dioxide from the flue gas and compresses it into a liquid for transfer via pipeline to a carbon dioxide storage site for injection into a deep geologic formation. The remaining non-condensable gases are vented to the atmosphere through the Compression and Purification Unit Stack.

EXECUTIVE SUMMARY

Figure ES-1



FutureGen 2.0 will result in the addition or modification of the following emission sources at the Meredosia Energy Center:

1. Oxy-Combustion Boiler
2. Compression and Purification Unit
3. Auxiliary Boiler
4. Waste Ash Transfer
5. Absorbent Feed System (Hydrated Lime)
6. Trona Transfer
7. Cooling Towers
8. Coal Handling System (addition to existing system)
9. Haul Roads

Emissions from FutureGen 2.0 are projected in Table ES-1. These emission projections include emissions from the oxy-combustion boiler and associated equipment as well as emissions from an emergency diesel generator proposed for the carbon dioxide storage site to be permitted by the FutureGen Alliance.

EXECUTIVE SUMMARY

Table ES-1: FutureGen 2.0 Emissions Summary

	SO_2 (tpy)	NO_x (tpy)	CO_2 (tpy)	GHG CO_2e (tpy)	CO (tpy)	PM (tpy)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	VOM (tpy)	Lead (tpy)	Fluorides (tpy)	Sulfur Acid Mist (tpy)
FutureGen 2.0 Emissions Increase	322.99	1,732.80	1,516,651	1,522,047	497.26	65.06	95.18	79.84	13.37	0.17	2.76	10.49

FutureGen 2.0 will also be taking credit for emissions decreases resulting from the shutdown of all existing boilers at the Facility. Net emissions include the contemporaneous increases from the existing Meredosia emergency generator, permitted in 2008. The net emissions change is shown in Table ES-2.

Table ES-2: Net Emissions Summary

	SO_2 (tpy)	NO_x (tpy)	CO_2 (tpy)	GHG CO_2e (tpy)	CO (tpy)	PM	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	VOM (tpy)	Lead	Fluorides	Sulfur Acid Mist
Net Emissions Change	(9,217.61)	(1,048.20)	(418,935)	(413,532)	(832.34)	(246.04)	(217.03)	(108.39)	(356.23)	0.17	2.76	6.91

1.0 INTRODUCTION

Ameren Energy Resources (AER) is working with the FutureGen Industrial Alliance, Inc. (Alliance), Air Liquide Process and Construction, Inc. (ALPC) and Babcock & Wilcox Power Generation Group (B&W PGG) to develop an oxy-combustion power generation plant in conjunction with the process equipment and facilities necessary for capturing and storing carbon dioxide (CO_2) from the flue gas. FutureGen 2.0 will repower the Meredosia Energy Center (utilizing various equipment from the existing coal and oil-fired Units 1 through 4. The existing oil fired boiler (Boiler 6) will be demolished and replaced with a new oxy-combustion boiler, which will be designated Boiler 7. Coal unloading, handling and conveying equipment from Boilers 1 through 5 will be retained and re-used by FutureGen 2.0 along with the Unit 4 steam turbine generator set.

Oxy-combustion is the combustion of coal using nearly pure oxygen instead of air for combustion gas. The combustion gas is created by combining a nearly pure oxygen stream that is generated by an Air Separation Unit (ASU) with recycled flue gas from the boiler. The resulting flue gas has a higher CO_2 concentration and lower nitrogen concentration than is typically produced by a coal-fired boiler. The high CO_2 concentration facilitates separation and compression of the CO_2 so it can be captured and stored. The flue gas passes through pollution control equipment and a Compression and Purification Unit (CPU) that removes the CO_2 from the flue gas and cools/compresses it into a liquid for transport via pipeline to a CO_2 storage site for injection into a deep geologic formation. The remaining non-condensable gas (NCG) is vented to the CPU Stack.

The oxy-combustion boiler has been designed to burn different coals ranging from bituminous coals to blends of bituminous and sub-bituminous coals. This permit application is based on stack conditions representative of the coals or coal blends contemplated. The oxy-combustion repowering Project will utilize as much of the existing Unit 4 equipment and steam systems as possible, with the exception of the existing Boiler 6, which will be demolished.

2.0 PROJECT DESCRIPTION

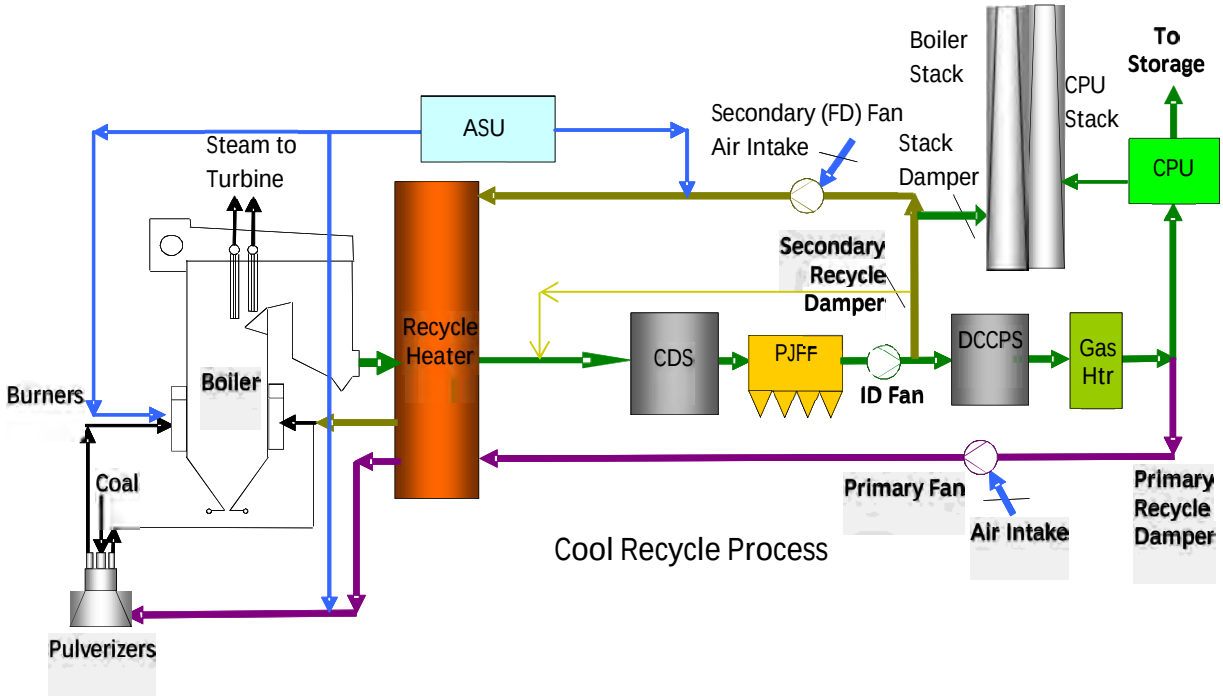
FutureGen 2.0 is a US Department of Energy demonstration project intended to develop a new pulverized coal-fired oxy-combustion boiler in combination with an ASU and a CPU for the concentration and pressurization of CO_2. FutureGen 2.0 will result in the upgrade of the steam supply for Electric Generating Unit (EGU) 4 with oxy-combustion boiler technology to enable the capture of CO_2 emissions and would construct a pipeline for transportation of the captured CO_2 to an underground injection site for permanent storage. A simple process flow diagram of the proposed FutureGen 2.0 is included as Figure 2-1.

2.1 Oxy-Combustion Boiler

Flue gases from the oxy-combustion boiler will be controlled in the proposed plant design. Flue gas leaving the boiler will enter the Gas Quality Control System (GQCS), which is designed to remove pollutants, recover heat, and prepare the gas for processing in CPU. The first pollution control device in the GQCS will be a circulating dry scrubber (CDS). In the CDS, flue gas will pass through a fluidized bed of hydrated lime, and the lime absorbs sulfur dioxide (SO_2), sulfur trioxide (SO_3), acid gases and, to a lesser degree, mercury in the flue gas. The flue gas will carry the lime out of the CDS and passes through a pulse jet fabric filter (PJFF) (baghouse) that removes lime and flyash from the gas stream. From the PJFF, the gas flow splits. One stream will be recycled to the boiler, and the remaining flow will pass through the direct contact cooling/polishing system (DCCPS), which primarily reduces the flue gas moisture content and adjusts the temperature for further processing in the CPU and incidentally reduces SO_2 and SO_3. After leaving the DCCPS, the gas will split, with one stream flowing to the CPU and the other supplying recycle gas for the boilers.

Flue gas recycled back to the boiler from the PJFF will be combined with oxygen from the ASU and will pass through a recycle heater prior to entering the boiler as secondary air. Flue gas processed in the DCCPS and recycled back to the boiler via the primary fans by way of the recycle heater will also combine with oxygen from the ASU and will be directed to the pulverizers as primary combustion air.

Figure 2-1: Simple Process Flow Diagram



2.2 Compression and Purification Unit

The flue gas entering the CPU will undergo further processing by first passing through a very high efficiency filtration system that will reduce particulate matter to a very low level. The CO_2 will then be dried, purified, compressed and transported to the storage location by pipeline. After processing in the CPU, the non-condensable gases remaining from the flue gas are vented to the CPU stack.

During boiler start-up or shut-down, the ASU, and CPU may not be fully operational. In that case, the boiler will combust fuel using ambient air (air firing mode) and all of the gas leaving the PJFF will flow to the Boiler Stack as in a conventional air-fired design. The DCCPS will not be in service during this time, and the CPU will not process flue gas to remove CO_2.

At various times, such as startup of the CPU or as a result of unavailability of the pipeline or storage site, the gases exiting the CPU will bypass the pipeline. During pipeline bypass CO_2 will be vented along with the non-condensable stream. Anytime the CPU would operate in pipeline bypass it would be necessary to vent the CO_2 stream through the CPU Stack along with the non-condensable gases.

2.3 Air Separation Unit

Ambient air enters the ASU where it will be cooled and compressed. Through a cryogenic separation process in the ASU, an oxygen stream of high purity will be separated from the air. The separated oxygen stream will be combined with recycled flue gas to provide the oxygen needed for oxy-combustion. After separation from the oxygen, the rest of the gases

(mostly nitrogen) are vented. The ASU separates air into its various components using refrigeration technology; no constituents are added or removed during this process.

2.4 Auxiliary Boiler

A new auxiliary boiler will be used to support FutureGen 2.0. The auxiliary boiler will provide steam for various plant systems during boiler downtime and as required for startup of the oxy-combustion boiler and auxiliary systems. The auxiliary boiler will utilize ultra low sulfur diesel oil and will discharge to its own stack.

2.5 Coal Handling System

FutureGen 2.0 will require the construction of additional material handling emission sources including coal, absorbent feed, and trona. Coal will be delivered to the Facility by truck and/or by barge as it has been historically through the life of the Facility. Coal will continue to be stored at the existing coal pile with loading of the pile and working of the pile to continue as has been normal practice at the Facility.

The yard hopper will continue to be used for reclaim of stored coal at the Facility. Coal will be transferred using the existing coal conveying system at Meredosia from the existing coal pile to new conveying equipment for the proposed boiler. Coal will be transported by extending the existing Conveyor C to a new enclosed chain conveyor, which will send coal to the oxy-combustion boiler's coal bunkers.

2.6 Ash Transfer

Ash removed from the PJFF will be pneumatically conveyed to the ash storage silo which will be equipped with a bin vent filter. For disposal, ash will be conveyed to a pug mill where the ash will be wetted before being discharged via discharge chute into a truck for transport to a licensed off-site disposal facility.

2.7 Absorbent Feed Transfer

For the absorbent feed system, trucks will deliver hydrated lime and pneumatically convey it to new storage silos equipped with vent filters to reduce particulate emissions during silo loading and unloading. The lime will exit the silo into a weigh hopper, also equipped with a vent filter. After the weigh hopper, the lime travels through an enclosed screw feeder, hopper (vented back to weigh hopper) and rotary air lock; the lime will then be pneumatically conveyed into a surge bin equipped with a vent filter. The lime is gravimetrically transferred by a volumetric feeder directly into the flue upstream of the CDS. Within the CDS, high concentration of solids will be recirculated as new lime is added to achieve high solids contact with the flue gas. Solids that are not entrained in the flue gas will fall to the bottom of the CDS. This material will be intermittently released to the CDS discharge container.

2.8 Trona Transfer

Dry trona will be delivered by truck, pneumatically transferred to one of two new storage bins, and mixed into trona liquor. The trucks will be enclosed and with water the storage bin dust collectors will control particulate emissions from the material loading system. The trona liquor will be transferred to the trona liquor storage tank. The trona liquor will then be used in the DCCPS to provide additional reduction of SO_2 and acid gases. The trona liquor and water used in the DCCPS will be cycled through the DCCPS cooling tower to reject heat before returning to the DCCPS.

2.9 Cooling Towers

Three cooling towers will be constructed to support FutureGen 2.0. These cooling towers will be the main cooling tower, the ASU/CPU cooling tower, and the DCCPS cooling tower. The existing Unit 4 cooling tower superstructure will be replaced with the new main cooling tower constructed on the existing basin. The cooling towers' design will incorporate drift eliminators to minimize particulate emissions.

2.10 Haul Roads

New and existing roadways at the Facility will be used to transport consumables including coal, trona, and lime. They will also be used to transport process byproducts such as ash off-site. Existing roadways will be used to transport coal; however, trona, and lime are not currently used at the Facility, and existing ash is currently stored in a fly ash or bottom ash pond on-site.

3.0 EMISSIONS ANALYSIS

The Code of Federal Regulations Title 40, Section 52.21 "Prevention of Significant Deterioration (PSD) of Air Quality" (40 CFR 52.21) provides a procedure to determine whether a proposed project requires a PSD permit. A PSD permit is required if the proposed construction or modification causes a significant emissions increase and a significant net emissions increase.[1] The following sections describe this determination. Illinois EPA (IEPA) has been delegated authority to implement the federal PSD program as promulgated under 40 CFR 52.21. This application details the emission calculations that are required to show whether the project requires permitting under the federal PSD program.

Emissions increases for the proposed FutureGen 2.0 were calculated in accordance with US Environmental Protection Agency (US EPA) PSD applicability procedures in 40 CFR 52.21(a)(2)(iv)(b) to determine if the project would result in a significant emission increase. This determination was based on one of three tests: the actual-to-projected-actual applicability test for projects that only involve existing emissions units; the actual-to-potential test for projects that only involve construction of new emissions units; and the hybrid test for projects that involve both types of emissions units. FutureGen 2.0 includes construction of new emissions units, so the actual-to-potential test[2] was used.

The hybrid test involves summing the emissions increases for each emissions unit. The emissions increases are calculated using the actual-to-potential test for new units and the actual-to-projected-actual test for existing units. The following Table 3-1 lists the emissions units associated with FutureGen 2.0.

Table 3-1: Affected Emission Units

Emissions Unit	**New or Existing**
Oxy-Combustion Boiler	New
Compression and Purification Unit	New
Auxiliary Boiler	New
Ash Transfer	New
Absorbent Feed Transfer	New
Trona Transfer	New
Cooling Towers	New
Coal Transfer and Conveying	Existing
Haul Roads	Existing
Emergency Diesel Generator (Storage Site)	New

3.1 Unit Specific Emissions Data

The following paragraphs describe the emission units in more detail as well as how emission estimates have been developed for each specific emission unit.

[1] 40 CFR 52.21 (a)(2)(iv)(a)
[2] 40 CFR 52.21 (a)(2)(iv)(d)

3.1.1 Oxy-Combustion Boiler

The oxy-combustion boiler startup begins like a typical coal-fired boiler using ambient air to supply the oxygen needed for combustion, which is considered air-firing. Combustion is initiated with oil-fired igniters. These igniters provide stable combustion during startup until the coal pulverizers and the boiler have reached the minimum loads required to sustain coal-fired combustion. Once the boiler reaches approximately 45 percent load and a concentrated oxygen stream is available from an onsite ASU, the boiler switches from air firing to oxy-combustion where oxygen and recycled flue gas are substituted for ambient air. Once the boiler is operating in oxy-combustion and CO_2 in the flue gas increases in concentration (due to recycling), flue gas is processed in the CPU and the boiler load is increased to full load operation. Emission estimates for the oxy-combustion boiler take into account emissions during processing of the flue gas by the CPU as well as emissions when the CPU is not processing flue gas (e.g. start-up and CPU downtime).

Startup emissions are similar to those seen during startup of well controlled pulverized coal boilers. During the oxy-combustion phase, flue gas is processed by the CPU, which further reduces criteria and toxic pollutants while concentrating and pressurizing the CO_2 for transportation and storage.

Annual emission estimates for the oxy-combustion boiler are based on the worst-case emission rates during either air firing or oxy-firing and assume 8,760 hours of operation annually with the exception of emissions of sulfuric acid mist. To limit sulfuric acid mist emissions, it is assumed that air firing would be limited to 4,800 hours per year (with 3,960 hours oxy-fire). Should sulfuric acid mist emission rates during air firing be lower than anticipated, a limitation on operating in air fire will not be necessary. These estimates also assume expected worst case conditions for the oxy-combustion boiler with a nominal heat rate of 1,605 mmBtu/hr.[3] All air firing emission rate estimates assume air firing ends at approximately 45 % load.

The FutureGen 2.0 Project goal is to exhibit the full integration of an innovative ASU and a CPU into a full scale utility application for electric power generation with associated CO_2 storage. To accomplish this goal necessitates operating the CPU which results in lower emissions than are the projected maximums in this application. Emission factors for the oxy-combustion boiler and maximum annual emissions are shown in Table 3-2 and Table 3-3, respectively.

[3] This value is a projection of the maximum long term average heat rate. It is not provided as a basis for short term emission rate calculations or as a short term heat rate limitation.

Table 3-2: Oxy-Combustion Boiler Emissions Factors

Operating Conditions[4]	Emission Factors lb/hr											
	[5]SO_2	NO_x	CO_2	GHG CO_2e[6]	CO	PM[7]	PM_{10}	$PM_{2.5}$	VOC	Lead[8]	Fluorides	Sulfur Acid Mist
Air-Firing* – Emissions through Boiler Stack												
	73.6	319	184,900	186,080	110	7.45	14.72	14.72	2.65	0.016	0.63	2.97
Oxy-Firing - Transferred to CPU Before Release – Emissions through CPU Stack												
CPU – Pipeline Storage	0.93	33	33,077	35,649	8.8	5.02	5.02	5.02	1.8	0.0343	0.05	1.7
CPU – Pipeline Bypass	9.99	386	330,767	331,947	9	5.02	5.02	5.02	1.8	0.0343	0.05	1.7
Worst Case	**73.6**	**386**	**330,767**	**331,947**	**110**	**7.45**	**14.72**	**14.72**	**2.65**	**0.0343**	**0.63**	**2.97**

*Oxy-combustion boiler in air-fire assumes maximum 45 % load.

[4] B&W provided emission factors for air firing operating conditions for the constituents SO_2, NO_x, CO_2, CO, $PM_{10}/PM_{2.5}$, VOC, Fluorides, and Sulfuric Acid Mist, "FutureGen 2.0 Phase 2 Preliminary Boiler and CPU Air Emissions for Permit Basis." ALPC provided emission factors for oxy-combustion operating conditions for the constituents SO_2, NO_x, CO_2, CO, $PM_{10}/PM_{2.5}$, VOC, Fluorides, and Sulfuric Acid Mist, "FutureGen 2.0 Phase 2 Preliminary Boiler and CPU Air Emissions for Permit Basis" and "Air Emissions FutureGen 2.0 Project – 90% CO2 Recovery Catox Case."

[5] ALPC provided emission factors for oxy-combustion operating conditions for SO_2, "Air Emissions FutureGen 2.0 Project – 90% CO2 Recovery Catox Case" as sulfur, URS calculated SO_2.

[6] The GHG emission factors are the sum of the CO_2e emission factors for CO_2, CH_4 and N_2O. The CH_4 and N_2O factors were calculated from default emission factors and default global warming potentials for those constituents for coal firing in Tables A-1 and C-2 of 40 CFR 98 Mandatory Greenhouse Gas Reporting rule.

[7] For oxy-firing operations, it was assumed that PM emission factor was equal to the $PM_{10}/PM_{2.5}$ emission factor provided by B&W for oxy-firing operations.

[8] Lead emission factors were calculated based on AP-42, Section 1.1 values for coal-fired boilers and typical design coal high heat values.

Table 3-3: EGU Emissions (Air-firing through Boiler Stack, All Other Emissions through CPU Stack)

Emission Unit[9]	Annual Potential Emissions (tpy)											
	SO_2	NO_x	CO_2	GHG CO_2e[10]	CO	PM[11]	PM_{10}	$PM_{2.5}$	VOC	Lead[12]	Fluorides	Sulfur Acid Mist
Air-Firing*	322.37	1,397.22	809,862	815,030	481.80	32.63	64.47	64.47	11.61	0.07	2.76	10.49*
CPU – Pipeline Storage	4.07	144.54	144,877	156,143	38.54	21.99	21.99	21.99	7.88	0.15	0.22	7.45
CPU – Pipeline Bypass	43.76	1,690.68	1,448,759	1,453,928	39.42	21.99	21.99	21.99	7.88	0.15	0.22	7.45
Worst Case Emissions	**322.37**	**1,690.68**	**1,448,759**	**1,453,928**	**481.80**	**32.63**	**64.47**	**64.47**	**11.61**	**0.15**	**2.76**	**10.49***

*Oxy-combustion boiler in air-firing operating condition assumes maximum 45 % load. For sulfuric acid mist annual emissions, it is assumed the boiler operates 4,800 hours per year in air fire and 3,960 hours in oxy-combustion.

[9] B&W provided emission factors for air firing operating conditions for the constituents SO_2, NO_x, CO_2, CO, $PM_{10}/PM_{2.5}$, VOC, Fluorides, and Sulfuric Acid Mist, "FutureGen 2.0 Phase 2 Preliminary Boiler and CPU Air Emissions for Permit Basis." ALPC provided emission factors for oxy-combustion operating conditions for the constituents SO_2, NO_x, CO_2, CO, $PM_{10}/PM_{2.5}$, VOC, Fluorides, and Sulfuric Acid Mist, "FutureGen 2.0 Phase 2 Preliminary Boiler and CPU Air Emissions for Permit Basis" and "Air Emissions FutureGen 2.0 Project – 90% CO2 Recovery Catox Case.

[10] The GHG emissions are the sum of the CO_2e emissions for CO_2, CH_4 and N_2O. The CH_4 and N_2O emissions were calculated from default emission factors and default global warming potentials for those constituents for coal firing in Tables A-1 and C-2 of 40 CFR 98 Mandatory Greenhouse Gas Reporting rule.

[11] It was assumed that CPU – Pipeline Bypass PM emission factor was equal to the $PM_{10}/PM_{2.5}$ emission factor provided by ALPC for CPU-Pipeline Bypass.

[12] Lead emission factors were calculated based on AP-42, Section 1.1 values for coal-fired boilers and typical design coal high heat values.

3.1.2 Auxiliary Boiler

Auxiliary boiler emissions assume a fuel oil fired auxiliary boiler with a maximum design heat rating of 95 MMBtu/hr. Auxiliary boiler emission factors are based on information provided by the boiler manufacturer and combusting ultra-low sulfur diesel fuel.[13] GHG emissions are based on CO_2 emission factors from the manufacturer summed with CH_4 and N_2O emission factors on a CO_2e basis.[14] Emission factors for the auxiliary boiler are shown in Table 3-4.

[13] SO_2 emission factor based on EPA AP-42 factor for combusting fuel with sulfur content of 15 ppm; NOx, CO, PM, PM_{10} and VOC emission values based on boiler manufacturer. $PM_{2.5}$ emission factor was not available from manufacturer; AP-42 value was used.

[14] The CH_4 and N_2O factors were calculated from default emission factors and default global warming potentials for those constituents for oil firing in Tables A-1 and C-2 of 40 CFR 98 Mandatory Greenhouse Gas Report rule.

Table 3-4: Auxiliary Boiler Emissions Factors (Emissions Auxiliary Boiler Stack)

Emission Unit	Emission Factors (lb/hr)[15]											
	SO_2	NO_x	CO_2	GHG CO_2e[16]	CO	PM	PM_{10}	[17]$PM_{2.5}$	VOC	Lead[18]	Fluorides	Sulfur Acid Mist
Auxiliary Boiler	0.14	9.50	15,490	15,542	3.52	2.85	3.80	1.12	0.38	0.0009	--	--

[15] Emission factors were supplied by the auxiliary boiler manufacturer, except where noted.
[16] The GHG emission factors are the sum of the CO_2e emission factors for CO_2, CH_4 and N_2O. The CO_2, CH_4 and N_2O factors were calculated from default emission factors and default global warming potentials for those constituents for coal firing in Tables A-1 and C-2 of 40 CFR 98 Mandatory Greenhouse Gas Reporting rule.
[17] $PM_{2.5}$ emission factors were calculated based on AP-42, Section 1.3 values for fuel oil-fired boilers.
[18] Lead emission factors were calculated based on AP-42, Section 1.3 values for fuel oil-fired boilers.

3.1.3 Coal Handling System

The existing coal handling system will be used for FutureGen 2.0. Coal will be delivered to the Facility using the existing coal yard equipment and/or the barge unloading system. The yard hopper will be used to reclaim and blend, as required, stored coal. When deliveries of coal are made by barge, the coal will be unloaded and sent to the plant where it is blended, as necessary, with coal reclaimed from the yard hopper. If coal is blended off-site before loading onto the barge, the blended coal will be sent directly to the plant or to the yard hopper using existing equipment.

There will be new coal handling equipment added as part of FutureGen 2.0. The existing coal Conveyor C will be extended (under hood covers) to a new enclosed transfer point. Conveyor C will discharge the coal to a new enclosed drag chain conveyor serving the coal silos; all of which have particulate emissions controlled by a fabric filter. Particulate emissions will occur when coal is transferred or dropped from one conveyor to another. In comparison to the existing coal handling system, two emission points will be added; 1) from the extended Conveyor C to the chain conveyor, and 2) from the conveyor into the coal bunkers.

Particulate emissions were calculated using a conveyor transfer emission factor from the Upgraded Coal Handling System construction permit (IEPA Permit No. 02060025) and a 95 percent control efficiency to account for the chain conveyor / coal silo transfer point fabric filter. Attachment No. 2 contains the emission estimate for the new coal handling system equipment.

Fugitive emissions from coal piles were not included in emissions calculations. The coal pile operations will not be modified as a result of FutureGen 2.0. The size and extent of the coal pile will not be changed and the methods utilized for operating the coal pile will not change. As a result, emissions are not expected to change from historic actual levels because the nature and extent of the coal pile activity will not change after shut down of Boilers 1 through 5 and construction of the new boiler.

3.1.4 Ash Transfer

Ash transfer emissions were calculated using the air flow rates, the filter manufacturer's particulate loading performance information, and silo loading and fluidization parameters. Ash will be pneumatically transferred to a storage silo and fluidized. The silo will be equipped with a dust collection system to remove particulate emissions from displaced air.

To unload the silo, an open-close knifegate valve will open, sending ash to a variable speed rotary feeder, which meters ash to a pug mill. The ash is wetted inside the pugmill before being discharged to trucks for offsite disposal. US EPA's drop point equation was used to

calculate the emissions from the drop point when transferring wetted ash from the pug mill to trucks. Attachment No. 3 details the ash conveying emissions calculation.

3.1.5 Hydrated Lime Transfer

Absorbent (hydrated lime) feed system emissions were calculated using the air flow rates and the filter manufacturer's particulate loading performance information for the control devices. The control devices capture all emissions generated by the individual emission units in the absorbent feed transfer system. Attachment No. 4 details the absorbent feed transfer emission calculation.

3.1.6 Trona Transfer

Trona transfer emissions were calculated using air flow rates and filter manufacturer's particulate loading performance information. Because the trona is subsequently wetted, there will be no emissions from the storage tank. Attachment No. 5 details the trona conveying emissions calculation.

3.1.7 Cooling Towers

The existing Unit 4 cooling tower's superstructure will be dismantled and replaced and renamed the Main Cooling Tower. More cooling tower capacity (DCCPS and ASU/CPU Cooling Towers) will be added for the new oxy-combustion boiler system. Cooling tower fugitive emissions are released when cooling water becomes entrained in the air stream and drifts away from the cooling tower and evaporates leaving behind the dissolved solids from the cooling water. Cooling tower emissions were calculated using the US EPA's methodology from AP-42 Section 13.4. To calculate the cooling tower emissions, the drift flow from the drift eliminators and the total dissolved solids (TDS) content of the water for the cooling towers were provided by the manufacturer. To determine PM_{10} and $PM_{2.5}$ emission rates, it was assumed that 95 percent of PM is PM_{10} and all PM_{10} is $PM_{2.5}$[19]. The calculation of fugitive cooling tower drift emissions is detailed in Attachment No. 7.

3.1.8 Haul Roads

Particulate emissions were calculated for new haul roads used to transport coal, trona, lime, ash, products to be used in the wastewater treatment system and sludge. Trona and lime will be new materials transported at the Facility. Ash is currently disposed in an on-site ash pond, but future ash generated will be transported off-site for disposal. Equation (1) from AP-42, Section 13.2[20], was used to calculate the haul roads emission factor. Equation (2) was used to account for the natural mitigation of particulate emissions from precipitation. Equation values such as silt surface loading, particle size multipliers, and the number of wet

[19] "Calculating Realistic PM_{10} Emissions from Cooling Towers," Joel Reisman and Gordon Frisbie. The PM_{10} fraction of drift particles is inversely related to TDS content of the cooling water drift.
[20] AP-42, *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition (AP-42) Section 13.2.1 "Paved Roads," January 2011

days using an annual averaging period were obtained from AP-42, Section 13.2. The calculation of fugitive emissions from the haul roads is detailed in Attachment No. 8.

3.2 Project Emissions Increase

Emissions were calculated for the oxy-combustion boiler and other emission units based on maximum projected operating characteristics. Except where noted, all systems are assumed to operate 8,760 hours per year and emissions are based on operating assumptions that result in the greatest potential emissions.

Total FutureGen 2.0 emissions include source emissions described above assuming, to the extent possible, worst case emission rates. The oxy-combustion boiler is assumed to operate at maximum load when the CPU is processing flue gas. As shown in Table 3-3 above, the operating condition that resulted in the highest emission was chosen on a pollutant-by-pollutant bases. It is assumed to operate with worst case emission rates for each pollutant in either air firing or oxy-combustion modes as discussed above. Maximum potential emissions do not assume the CPU processes flue gas unless that results in higher emission estimates. This maximizes potential emissions for all pollutants but does not take into account the purpose of the demonstration project is to prove the viability of the combination of the oxy-combustion boiler in combination with the CPU and associated storage.

Part of FutureGen 2.0 includes the proposed construction of an emergency diesel generator at the CO_2 storage site. The FutureGen Industrial Alliance, Inc. is herein applying for authority to construct this emergency diesel generator as part of this permit application. This generator will provide backup power for the storage equipment in cases of emergency. For the purpose of determining the emissions increases from the emergency diesel generator, emissions from the generator were calculated based on assumed continuous operation (8760 hours per year) at maximum load. Emissions of SO_2, NO_X, CO, PM_{10}, $PM_{2.5}$, and VOM are based on US EPA Tier 2 emissions standards. Emissions of GHG are based on AP-42 emissions factors. The emissions increases from the generator are included in Table 3-5.

FutureGen 2.0 emissions increases are shown in Table 3-5 below. FutureGen 2.0 emissions increases are greater than the significant emissions rates,[21] so the Project will result in a significant emissions increase as that term is defined in the US EPA regulations.

[21] 40 CFR 52.21(b)(23)(i)

Table 3-5: FutureGen 2.0 Emissions Increase Summary

Emission Unit	SO_2 (tpy)	NO_x (tpy)	CO_2 (tpy)	GHG CO_2e (tpy)	CO (tpy)	PM (tpy)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	VOM (tpy)	Lead (tpy)	Fluorides (tpy)	Sulfur Acid Mist (tpy)
Oxy-Combustion Boiler Worst Case	322.37	1,690.68	1,448,759	1,453,928	481.80	32.63	64.47	64.47	11.61	0.15	2.76	10.49*
Auxiliary Boiler	0.62	41.61	67,847	68,075	15.40	12.48	16.64	4.91	1.66	0.004		
Coal Transfer						7.45	3.52	0.25				
Ash Transfer						2.60	2.59	2.58				
Absorbent Feed Transfer						3.06	3.06	3.06				
Trona Transfer						0.02	0.02	0.02				
Cooling Towers						4.59	4.36	4.36				
Haul Roads						2.22	0.44	0.11				
Emergency Diesel Generator (Storage Site 500 hr/yr)	<0.01	0.51	44.40	44.50	0.06	0.01	0.08	0.08	0.10			
FutureGen 2.0 Emissions Increase	322.99	1,732.80	1,516,651	1,522,047	497.26	65.06	95.18	79.84	13.37	0.17	2.76	10.49

3.3 Net Emissions Increase

Since the project results in a significant emissions increase, a determination of whether the project results in a significant net emissions increase must be made to determine whether the project is subject to the PSD regulations. Net emissions increase is defined in 40 CFR 52.21(b)(3)(i) as:

"*…the amount by which the sum of the following exceeds zero:*

> *(a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source…*[this is the project emissions increase]*…and*
> *(b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable…*"

Contemporaneous changes in emissions for any particular project like the proposed project are determined by rule to be any increase or decrease in emissions at the Facility that occurs during a period which begins 5 years before the start of construction of a project and ends with the date when the project begins operation. To be creditable, a decrease must be federally enforceable. Based on the anticipated start of construction for the proposed project, the changes at Meredosia Energy Center that are contemporaneous with the proposed project include the installation of an emergency diesel generator in November 2008 under IEPA Permit No. 08100029 and the shutdown of the six existing boilers and the proposed demolition of the existing Unit 4 cooling tower. To be creditable, the decreases in emissions described above will have to be made enforceable through the inclusion of federally enforceable permit conditions requiring the permanent cessation of operation of the existing boilers and the Unit 4 cooling tower. Other requirements for increases and decreases to be creditable have been met including the following:

1. The Administrator has not relied on any increase or decrease discussed above in issuing a permit for the Facility.
2. None of the contemporaneous increases or decreases occurred at a "Clean Unit".
3. All increases and decreases have occurred after the applicable minor source baseline date.
4. All decreases have higher levels of actual emissions prior to the shutdowns.

3.3.1 Contemporaneous Emission Changes

The net change in emissions for any particular contemporaneous change in emissions is based on the definition of net emissions increase. Under that definition, 40 CFR 52.21(b)(3)(i)(b) states:

"*Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph (b)(3)(i)(b)*

shall be determined as provided in paragraph (b)(48) of this section, except that paragraphs (b)(48)(i)(c) and (b)(48)(ii)(d) of this section shall not apply."

Paragraph (b)(48)(i)(c) relates to determining baseline actual emissions at EGU's and states that "*For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.*" Because this paragraph does not apply to contemporaneous increases and decreases for a project, contemporaneous emissions changes can utilize different baseline periods for the same pollutants and different baseline periods than the proposed project's baseline period.

Baseline actual emissions are defined under 40 CFR 52.21(b)(48) as the "…*average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation.*" US EPA has determined that the baseline period for contemporaneous emissions changes is based on the date the change occurred.

Boilers 1 through 4 were removed from service on November 9, 2009. Baseline actual emissions for the shutdown of Boilers 1-4 can be based on the actual emissions for any consecutive 24-month period during the 5-year period from November 1, 2004 to October 31, 2009. Boilers 5 and 6 were removed from service on January 1, 2012 and baseline actual emissions for the shutdown of Boiler 5 and 6 can be based on the actual emissions for any consecutive 24-month period during the 5-year period from January 2006 to December 2011.

Baseline actual emission rates have been calculated for all contemporaneous emissions changes at the Meredosia Energy Center. As a coal-fired utility, the boilers at the Meredosia Energy Center are subject to the US EPA's Acid Rain program (Title IV of the Clean Air Act) and the associated monitoring provisions of 40 CFR 75. Accordingly, the Facility has CO_2, SO_x, and NO_x certified emissions monitoring (CEMs) data for all Facility boilers, as well as CEMs data for heat input to the boiler based on measured stack flow rate. CEMs heat input data is used as the basis for calculating monthly emissions of all regulated PSD pollutants from the boilers except those pollutants directly monitored. Data from CEMs for the baseline period are included as Attachment No. 9 to this analysis. Emission rates for material handling sources are based on coal consumption data from the Facility and emission factors as described below. Emission rates for cooling tower emissions based on US EPA AP-42 emission factor equation for cooling towers and site specific data on TDS levels, drift rates, and cooling water flow.

The Facility also has limited data from an uncertified carbon monoxide (CO) process monitor on the Unit 3 Boiler 5 stack. The monitor was not certified but is considered to be a better estimate of actual CO emissions than AP-42 emission factors. The CO monitor was utilized

for a period beginning September 2008 to April 2009. The data from that period shows that CO emissions were on average 0.03 pounds per MMBtu of heat input. Information from operations personnel at the Facility indicate that the boiler was operated with significant amounts of excess air. As a result, CO emissions from this boiler were much lower than from other coal-fired boilers at the plant (and other coal-fired boilers in general) which do not require firing under lean conditions. To determine monthly emissions for pollutants which are not monitored, emission factors were developed based on stack test data when available, or US EPA emission factor data (AP-42). Emission factors for CO, PM, and VOM are shown in Table 3-6 below.

Table 3-6: Boiler Emission Factors for CO, PM and VOM (lb/MMBtu)

Emission Unit	CO	PM_{10}	$PM_{2.5}$	VOM[22]
Units 1 & 2 Combined Stack (Boilers 1 - 4)	[23]0.5	[24]0.055	[25]0.032	0.04
Unit 3 Boiler 5	0.03	[26]0.026	[27]0.016	0.04
Unit 4 Boiler 6	0.03	[28]0.05	[29]0.04	0.01

Existing cooling tower baseline emissions were based on cooling tower operating time from operating logs in Attachment No. 10. Hourly emission rates calculated using site specific TDS levels, guaranteed drift rate, and cooling water flow rate are listed in Table 3-7.

Table 3-7: Existing Cooling Tower Emission Rates (lb/hr)

	PM_{10}	$PM_{2.5}$
Cooling Tower Emissions	7.73	7.73

Baseline emission rates for Boilers 1 through 6 and the cooling tower at the Facility are tabulated for each rolling 24 month period beginning January 2006 through September 2009 in Table 3-8. This time period represents the overlap of the baseline actual emissions from each of the individual boilers shutdown at the Facility.

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[22] VOM emissions are based on AP-42 emission rates.
[23] CO emissions for Boilers 1 through 4 are based on AP-42.
[24] PM_{10} emissions are based on 2004 Stack Test for PM multiplied by the cumulative mass percent from AP-42 Table 1.1-7 plus condensable PM from 2010 ICR test of Unit 3.
[25] $PM_{2.5}$ emissions are based on ratio of filterable PM to filterable $PM_{2.5}$ identified during 2010 ICR test (36.79%) multiplied by 2004 Stack Test for PM added to condensable PM from 2010 ICR test of Unit 3. Particle size distribution table for dry bottom boilers with ESPs (67 % PM is PM_{10})
[26] PM_{10} emissions are based on filterable PM measured during ICR testing multiplied by the cumulative mass percent from AP-42 Table 1.1-7 plus condensable PM from 2010 ICR test of Unit 3.
[27] $PM_{2.5}$ emissions are based on ratio of filterable $PM_{2.5}$ identified during 2010 ICR test plus condensable PM from 2010 ICR test of Unit 3.
[28] PM_{10} emissions are based on filterable PM multiplied by the cumulative mass percent from AP-42 Table 1.3-4 plus condensable PM from AP-42 Table 1.3-2 and assume 0.63 percent S.
[29] $PM_{2.5}$ emissions are based on filterable PM multiplied by the cumulative mass percent from AP-42 Table 1.3-4 plus condensable PM from AP-42 Table 1.3-2 and assume 0.63 percent S.

Table 3-8: Baseline Actual Emissions from Boilers 1-6 and Cooling Tower

End of 24-month period	SO_2 (tpy)	NO_x (tpy)	CO_2 (tpy)	CO (tpy)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	VOM (tpy)
Dec-08	9,702.29	2,855.32	1,960,127.48	1,418.77	318.48	192.29	378.89
Jan-09	9,541.14	2,813.17	1,937,858.18	1,368.88	312.60	188.86	374.25
Feb-09	9,238.59	2,741.62	1,896,015.93	1,288.13	302.54	182.96	365.84
Mar-09	8,597.94	2,604.37	1,813,029.83	1,181.92	286.15	173.24	349.54
Apr-09	8,036.94	2,454.37	1,718,030.53	1,069.98	268.02	162.47	330.95
May-09	7,588.44	2,336.32	1,637,389.08	1,010.41	254.57	154.27	315.24
Jun-09	7,101.64	2,225.52	1,566,107.83	953.61	242.12	146.58	301.43
Jul-09	6,656.59	2,090.37	1,478,907.38	884.36	227.59	137.86	284.43
Aug-09	6,375.29	2,024.37	1,449,488.38	822.86	220.01	133.35	278.47
Sep-09	6,290.09	1,998.42	1,434,539.28	793.31	216.34	131.22	275.28

The 24 month period beginning March 2007 and ending February 2009 has been chosen as the baseline period for all pollutants and for all contemporaneous emissions changes. Baseline emission rates for GHG emissions as tons of CO_2 equivalent are assumed to equal CO_2 tons for emissions decreases. Actual decreases of GHG emissions including CO_2, CH_4, and N_2O are higher than the decreases of CO_2 emissions on a CO_2 equivalent basis. Consequently the reduction in GHG emissions resulting from these contemporaneous changes is greater than estimated here. Because these contemporaneous changes result from the shutdown of these units, the amount of the decrease in emissions is equal to the baseline actual emissions from these units for the baseline period chosen.

A construction permit (IEPA Permit No. 08100029) for an emergency diesel generator (EDG) at the Meredosia Energy Center was issued on November 21, 2008. The permit states that the EDG shall be fueled by distillate fuel oil with sulfur content of 0.28 percent by weight or less, and its annual throughput shall not exceed 201,000 gallons. Contemporaneous emission increases from the EDG are based on permit limits,[30] AP-42 emission factors,[31] and GHG reporting rule emission factors[32] and are included in Table 3-9.

[30] SO_2, NO_x, CO, and VOM values obtained from emissions limits in IEPA Permit No. 08100029

[31] CO_2, CH_4, PM_{10}, and $PM_{2.5}$ values were calculated using AP-42, *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition (AP-42) Section 3.4 "Large Diesel and All Stationary Dual-fuel Engines," January 2011

[32] N_2O values were calculated using 40 CFR 98 Table C-2 to Subpart C, "Default CH_4 and N_2O Emission Factors for Various Types of Fuel."

3.3.2 Net Emissions Increase

Table 3-9 details the net change in emissions that will result from FutureGen 2.0. The table shows that FutureGen 2.0 will not result in a significant net emission increase for any pollutant and is therefore not subject to the PSD regulations. Because FutureGen 2.0 includes the construction of new emission units as well as modifying existing emission units, a state construction permit will be required.

3.4 Hazardous Air Pollutant Emission Estimate

Hazardous air pollutant (HAP) emissions were calculated for the oxy-combustion boiler and the auxiliary boiler. Total HAPs potential emissions are less than 10 tons per year, therefore any single HAP emission is also less that 10 tons per year. These are non-major source levels. The HAP calculations are in Attachment No. 11.

Table 3-9: Significant Net Emissions Increase Determination Summary

Emission Unit	SO_2 (tpy)	NO_x (tpy)	CO_2 (tpy)	GHG CO_2e (tpy)	CO (tpy)	PM (tpy)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	VOM (tpy)	Lead (tpy)	Fluorides (tpy)	Sulfur Acid Mist (tpy)
FutureGen 2.0 Emissions Increase[33]	322.99	1,732.80	1,516,651	1,522,047	497.26	65.06	95.18	79.84	13.37	0.17	2.76	10.49
Contemporaneous Emissions Decreases	9,541	2,813	1,937,858	1,937,858	1,369	313	313	189	374	--	--	3.58
Contemporaneous Increases from the Meredosia EDG[34]	0.4	32	2,272	2,280	39.4	1.9	0.79	0.77	4.4	--	--	
Net Emissions Increase	(9,217.61)	(1,048.20)	(418,935)	(413,532)	(832.34)	(246.04)	(217.03)	(108.39)	(356.23)	0.17	2.67	6.91
Significance Level	40	40	NA	75,000	100	25	15	10	40	0.6	3	7
Significant Increase	No	No	No	No	No	No	No	No	No	No	No	No

[33] From Table 3-5: Project Emissions Increase Summary
[34] Emergency Diesel Generator

4.0 APPLICABLE EMISSION STANDARDS

This section details the air quality regulations applicable to the equipment being constructed and/or modified for FutureGen 2.0. FutureGen 2.0 will operate the Facility under operating conditions that meet applicable emission standards. Air quality regulations are discussed for each component as well as the basis for those requirements.

4.1 Oxy-Combustion Boiler

The new oxy-combustion boiler will be an electric generating unit. Electric generating units are the subject of special attention under the federal Clean Air Act and the regulations promulgated thereunder. Electric generating units are affected sources under the following federal regulations and these regulations will therefore apply to the proposed oxy-combustion boiler:

- 40 CFR 60 Subpart Da Standards of Performance (referred to as New Source Performance Standards [NSPS]) for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978
- 40 CFR 63 Subpart UUUUU National Emission Standards for Hazardous Air Pollutants (NESHAP) From Coal- and Oil-Fired Electric Utility Steam Generating Units
- 40 CFR 72 through 76 Acid Rain Program

The oxy-combustion boiler is a stationary source under the Illinois Administrative Code (IAC) and these state rules will therefore apply to the proposed oxy-combustion boiler:

- 35 IAC 212 Visible and Particulate Matter Emissions
- 35 IAC 214 Sulfur Limitations
- 35 IAC 216 Carbon Monoxide Emissions
- 35 IAC 217 Nitrogen Oxide Emissions
- 35 IAC 225 Control of Emissions from Large Combustion Sources

4.1.1 NSPS

40 CFR 60 Subpart Da regulates emissions of PM, NO_x, SO_2, and Hg from new, modified and reconstructed Electric Utility Steam Generating Units. US EPA recently amended the Standards of Performance in Subpart Da.[35] The amended standards are in listed Table 4-1.

[35] EPA 40 CFR Part 63; FR Docket No. EPA-HQ-2009-0234; EPA-HQ-OAR-2001-0044; FRL-9286-1

Table 4-1: Applicable NSPS for the Oxy-Combustion Boiler

Pollutant	Potential Emission Limits	Averaging Period	Basis/Citation
SO_2	1.0 lb/MWhr (gross); or 1.2 lb/MWhr (net); or 97 % reduction	30 day rolling average	60.43Da(l)(1)(i)&(ii)&(iii)
NO_X	0.70 lb/MWhr (gross); or 0.76 lb/MWhr (net)	30 day rolling average	60.44Da(f)(1)(i)&(ii)
NO_X/CO[36]	1.1 lb/MWhr (gross); or 1.2 lb/MWhr (net)	30 day rolling average	60.45Da(b)(1)(i)&(ii)
PM - Total	0.090 lb/MWhr (gross); or 0.097 lb/MWhr (net)	performance testing	60.42Da(e)(1)(i)(A)&(B)
Opacity	Opacity - 20%	6 minute	60.42Da(b)

4.1.2 EGU NESHAP

The US EPA finalized revised emission limits for new Electric Utility Steam Generating Units in NESHAP at 40 CFR 63 Subpart UUUUU for Hazardous Air Pollutants from Electric Utility Steam Generating Units on April 24, 2013.[37] The NESHAP for Electric Utility Steam Generating Units are shown in Table 4-2 below.

Table 4-2: NESHAP for the EGU

Pollutant	Emission Limits	Averaging Period	Citation
PM Filterable	0.090 lb/MWhr (gross)	30-day rolling average (CEMS)	40 CFR 63.9991
SO_2	1.0 lb/MWhr	30-day rolling average (CEMS)	40 CFR 63.9991
Hg	0.0030 lb/GWh	30-day or 90-day rolling average (CEMS)	40 CFR 63.9991

Notes:
PM Filterable is a surrogate for the Individual HAP metals standard.
SO2 is a surrogate for the HCL standard.

4.1.3 Acid Rain Program

The Acid Rain Program was promulgated under Title IV of the Clean Air Act to control NO_x and SO_2 emissions, which contribute to the formulation of acid rain. The Cross State Air Pollution Rule (CSAPR) was promulgated under Section 110 of the Clean Air Act to control interstate transport of fine particulate matter and ozone in the eastern half of the United States. The Acid Rain Program and CSAPR are air pollutant trading programs, which do not include emission limitations but regulate emissions by limiting emission allowances. Sources are allowed to trade allowances, but are prohibited from emitting more pollutants than the source holds allowances for.

[36] Alternative to NOx standard
[37] PA 40 CFR Part 63; FR Docket No. EPA-HQ-2009-0234; EPA-HQ-OAR-2001-0044; FRL-9789-5

4.1.4 State Standards

The new oxy-combustion boiler will also be subject to several State of Illinois regulations. The State of Illinois has developed several regulations in Title 35 of the IAC pertaining to air quality and limiting emissions from fuel combustion emission units including Electric Utility Steam Generating Units. The oxy-combustion boiler is a fuel combustion emission unit as defined in 35 IAC 211.2470. The oxy-combustion boiler will be subject to the following state emission limits, which apply to fuel combustion emission units or in the case of NO_x and Hg, apply to electric utility steam generating units. The applicable Illinois standards are shown in Table 4-3 below.

Table 4-3: Applicable Illinois Standards for the Unit 4 Oxy-Combustion Boiler

Pollutant	State Emission Limits	Basis/Citation
SO_2	1.2 lb/MMBtu	35 IAC 214.121
NO_x	0.25 lb/MMBtu (ozone season average)	35 IAC 217 Subpart V
PM Filterable	0.1 lb/MMBtu	35 IAC 212.204
Opacity	20% (6 minute average)	35 IAC 212.122
CO	200 ppm @ 50 % excess air (air fire only)	35 IAC 216.121
Hg	0.0080 lb/GWh gross or 90 % control	35 IAC 225.230(a)(1)

4.2 Auxiliary Fuel Oil Fired Boiler

FutureGen 2.0 includes a 95 MMBtu per hour fuel oil fired auxiliary boiler. Fuel oil will be used because the current natural gas pipeline serving Meredosia does not have the capacity to supply the required auxiliary fuel supply needs for FutureGen 2.0. The auxiliary boiler generates steam for plant heating during startup but does not generate steam for production of electrical power and is therefore classified as an industrial boiler. Like electric generating units, industrial boilers are affected sources under several state and federal regulations. The auxiliary fuel oil fired boiler will be subject to the following federal regulations:

- 40 CFR 60 Subpart Dc NSPS for Small Industrial-Commercial-Institutional Steam Generating Units
- 40 CFR 63 Subpart JJJJJJ NESHAP for Area Sources: Industrial, Commercial, and Institutional Boilers

40 CFR 60 Subpart Dc regulates emissions of SO_2 and PM from new, modified and reconstructed small industrial commercial and institutional steam generating units. These standards are detailed in Table 4-4.

Table 4-4 Applicable NSPS for the Auxiliary Boiler

Pollutant	Potential Emission Limits	Averaging Period	Basis/Citation
SO_2	Fuel Sulfur < 0.5 % by weight or SO_2 < 0.5 lb/MMBtu	30 day rolling average 30 day rolling average	60.42c(d) 60.42c(d)
PM Filterable	0.03 lb/MMBtu or Fuel Sulfur < 0.5 % by weight	30 day rolling average	60.43c(e)(1) & (e)(4)
Opacity	Opacity - 20%	6 minute	60.43c(c)

The US EPA promulgated NESHAP at 40 CFR 63 Subpart JJJJJJ for Hazardous Air Pollutants from Industrial, Commercial and Institutional Boilers at Area Sources on March 21, 2011. The NESHAP for oil fired industrial boilers at area sources does not include numerical emission limits. Fuel oil fired boilers at area sources are required to conduct, a one-time energy assessment and biennial tune-ups.

The new fuel oil fired auxiliary boiler will also be subject to several State of Illinois regulations. The auxiliary boiler is a fuel combustion emission unit as defined under 35 IAC 211.2470. The auxiliary boiler will be subject to the following state emission limits listed in Table 4-5.

Table 4-5: Applicable Illinois Standards for the Auxiliary Boiler

Pollutant	State Emission Limits	Basis/Citation
SO_2	0.3 lb/MMBtu	35 IAC 214.122(b)(2)
PM Filterable	0.1 lb/MMBtu	35 IAC 212.204
Opacity	Opacity - 20% (6 minute average)	35 IAC 212.122
CO	200 ppm @ 50 % excess air	35 IAC 216.121

4.3 Material Handling Operations

Existing material handling operations at the Facility will be subject to the same air quality particulate matter and visible emissions limitations as are contained in existing air quality permits. All new material handling operations will be subject to additional State of Illinois particulate matter and visible emission limitations. These limitations are contained in Title 35 IAC Part 212. Material handling sources are defined as process emission units and are subject to the process weight rate rule in 35 IAC 212.321. New material handling emission units will also be subject to the opacity limitation of 30 percent on a 6 minute average contained in 35 IAC 212.122.

4.4 New Coal Handling Emission Units

New coal handling sources, including any coal conveyors, will be subject to the requirements of 40 CFR 60 Subpart Y New Source Performance Standards for Coal Preparation Plants.

The NSPS for Coal Preparation Plants requires that new, reconstructed, or modified coal processing and conveying equipment, coal storage systems, and transfer and loading systems constructed after April 28, 2008 limit opacity to less than 10 percent. This will apply for only the added equipment.

4.5 Lime Feed and Trona Handling Emission Units

New absorbent feed and trona handling sources will be subject to the requirements of 40 CFR 60 Subpart OOO New Source Performance Standards for non-metallic mineral processing plants if the Facility includes non-metallic mineral processing equipment like grinders or crushers. FutureGen 2.0 will not use grinders or crushers; therefore the NSPS will not apply to any emission units.

5.0 AIR QUALITY ANALYSIS

5.1 Introduction

The new oxy-combustion boiler will have its own stack, with different plume velocity and buoyancy effects than the stack on Boiler 6, thus changing ambient air concentrations. The proposed general arrangement plan is provided in Attachment No.12. The CPU and auxiliary boiler will also each have individual stacks. URS conducted air dispersion modeling to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS) for the pollutants nitrogen dioxide (NO_2) and sulfur dioxide (SO_2).

5.2 Dispersion Model

URS used the US EPA's air quality model, AERMOD, (Version 12345, BeeLine Version 10.06) to assess the potential air quality impacts from FutureGen 2.0. AERMAP (Version 11103) was also used as part of the modeling exercise to assign elevations to various points. URS entered structures (coordinates and height) at the Meredosia Energy Center into the US EPA's Building Profile Input Program (BPIP-Prime) Version 04274, to evaluate aerodynamic downwash. URS used US EPA regulatory default options for all model runs.

5.3 Meteorological Data

The IEPA provided meteorological data for the years 2005 through 2009 - surface meteorological data from the Springfield, IL and upper air data from the Lincoln, IL National Weather Service Stations. The meteorological data provided by IEPA was used for all model runs.

5.4 Background Air Quality Data

Background concentrations provided by the IEPA[38] were added to modeled air quality concentrations for comparison to the NAAQS. Table 5-1 lists the utilized background concentrations.

[38] Steve King (IEPA) email dated 05/23/2013

Table 5-1: Background Air Quality Concentrations (µg/m^3)

Pollutant	1-hour
SO_2	[39]34.03
NO_2	[40]80.90

5.5 Terrain Data

URS obtained terrain data around the plant from the United States Geological Survey (USGS) national map seamless server at http://nationalmap.gov/viewer.html. URS used these data with AERMAP to assign elevations and hill heights to buildings, sources, and receptors.

5.6 Land Use Classification

US EPA has specified that land use is the most definitive criterion to classify an area as either rural or urban for dispersion modeling purposes.[41] The urban/rural classification scheme based on land use is:

> *The land use within the total area, A_0, circumscribed by a 3 km circle about the source, is classified using the meteorological land use typing scheme proposed by Auer.* [42] *The classification scheme requires that more than 50percent of the area, A_0, be from the following land use types in order to be considered urban for dispersion modeling purposes: heavy industrial (I1); light-moderate industrial (I2); commercial (C1); single-family compact residential (R2); and multi-family compact residential (R3). Otherwise, the use of rural dispersion coefficients is appropriate.*

URS used this methodology to determine that the land use area surrounding the Meredosia Energy Center is predominantly rural.

5.7 Receptor Grid

Using the following criteria, URS created a Cartesian receptor grid in Universal Transverse Mercator (UTM) coordinate system based on the North American Datum of 1983 (NAD 1983):

- 50 meter intervals along the fence-line
- 100 meter intervals out to 2,500 meters
- 500 meter intervals out to 10,000 meters
- 1,000 meter intervals out to 50,000 meters

[39] 1-Hour SO_2 Nilwood 2009-2011 average of the 3 yearly 99th percentile DV's.
[40] 1-Hour NO_2 East St. Louis 2009-2011 average of the 3 yearly 98th percentile DV's.
[41] 40 CFR 51 Appendix W, Section 7.2.3(e).
[42] Auer, Jr., A.H. (1978): Correlation of Land Use and Cover with Meteorological Anomalies. Journal of Applied Meteorology, 17:636-643.

When violating receptors fell outside of the 100 meter grid, URS modeled a nested 100 meter receptor grid centered on the point of maximum impact.

5.8 Averaging Periods

URS modeled NO_x and SO_2 air quality concentrations for comparison to the NO_2 and SO_2 air quality standards using the averaging periods below:

NO_2 1-hour (5 year mean of the annual highest 8th high daily maximum 1-hour concentration)[43]
SO_2 1-hour (5 year mean of the annual highest 4th high daily maximum 1-hour concentration)[44]

5.9 Sources

URS modeled the Facility based on the proposed FutureGen 2.0 design basis, which includes decommissioning of the existing boilers at the Facility. FutureGen 2.0 sources included the oxy-combustion boiler, the CPU, and the auxiliary boiler that each will vent to a separate stack.

The IEPA provided a NAAQS source inventory,[45] which included emissions and stack data for sources that IEPA determined were "background" sources for use in this modeling exercise. URS used these data when modeling to assess if the Facility in combination with IEPA NAAQS inventory sources resulted in any cumulative impacts.

Model guidance allows for input of negative emission rates for sources being decommissioned when these sources are included in the "background" inventory. Ameren determined, however, that for this modeling exercise, credit would not be taken for decommissioning existing sources.

5.10 Model Conditions

IEPA requires permit applicants to model emission units under several operating conditions in order to determine which operating condition results in the highest pollutant concentrations in ambient air. The FutureGen 2.0 sources and their operating modes were represented in the model using four operating conditions. These conditions are described below.

5.10.1 Model Condition 1-Air-Firing

The oxy-combustion boiler is air-firing and the auxiliary boiler is operating. This model represents low-power operation during start-up or shut-down of the oxy-combustion boiler. The flue gas from the oxy-combustion boiler is vented to the Boiler Stack.

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[43] US EPA, Office of Air Quality Planning and Standards, 2010 Memorandum: "Guidance Concerning the Implementation of the 1-hour NO_2 NAAQS for the Prevention of Significant Deterioration Program," page 1.
[44] US EPA, Office of Air Quality Planning Standards, 2010 Memorandum: "Guidance Concerning Implementation of the 1-hour SO_2 NAAQS for the Prevention of Significant Deterioration," page 1.
[45] Steven King (IEPA) email dated 05/23/2013

5.10.2 Model Condition 2-Storage

The oxy-combustion boiler is oxy-combusting where flue gas is processed in the CPU. The CPU vents non-condensable gasses to the CPU Stack and transfers CO_2 to the pipeline for transport to the CO_2 storage site. The Auxiliary Boiler is not operating in the model condition.

5.10.3 Model Condition 3-Bypass

The oxy-combustion boiler is oxy-combusting and the CPU is processing flue gas. Instead of transferring CO_2 to the pipeline, CO_2 is vented to the CPU Stack along with the non-condensable gases. The Auxiliary Boiler is not operating in this model condition.

5.10.4 Model Condition 4-Transition

The oxy-combustion boiler has just switched from air-firing to oxy-combustion. The GQCS and DCCPS are online, but the CPU is not compressing CO_2. The flue gases are vented to the CPU Stack. This condition results in a low stack gas exit velocity compared to other model conditions, and the lower exit velocity could result in elevated pollutant concentrations in the ambient air. The Auxiliary Boiler is not operating in this model condition.

5.11 Aerodynamic Downwash Analysis

URS performed a Good Engineering Practice (GEP) stack height and downwash/wake effects analysis using the BPIP-Prime algorithm to determine the potential for building-induced aerodynamic downwash affecting plume dispersion from the proposed plant. Sixteen buildings and structures were entered into the model.

Using the BPIP-Prime algorithm, URS calculated the GEP height at 135.94 m (446 feet), which was used in the remaining modeling efforts.

5.12 Tiered Approach for NO_2

On March 1, 2011, EPA issued a memorandum recommending use of 0.80 as a default ambient ratio of NO_2 to NO_X for the 1-hr NO_2 NAAQS without additional justification by applicants under Tier 2.[46]

URS used the Tier 2 screening method in all modeling analyses. The model was run assuming full conversion of NO to NO_2 as specified in Tier 1. URS then multiplied these Tier 1 results by the 0.80 NO_2/NOx ratio specified in Tier 2 for all scenarios and model concentrations.

[46] USEPA US EPA, Office of Air Quality Planning and Standards, March 1, 2011 Memorandum: "Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO_2 National Ambient Air Quality Standard."

5.13 Significant Impact Levels

The first step in this modeling exercise was to determine whether the FutureGen 2.0 required a cumulative air quality analysis. This determination was made by modeling the FutureGen 2.0 sources for each modeling condition and comparing the resulting highest ambient air quality impacts to the significant impact levels (SILs) established by the USEPA, as shown in Table 5-2. Air quality impacts at or below the SIL are considered *de minimis* in nature.

Table 5-2: Significant Impact Levels

Pollutant	Averaging Period	SIL ($\mu g/m^3$)
NO_2	1-hour	7.5
SO_2	1-hour	7.9

A cumulative impacts assessment is necessary if the ambient air quality impacts associated with the FutureGen 2.0 emissions are greater than the SILs. Table 5-3 lists the highest modeled concentrations for each model condition and indicates if there is significant impact.

Table 5-3: Model Summary for Internal Sources

	NO_2 (1-hr)		SO_2 (1-hr)	
Model Condition	Highest Concentration* ($\mu g/m^3$)	Significant Impact?	Highest Concentration ($\mu g/m^3$)	Significant Impact?
1	141.06	Yes	9.91	Yes
2	22.82	Yes	0.80	No
3	506.91	Yes	16.42	Yes
4	13.15	Yes	0.44	No

*Tier 2 was applied to Highest Concentration results for NO_2.

5.14 Cumulative Impact Assessment

All model conditions resulted in significant impacts for 1-hour NO2 and Model Conditions 1 and 3 resulted in significant impacts for 1-hour SO2; thus, a cumulative impact assessment was performed for these cases. For the cumulative impact assessment, FutureGen 2.0 sources were modeled with the NAAQS source inventory provided by the IEPA. The modeled concentrations were added to their respective background values for comparison to the NAAQS. Table 5-4 lists the highest cumulative impacts and NAAQS for each modeled pollutant.

Table 5-4: Cumulative Impact Assessment Summary

Model Condition	Maximum Modeled Concentration (µg/m3)	Maximum Modeled Plus Background Concentration (µg/m3)	National Ambient Air Quality Standard (µg/m3)
1-Hour NO_2 Cumulative Impact Assessment*			
1	168.9	249.8	188
2	168.9	249.8	
3	168.9	249.8	
4	168.9	249.8	
1-Hour SO_2 Cumulative Impact Assessment			
1	2737.41	2771.44	196
2	--	--	
3	2737.41	2771.44	
4	--	--	

*Tier 2 was applied to the Maximum Modeled Concentration results for NO_2.

Because the NAAQS was exceeded, a significant contribution analysis was performed to determine FutureGen 2.0's contribution to the exceedance, and FutureGen 2.0's contribution was compared to the SIL. Contributions below the SIL are considered de minimis, which indicates proposed FutureGen 2.0 does not significantly contribute to a violation of the NAAQS.

As shown in Table 5-4, all model conditions exceed the NAAQS for NO_2 and Model Conditions 1 and 3 exceed the NAAQS for SO_2, so a significant contribution analysis was performed using AERMOD's MAXDCONT output function.

For the significant contribution analysis, URS modeled each of the receptors where FutureGen 2.0 had a significant impact and the cumulative impact exceeded the NAAQS. The area of the modeled significant impact was compared to the location of the receptors where the NAAQS was violated. There was no overlap of these areas, therefore, there were no receptors where Model Conditions 1, 2, and 4 had a significant impact and the cumulative impact exceeded the 1-hr NO_2 NAAQS. Therefore, those Model Conditions were not included in the significant contribution analysis for the 1-hr NO_2 standard. The MAXDCONT output function listed the FutureGen 2.0 contribution to each NAAQS exceedance at each receptor. Table 5-5 shows FutureGen 2.0's maximum contribution to modeled exceedances. The FutureGen 2.0 contributions were not above the SILs when a NAAQS exceedance occurred; therefore, the model shows that FutureGen 2.0 does not significantly contribute to any modeled NAAQS exceedance.

Table 5-5: FutureGen 2.0 Significant Contribution Analysis Results

Model Condition	Pollutant	Averaging Period	Maximum Contribution (µg/m^3)	SIL (µg/m^3)
Model Condition 1	SO_2	1-hour	0.017	7.9
Model Condition 3	NO_2*	1-hour	4.46	7.5
	SO_2	1-hour	1.03	7.9

*Tier 2 was applied to the maximum contribution results for NO_2.

Attachments: Table of Contents

Attachment No. 2: FutureGen 2.0 New Coal Transfer Emissions

Coal Usage Calculation

170,000 = lb/hr maximum, Blended Coal (B&W email, 05/15/2013)
744,600 = tons per year maximum

Emission Factors, Control Efficiencies, and Emission Rates

Transfer Point Description	Emission Factors			Uncontrolled Emissions			Control Efficiency[c] (%)	Control Descriptions	Controlled Emissions		
	PM[a]	PM_{10}[b]	$PM_{2.5}$[b]	PM	PM_{10}	$PM_{2.5}$			PM	PM_{10}	$PM_{2.5}$
	(lb/ton)			(tpy)					(tpy)		
Conveyor C to Chain Conveyor	0.2	0.09	0.01	74.46	35.22	2.52	95	fabric filter	3.72	1.76	0.13
Chain Conveyor to Coal Silos	0.2	0.09	0.01	74.46	35.22	2.52	95	fabric filter	3.72	1.76	0.13
			Total:	**148.92**	**70.44**	**5.04**		**Total:**	**7.45**	**3.52**	**0.25**

[a] The PM emission factors were taken from the Meredosia Upgraded Coal Handling permit, Application No. 02060025, issued September 25, 2002.

[b] PM_{10} and $PM_{2.5}$ emission factors are based on the PM emission factor and aerodynamic particle size multipliers (k) for PM (0.74), PM_{10} (0.35), and $PM_{2.5}$ (0.053) from Table in AP 42 - 13.2.4 Aggregate Handling & Storage Piles.

[c] URS used control efficiency of 95% to be conservative.

Attachment No. 3: FutureGen 2.0 Ash Transfer Emissions

Silo Loading

T_L = 525,600 minutes per year for silo loading, (B&W email, 05/29/2013)

F_L = 2,500 scfm - Byproduct Conveying Air Blowers air flow rate, (B&W email, 05/29/2013)
1,314,000,000 scf - air flow due to loading silo

Silo Fluidization

T_F = 525,600 minutes required to fluidize silo, (B&W email, 05/29/2013)

F_F = 930 scfm - Silo Fluidizing Compressors air flow rate, (B&W email, 05/29/2013)
= 488,808,000 scf - air flow due to fluidizing silo

Silo Bin Vent Emissions

F_T = 1,802,808,000 dscf - total air flow due to loading, fluidizing, and unloading silo
E = 0.02 grains per dry standard cubic feet (dscf) guarantee baghouse performance, (B&W email, 05/29/2013)
g = 14,000,000 grains per ton

Uncontrolled Emission Estimate

NA - uncontrolled emissions are not calculated with this method.

Controlled Emission Estimate

PM_{10} = 2.58 tpy maximum
$PM_{2.5}$ = 2.58 tpy maximum
PM = 2.58 tpy maximum

Drop Point Emissions - Pugmill to trucks

Waste Ash Production (fly ash + CDS byproducts)

= 40,000 lb/hr maximum (B&W email, 05/15/2013)
= 175,200 tons per year (tpy) maximum

$$EMF\ [lb/ton] = k(0.0032)\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}$$ AP 42 - 13.2.4 Equation 1

k = particle size multiplier (dimensionless) from table in AP 42 - 13.2.4 Aerodynamic Particle Size Multipliers (k) for Equation 1
= 0.35 for PM_{10}
= 0.053 for $PM_{2.5}$
= 0.74 for PM

U = mean wind speed, based on meteorological data from 2005 to 2009 from Springfield NWS station
= 4.23 m/s
= 9.46 mph

Uncontrolled Emission Estimate

M = 1 % moisture content of dry waste ash

EMF = 0.01 lb/ton for PM_{10}
0.001 lb/ton for $PM_{2.5}$
0.01 lb/ton for PM

PM_{10} = 0.59 tpy maximum
$PM_{2.5}$ = 0.09 tpy maximum
PM = 1.25 tpy maximum

Controlled Emission Estimate

M = 15 % moisture content of waste ash wetted in pugmill

EMF = 0.0002 lb/ton for PM_{10}
0.00002 lb/ton for $PM_{2.5}$
0.0003 lb/ton for PM

PM_{10} = 0.01 tpy maximum
$PM_{2.5}$ = 0.002 tpy maximum
PM = 0.03 tpy maximum

Total Emissions

Uncontrolled Emission Estimate

PM_{10} = 3.17 tpy maximum
$PM_{2.5}$ = 2.67 tpy maximum
PM = 3.83 tpy maximum

Controlled Emission Estimate

PM_{10} = 2.59 tpy maximum
$PM_{2.5}$ = 2.58 tpy maximum
PM = 2.60 tpy maximum

Attachment No. 4: FutureGen 2.0 Lime Transfer Emissions

Silo Loading

Lime Consumption

15,400 = lb/hr maximum, (B&W email, 05/15/2013)
67,452 = tons per year (tpy) maximum

Trucks Unloaded Per Year

25 = tons per truck load, (Mitch White email, 05/03/2011)
2,698 = trucks unloaded per year

T_L = 120 minutes required to load silo from truck, (B&W email, 05/29/2013)
= 323,770 minutes per year

F_L = 600 scfm - truck blower flow rate, (B&W email, 05/29/2013)
194,261,760 scf - air flow due to loading silo

Silo Fluidization

T_F = 525,600 minutes per year for fluidizing silo, (B&W email, 05/29/2013)

F_F = 700 scfm - Silo Fluidizing Air Compressors flow rate, (B&W email, 05/29/2013)
= 367,920,000 scf - air flow due to fluidizing silo

Lime Transfer

T_U = 525,600 minutes per year for lime transfer, (B&W conference call, 05/29/2013)

N = 2 (Number of vent filters - weigh hopper vent filter and surge bin vent filter)

F_U = 1,500 scfm - lime transfer air flow rate, (B&W conference call, 05/29/2013)
= 1,576,800,000 scf - air flow due to lime transfer

Silo Bin Vent Emissions

F_T = 2,138,981,760 dscf - total air flow
E = 0.02 grains per dry standard cubic feet (dscf) guarantee baghouse performance, (B&W email, 05/29/2013)
k = 14,000,000 grains per ton

Uncontrolled Emission Estimate

NA - uncontrolled emissions are not calculated with this method.

Controlled Emission Estimate

PM_{10} = 3.06 tpy maximum
$PM_{2.5}$ = 3.06 tpy maximum
PM = 3.06 tpy maximum

Attachment No. 5: FutureGen 2.0 Trona Transfer Emissions

Trona Filter Receiver Loading

Trona usage calculation

740 = lb/hr, (B&W email, 05/15/2013)

3,241 = tons per year (tpy) maximum

Trucks Unloaded Per Year

25 = tons per truck load, (Mitch White email, 05/03/2011)

130 = trucks unloaded per year

T_L = 120 minutes to unload truck, (B&W email, 05/29/2013)

= 15,558 minutes per year to unload truck

F_L = 700 scfm - truck blower flow rate, (B&W email, 05/29/2013)

10,890,432 scf - air flow due to truck blower

Vent Filter Emissions

E = 0.02 grains per dry standard cubic feet (dscf) guarantee baghouse performance, (B&W email, 05/29/2013)

k = 14,000,000 grains per ton

Uncontrolled Emission Estimate

NA - uncontrolled emissions are not calculated with this method.

Controlled Emission Estimate

PM_{10} = 0.02 tpy maximum

$PM_{2.5}$ = 0.02 tpy maximum

PM = 0.02 tpy maximum

Attachment No. 7: FutureGen 2.0 Cooling Tower Drift Emissions

**Calculation methodology based on AP 42 - 13.4 Wet Cooling Towers*

Equation

$$E\,[tpy] = Drift\ Flow\ \left[\frac{gallon}{year}\right] * Water\ Density\ \left[\frac{pound}{gallon}\right] * (\mathrm{TDS} * 10^{-6}) * \left(\frac{1}{2{,}000}\right)\left[\frac{ton}{pound}\right]$$

Drift Flow and TDS (Burns & McDonnell memorandum, 05/07/2013)

Drift Flow	=	0.94	gpm	Unit 4 Main Cooling Tower
	=	0.23	gpm	ASU/CPU Cooling Tower
	=	0.16	gpm	DCCPS Cooling Tower
TDS	=	518	ppm	Unit 4 Main Cooling Tower
	=	2090	ppm	ASU/CPU Cooling Tower
	=	7043	ppm	DCCPS Cooling Tower
Water Density	=	8.34	lbs / gallon	

Uncontrolled Emission Estimate

NA - uncontrolled emissions are not calculated with this method.

Controlled Emission Estimate

Control Device: Drift Eliminators

PM	=	1.07	tons per year	Unit 4 Main Cooling Tower
	=	1.05	tpy maximum	ASU/CPU Cooling Tower
	=	2.47	tpy maximum	DCCPS Cooling Tower
PM_{10} [a]	=	1.01	tpy maximum	Unit 4 Main Cooling Tower
	=	1.00	tpy maximum	ASU/CPU Cooling Tower
	=	2.35	tpy maximum	DCCPS Cooling Tower
$PM_{2.5}$ [a]	=	1.01	tpy maximum	Unit 4 Main Cooling Tower
	=	1.00	tpy maximum	ASU/CPU Cooling Tower
	=	2.35	tpy maximum	DCCPS Cooling Tower

[a] PM_{10} and $PM_{2.5}$ particle size distribution based on "Calculating Realistic PM_{10} Emissions from Cooling Towers," Joel Reisman and Gordon Frisbie. The PM_{10} fraction of drift particles is inversely related to TDS content of the cooling water drift. (95 percent of PM is PM10 and all PM10 is PM2.5)

TOTAL

PM	=	4.59	tpy maximum
PM_{10}	=	4.36	tpy maximum
$PM_{2.5}$	=	4.36	tpy maximum

Attachment No. 8: FutureGen 2.0 Haul Road Emissions

Haul Roads

$$E_{ext} = [k * (sL)^{0.91} * W^{1.02}]\left(1 - \frac{P}{4N}\right)$$

from AP-42 Miscellaneous Sources - 13.2.1 Paved Roads, Equation 2, published January 2011

k = particulate size multiplier for particle size and unit of measure
- = 0.00054 lb/VMT for $PM_{2.5}$ from Table 13.2.1-1 Particulate Size Multipliers for Paved Road Equation, (VMT = Vehicle Miles Travelled)
- = 0.0022 lb/VMT for PM_{10}
- = 0.011 lb/VMT for PM

sL = road surface silt loading, grams per square meter (g/m^2)
- = 0.8 g/m^2 from Table 13.2.1-2 Ubiquitous Silt Loading Default Values with Hot Spot Contributions from Anti-Skid Abrasives (g/m^2).

W_1 = average weight (tons) of vehicles traveling the road for coal, trona, lime, waste ash, bottom ash, and economizer ash
- 40 tons full, (Mitch White email, 5/3/2011)
- 15 tons - empty truck weight
- = 27.5 tons - average truck weight

W_2 = average weight (tons) of vehicles traveling the road for water/wastewater treatment chemicals
- 15 tons - empty truck weight
- 20 tons - material weight, (Burns & McDonnell memorandum, 05/15/2013)
- 35 tons - full truck
- = 25 tons - average truck weight

W_3 = average weight (tons) of vehicles traveling the road for wastewater sludge
- 15 tons - empty truck weight
- 25 tons - material weight, (Burns & McDonnell memorandum, 05/15/2013)
- 40 tons - full truck
- = 28 tons - average truck weight

P = number of "wet" days with at least 0.01 inches of precipitation during the averaging period From Figure 13.2.1-2 Mean number of days with 0.01 inch or more of precipitation in the United States
- = 110 days

N = number of days in the averaging period
- = 365 days/year

E_1 = particulate emission factor (pounds per vehicle mile traveled) (lb/VMT) for coal, trona, coal, lime, waste ash, bottom ash, and economizer ash
- = 0.0092 lb/VMT for $PM_{2.5}$
- = 0.0376 lb/VMT for PM_{10}
- = 0.1878 lb/VMT for PM

E_2 = particulate emission factor (pounds per vehicle mile traveled) (lb/VMT) for water/wastewater treatment chemicals
- = 0.0084 lb/VMT for $PM_{2.5}$
- = 0.0341 lb/VMT for PM_{10}
- = 0.1704 lb/VMT for PM

E_3 = particulate emission factor (pounds per vehicle mile traveled) (lb/VMT) for wastewater sludge
- = 0.0092 lb/VMT for $PM_{2.5}$
- = 0.0376 lb/VMT for PM_{10}
- = 0.1878 lb/VMT for PM

VMT calculation based upon oxy-boiler consumption/generation values

Consumption/Generation values (B&W email, 05/15/2013)

IL Coal	=	102,000 lbs/hr
Trona	=	740 lbs/hr
Lime	=	15,400 lbs/hr
Waste Ash	=	40,000 lbs/hr
Bottom Ash + Economizer Ash	=	4,700 lbs/hr

	Coal	Trona	Lime	Waste Ash	Bottom Ash + Economizer Ash
VMT [1] per truck route (miles)	0.9	0.7	0.7	0.7	0.7
Tons per year (tpy) Consumed/Generated	446,760	3,241	67,452	175,200	20,586
Vehicle trips per year	17,871	130	2,699	7,008	824

[1] Vehicle miles traveled per round trip based on transportation routes documented in Drawing Number 30384-SK-001S, Revision P2. Distance from routes to plant main entrance approximated using Google Earth Pro version 6.1.0.5001

VMT calculation based upon water/wastewater treatment process chemicals

Vehicle trips per week	=	7.53 (Burns & McDonnell email, 05/22/2013)
Vehicle trips per year	=	391.56
VMT per truck trip	=	0.1 Based on transportation routes documented in Drawing Number 30384-SK-001S, Revision P2. Distance from routes to plant main entrance approximated using Google Earth Pro version

VMT calculation based upon wastewater treatment sludge generation

Vehicle trips per week	=	3.71 (Burns & McDonnell email, 05/22/2013)
Vehicle trips per year	=	192.92
VMT per truck trip	=	0.1 Based on transportation routes documented in Drawing Number 30384-SK-001S, Revision P2. Distance from routes to plant main entrance approximated using Google Earth Pro version

Vehicle Miles Traveled
- = 23,547 Annual VMT for coal, trona, lime, waste ash, bottom ash, and economizer ash
- = 39 Annual VMT for water/wastewater treatment chemicals
- = 19 Annual VMT for wastewater sludge

Emission Estimate

Control Device: None

$PM_{2.5}$	=	0.11 tpy maximum
PM_{10}	=	0.44 tpy maximum
PM	=	2.22 tpy maximum

Attachment No. 10: Meredosia Energy Center
Cooling Tower Operational Data

U4 Circulating Water Pump Start/Stop Times			
Start	**Stop**	**Hours**	**Annual Total**
2007			
5/8/07 11:00	5/11/07 14:00	75.00	
5/29/07 3:15	6/1/07 17:30	86.25	
6/17/07 19:00	6/22/07 15:45	116.75	
6/25/07 19:30	6/29/07 15:30	92.00	
8/6/07 23:00	8/8/07 21:30	45.50	
8/9/07 17:30	8/11/07 10:00	40.50	456.00
2008			
5/14/08 8:30	5/16/08 17:30	57.00	
5/27/08 10:00	5/30/08 14:00	76.00	
7/29/08 12:00	8/5/08 15:00	147.00	
11/3/08 8:30	11/7/08 17:00	104.50	384.50
2009			
9/14/09 15:30	9/18/09 11:00	91.50	91.50
2010			
6/20/10 15:00	6/25/10 14:00	124.00	
7/13/10 13:00	7/16/10 19:30	78.50	
8/9/10 18:00	8/13/10 20:00	98.00	300.50

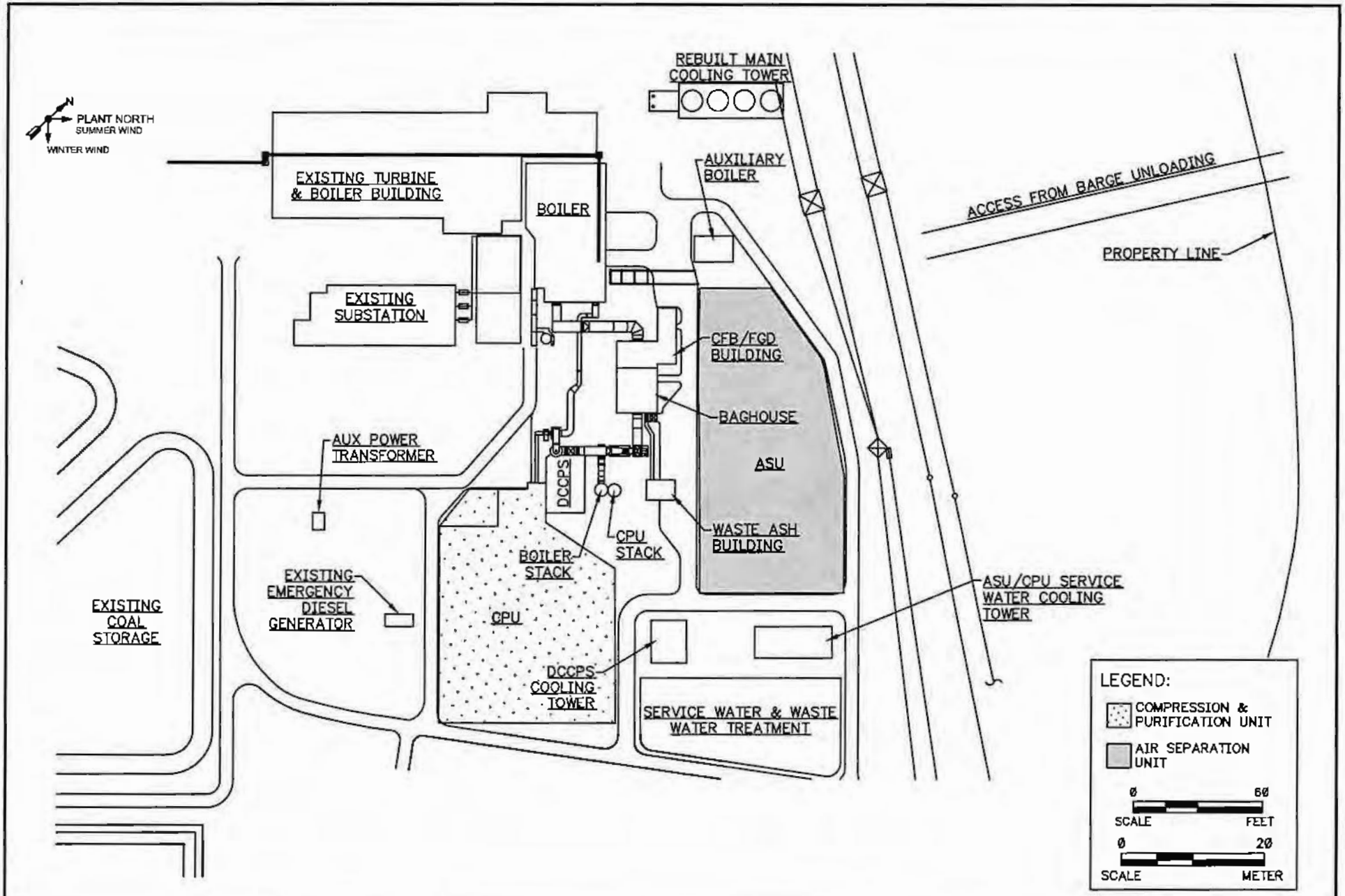
Attachment No. 11: FutureGen 2.0 Hazardous Air Pollutants

Emission Unit	Emission Factor (lb/hr)	Annual Hours	Emissions (tpy)
Auxiliary Boiler[a]	0.03	8760	0.14
EGU Air-Fire Operating Condition [b]	1.09	5500	3.00
EGU Oxy-Fire Operating Condition [b]	1.05	3260	1.72
		Total HAPs:	4.86

[a] URS calculated the auxiliary boiler HAPs emission factor based on the 95 MMBtu/hr auxiliary boiler heat input and AP-42 Section 1.3.

[b] B&W provided emission factors for air firing operating conditions for the constituents HCl, HF, and mercury "FutureGen 2.0 Phase 2 Preliminary Boiler and CPU Air Emissions for Permit Basis." ALPC provided emission factors for oxy-combustion operating conditions for the constituents HCl, HF, and mercury, "FutureGen 2.0 Phase 2 Preliminary Boiler and CPU Air Emissions for Permit Basis" and "Air Emissions FutureGen 2.0 Project – 90% CO2 Recovery Catox Case. Other HAP emission factors are from EPA AP-42 Section 1.1.

Attachment No. 12: General Arrangement Plan



DRAWN: cak CHECKED: glh JUNE 2013	URS 1001 HIGHLANDS PLAZA DRIVE WEST SUITE 300 BOCA RATON, FLORIDA 33487 PHONE: (561) 994-8500 FAX: (561) 994-8524	**OXYCOMBUSTION - AMEREN MEREDOSIA ENERGY CENTER**	FUTURE GEN 2.0 PLOT PLAN	DWG. NO. 30384-SK-001S

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

FUEL COMBUSTION EMISSION UNIT DATA AND INFORMATION	*FOR AGENCY USE ONLY*
	ID NUMBER:
	EMISSION POINT #:
	DATE:

SOURCE INFORMATION	
1) SOURCE NAME: Meredosia Energy Center	
2) DATE FORM PREPARED: 06/12/2013	3) SOURCE ID NO. (IF KNOWN): 137805AAA

GENERAL INFORMATION	
4) NAME OF EMISSION UNIT: Oxy-combustion Boiler (Boiler No. 7)	
5) NAME OF PROCESS: Steam Production	
6) DESCRIPTION OF PROCESS: Steam to power turbine for electric generation	
7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR ACTIVITY ACCOMPLISHED: Process steam that is expanded in a steam turbine generator for the production of electricity	
8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT: Boiler (See EXHIBIT 240-FD.)	
9) MANUFACTURER OF EMISSION UNIT (IF KNOWN): Babcock and Wilcox Power Generation Group, Inc. (B&W PGG)	
10) MODEL NUMBER (IF KNOWN):	11) SERIAL NUMBER (IF KNOWN):
12) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)	a) CONSTRUCTION (MONTH/YEAR): July 2014 - August 2017
	b) OPERATION (MONTH/YEAR): September 2017
	c) LATEST MODIFICATION (MONTH/YEAR):
13) DESCRIPTION OF MODIFICATION (IF APPLICABLE):	

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

APPLICATION PAGE _____

14) DOES THE EMISSION UNIT HAVE MORE THAN ONE MODE OF OPERATION? ☐ YES ☒ NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 240-CAAPP MUST BE COMPLETED FOR EACH MODE):

15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT):

Gas Quality Control System (GQCS). See EXHIBIT 240-FD.

16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS ESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION? ☐ YES ☒ NO

IF YES, COMPLETE AND ATTACH FORM 203-CAAPP, "REQUEST TO OPERATE WITH EXCESS EMISSIONS DURING STARTUP OF EQUIPMENT".

17) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE STANDARDS (E.G., ONLY ONE UNIT IS OPERATED AT A TIME):

Air-firing up to 45% load.

OPERATING INFORMATION

18) ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSION RELATED, FROM WHICH THE FOLLOWING OPERATING INFORMATION, MATERIAL USAGE INFORMATION AND FUEL USAGE DATA WERE BASED AND LABEL AS EXHIBIT 240-1. REFER TO SPECIAL NOTES OF FORM 202-CAAPP.

19a) MAXIMUM OPERATING HOURS 8760 hr/yr	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
b) TYPICAL OPERATING HOURS 7446 hr/yr	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
20) ANNUAL THROUGHPUT	DEC-FEB(%): 25	MAR-MAY(%): 25	JUN-AUG(%): 25	SEP-NOV(%): 25

FIRING RATE INFORMATION

21a) RATED OR DESIGN HEAT INPUT CAPACITY (MILLION BTU/HR):
1605

b) IS MORE THAN ONE FUEL FIRED AT A TIME? ☒ YES ☐ NO

IF YES, EXPLAIN:

Oil is used as ignition fuel and to maintain coal-fired flame stability at low loads during startup.

21c) IF HEAT INPUT CAPACITY IS 100 MILLION BTU/HOUR OR GREATER, PROVIDE FURNACE VOLUME (CUBIC FEET)
NOTE: FURNACE VOLUME IS DEFINED AS THAT VOLUME BOUNDED BY THE FRONT FURNACE WALL WHERE THE BURNER IS LOCATED, THE FURNACE SIDE WATERWALL, AND EXTENDING TO THE LEVEL JUST BELOW OR IN FRONT OF THE FIRST ROW OF CONVECTION PASS TUBES.

112,500 CF

	NATURAL GAS	FUEL OIL	COAL	OTHER
d) SINGLE FUEL (MAXIMUM - MILLION BTU/HOUR)	NA	-	1605	NA
e) SINGLE FUEL (TYPICAL - MILLION BTU/HOUR)	NA	-	-	NA
f) COMBINED FUEL (TYPICAL - MILLION BTU/HOUR) (IF APPLICABLE)	NA	-	-	NA

NATURAL GAS FIRING

22a) CURRENT ORIGIN OF NATURAL GAS:
☐ PIPELINE (FIRM CONTRACT) ☐ BY-PRODUCT, SPECIFY ORIGIN:
☐ PIPELINE (INTERRUPTIBLE SUPPLY CONTRACT) ☐ OTHER, - SPECIFY: _____

b) TYPICAL HEAT CONTENT (BTU/SCF):

c) MAXIMUM CONSUMPTION	SCF/MONTH:	SCF/YEAR:
d) TYPICAL CONSUMPTION	SCF/MONTH:	SCF/YEAR:

OIL FIRING

23a) OIL TYPE (CHECK ONE):
☐ NO. 1 ☐ NO. 2 ☐ NO. 4 ☐ NO. 5 ☐ NO. 6
☐ OTHER, SPECIFY (INCLUDE GENERATOR OR SUPPLIER): _____

b) TYPICAL HEAT CONTENT: _____
☐ BTU/LB - OR - ☐ BTU/GAL

c) IS OIL USED ONLY AS A RESERVE FUEL? ☐ YES ☐ NO

d) TYPICAL SULFUR CONTENT AS FIRED (WT %):

e) TYPICAL ASH CONTENT AS FIRED (WT %): 0

f) MAXIMUM CONSUMPTION	GAL/MONTH:	GAL/YEAR:
g) TYPICAL CONSUMPTION	GAL/MONTH:	GAL/YEAR:

h) FIRING DIRECTION:
☐ HORIZONTAL ☐ TANGENTIAL ☐ OTHER, SPECIFY:

SOLID FUEL FIRING

*24a) SOLID FUEL TYPE (CHECK ALL THAT APPLY):

- [x] SUB-BITUMINOUS COAL
- [ ] LIGNITE COAL
- [x] BITUMINOUS COAL
- [ ] ANTHRACITE COAL
- [ ] OTHER, SPECIFY:

b) TYPICAL HEAT CONTENT AS FIRED (BTU/LB): 9,834	c) TYPICAL MOISTURE CONTENT AS FIRED (WT %): 20.70
d) TYPICAL SULFUR CONTENT AS FIRED (WT %): 2.10	e) TYPICAL ASH CONTENT AS FIRED (WT %): 7.83
f) TYPICAL FINES CONTENT (% LESS THAN 1/8 INCH): 100 after pulverizer	g) IS THE COAL CLEANED? [ ] YES [x] NO

h) HOW MUCH COAL REFUSE IS IN THE FUEL? (WT %): 0.00

i) MAXIMUM CONSUMPTION	TON/MONTH: 61,200	TON/YEAR: 744,600
j) TYPICAL CONSUMPTION	TON/MONTH:	TON/YEAR:

k) FIRING TYPE (CHECK ONE):

- [ ] TRAVELING GRATE
- [ ] SPREADER STOKER % REINJECTION:
- [ ] CYCLONE
- [x] PULVERIZED, TYPE (CIRCLE ONE): (WET BOTTOM) DRY BOTTOM
- [ ] HORIZONTALLY OPPOSED
- [ ] OTHER, SPECIFY:

*NOTE: IF REQUIRED, SUBMIT COPIES OF THOSE PORTIONS OF COAL SUPPLY CONTRACTS WHICH SET FORTH THE SPECIFICATIONS OF THE FUEL AND THE DURATION OF THE CONTRACT. IF THE ACTUAL FUEL FIRED IS A BLEND OF COAL, SUBMIT APPROPRIATE PORTIONS OF ALL FUEL CONTRACTS AND STATE THE MANNER BY WHICH THE FUELS ARE BLENDED AND ACTUALLY FIRED. ATTACH AND LABEL AS EXHIBIT 240-2.

OTHER FUEL FIRING

25a) OTHER FUEL FIRING

	TYPE	SUPPLIER
a)		
b)		

b) TYPICAL HEAT CONTENT (SPECIFY UNITS):	c) TYPICAL NITROGEN CONTENT AS FIRED (WT %):
d) TYPICAL SULFUR CONTENT AS FIRED (WT %):	e) TYPICAL ASH CONTENT AS FIRED (WT %):

f) MAXIMUM CONSUMPTION	(SPECIFY UNITS/MONTH):	(SPECIFY UNITS/YEAR):
g) TYPICAL CONSUMPTION	(SPECIFY UNITS/MONTH):	(SPECIFY UNITS/YEAR):

APPLICABLE RULES

26) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., PARTICULATE MATTER, IAC 212.206, <= 0.10 LBS/MMBTU):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
See EXHIBIT 240-B7-AR-1		

27) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
See EXHIBIT 240-B7-AR-2		

28) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
See EXHIBIT 240-B7-AR-3		

29) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
See EXHIBIT 240-B7-AR-4		

30) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT :

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
See EXHIBIT 240-B7-AR-5		

31) DOES THE EMISSION UNIT QUALIFY FOR AN EXEMPTION FROM AN OTHERWISE APPLICABLE RULE? ☐ YES ☒ NO

IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 240-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION.

COMPLIANCE INFORMATION

32) IS THE EMISSION UNIT IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? ☒ YES ☐ NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE – ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

33) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

Compliance will be demonstrated through source testing after construction and initial start-up of the facility.

34) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

Continuous Emission Monitors (CEM) will be installed and operated for Opacity, SO2, NOx, CO2, and mercury.

TESTING, MONITORING, RECORDKEEPING AND REPORTING

35a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
SEE EXHIBIT			
240-B7-AR-6			

35b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
SEE EXHIBIT 240-B7-AR-7			

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS? ☒ YES ☐ NO

IF NO, EXPLAIN

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND SUBMITTAL TO THE AGENCY UPON REQUEST? ☒ YES ☐ NO

IF NO, EXPLAIN:

36a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

Emissions are being monitored in accordance with the applicable rules.

b) WHAT PARAMETER(S) IS(ARE) BEING MONITORED (E.G., OPACITY)?

Opacity, SO2, NOx, Hg, CO2, PM

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., IN STACK MONITOR):

In Boiler Stack

36d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? ☒ YES ☐ NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? ☒ YES ☐ NO

IF NO, EXPLAIN:

f) IS EACH MONITOR OPERATED AT ALL TIMES THE ASSOCIATED EMISSION UNIT IS IN OPERATION? ☒ YES ☐ NO

IF NO, EXPLAIN:

37) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 240-4:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
NA				

38) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY
See EXHIBIT 240-B7-AR-3		

(39)EMISSION INFORMATION

REGULATED AIR POLLUTANT		☐ [1]ACTUAL EMISSION RATE ☐ [1]UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			[2]PERMITTED EMISSION RATE	
		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[3]OTHER TERMS	[4]DM	[5]RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:	Vents to	GQCS.				200 (ppm)	IAC 216.121			
	TYPICAL:	See	Form	260-GQCS			( )				
LEAD	MAXIMUM:						( )				
	TYPICAL:						( )				
NITROGEN OXIDES (NOx)	MAXIMUM:						0.7 (#/MWh)	CFR 60.44 Da			
	TYPICAL:						( )				
PARTICULATE MATTER (PART)	MAXIMUM:						30 (#/MBtu)	CFR 60.42 Da			
	TYPICAL:						( )				
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM:						( )				
	TYPICAL:						( )				
SULFUR DIOXIDE (SO2)	MAXIMUM:						1.0 (#/MWh)	CFR 60.43 Da			
	TYPICAL:						( )				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:						( )				
	TYPICAL:						( )				
OTHER, SPECIFY: _____	MAXIMUM:						( )				
	TYPICAL:						( )				
EXAMPLE: PARTICULATE MATTER	*MAXIMUM:*	*5.00*	*21.9*	*0.3 GR/DSCF*		*1*	*6.0 (LBS/HR)*	*212.321*	*26.28*	*5.5 LBS/HR*	*22*
	TYPICAL:	*4.00*	*14.4*	*0.24 GR/DSCF*		*4*	*5.5 (LBS/HR)*	*212.321*	*19.80*		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 240-5.

[1]CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.
[2]PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
[5]RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

(40) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

HAP INFORMATION		☐ [1]ACTUAL EMISSION RATE ☐ [1]UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE	
NAME OF HAP EMITTED	[2]CAS NUMBER		POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[4]DM	[5]RATE OR STANDARD	APPLICABLE RULE
Vents to GQCS.		MAXIMUM:					3.0 E-3 lb/GWh	CFR 63 UUUUU
		TYPICAL:						
See Form 260-GQCS.		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
EXAMPLE:		MAXIMUM:	*10.0*	*1.2*		*2*	*98% by wt control device*	*CFR 61*
Benzene	*71432*	TYPICAL:	*8.0*	*0.8*		*2*	*leak-tight trucks*	*61.302(b),(d)*

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 240-6.

[1]PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY.
[2]CAS - CHEMICAL ABSTRACT SERVICE NUMBER.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).
[5]RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION

THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

41) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:

42) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS.

Vents to Gas Quality Control System (GQCS). See Form 260 - GQCS.

43) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):

44) DISCHARGE HEIGHT ABOVE GRADE (FT):

45) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):

46) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA.

47) EXIT GAS FLOW RATE	a) MAXIMUM (ACFM):	b) TYPICAL (ACFM):
48) EXIT GAS TEMPERATURE	a) MAXIMUM (°F):	b) TYPICAL (°F):

49) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):

50) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

	NAME	FLOW DIAGRAM DESIGNATION
a)		
b)		
c)		
d)		
e)		

THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.

51a) LATITUDE:	b) LONGITUDE:	
52) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):

EXHIBIT 240-FD

Dwg No. SK-21-11-200-001, Rev D
June 10, 2013

FUTUREGEN 2.0
OVERALL PROCESS FLOW DIAGRAM

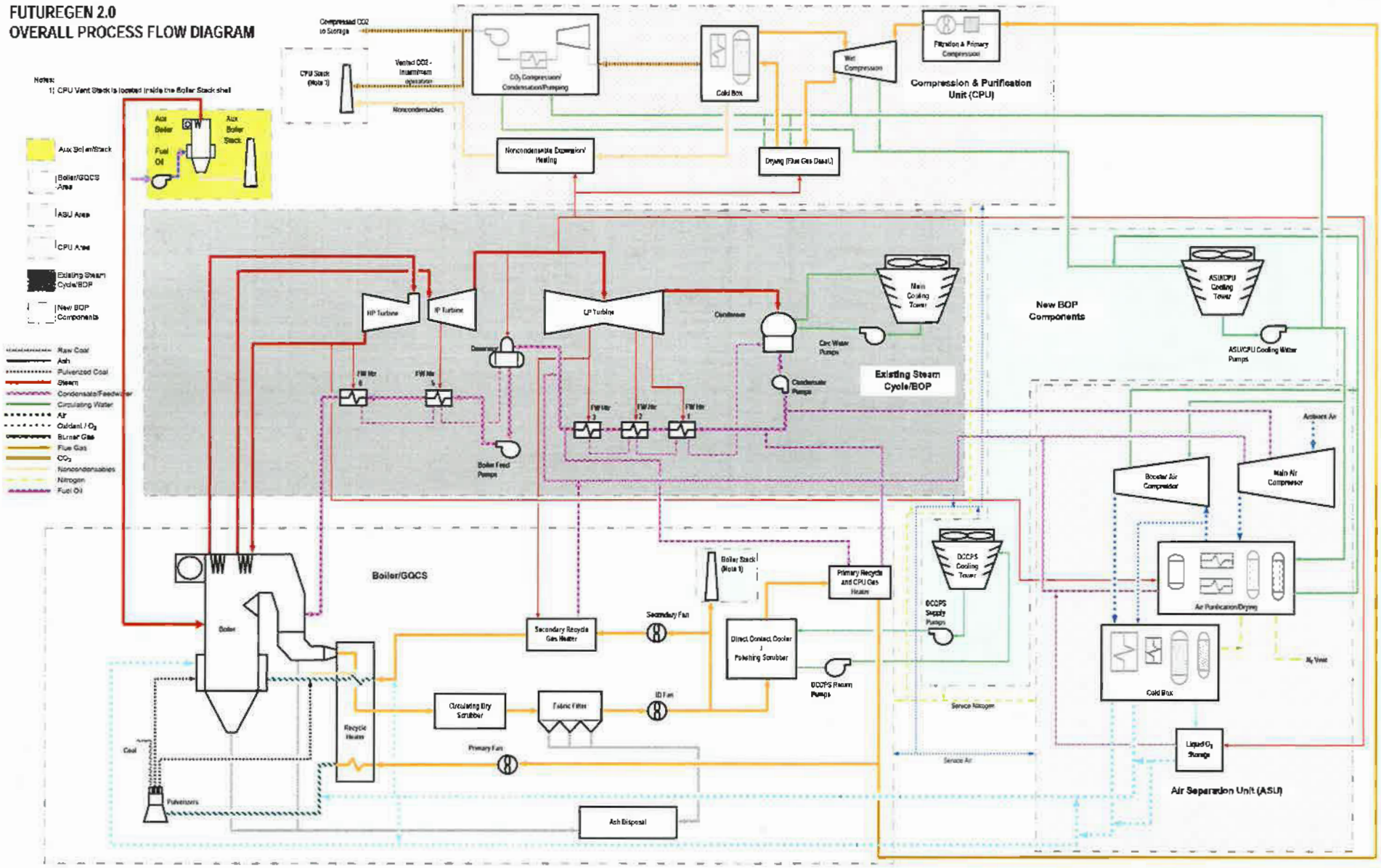


EXHIBIT 240-EP

Emission Units And Control Devices

50) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

Name	Flow Diagram Designation	Emission/Control
Oxy-combustion boiler	Boiler	Emission
Circulating Dry Scrubber - Flue Gas Desulfurization	Circulating Dry Scrubber	Control
Pulse Jet Fabric Filter	Fabric Filter	Control

EXHIBIT 240-B7-AR-1

Emission Standards for the Oxy-Combustion Boiler

26) PROVIDE ANY SPECIFIC EMISSION STANDARDS AND LIMITATIONS SET BY RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	EMISSION STANDARD	REQUIREMENTS
SO2	CFR 60.43Da (l)(1)	1.0 lb/MWh (gross output) or 1.2 lb/MWh (net output) or 97% reduction
	CFR 63 UUUUU Table 1	1.0 lb/MWh
	IAC 214.121	1.2 lb/MMBtu
	IAC 214.301	2000 ppm
NOX	CFR 60.44Da (g)(1)	0.70 lb/MWh (gross output) or 0.76 lb/MWh (net output)
	IAC 217 Subpart V	0.25 lb/MMBtu
PM	CFR 60.42Da (d)(1)	0.03 lb/MMBtu heat input
	CFR 63 UUUUU Table 1	0.09 lb/MWh
	IAC 212.204	0.1 lb/MMBtu
	IAC 212.322	42.2 lb/hr
Opacity	IAC 212.122	≤ 20%
CO	IAC 216.121	≤ 200 ppm @ 50% excess air
Hg	CFR 63 UUUUU Table 1	0.003 lb/GWh
	IAC 225.230(a)(1)	≤ 0.0080 lb/GWh (gross) or 90% reduction

PM Filterable is a surrogate for the Individual HAP metals standard.

SO_2 is a surrogate for the HCL standard.

EXHIBIT 240-B7-AR-2

Recordkeeping Rules for the Oxy-Combustion Boiler

27) PROVIDE ANY SPECIFIC RECORDKEEPING RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	RECORDKEEPING RULES	REQUIREMENTS
Administrative	CFR 63.10032	Keep records as outlined in CFR 63 UUUUU Table 7.
		Monthly fuel use of each EGU.
		Keep copies of each notification and report required to be submitted.
		Keep records as required by 63.10 and 63.8.
		Keep records of occurrence and duration of each startup/shutdown, including the amount and type of fuel used.
		Keep records of occurrence and duration of each malfunction of process equipment or air pollution control and monitoring equipment.
		Keep records of actions taken during malfunctions to minimize emissions.
Administrative	CFR 63.10033	Keep records for 5 years following occurrence.
Administrative	CFR 63.10040	Keep records as outlined in CFR 63 UUUUU Table 9.
Administrative	35 IAC 254	Annual Emission Report shall be submitted.

EXHIBIT 240-B7-AR-3

Reporting Rules for the Oxy-Combustion Boiler

28) PROVIDE ANY SPECIFIC REPORTING RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	REPORTING RULE	REQUIREMENTS
SO_2, NO_X, PM	CFR 60.51Da (a)	Submit the initial and subsequent performance test data and the performance evaluation of of the continuous monitors.
SO_2 and NO_X	CFR 60.51Da (b)	Submit the listed information to the Administrator for each 24-hour period.
Hg, PM and SO_2	CFR 63.10031	Submit reports as outlined in CFR 63 UUUUU Table 8.
Hg, PM and SO_2	CFR 63.10021(9)	Report dates of initial and subsequesnt tune-ups.
SO_2 and NO_X	CFR 60.51Da (f)	Submit statement with describing operations for periods when emissions data not available
Administrative	CFR 60.51Da (h)	Submit report indicating whether various requirements were met.
Administrative	CFR 63 UUUUU Table 8	Semiannual reporting requirement.
	CFR 60.51Da (j)	Semiannual reporting requirement.

PM Filterable is a surrogate for the Individual HAP metals standard.

SO_2 is a surrogate for the HCL standard.

EXHIBIT 240-B7-AR-4

Monitoring Rules for the Oxy-Combustion Boiler

29) PROVIDE ANY SPECIFIC MONITORING RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	MONITORING RULE	REQUIREMENTS
PM	CFR 60.42 Da (b)(1)	PM CEMS
	CFR 63.10000(c)	PM CEMS
SO_2	CFR 60.49Da (b)	SO_2 CEMS
	CFR 63 UUUUU Table 1	SO2 CEMS
Hg	CFR 63 UUUUU Table 1	Hg CEMS or sorbent trap
NO_X	CFR 60.49Da (c)	NO_X CEMS

PM Filterable is a surrogate for the Individual HAP metals standard.

SO_2 is a surrogate for the HCL standard.

EXHIBIT 240-B7-AR-5

Testing Rules and Procedures for the Oxy-Combustion Boiler

30) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	TESTING / PROCEDURES RULE	REQUIREMENTS
PM	CFR 60.50Da (b)	Method 5 / Method 19 / Method 3B / Method 202
	CFR 60.50Da (b)(1)	Work Practice Standards in 40 CFR 63 UUUUU Table 3
	CFR 63.10000(c)	Method 5 / Method 19 / Method 3A or 3B
SO_2	CFR 60.50Da (c)	Method 19
NO_X	CFR 60.50Da (d)	Method 19
Hg	CFR 63.10000(c)	CFR 63 UUUUU Appendix A

PM Filterable is a surrogate for the Individual HAP metals standard.

SO_2 is a surrogate for the HCL standard.

EXHIBIT 240-B7-AR-6
TESTING, MONITORING, RECORDKEEPING AND REPORTING

35a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE.

PARAMETER	UNIT OF MEASURE	METHOD OF MEASUREMENT	FREQUENCY
SO_2	lb	CEMs	continuous
SO_2	ppm	CEMs	continuous
NO_x	lb	CEMs	continuous
PM	lb	CEMs	continuous
CO	ppm	CEMs	continuous
Hg	lb	CEMs	continuous

EXHIBIT 240-B7-AR-7

TESTING, MONITORING, RECORDKEEPING AND REPORTING

35b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED.

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
SO_2	Distributed Control System	Plant Manager	Plant Manager
NO_x	Distributed Control System	Plant Manager	Plant Manager
PM	Distributed Control System	Plant Manager	Plant Manager
CO	Distributed Control System	Plant Manager	Plant Manager
Hg	Distributed Control System	Plant Manager	Plant Manager

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL – PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

AIR POLLUTION CONTROL EQUIPMENT DATA AND INFORMATION

FOR AGENCY USE ONLY
ID NUMBER:
CONTROL EQUIPMENT #:
DATE:

THIS FORM MUST BE COMPLETED FOR EACH AIR POLLUTION CONTROL EQUIPMENT. COMPLETE AND PROVIDE THIS FORM IN ADDITION TO THE APPLICABLE ADDENDUM FORM 260-A THROUGH 260-K. A SEPARATE FORM MUST BE COMPLETED FOR EACH MODE OF OPERATION OF AIR POLLUTION CONTROL EQUIPMENT FOR WHICH A PERMIT IS BEING SOUGHT.

SOURCE INFORMATION

1) SOURCE NAME: Meredosia Energy Center

2) DATE FORM PREPARED: 06/12/2013

3) SOURCE ID NO. (IF KNOWN): 137805AAA

GENERAL INFORMATION

4) NAME OF AIR POLLUTION CONTROL EQUIPMENT AND/OR CONTROL SYSTEM:
Gas Quality Control System (GQCS)

5) FLOW DIAGRAM DESIGNATION OF CONTROL EQUIPMENT AND/OR CONTROL SYSTEM:
See EXHIBIT 240-EP and EXHIBIT 240-FD.

6) MANUFACTURER OF CONTROL EQUIPMENT (IF KNOWN):
Babcock & Wilcox Power Generation Group, Inc. (B&W PGG).

7) MODEL NUMBER (IF KNOWN): N/A

8) SERIAL NUMBER (IF KNOWN):

9) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EQUIPMENT (ACTUAL OR PLANNED)

a) CONSTRUCTION (MONTH/YEAR): July 2014 - August 2017

b) OPERATION (MONTH/YEAR): September 2017

c) LATEST MODIFICATION (MONTH/YEAR):

10) BRIEFLY DESCRIBE MODIFICATION (IF APPLICABLE):

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

APPLICATION PAGE _____

11) LIST ALL EMISSION UNITS AND OTHER CONTROL EQUIPMENT DUCTING EMISSIONS TO THIS CONTROL EQUIPMENT:

NAME	DESIGNATION OR CODE NUMBER
Oxy-combustion Boiler (Boiler No. 7)	Oxy-combustion Boiler (Boiler No. 7)

12) DOES THE CONTROL EQUIPMENT HAVE MORE THAN ONE MODE OF OPERATION? ☐ YES ☒ NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE AIR POLLUTION CONTROL EQUIPMENT FORM 260-CAAPP MUST BE COMPLETED FOR EACH MODE):

13) IDENTIFY ALL ATTACHMENTS TO THIS FORM RELATED TO THIS AIR POLLUTION CONTROL EQUIPMENT(E.G., TECHNICAL DRAWINGS):

EXHIBIT 240-GQCS 1 through 5
EXHIBIT 240-EP
EXHIBIT 240-FD
Form 260C
Form 260H

OPERATING SCHEDULE

14) IDENTIFY ANY PERIOD WHEN THE CONTROL EQUIPMENT WILL NOT BE OPERATING DUE TO SCHEDULED MAINTENANCE AND/OR REPAIRS WHEN THE FEEDING EMISSION UNIT(S) TO THIS CONTROL EQUIPMENT IS/ARE IN OPERATION:

None

15a) IDENTIFY ANY PERIODS DURING OPERATION OF THE FEEDING EMISSION UNIT(S) WHEN THE CONTROL EQUIPMENT IS/ARE NOT USED:

None

b) IS THIS CONTROL EQUIPMENT IN OPERATION AT ALL OTHER TIMES THAT THE FEEDING EMISSION UNIT(S) IS/ARE IN OPERATION? ☒ YES ☐ NO

IF NO, EXPLAIN AND PROVIDE THE DURATION OF THE CONTROL EQUIPMENT DOWNTIME:

APPLICABLE RULES

16) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.207(b)(1), 81% OVERALL & 90% CONTROL DEVICE EFF.):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
See EXHIBIT 260-GQCS-AR-1		

17) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
See EXHIBIT 260-GQCS-AR-2		

18) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
See EXHIBIT 260-GQCS-AR-3		

19) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
See EXHIBIT 260-GQCS-AR-4		

20) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT :

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
See EXHIBIT 260-GQCS-AR-5		

COMPLIANCE INFORMATION

21) IS THE CONTROL SYSTEM IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? ☒ YES ☐ NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE -- ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

22) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

Initial compliance will be demonstrated through performance testing as specified in the applicable rules.

23) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

Ongoing compliance will be demonstrated through continous emissions monitoring as specified in the applicable rules.

TESTING, MONITORING, RECORDKEEPING AND REPORTING

24a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
SEE EXHIBIT			
260-GQCS-AR-6			

24b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
SEE EXHIBIT 260-GQCS-AR-7			

c) IS COMPLIANCE OF THE CONTROL EQUIPMENT READILY DEMONSTRATED BY REVIEW OF THE RECORDS? ☒ YES ☐ NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND/OR SUBMITTAL TO THE AGENCY UPON REQUEST? ☒ YES ☐ NO

IF NO, EXPLAIN

25a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

See EXHIBIT 240-B7-AR-4

b) WHAT OPERATING PARAMETER(S) IS(ARE) BEING MONITORED (E.G., COMBUSTION CHAMBER TEMPERATURE)?

See EXHIBIT 240-B7-AR-4

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., EXIT OF COMBUSTION CHAMBER):

In Boiler Stack

25d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? ☒ YES ☐ NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? ☒ YES ☐ NO

IF NO, EXPLAIN:

f) IS EACH MONITOR OPERATED AT ALL TIMES THE CONTROL EQUIPMENT IS IN OPERATION? ☒ YES ☐ NO

IF NO, EXPLAIN.

26) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 260-1:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
NA				

27) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY
See EXHIBIT 240-B7-AR-3		

CAPTURE AND CONTROL

28) DESCRIBE THE CAPTURE SYSTEM USED TO CONTAIN, COLLECT AND TRANSPORT EMISSIONS TO THE CONTROL EQUIPMENT. INCLUDE ALL HOODS, DUCTS, FANS, ETC. ALSO INCLUDE THE METHOD OF CAPTURE USED AT EACH EMISSION POINT. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 260-2):

Due to the nature of the boiler (oxy-combustion) the boiler and GQCS are designed to not allow the introduction of ambient air into or the excape of flue gas out of the system. The boiler is ducted directly to the GQCS, which is then ducted to either the CPU or stack based on valve settings.

29) ARE FEATURES OF THE CAPTURE SYSTEM ACCURATELY DEPICTED IN THE FLOW DIAGRAM CONTAINED IN THIS APPLICATION? ☒ YES ☐ NO

IF NO, A SKETCH SHOWING THE FEATURES OF THE CAPTURE SYSTEM SHOULD BE ATTACHED AND LABELED AS EXHIBIT 260-3:

30) PROVIDE THE ACTUAL (MINIMUM AND TYPICAL) CAPTURE SYSTEM EFFICIENCY, CONTROL EQUIPMENT DESTRUCTION/REMOVAL EFFICIENCY, AND THE OVERALL REDUCTION EFFICIENCY PROVIDED BY THE COMBINATION OF THE CAPTURE SYSTEM AND CONTROL EQUIPMENT FOR EACH REGULATED AIR POLLUTANT TO BE CONTROLLED. ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH THESE EFFICIENCIES WERE BASED AND LABEL AS EXHIBIT 260-4:

a) CONTROL PERFORMANCE:

	REGULATED AIR POLLUTANT	CAPTURE SYSTEM EFFICIENCY (%)		CONTROL EQUIPMENT EFFICIENCY (%)		OVERALL REDUCTION EFFICIENCY (%)	
		(MIN)	(TYP)	(MIN)	(TYP)	(MIN)	(TYP)
i	PM	100	100	99	99	99	99
ii	SO2	100	100	97	97	97	97
iii	HAPs	100	100	TBD	TBD	TBD	TBD

iv. EXPLAIN ANY OTHER REQUIRED LIMITS ON CONTROL EQUIPMENT PERFORMANCE SUCH AS OUTLET CONCENTRATION, COOLANT TEMPERATURE, ETC.:

b) METHOD USED TO DETERMINE EACH OF THE ABOVE EFFICIENCIES (E.G., STACK TEST, MATERIAL BALANCE, MANUFACTURER'S GUARANTEE, ETC.) AND THE DATE LAST TESTED, IF APPLICABLE:

	EFFICIENCY DETERMINATION METHOD	DATE LAST TESTED
CAPTURE:	Stack Test	NA
CONTROL:	Stack Test	NA
OVERALL:	Stack Test	NA

c) REQUIRED PERFORMANCE:

	REGULATED AIR POLLUTANT	CAPTURE SYSTEM EFFICIENCY (%)	CONTROL EQUIPMENT EFFICIENCY (%)	OVERALL REDUCTION EFFICIENCY (%)	APPLICABLE RULE
i	SO2	100	97	97	40CFR60.43 Da(I)(1)
ii	Hg (alternative)	100	90	90	35 IAC 225.230(a)(1)
iii					

iv EXPLAIN ANY OTHER REQUIRED LIMITS ON CONTROL EQUIPMENT PERFORMANCE SUCH AS OUTLET CONCENTRATION, COOLANT TEMPERATURE, ETC.:

(31)EMISSION INFORMATION

REGULATED AIR POLLUTANT		[1]ACTUAL EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			[2]PERMITTED EMISSION RATE	
		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[3]OTHER TERMS	[4]DM	[5]RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:	110	481.80			4	200 (ppm)	IAC 216.121			
	TYPICAL:						( )				
LEAD	MAXIMUM:	0.016	0.07			4	( )				
	TYPICAL:						( )				
NITROGEN OXIDES (NOx)	MAXIMUM:	319	1397.22			4	0.7 (#/MWh)	CFR 60.44 Da			
	TYPICAL:						( )				
PARTICULATE MATTER (PART)	MAXIMUM:	7.45	32.63			4	30 (#/MBtu)	CFR 60.42 Da			
	TYPICAL:						( )				
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM:	14.72	64.47			4	( )				
	TYPICAL:						( )				
SULFUR DIOXIDE (SO2)	MAXIMUM:	73.6	322.37			4	1.0 (#/MWh)	CFR 60.43 Da			
	TYPICAL:						( )				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:	2.65	11.61			4	( )				
	TYPICAL:						( )				
OTHER, SPECIFY: _____	MAXIMUM:						( )				
	TYPICAL:						( )				
EXAMPLE: PARTICULATE MATTER	MAXIMUM:	*5.00*	*21.9*	*0.3 GR/DSCF*		*1*	*6.0 (LBS/HR)*	*212.321*	*26.28*	*5.5 LBS/HR*	*22*
	TYPICAL:	*4.00*	*14.4*	*0.24 GR/DSCF*		*4*	*5.5 (LBS/HR)*	*212.321*	*19.80*		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 260-5.

[1]PROVIDE CONTROLLED EMISSIONS (E.G., THE EMISSIONS THAT WOULD RESULT AFTER ALL CONTROL AND CAPTURE EFFICIENCIES ARE ACCOUNTED FOR).
[2]PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
[5]RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

(32) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

HAP INFORMATION		[1]ACTUAL EMISSION RATE					ALLOWABLE BY RULE	
NAME OF HAP EMITTED	[2]CAS NUMBER		POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[4]DM	[5]RATE OR STANDARD	APPLICABLE RULE
Mercury	7439976	MAXIMUM:	0.005	0.02		4	3.0 E-3 lb/GWh	CFR 63 UUUUU
		TYPICAL:						
Total HAPs	NA	MAXIMUM:	1.09	4.77		3		
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
EXAMPLE:		MAXIMUM:	*10.0*	*1.2*		*2*	*98% by wt control device*	*CFR 61*
Benzene	*71432*	TYPICAL:	*8.0*	*0.8*		*2*	*leak-tight trucks*	*61.302(b),(d)*

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 260-6.

[1]PROVIDE CONTROLLED EMISSIONS (E.G., THE EMISSIONS THAT WOULD RESULT AFTER ALL CONTROL AND CAPTURE EFFICIENCIES ARE ACCOUNTED FOR).
[2]CAS - CHEMICAL ABSTRACT SERVICE NUMBER.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).
[5]RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION

33) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS.

Boiler Stack

34) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):

Approximately 1100 feet

35) DISCHARGE HEIGHT ABOVE GRADE (FT):

446

36) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):

446

37) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA.

9

	a) MAXIMUM (ACFM):	b) TYPICAL (ACFM):
38) EXIT GAS FLOW RATE	275,900	234,500
39) EXIT GAS TEMPERATURE	a) MAXIMUM (°F):	b) TYPICAL (°F):
	176	176

40) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):

Vertical

41) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

	NAME	FLOW DIAGRAM DESIGNATION
a)	See EXHIBIT 240-EP	See EXHIBIT 240-FD
b)		
c)		
d)		
e)		
f)		
g)		

42) WHAT PERCENTAGE OF THE CONTROL EQUIPMENT EMISSIONS ARE BEING DUCTED TO THIS EXHAUST POINT (%)?

100% during air-fire; 0% w/ oxy-fire

43) IF THE PERCENTAGE OF THE CONTROL EQUIPMENT EMISSIONS BEING DUCTED TO THE EXHAUST POINT IS NOT 100%, THEN EXPLAIN WHERE THE REMAINING EMISSIONS ARE BEING EXHAUSTED TO:

During oxy-combustion, 100% is directed to the CPU.

THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE

44a) LATITUDE:	b) LONGITUDE:
39:49:22.06	-90:33:55.472

45) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):
15	4,410.925	708.363

EXHIBIT 260-GQCS-AR-1

Emission Standards for the Gas Quality Control System (GQCS)

26) PROVIDE ANY SPECIFIC EMISSION STANDARDS AND LIMITATIONS SET BY RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	EMISSION STANDARD	REQUIREMENTS
SO2	CFR 60.43Da (l)(1)	1.0 lb/MWh (gross output) or 1.2 lb/MWh (net output) or 97% reduction
	CFR 63 UUUUU Table 1	1.0 lb/MWh
	IAC 214.121	1.2 lb/MMBtu
	IAC 214.301	2000 ppm
NOX	CFR 60.44Da (g)(1)	0.70 lb/MWh (gross output) or 0.76 lb/MWh (net output)
	IAC 217 Subpart V	0.25 lb/MMBtu
PM	CFR 60.42Da (d)(1)	0.03 lb/MMBtu heat input
	CFR 63 UUUUU Table 1	0.09 lb/MWh
	IAC 212.204	0.1 lb/MMBtu
	IAC 212.322	42.2 lb/hr
Opacity	IAC 212.122	≤ 20%
CO	IAC 216.121	≤ 200 ppm @ 50% excess air
Hg	CFR 63 UUUUU Table 1	0.003 lb/GWh
	IAC 225.230(a)(1)	≤ 0.0080 lb/GWh (gross) or 90% reduction

EXHIBIT 260-GQCS-AR-2

Recordkeeping Rules for the Gas Quality Control System (GQCS)

27) PROVIDE ANY SPECIFIC RECORDKEEPING RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	RECORDKEEPING RULES	REQUIREMENTS
Administrative	CFR 63.10032	Keep records as outlined in CFR 63 UUUUU Table 7.
		Monthly fuel use of each EGU.
		Keep copies of each notification and report required to be submitted.
		Keep records as required by 63.10 and 63.8.
		Keep records of occurrence and duration of each startup/shutdown, including the amount and type of fuel used.
		Keep records of occurrence and duration of each malfunction of process equipment or air pollution control and monitoring equipment.
		Keep records of actions taken during malfunctions to minimize emissions.
Administrative	CFR 63.10033	Keep records for 5 years following occurrence.
Administrative	CFR 63.10	Keep records as outlined in CFR 63 UUUUU Table 9.
Administrative	35 IAC 254	Annual Emission Report shall be submitted.

EXHIBIT 260-GQCS-AR-3

Reporting Rules for the Gas Quality Control System (GQCS)

28) PROVIDE ANY SPECIFIC REPORTING RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	REPORTING RULE	REQUIREMENTS
SO_2, NO_X, PM	CFR 60.51Da (a)	Submit the initial and subsequent performance test data and the performance evaluation of of the continuous monitors.
SO_2 and NO_X	CFR 60.51Da (b)	Submit the listed information to the Administrator for each 24-hour period.
Hg, PM and SO_2	CFR 63.10031	Submit reports as outlined in CFR 63 UUUUU Table 8.
Hg, PM and SO_2	CFR 63.10021(9)	Report dates of initial and subsequesnt tune-ups.
SO_2 and NO_X	CFR 60.51Da (f)	Submit statement with describing operations for periods when emissions data not available
Administrative	CFR 60.51Da (h)	Submit report indicating whether various requirements were met.
Administrative	CFR 63 UUUUU Table 8	Semiannual reporting requirement.
	CFR 60.51Da (j)	Semiannual reporting requirement.

EXHIBIT 260-GQCS-AR-4

Monitoring Rules for the Gas Quality Control System (GQCS)

29) PROVIDE ANY SPECIFIC MONITORING RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	MONITORING RULE	REQUIREMENTS
PM	CFR 60.42 Da (b)(1)	PM CEMS
	CFR 63.10000(c)	PM CEMS
SO_2	CFR 60.49Da (b)	SO_2 CEMS
	CFR 63 UUUUU Table 1	SO2 CEMS
Hg	CFR 63 UUUUU Table 1	Hg CEMS or sorbent trap
NO_X	CFR 60.49Da (c)	NO_X CEMS

EXHIBIT 260-GQCS-AR-5

Testing Rules and Procedures for the Gas Quality Control System (GQCS)

30) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	TESTING / PROCEDURES RULE	REQUIREMENTS
PM	CFR 60.50Da (b)	Method 5 / Method 19 / Method 3B / Method 202
	CFR 60.50Da (b)(1)	Work Practice Standards in 40 CFR 63 UUUUU Table 3
	CFR 63.10000(c)	Method 5 / Method 19 / Method 3A or 3B
SO_2	CFR 60.50Da (c)	Method 19
NO_X	CFR 60.50Da (d)	Method 19
Hg	CFR 63.10000(c)	CFR 63 UUUUU Appendix A

EXHIBIT 260-GQCS-AR-6

Testing, Monitoring, Recordkeeping and Reporting for the Gas Quality Control System (GQCS)

35a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE.

PARAMETER	UNIT OF MEASURE	METHOD OF MEASUREMENT	FREQUENCY
SO_2	% reduction	CEMs	continuous
Hg	% reduction	CEMs	continuous

EXHIBIT 260-GQCS-AR-7

Testing, Monitoring, Recordkeeping and Reporting for the Gas Quality Control System (GQCS)

35b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED.

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
SO_2	Distributed Control System	Plant Manager	Plant Manager
Hg	Distributed Control System	Plant Manager	Plant Manager

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation:
_____

SUPPLEMENTAL FORM AIR POLLUTION CONTROL EQUIPMENT SCRUBBER (260H)

FOR AGENCY USE ONLY
ID NUMBER:
CONTROL EQUIPMENT #:
DATE:

NOTE: FOR PACKED COLUMN SCRUBBERS, FORM 260G SHOULD BE COMPLETED RATHER THAN FORM 260H

DATA AND INFORMATION

1) FLOW DIAGRAM DESIGNATION OF SCRUBBER:
Circulating Dry Scrubber

2) TYPE OF SCRUBBER:
Circulating Dry Scrubber (CDS)

3) TYPE OF SCRUBBANT USED:
Hydrated Lime

4) IS SCRUBBANT RECYCLED BACK INTO CONTROL SYSTEM? ☒ YES ☐ NO

IF YES, DESCRIBE METHOD BY WHICH SCRUBBANT SATURATION IS AVOIDED AND THE DESIRED CONTROL EFFICIENCY IS MAINTAINED:
The solids recirculation system maintains the appropriate scrubbant concentration in the CDS by modulating the presssure drop across the CDS, which signals the scrubbant flow demand. SO2 outlet emissions are compared against an operator setpoint, and the resulting error signal controls the feed rate of fresh hydrated lime into the CDS inlet flue.

5) TYPICAL PRESSURE DROP (INCHES H_20):
6

6) SCRUBBER OPERATING PARAMETERS:

	DURING MAXIMUM OPERATION OF FEEDING UNIT(S)	DURING TYPICAL OPERATION OF FEEDING UNIT(S)
INLET GAS TEMPERATURE (DEGREES F°):	325	
INLET GAS FLOW RATE (SCFM):	510,700 acfm	
SCRUBBANT RATE (GAL/MIN):	147 lb/hr	
EFFICIENCY (PM REDUCTION):	0 (%)	(%)
EFFICIENCY (OTHER; SPECIFY REGULATED AIR POLLUTANT: SO2):	95 (%)	(%)

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

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SUPPLEMENTAL FORM AIR POLLUTION CONTROL EQUIPMENT FILTER (260C)

FOR AGENCY USE ONLY
ID NUMBER:
CONTROL EQUIPMENT #:
DATE:

DATA AND INFORMATION

1) FLOW DIAGRAM DESIGNATION OF FILTER:
Fabric Filter

2) FILTER CONFIGURATION (CHECK ONE):
☐ OPEN PRESSURE ☐ CLOSED PRESSURE ☒ CLOSED SUCTION
☐ OTHER, SPECIFY:

3) DESCRIBE FILTER MATERIAL:
Six (6) gas-tight filter bag compartments with 729 filter bags per compartment.

4) FILTERING AREA (SQUARE FEET): 36,050

5) AIR TO CLOTH RATIO (FEET/MIN): 2.99 to 1

6) CLEANING METHOD
☐ SHAKER ☐ REVERSE AIR ☐ PULSE AIR ☒ PULSE JET
☐ OTHER, SPECIFY:

7) NORMAL RANGE OF PRESSURE DROP: TO < 8 (INCH H_20)

8a) INLET EMISSION STREAM PARAMETERS:

	MAX	TYPICAL
MOISTURE CONTENT (% BY VOLUME):	29.2	
PARTICULATE INLET LOADING (GRAINS/SCF):	437gr/acf	

b) MEAN PARTICLE DIAMETER (MICRONS):
Unknown

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9) FILTER OPERATING PARAMETERS:

	DURING MAXIMUM OPERATION OF FEEDING UNIT(S)	DURING TYPICAL OPERATION OF FEEDING UNIT(S)
INLET FLOW RATE (SCFM):	409,100	
INLET GAS TEMPERATURE (DEGREES FAHRENHEIT):	184	
EFFICIENCY (PM REDUCTION):	(%) > 99	(%)
EFFICIENCY (PM10 REDUCTION):	(%) > 99	(%)

10) HOW IS FILTER MONITORED FOR INDICATIONS OF DETERIORATION (E.G., BROKEN BAGS)?

- ☐ CONTINUOUS OPACITY
- ☒ PRESSURE DROP
- ☒ ALARMS-AUDIBLE TO PROCESS OPERATOR
- ☐ VISUAL OPACITY READINGS, FREQUENCY: _____
- ☒ OTHER, SPECIFY: Leak detectors to detect broken bags

11) DESCRIBE ANY RECORDING DEVICE AND FREQUENCY OF LOG ENTRIES:

Pressure drop will be monitored by tthe plant data historian. The recording devices and frequency of log entries will be per the plant DCS system.

12) DESCRIBE ANY FILTER SEEDING BEING PERFORMED:

The bags will require filter seeding per vendor's direction.

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Source Designation:

PROCESS EMISSION UNIT DATA AND INFORMATION

FOR AGENCY USE ONLY
ID NUMBER:
EMISSION POINT #:
DATE:

SOURCE INFORMATION

1) SOURCE NAME: Meredosia Energy Center

2) DATE FORM PREPARED: 06/12/2013

3) SOURCE ID NO. (IF KNOWN): 137805AAA

GENERAL INFORMATION

4) NAME OF EMISSION UNIT: Compression and Purification Unit (CPU)

5) NAME OF PROCESS: Liquefied CO2 Production

6) DESCRIPTION OF PROCESS: Compression and purification of flue gas to produce liquefied CO2

7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR ACTIVITY ACCOMPLISHED: Liquefied CO2

8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT: CPU (See EXHIBIT 240-FD)

9) MANUFACTURER OF EMISSION UNIT (IF KNOWN): Air Liquide

10) MODEL NUMBER (IF KNOWN): N/A

11) SERIAL NUMBER (IF KNOWN):

12) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)

a) CONSTRUCTION (MONTH/YEAR): July 2014-August 2017

b) OPERATION (MONTH/YEAR): September 2017

c) LATEST MODIFICATION (MONTH/YEAR): NA

13) DESCRIPTION OF MODIFICATION (IF APPLICABLE):

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

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14) DOES THE EMISSION UNIT HAVE MORE THAN ONE MODE OF OPERATION? ☐ YES ☒ NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED FOR EACH MODE):

15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT):

NA

16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS ESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION? ☐ YES ☒ NO

IF YES, COMPLETE AND ATTACH FORM 203-CAAPP, "REQUEST TO OPERATE WITH EXCESS EMISSIONS DURING STARTUP OF EQUIPMENT".

17) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE STANDARDS (E.G., ONLY ONE UNIT IS OPERATED AT A TIME):

Unit is only operated when operating in oxy-combustion mode. Unit cannot be operated above a design wet bulb day globe temperature of 76 degrees F.

OPERATING INFORMATION

18) ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSION RELATED, FROM WHICH THE FOLLOWING OPERATING INFORMATION, MATERIAL USAGE INFORMATION AND FUEL USAGE DATA WERE BASED AND LABEL AS EXHIBIT 220-1. REFER TO SPECIAL NOTES OF FORM 202-CAAPP.

19a) MAXIMUM OPERATING HOURS 8760 hr/yr	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
b) TYPICAL OPERATING HOURS 7446 hr/yr	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
20) ANNUAL THROUGHPUT	DEC-FEB(%): 25	MAR-MAY(%): 25	JUN-AUG(%): 25	SEP-NOV(%): 25

MATERIAL USAGE INFORMATION

	MAXIMUM RATES		TYPICAL RATES	
21a) RAW MATERIALS	LBS/HR	TONS/YEAR	LBS/HR	TONS/YEAR
Flue Gas	385,762	1,690,000		

APPLICATION PAGE _____

21b) PRODUCTS	MAXIMUM RATES LBS/HR	MAXIMUM RATES TONS/YEAR	TYPICAL RATES LBS/HR	TYPICAL RATES TONS/YEAR
CO2		1,196,900		1,122,612

21c) BY-PRODUCT MATERIALS	MAXIMUM RATES LBS/HR	MAXIMUM RATES TONS/YEAR	TYPICAL RATES LBS/HR	TYPICAL RATES TONS/YEAR
NA				

FUEL USAGE DATA

22a) MAXIMUM FIRING RATE (MILLION BTU/HR):	b) TYPICAL FIRING RATE (MILLION BTU/HR):	c) DESIGN CAPACITY FIRING RATE (MILLION BTU/HR):
NA	NA	NA

d) FUEL TYPE:

☐ NATURAL GAS ☐ FUEL OIL: GRADE NUMBER _____ ☐ COAL ☐ OTHER _____

IF MORE THAN ONE FUEL IS USED, ATTACH AN EXPLANATION AND LABEL AS EXHIBIT 220-2.

e) TYPICAL HEAT CONTENT OF FUEL (BTU/LB, BTU/GAL OR BTU/SCF):	f) TYPICAL SULFUR CONTENT (WT %., NA FOR NATURAL GAS):
g) TYPICAL ASH CONTENT (WT %., NA FOR NATURAL GAS):	h) ANNUAL FUEL USAGE (SPECIFY UNITS, E.G., SCF/YEAR, GAL/YEAR, TON/YEAR):

23) ARE COMBUSTION EMISSIONS DUCTED TO THE SAME STACK OR CONTROL AS PROCESS UNIT EMISSIONS? ☐ YES ☐ NO

IF NO, IDENTIFY THE EXHAUST POINT FOR COMBUSTION EMISSIONS:

APPLICABLE RULES

24) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAL):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
See EXHIBIT 220-CPU-AR-1		

25) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
See EXHIBIT 220-CPU-AR-2		

26) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
See EXHIBIT 220-CPU-AR-3		

27) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
See EXHIBIT 220-CPU-AR-4		

28) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT :

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
See EXHIBIT 220-CPU-AR-5		

29) DOES THE EMISSION UNIT QUALIFY FOR AN EXEMPTION FROM AN OTHERWISE APPLICABLE RULE? ☐ YES ☒ NO

IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION.

COMPLIANCE INFORMATION

30) IS THE EMISSION UNIT IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? ☒ YES ☐ NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE – ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

31) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

Initial compliance will be demonstrated through stack testing of applicable pollutants.

32) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

Continual compliance will be demonstrated through continuous emission monitoring of applicable pollutants.

TESTING, MONITORING, RECORDKEEPING AND REPORTING

33a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
SEE EXHIBIT			
220-CPU-AR-6			

33b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
SEE EXHIBIT 220-CPU-AR-7			

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS? ☒ YES ☐ NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND SUBMITTAL TO THE AGENCY UPON REQUEST? ☒ YES ☐ NO

IF NO, EXPLAIN:

34a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

In stack monitors at the CPU Vent Stack will be operated as required by the applicable rules. See EXHIBIT 220-CPU-AR-4

b) WHAT PARAMETER(S) IS(ARE) BEING MONITORED (E.G., VOM EMISSIONS TO ATMOSPHERE)?

See EXHIBIT 220-CPU-AR-4.

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., IN STACK MONITOR 3 FEET FROM EXIT):

In CPU Vent Stack

34d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? ☒ YES ☐ NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? ☒ YES ☐ NO

IF NO, EXPLAIN:

f) IS EACH MONITOR OPERATED AT ALL TIMES THE ASSOCIATED EMISSION UNIT IS IN OPERATION? ☒ YES ☐ NO

IF NO, EXPLAIN:

35) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 220-4:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
NA				

36) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY
EXHIBIT 220-CPU-AR-3		

(37)EMISSION INFORMATION

☒ [1]ACTUAL EMISSION RATE
☐ [1]UNCONTROLLED EMISSIDN RATE

REGULATED AIR POLLUTANT		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[3]OTHER TERMS	[4]DM	ALLOWABLE BY RULE EMISSION RATE: [5]RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	[2]PERMITTED EMISSION RATE: RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:	9	39.42			4	( )				
	TYPICAL:						( )				
LEAD	MAXIMUM:	0.0343	0.15			4	( )				
	TYPICAL:						( )				
NITROGEN OXIDES (NOx)	MAXIMUM:	386	1690.68			4	0.7 (#/MWh)	CFR 60.44 Da			
	TYPICAL:						( )				
PARTICULATE MATTER (PART)	MAXIMUM:	5.02	21.99			4	30 (#/MBtu)	CFR 60.42 Da			
	TYPICAL:						( )				
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM:	5.02	21.99			4	( )				
	TYPICAL:						( )				
SULFUR DIOXIDE (SO2)	MAXIMUM:	10	43.76			4	1.0 (#/MWh)	CFR 60.43 Da			
	TYPICAL:						( )				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:	1.80	7.88			4	( )				
	TYPICAL:						( )				
OTHER, SPECIFY: _____	MAXIMUM:						( )				
	TYPICAL:						( )				
EXAMPLE: PARTICULATE MATTER	MAXIMUM:	*5.00*	*21.9*	*0.3 GR/DSCF*		*1*	*6.0 (LBS/HR)*	*212.321*	*26.28*	*5.5 LBS/HR*	*22*
	TYPICAL:	*4.00*	*14.4*	*0.24 GR/DSCF*		*4*	*5.5 (LBS/HR)*	*212.321*	*19.80*		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-5.

[1]CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.
[2]PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
[5]RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

(38) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

☒ [1]ACTUAL EMISSION RATE
☐ [1]UNCONTROLLED EMISSION RATE

NAME OF HAP EMITTED	[2]CAS NUMBER		POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[4]DM	ALLOWABLE BY RULE: [5]RATE OR STANDARD	ALLOWABLE BY RULE: APPLICABLE RULE
Mercury	7439976	MAXIMUM:	0.009	0.04		4	3.0 E-3 lb/GWh	CFR 63 UUUUU
		TYPICAL:						
Total HAPs	NA	MAXIMUM:	1.05	4.60		3		
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
EXAMPLE:		MAXIMUM:	*10.0*	*1.2*		*2*	*98% by wt control device*	*CFR 61*
Benzene	*71432*	TYPICAL:	*8.0*	*0.8*		*2*	*leak-tight trucks*	*61.302(b),(d)*

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

[1]PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY.
[2]CAS - CHEMICAL ABSTRACT SERVICE NUMBER.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).
[5]RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION

THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:
CPU Vent Stack

40) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS.
Stack

41) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):
Approximately 1,100 feet

42) DISCHARGE HEIGHT ABOVE GRADE (FT):
446

43) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):
446

44) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA. 2

45) EXIT GAS FLOW RATE	a) MAXIMUM (ACFM): 57,000	b) TYPICAL (ACFM):
46) EXIT GAS TEMPERATURE	a) MAXIMUM (°F): 84.2	b) TYPICAL (°F): 55.4

47) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):
Vertical

48) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

	NAME	FLOW DIAGRAM DESIGNATION
a)	See EXHIBIT 240-EP	See EXHIBIT 240-FD
b)		
c)		
d)		
e)		

THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.

49a) LATITUDE: 39:49:22.099	b) LONGITUDE: -90:33:55.432	
50) UTM ZONE: 15	b) UTM VERTICAL (KM): 4,410.927	c) UTM HORIZONTAL (KM): 708.364

EXHIBIT 220-CPU-AR-1
Emission Standards for the EGU

26) PROVIDE ANY SPECIFIC EMISSION STANDARDS AND LIMITATIONS SET BY RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	EMISSION STANDARD	REQUIREMENTS
SO2	CFR 60.43Da (I)(1)	1.0 lb/MWh (gross output) or 1.2 lb/MWh (net output) or 97% reduction
	CFR 63 UUUUU Table 1	1.0 lb/MWh
	IAC 214.121	1.2 lb/MMBtu
	IAC 214.301	2000 ppm
NOX	CFR 60.44Da (g)(1)	0.70 lb/MWh (gross output) or 0.76 lb/MWh (net output)
	IAC 217 Subpart V	0.25 lb/MMBtu
PM	CFR 60.42Da (d)(1)	0.03 lb/MMBtu heat input
	CFR 63 UUUUU Table 1	0.09 lb/MWh
	IAC 212.204	0.1 lb/MMBtu
	IAC 212.322	42.2 lb/hr
Opacity	IAC 212.122	≤ 20%
Hg	CFR 63 UUUUU Table 1	0.003 lb/GWh
	IAC 225.233(d)(1)	≤ 0.0080 lb/GWh (gross) or 90% reduction

EXHIBIT 220-CPU-AR-2
Recordkeeping Rules for the EGU

27) PROVIDE ANY SPECIFIC RECORDKEEPING RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	RECORDKEEPING RULES	REQUIREMENTS
Administrative	CFR 63.10032	Keep records as outlined in CFR 63 UUUUU Table 7.
		Monthly fuel use of each EGU.
		Keep copies of each notification and report required to be submitted.
		Keep records as required by 63.10 and 63.8.
		Keep records of occurrence and duration of each startup/shutdown, including the amount and type of fuel used.
		Keep records of occurrence and duration of each malfunction of process equipment or air pollution control and monitoring equipment.
		Keep records of actions taken during malfunctions to minimize emissions.
Administrative	CFR 63.10033	Keep records for 5 years following occurrence.
Administrative	CFR 63.10040	Keep records as outlined in CFR 63 UUUUU Table 9.

EXHIBIT 220-CPU-AR-3
Reporting Rules for the EGU

28) PROVIDE ANY SPECIFIC REPORTING RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	REPORTING RULE	REQUIREMENTS
SO_2, NO_x, PM	CFR 60.51Da (a)	Submit the initial and subsequent performance test data and the performance evaluation of of the continuous monitors.
SO_2 and NO_x	CFR 60.51Da (b)	Submit the listed information to the Administrator for each 24-hour period.
Hg, PM and SO_2	CFR 63.10031	Submit reports as outlined in CFR 63 UUUUU Table 8.
Hg, PM and SO_2	CFR 63.10021(9)	Report dates of initial and subsequesnt tune-ups.
SO_2 and NO_x	CFR 60.51Da (f)	Submit statement with describing operations for periods when emissions data not available
Administrative	CFR 60.51Da (h)	Submit report indicating whether various requirements were met.
Administrative	CFR 63 UUUUU Table 8	Semiannual reporting requirement.
	CFR 60.51Da (j)	Semiannual reporting requirement.
Administrative	35 IAC 254	Annual Emission Report shall be submitted.

EXHIBIT 220-CPU-AR-4
Monitoring Rules for the EGU

29) PROVIDE ANY SPECIFIC MONITORING RULES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	MONITORING RULE	REQUIREMENTS
PM	CFR 60.42 Da (b)(1)	PM CEMS
	CFR 63.10000(c)	PM CEMS
SO_2	CFR 60.49Da (b)	SO_2 CEMS
	CFR 63 UUUUU Table 1	SO2 CEMS
Hg	CFR 63 UUUUU Table 1	Hg CEMS or sorbent trap
NO_X	CFR 60.49Da (c)	NO_X CEMS

EXHIBIT 220-CPU-AR-5

Testing Rules and Procedures for the EGU

30) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT

REGULATED AIR POLLUTANT	TESTING / PROCEDURES RULE	REQUIREMENTS
PM	CFR 60.50Da (b)	Method 5 / Method 19 / Method 3B / Method 202
	CFR 60.50Da (b)(1)	Work Practice Standards in 40 CFR 63 UUUUU Table 3
	CFR 63.10000(c)	Method 5 / Method 19 / Method 3A or 3B
SO_2	CFR 60.50Da (c)	Method 19
NO_X	CFR 60.50Da (d)	Method 19
Hg	CFR 63.10000(c)	CFR 63 UUUUU Appendix A

EXHIBIT 220-CPU-AR-6
TESTING, MONITORING, RECORDKEEPING AND REPORTING

35a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE.

PARAMETER	UNIT OF MEASURE	METHOD OF MEASUREMENT	FREQUENCY
SO_2	lb	CEMs	continuous
SO_2	ppm	CEMs	continuous
NO_x	lb	CEMs	continuous
PM	lb	CEMs	continuous
Hg	lb	CEMs or sorbent trap	continuous

EXHIBIT 220-CPU-AR-7
TESTING, MONITORING, RECORDKEEPING AND REPORTING

35b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED.

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
SO_2	Distributed Control System	Plant Manager	Plant Manager
NO_x	Distributed Control System	Plant Manager	Plant Manager
PM	Distributed Control System	Plant Manager	Plant Manager
Hg	Distributed Control System	Plant Manager	Plant Manager

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

FUGITIVE EMISSIONS DATA AND INFORMATION	*FOR AGENCY USE ONLY*
	ID NUMBER:
	EMISSION POINT #:
	DATE:

THIS FORM MAY BE COMPLETED FOR FUGITIVE EMISSION ACTIVITIES RATHER THAN COMPLETING AN EMISSION UNIT OR STAND ALONE FORM. FUGITIVE EMISSIONS ARE DEFINED AS THOSE EMISSIONS WHICH COULD NOT REASONABLY PASS THROUGH A STACK, CHIMNEY, VENT OR OTHER FUNCTIONALLY EQUIVALENT OPENING. NOTE THAT UNCAPTURED PROCESS EMISSION UNIT EMISSIONS ARE TYPICALLY NOT CONSIDERED FUGITIVE AND MUST BE ACCOUNTED FOR ON THE APPROPRIATE EMISSION UNIT OR STAND ALONE FORM. ANY EMISSIONS AT THE SOURCE NOT PREVIOUSLY ACCOUNTED FOR ON AN EMISSION UNIT OR STAND ALONE FORM MUST BE ACCOUNTED FOR ON THIS FORM.

SOME EXAMPLES OF EMISSIONS WHICH ARE TYPICALLY CONSIDERED FUGITIVE ARE;

- ROAD DUST EMISSIONS (PAVED ROADS, UNPAVED ROADS, AND LOTS)
- STORAGE PILE EMISSIONS (WIND EROSION, VEHICLE DUMP AND LOAD)
- LOADING/UNLOADING OPERATION EMISSION
- EMISSIONS FROM MATERIAL BEING TRANSPORTED IN A VEHICLE
- EMISSIONS OCCURRING FROM THE UNLOADING AND TRANSPORTING OF MATERIALS COLLECTED BY POLLUTION CONTROL EQUIPMENT
- EQUIPMENT LEAKS (E.G., LEAKS FROM PUMPS, COMPRESSORS, IN-LINE PROCESS VALVES, PRESSURE RELIEF DEVICES, OPEN-ENDED VALVES, SAMPLING CONNECTIONS, FLANGES, AGITATORS, COOLING TOWERS, ETC.)
- GENERAL CLEAN-UP VOM EMISSIONS

NOTE THAT TOTAL EMISSIONS FROM THE SOURCE (TS) ARE EQUAL TO SOURCE-WIDE TOTAL EMISSION UNIT EMISSIONS (PT) PLUS TOTAL FUGITIVE EMISSIONS (FT), E.G., TS = PT + FT.

SOURCE INFORMATION	
1) SOURCE NAME: Meredosia Energy Center	
2) DATE FORM PREPARED: 06/05/2013	3) SOURCE ID NO. (IF KNOWN): 137805AAA

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

APPLICATION PAGE _____

GENERAL INFORMATION

4) PROVIDE THE FOLLOWING INFORMATION FOR THE FUGITIVE EMISSION POINTS AT THE SOURCE INCLUDED IN THIS APPLICATION. SIMILAR POINTS MAY BE GROUPED TOGETHER.

NOTE: ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, FROM WHICH THE ABOVE EMISSIONS, WERE BASED AND LABEL AS EXHIBIT 391-1. IF THE ABOVE SPACE WAS NOT ADEQUATE , LIST ALL OTHER FUGITIVE POINTS AND INCLUDE THE REQUIRED INFORMATION ON THIS ATTACHMENT.

FOR PAVED AND UNPAVED ROADS, INCLUDE ROAD MILES (E.G., 6 MILES OF UNPAVED ROADS); FOR STORAGE PILES, INDICATE THE MATERIAL BEING STORED (E.G., 20 LIMESTONE STORAGE PILES); FOR EQUIPMENT LEAK POINTS, GROUP SIMILAR POINTS TOGETHER (E.G., 15 ORGANIC LIQUID PUMPS); FOR TRANSFER POINTS, IDENTIFY THE ORIGIN AND DESTINATION OF TRANSFER AND THE MATERIAL BEING TRANSFERRED (E G., 5 BELT TO BIN TRANSFERS OF CORN).

FUGITIVE POINT(S)	REGULATED AIR POLLUTANT(S)	UNCONTROLLED ANNUAL EMISSIONS (TONS/YR)	
		MAXIMUM	TYPICAL
See EXHIBIT 391-1			

5) ATTACH A DIAGRAM OF THE SOURCE THAT INDICATES THE LOCATION OF ALL FUGITIVE EMISSION POINTS. A SKETCH DRAWING WITH THE PROPER NOTATIONS IS SUFFICIENT. ALTERNATIVELY, THE REQUIRED INFORMATION MAY BE PLACED ON A COPY OF AN EXISTING PLAN OR MAP SUBMITTED WITH THIS APPLICATION (E.G., PLOT PLAN/MAP). ALSO INDICATE ON THIS DIAGRAM THE LOCATION OF ANY AMBIENT AIR MONITORING STATIONS. LABEL THIS DIAGRAM 391-2. NOTE: EQUIPMENT LEAK FUGITIVE EMISSION POINTS NEED NOT BE SHOWN ON THIS DIAGRAM.

APPLICABLE RULES

6) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATIONS(S) WHICH ARE APPLICABLE TO FUGITIVE EMISSIONS AT THE SOURCE (E.G., ROAD SEGMENT F, PM-10, IAC 212.316(d), OPACITY < OR = 10% AT 4 FT):

FUGITIVE POINTS(S)	REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
See EXHIBIT 391-3			

7) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE:

FUGITIVE POINTS(S)	REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
Coal Transfer	Opacity, PM	CFR 60.258	See rule text for requirements

IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS 391-3.

APPLICABLE RULES (CON'T)

8) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE:

FUGITIVE POINTS(S)	REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
Coal Transfer	Opacity, PM	CFR 60.258	See rule text for requirements

9) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE:

FUGITIVE POINTS(S)	REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
Coal Transfer	PM	CFR 60.256	See rule text for requirements

10) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE:

FUGITIVE POINTS(S)	REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
Coal Transfer	Opacity	CFR 60.257	See rule text for requirements

IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS 391-3.

COMPLIANCE INFORMATION

11) IS EACH FUGITIVE POINT IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? ☒ YES ☐ NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE -- ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

12) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

Initial compliance with 40 CFR Part 60 Subpart Y will be demonstrated as required in the rule text.

13) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

Continual compliance with 40 CFR Part 60 Subpart Y will be demonstrated as required in the rule text.

TESTING, MONITORING, RECORDKEEPING AND REPORTING

14a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	FUGITIVE POINT	METHOD OF MEASUREMENT	FREQUENCY
Throughput	All Points	System Weigh Scale	Monthly

b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS? ☒ YES ☐ NO

IF NO, EXPLAIN.

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND/OR SUBMITTAL TO THE AGENCY UPON REQUEST? ☒ YES ☐ NO

IF NO, EXPLAIN:

15a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

b) WHAT PARAMETER(S) IS(ARE) BEING MONITORED?

c) DESCRIBE THE LOCATION OF EACH MONITOR AND/OR MONITORING PROCEDURES:

d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? ☐ YES ☐ NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? ☐ YES ☐ NO

IF NO, EXPLAIN

f) IS EACH MONITOR OPERATED AT ALL TIMES THAT FUGITIVE EMISSIONS MAY OCCUR? ☐ YES ☐ NO

IF NO, EXPLAIN:

16) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 391-4:

FUGITIVE POINT(S)	TEST DATE	TEST METHOD	TESTING FIRM	OPERATING CONDITIONS	SUMMARY OF RESULTS

17) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

FUGITIVE POINT(S)	REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY

FUGITIVE DUST (complete if applicable)

18a) ARE OPACITY READINGS REQUIRED TO BE TAKEN? ☒ YES ☐ NO

IF YES, SPECIFY THE RELEVANT FUGITIVE POINT(S):

i) All points

ii) _____

iii) _____

b) SPECIFY THE FREQUENCY OF OPACITY READINGS:

c) IS USEPA METHOD 9 USED TO READ ALL VISIBLE EMISSIONS? ☒ YES ☐ NO

IF NO, EXPLAIN AND SPECIFY THE METHOD USED:

19) IS AN OPERATING PROGRAM FOR FUGITIVE PARTICULATE MATTER AND/OR PM10 CONTROL REQUIRED PURSUANT TO 35 ILL. ADM. CODE 212.309? ☐ YES ☒ NO

IF YES, HAS SUCH A PROGRAM PREVIOUSLY BEEN SUBMITTED TO THE AGENCY? ☐ YES ☐ NO

IF SUCH A PROGRAM HAS NOT BEEN SUBMITTED, IT SHOULD BE ATTACHED TO THIS FORM UPON SUBMITTAL AND LABELED AS 391-5.

20) IS THE SOURCE IN COMPLIANCE WITH 35 ILL. ADM. CODE 212.301 WHICH STATES THAT NO EMISSIONS SHALL BE VISIBLE BEYOND THE PROPERTY LINE OF THE SOURCE? ☒ YES ☐ NO

IF NO, EXPLAIN:

FUGITIVE VOM FROM EQUIPMENT LEAKS (complete if applicable)

21) INDICATE WHICH OF THE FOLLOWING METHODS WAS USED TO ESTIMATE FUGITIVE EMISSIONS OF VOM FROM EQUIPMENT LEAKS:

☐ AVERAGE EMISSION FACTOR ☐ LEAK/NO LEAK EMISSION FACTOR ☐ STRATIFIED EMISSION FACTOR ☐ LEAK RATE/SCREENING VALUE CORRELATION

☐ OTHER; (SPECIFY):

_____

ATTACH A COPY OF THE FINAL REPORT FOR ANY OF THE ABOVE TESTS THAT HAVE BEEN PERFORMED. THIS REPORT SHOULD SUMMARIZE THE TEST PROCEDURES AND RESULTS. LABEL AS 391-6.

22) IS THERE AN ACTIVE INSPECTION AND MONITORING PROGRAM OF EQUIPMENT LEAKS? ☐ YES ☐ NO

IF YES, PROVIDE A DESCRIPTION OF SUCH PROGRAM OR ATTACH THE INSPECTION PROGRAM TO THIS FORM AND LABEL AS 391-7:

FUGITIVE VOM FROM CLEANUP OPERATIONS (complete if applicable)

23) COMPLETE THE FOLLOWING FOR EACH VOM CONTAINING MATERIAL USED FOR CLEANUP FOR WHICH THE EMISSIONS ARE FUGITIVE AND HAVE NOT BEEN ACCOUNTED FOR ELSEWHERE IN THIS APPLICATION:

	GENERIC NAME OF CLEANUP MATERIAL	DENSITY (LB/GAL)	VOM CONTENT (WEIGHT %)	ANNUAL USAGE (GAL/YEAR) MAX	ANNUAL USAGE (GAL/YEAR) TYPICAL
a)					
b)					
c)					

24) EXPLAIN THE MEANS BY WHICH THESE MATERIALS ARE USED AND WHAT EQUIPMENT OR ITEMS ARE BEING CLEANED:

25a) ARE ALL VOM USED IN CLEANUP OPERATIONS CONSIDERED TO BE EMITTED? ☐ YES ☐ NO

IF NO, EXPLAIN:

b) IF APPLICABLE, COMPLETE ITEMS i, ii, AND iii BELOW:

i) PROVIDE THE MAXIMUM AND TYPICAL AMOUNT OF VOM RECLAIMED AND/OR SHIPPED OFF-SITE AND HENCE, NOT EMITTED:

	(GALSYR)	(TONS/YR)
MAX		
TYP		

ii) EXPLAIN THE MEANS BY WHICH VOM IS COLLECTED FOR RECLAMATION AND/OR DISPOSAL:

iii) EXPLAIN THE MEANS BY WHICH THE AMOUNT OF VOM COLLECTED IS MEASURED OR DETERMINED:

FUGITIVE CONTROL

26) COMPLETE THE FOLLOWING, INCLUDING THE MINIMUM AND TYPICAL REDUCTION EFFICIENCY FOR EACH CONTROL MEASURE UTILIZED:

	CONTROL MEASURES	REGULATED AIR POLLUTANT	FUGITIVE POINT(S) CONTROLLED	REDUCTION EFF.(%) MIN	REDUCTION EFF.(%) TYP	FREQUENCY OF CONTROL APPLICATION
a)	See EXHIBIT 391-8					
b)						
c)						
d)						
e)						

NOTE: IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS 391-8.

27) PROVIDE A DESCRIPTION OF EACH OF THE CONTROL MEASURES INDICATED IN ITEM 32. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS 391-9.

	CONTROL MEASURE(S)	DESCRIPTION
a)	Enclosure	A structure around the emission unit that reduces the affects of wind on particulate emitting sources.
b)	Wet Suppression	Water or chemical surfactant applied to the product to reduce particule emissions.

27) **(CONTINUED)** PROVIDE A DESCRIPTION OF EACH OF THE CONTROL MEASURES INDICATED IN ITEM 26. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS 391-9.

	CONTROL MEASURE(S)	DESCRIPTION
c)	Fabric Filter	Silo top filters that capture particulate emissions.
d)	Drift eleminators	Intrinsic part of cooling towers that reduce the amount of water droplets leaving the unit.
e)		
f)		
g)		
h)		

EXHIBIT 391-1
GENERAL INFORMATION

FUGITIVE POINTS	REGULATED AIR POLLUTANTS			UNCONTROLLED ANNUAL EMISSIONS (TONS/YR)				EMISSION CALCULATION WORKSHEET
				Maximum		Typical		
				PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$	
New Coal Transfer	PM	PM_{10}	$PM_{2.5}$	70.44	5.04	N/D	N/D	Attachment No. 2
Waste Ash Transfer	PM	PM_{10}	$PM_{2.5}$	3.17	2.67	N/D	N/D	Attachment No. 3
Lime Transfer	PM	PM_{10}	$PM_{2.5}$	N/A	N/A	N/D	N/D	Attachment No. 4
Trona Transfer	PM	PM_{10}	$PM_{2.5}$	N/A	N/A	N/D	N/D	Attachment No. 5
Cooling Tower Drift	PM	PM_{10}	$PM_{2.5}$	N/A	N/A	N/D	N/D	Attachment No. 7
Haul Roads	PM	PM_{10}	$PM_{2.5}$	N/A	N/A	N/D	N/D	Attachment No. 8

N/A indicates uncontrolled emissions not calcuated - PM controls are integral to process.
N/D indicates No Data

EXHIBIT 391-3
APPLICABLE RULES

6) PROVIDE ANY SPECIFIC EMISSION STANDARDS AND LIMITATIONS WHICH ARE APPLIABLE TO FUGITIVE EMISSIONS AT THE SOURCE:

FUGITIVE POINTS	REGULATED AIR POLLUTANTS	EMISSION STANDARDS	REQUIREMENTS
New Coal Transfer	Opacity	IAC 212.123(a)	Opacity <= 30 percent
	PM	IAC 212.321 (b)	PM <= 28.2 lbs/hr
	Opacity	CFR 60.254	Opacity <= 10 percent
Waste Ash Transfer	Opacity	IAC 212.123(a)	Opacity <= 30 percent
	PM	IAC 212.321 (b)	PM <=3.9 lbs/hr
Lime Transfer	Opacity	IAC 212.123(a)	Opacity <= 30 percent
	PM	IAC 212.321 (b)	PM <=3.9 lbs/hr
Trona Transfer	Opacity	IAC 212.123(a)	Opacity <= 30 percent
	PM	IAC 212.321 (b)	PM <=3.9 lbs/hr
Cooling Tower Drift	Opacity	IAC 212.123(a)	Opacity <= 30 percent
	PM	IAC 212.321 (b)	PM <= 13.7 lbs/hr
Haul Roads	Opacity	IAC 212.123(a)	Opacity <= 30 percent

EXHIBIT 391-8
GENERAL INFORMATION

FUGITIVE POINTS	REGULATED AIR POLLUTANTS			CONTROL MEASURES	FREQUENCY OF CONTROL APPLICATION	REDUCTION EFFICIENCY (%)		CONTROLLED ANNUAL EMISSIONS (TONS/YR)				EMISSION CALCULATION WORKSHEET
								Maximum		Typical		
						Minimum	Typical	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$	
Coal Transfer	$PM_{2.5}$	PM_{10}	PM	Fabric Filter	Continuous	Filter Guarantee	N/D	3.52	0.25	N/D	N/D	391-1.2 New Coal Transfer
Waste Ash Transfer	$PM_{2.5}$	PM_{10}	PM	Fabric Filter, Wet Suppression	Continuous	Filter Guarantee, 90%	N/D	2.59	2.58	N/D	N/D	391-1.3 Waste Ash Transfer
Lime Transfer	$PM_{2.5}$	PM_{10}	PM	Fabric Filter	Continuous	Filter Guarantee	N/D	3.06	3.06	N/D	N/D	391-1.4 Lime Transfer
Trona Transfer	$PM_{2.5}$	PM_{10}	PM	Fabric Filter	Continuous	Filter Guarantee	N/D	0.02	0.02	N/D	N/D	391-1.5 Trona Transfer
Cooling Tower Drift	$PM_{2.5}$	PM_{10}	PM	Drift Eliminators	Continuous	N/A	N/A	4.38	4.38	N/D	N/D	391-1.7 Cooling Tower Drift
Haul Roads	$PM_{2.5}$	PM_{10}	PM	Paved	Continuous	N/A	N/A	0.44	0.11	N/D	N/D	391-1.8 Haul Roads

N/D indicates No Data

State of Illinois
Pollution Control Board
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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the matter of:

SIERRA CLUB, Complainant, vs. AMERENENERGY MEDINA VALLEY COGEN, LLC and FUTUREGEN INDUSTRIAL ALLIANCE INC., Respondents.	)	PCB No. 2014-134 (Enforcement)

SIERRA CLUB'S MEMORANDUM IN OPPOSITION TO RESPONDENTS' MOTION TO EXPEDITE

Complainant Sierra Club respectfully submits its memorandum in opposition to Respondent FutureGen Industrial Alliance Inc.'s ("FutureGen") Motion to Expedite and further states as follows.

PROCEDURAL BACKGROUND

On June 11, 2014, Sierra Club filed this citizen enforcement action with the Illinois Pollution Control Board ("IPCB" or "Board") pursuant to the Illinois Environmental Protection

Act § 31(d), 415 ILCS 5/31(d), against Respondents AmerenEnergy Medina Valley Cogen, LLC and FutureGen Industrial Alliance Inc., alleging that their proposal to construct a new boiler (Unit No. 7) at the Meredosia Energy Center in Meredosia, Illinois (the "FutureGen project") without obtaining a Prevention of Significant Deterioration ("PSD") permit violates Section 9.1(d) of the Illinois Environmental Protection Act, 415 ILCS 5/9.1(d). The Respondents jointly filed a motion for summary judgment on July 15, 2014 and FutureGen separately filed the subject motion to expedite these proceedings pursuant to 35 Ill. Adm. Code § 101.512 on July 16, 2014.

LEGAL ARGUMENT

Illinois Administrative Code Section § 101.512(b) provides that "[i]n acting on a motion for expedited review, the Board will, at a minimum, consider . . . whether material prejudice will result from the motion being granted or denied." Thus, the potential for prejudice resulting from the granting or the denial of a motion for expedited consideration is typically the most important factor in assessing whether such a motion should be granted.

FutureGen's motion to expedite addresses only one side of the required prejudice analysis. FutureGen's motion boils down to a complaint about money. It claims that an expenditure deadline of September 30, 2015 imposed by the American Recovery and Reinvestment Act of 2009 ("ARRA"), Pub. L. No. 111-5, covers $1 billion in federal funds appropriated to fund the FutureGen and that the expenditure deadline might not be met as a consequence of Sierra Club's action. FutureGen's Memorandum in Support of Motion to Expedite at 3; Declaration of Kenneth Humphreys, Jr. ("Humphreys Decl.") at 2-3. That alleged expenditure deadline is still, however, more than a year away. FutureGen fails to explain how

that attenuated federal funding deadline is related to its alleged inability to obtain the additional private funding it describes, and, perhaps more importantly, how either alleged obstacle impedes its ability to start construction under the minor source construction permit currently in effect. FutureGen's Memorandum in Support of its Motion to Expedite at 3-5.

Instead, FutureGen obliquely refers to a requisite "commercial finance transaction" without which undefined DOE requirements cannot be satisfied, which will then "likely result in a decision by USDOE to withdraw ARRA funding for the project." Humphreys Decl. at ¶¶ 6, 9. The reasons that DOE may take such action are unclear. FutureGen also lists standard Board procedures and time frames as litigation risks resulting in "cost uncertainty" that will "adversely impact the Project's financing efforts and the availability of continued ARRA funding." *Id*. at ¶ 11.[1] Again, the connection between private financing efforts and the availability of the federal funding is unclear.

Further, FutureGen's motion fails to meaningfully consider the due process rights of Sierra Club, or the potential environmental harm that this action seeks to prevent, which ought to override any corporation's interest in future financing. Due Process Clause of the Illinois Constitution, Ill. Const. 1970, art. I, § 2. Undoubtedly, FutureGen has an interest in truncating this proceeding as much as possible. By doing so, it would significantly hamper Sierra Club's ability to obtain discovery and to develop and bolster its claim with informed expert witness

[1] Notably, FutureGen's motion to expedite laments the harm that will befall the project if they are forced to follow what they refer to as a "normal schedule," FutureGen's Memorandum in Support to Motion to Expedite at 4, while failing to indicate either what a "normal schedule" is before the Board or what the expedited schedule will be that FutureGen is seeking. See also Humphreys Decl. at 3 ("To maintain the Project's schedule and necessary compliance with the ARRA Spending Deadline, it is critical that the Claim be resolved as expeditiously as possible."). Without know what the difference will be between a "normal schedule" and an expedited one, it is difficult for Sierra Club to formulate a position with regard to FutureGen's motion.

testimony, both of which are critical to proving Sierra Club's claim against Respondents. However, those interests should not trump Sierra Club's due process rights, which in this situation should guarantee Sierra Club a reasonable opportunity to engage in discovery and to have its claims adjudicated in a fair and impartial manner over a reasonable period of time, in accordance with standard Board procedures and time frames. *See generally Jiotis v. Burr Ridge Park Dist.*, 2014 IL App (2d) 121293, at 24-30, 44-50 (Ill. App. Ct. 2d Dist. 2014); *Williams v. Covenant Med. Ctr.*, 316 Ill. App. 3d 682, 688 (Ill. App. Ct. 4th Dist. 2000).

Furthermore, Sierra Club's suit is designed to prevent the unlawful construction of a major source of air pollution without a required PSD permit. The potential harm to Sierra Club's membership and the environment that could flow from expediting this proceeding to such a degree that Sierra Club is incapable of adequately litigating its claim against Respondents, thereby allowing for the unlawful construction of the FutureGen project to commence, should outweigh any harm to Respondents due to an alleged risk of loss of financing dollars.

FutureGen's motion to expedite is premised on the erroneous propositions that Sierra Club's claims are meritless, Respondents will ultimately prevail in this case, and the only question to be assessed for purposes of the motion to expedite is what prejudice will result from a delay in defeating Sierra Club's case. Of course, no such decision on the merits has been reached, nor is it appropriate at this stage.

Moreover, the Board must take into account the harm that could be caused to all parties from inappropriately expediting the case and subsequently having Sierra Club prevail on the merits anyway, potentially following an appeal addressing a ruling on this motion to expedite. In that event, it would appear that the minor prejudice associated with allowing the litigation of

Plaintiffs' claims to proceed before the Board according to standard procedures and schedules would be dwarfed by the harm caused to FutureGen, the federal government and all the commercial lending institutions who loaned Respondents money to build what might subsequently be proven to be an unlawful project. Sierra Club would respectfully submit that it is more prudent to address Sierra Club's claims according to standard procedures and schedules than it is to artificially truncate this proceeding to prejudice Sierra Club and benefit Respondents.

Finally, because Sierra Club is unclear about precisely what sort of expedited schedule FutureGen is seeking, Sierra Club must oppose the motion. Without question, Sierra Club would be severely prejudiced if granting FutureGen's motion to expedite meant that Sierra Club would be denied the four (4) months of discovery that it is seeking through its Motion for Extension of Time and a Continuance to Allow for Discovery Necessary to Respond to Summary Judgment and Incorporated Memorandum in Support ("Motion for Continuance"), which is hereby incorporated by reference. *See also* Affidavit of Sierra Club's Kristin Henry at 2-6. As explained in the Motion for Continuance, Sierra Club needs approximately four (4) months to complete discovery relating to its claims. After that, Sierra Club needs some additional time to prepare for a hearing on the merits it claims. Consequently, an expedited schedule that is shorter than approximately five (5) months should be denied as it would result in significant prejudice to Sierra Club. On the other hand, if the Board were to impose an expedited five (5) to six (6) month schedule for this matter, Sierra Club anticipates that it could conclude discovery and be prepared to participate in an adjudicatory hearing within that time frame, and such a schedule would provide a cushion of approximately six (6) additional months for the Respondents to deal with the ARRA Spending Deadline.

CONCLUSION

For all the forgoing reasons, Sierra Club respectfully requests that Respondent FutureGen's motion to expedite be denied.

Respectfully submitted,

DATED: August 25, 2014

/s/ Eric Schwing (by consent)

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the matter of:

SIERRA CLUB,	)	
	)	
Complainant,	)	
	)	
vs.	)	
	)	PCB No. 2014-134
AMERENENERGY MEDINA VALLEY COGEN, LLC	)	(Enforcement)
	)	
and	)	
	)	
FUTUREGEN INDUSTRIAL ALLIANCE INC.,	)	
	)	
Respondents.	)	

SIERRA CLUB'S MOTION FOR EXTENSION OF TIME AND A CONTINUANCE TO ALLOW FOR DISCOVERY NECESSARY TO RESPOND TO SUMMARY JUDGMENT AND INCORPORATED MEMORANDUM IN SUPPORT

Pursuant to 35 Illinois Administrative Code ("Ill. Adm. Code") § 101.516(a) and Supreme Court Rule 191(b), Complainant Sierra Club hereby files this motion for an extension time and/or a continuance of four months to respond to Respondents' Motion for Summary Judgment and to allow Sierra Club to pursue the discovery necessary to adequately prepare its response, and incorporated memorandum in support, and further states as follows:

1. Sierra Club filed this citizens enforcement action pursuant to Illinois

Environmental Protection Act Section 31(d), 415 ILCS 5/31(d), against Respondents AmerenEnergy Medina Valley Cogen, LLC and FutureGen Industrial Alliance Inc. (collectively "Respondents") with the Illinois Pollution Control Board ("IPCB") on June 11, 2014.

2. As discussed in Sierra Club's Memorandum in Opposition to Defendants' Motion for Summary Judgment and Incorporated Memorandum in Support ("Opposition to Summary Judgment"), which is hereby incorporated by reference, Sierra Club's Complaint alleges that the Respondents' proposal to construct a new boiler (Unit No. 7) at the Meredosia Energy Center in Meredosia, Illinois (the "FutureGen project"), as configured and permitted, threatens to cause air pollution and violates Section 9.1(d) of the Illinois Environmental Protection Act, 415 ILCS 5/9.1(d) (which incorporates by reference Section 165 of the Clean Air Act, 42 U.S.C. § 7475, and all associated regulations) because the project lacks a Prevention of Significant Deterioration ("PSD") permit that is required for the construction, installation, modification and operation of the proposed new unit.

3. On July 15, 2014, prior to any discovery being conducted, Respondents filed a motion for summary judgment pursuant to 35 Ill. Adm. Code 101.516, Section 2-1005 of the Illinois Code of Civil Procedure, 735 ILCS 5/2-1005.

4. On July 29, 2014, Sierra Club filed a motion seeking a limited extension of the deadline for filing a response to Respondents' motion for summary judgment and the motion to expedite. 7/29/14 Sierra Club's Motion for Extension of Time to Respond to Motion for Summary Judgment and Motion to Expedite and Incorporated Memorandum in Support.

5. In that motion, Sierra Club explained that it ultimately intended to file this motion so that it could complete discovery and obtain the necessary information to respond to Respondents' motion for summary judgment. *Id*. at 3 n. 1.

6. On July 31, 2014, Sierra Club's motion for an extension was granted and the deadline for responding to both pending motions was extended to August 25, 2014. 7/31/14 Order Granting Mot. for Exten. at 1.

7. However, that Order stated that "no additional extensions will be given." *Id.*

8. As best Sierra Club can discern, Respondents' motion is premised solely on an issue of law; namely, the contention that since FutureGen project has received a minor source construction permit from the Illinois Environmental Protection Agency ("IEPA") issued pursuant to 35 Ill. Adm. Code § 201.142, which was based in part on IEPA's conclusion that the FutureGen project would result in a less than significant net emissions increase (in other words, that the project "net out" of PSD), Sierra Club is barred from pursuing an independent claim under Section 9.1(d) of the Illinois Environmental Protection Act, 415 ILCS 5/9.1(d) alleging that the FutureGen project is violating the PSD requirements. Def.['s] Mem. in Supp. of Summ. J. Mot. at 4-5, 6-8.

9. Despite submitting some ancillary minor source permitting documents and a declaration attempting to authenticate the same, Respondents' motion is clearly a *Celotex*-type motion.

10. It asserts that "IEPA has issued a Minor Source Construction Permit for the Project[,] . . . Defendants' construction of the Project is pursuant to the terms of this Permit and is lawful, and ***Sierra Club presents no arguments to the contrary***," Def.['s] Mot. for Summ. J. at 2 (emphasis added); and the associated memorandum in support also argues that "***there is no factual or legal basis to conclude that Defendants are in violation of state or federal law***," Def.['s]. Mem. in Supp. of Summ. J. Mot. at 8 (emphasis added).

11. In essence, Respondents assert that Sierra Club is completely incapable of acquiring the evidence necessary to prove its claims and, when construed broadly, these contentions purport to put Sierra Club to its proof on every conceivable fact and legal theory implicated by the litigation. *See generally Williams v. Covenant Med. Ctr.*, 316 Ill.App.3d 682, 688 (4th Dist. 2000) (citing *Celotex Corp. v. Catrett*, 477 U.S 317, 323 (1986)); *Jiotis v. Burr Ridge Park Dist.*, 2014 IL App (2d) 121293, at 24-30, 44-50 (2d Dist. 2014); *Willett v. Cessna Aircraft Co.*, 366 Ill.App.3d 360, 368-369 (1st Dist. 2006).

12. Although 35 Ill. Adm. Code § 101.516(a) allows for the filing of summary judgment motions at any time up until the last thirty (30) days before a hearing,[1] Illinois courts treat traditional and *Celotex*-type summary judgment motions very differently so far as the timing of filing is concerned.

13. Traditional summary judgment motions may be filed by defendants and resolved at any time, regardless of whether a plaintiff has had an opportunity for discovery. *See Williams*, 316 Ill.App.3d at 691; *Jiotis*, 2014 IL App (2d) 121293 at 12, 23.

14. If a need for discovery is evident to respond to some specific factual issue, plaintiffs may avail themselves to Supreme Court Rule 191 and ask for a continuance and discovery to obtain the evidence necessary to rebut such a traditional motion. *Williams*, 316 Ill.App.3d at 692; *Jiotis*, 2014 IL App (2d) 121293 at 28.

15. On the other hand, because *Celotex*-type summary judgment motions contend that a non-moving party is incapable of acquiring the evidence necessary to prove their claims, concepts of fundamental fairness dictate that these motions cannot be pursued prematurely, without giving plaintiffs a full and fair opportunity to conduct discovery and endeavor to substantiate their claims. *Willett*, 366 Ill.App.3d at 369 ("A Celotex-type motion is appropriate

[1] *See also* Section 2-1005 of the Illinois Code of Civil Procedure, 735 ILCS 5/2-1005.

only when the nonmovant has had an adequate opportunity to conduct discovery."); *Williams*, 316 Ill.App.3d at 691 ("a plaintiff should be given adequate time to gather evidence when a defendant makes a Celotex-type motion.") (citing *Hansbrough v. Kosyak*, 141 Ill.App.3d 538, 549 (4th Dist. 1986); *Jiotis*, 2014 IL App (2d) at 27-30, *see also* Due Process Clause of the Illinois Constitution, Ill. Const. 1970, art. I, § 2.

16. Consequently, premature *Celotex*-type summary judgment motions should be denied and parties confronting such motions prior to the completion of adequate discovery[2] must be excused from strict compliance with Supreme Court Rule 191 and afforded continuances to complete necessary discovery before being required to respond. *Williams*, 316 Ill.App.3d at 692 ("Rule 191(b) was adopted before *Celotex*-type motions were widely used and was never intended to apply to them" and "a plaintiff should not be required to comply with Rule 191(b) when a defendant files a premature *Celotex*-type motion" since without discovery, compliance may well be impossible); *Jiotis*, 2014 IL App (2d) at 23, 27-30 ("while section 2-1005(b) indeed states that a defendant may move for summary judgment at any time, it does not say that the trial court must immediately adjudicate the motion regardless of pending discovery."); *Hansbrough*, 141 Ill.App.3d at 549 ("a medical malpractice plaintiff should be afforded every reasonable opportunity to establish his case"); *Lamkin v. Towner*, 246 Ill.App.3d 201, 208-209 (5th Dist. 1993) (moving for continuance to obtain affidavits or additional discovery in opposition to

[2] In this case, there has been absolutely no discovery and Sierra Club's Complaint was only filed in June of 2014, while in *Williams*, 316 Ill.App.3d at 690-694, plaintiff's action had been ongoing for thirteen (13) months and, during that time, five (5) fact witness depositions had been completed. Nonetheless, discovery in *Williams* was deemed inadequate. Similarly, in *Hansbrough*, 141 Ill.App.3d at 549, the case had been ongoing for ten (10) months, discovery had been initiated but was still in progress and, after receiving a motion for summary judgment, plaintiffs failed to seek a continuance. In those circumstances, the court still concluded that discovery was inadequate and refused to award summary judgment. *Id*.

summary judgment deemed prudent but not required and ruling that plaintiffs should be given an opportunity "to present a factual basis for [their] action.").

17. As the Court of Appeals in *Jiotis*, 2014 IL App (2d) at 27-30, explained:

> Because a motion for summary judgment under section 2-1005 may be made by a defendant at any time, the plaintiff will often desire to conduct discovery before responding to the motion. *Id.* Doing so generally requires compliance with Rule 191(b), but ***this is not always the case. The trial court has discretion to permit a continuance for discovery without compliance with Rule 191(b), and, moreover, it is "critical that the respondent be given a reasonable opportunity to conduct discovery before summary judgment is rendered against him or her" in a case where the movant asserts that the nonmovant cannot prove a prima facie case and the movant does not have the burden of proof on the issue***. *Id.* . . . .
>
> This reasoning behind trial court discretion is sensible and persuasive. ***Discovery is intended, first and foremost, for the "ascertainment of truth, for the purpose of promoting either a fair settlement or a fair trial***." *Ostendorf v. International Harvester Co.*, 89 Ill. 2d 273, 282, 433 N.E.2d 253, 60 Ill. Dec. 456 (1982); *see also Mueller Industries, Inc. v. Berkman*, 399 Ill. App. 3d 456, 464, 927 N.E.2d 794, 340 Ill. Dec. 55 (2010) (noting that Illinois adheres to a strong policy of encouraging disclosure, with an eye toward ascertaining truth); *People v. Turner*, 367 Ill. App. 3d 490, 499, 854 N.E.2d 1139, 305 Ill. Dec. 229 (2006) (discovery rules prevent surprise or unfair advantage by either party and aid in search for the truth). . . . ***When the nonmovant has had ample time for discovery, and does not even request a continuance for discovery, there is no reason why noncompliance with Rule 191(b) should be excused***; the rule clearly outlines the procedure to be followed for procuring necessary affidavits containing material facts that are unavailable to the nonmovant when the summary judgment motion is filed. It acts, therefore, as a shield for the nonmovant: if, for instance, the movant is in sole possession of material facts relevant to summary judgment that have yet to come out through discovery, Rule 191(b) can stay the disposition of summary judgment until the nonmovant can procure the affidavits that it knows it needs to respond to the motion.
>
> ***However, to demand strict compliance with Rule 191(b) before adequate discovery—before a party even knows the identity of witnesses who can provide material facts—turns Rule 191(b) from a procedural safeguard for the nonmovant into a tactical weapon for the movant. By the letter of Rule 191(b), the affiant moving under the rule must name the persons whose affidavits it cannot procure, list why the affidavits cannot be procured, and provide what the affiant believes the affidavits would say. This can be an impossible task without at least a reasonable amount of discovery that both parties fairly and in good faith participate in.*** . . .

> ***Essentially**, . . . **it is basic fairness that dictates that a plaintiff, whose complaint has survived a motion to dismiss, is entitled to investigate and attempt to substantiate his claims before facing a motion for summary judgment that claims that he is unable to prove his case. Strict compliance with Rule 191(b) is not required for a Celotex-type motion, and this position comports with the truth-finding spirit of discovery and the trial court's broad discretion in handling discovery matters.***

(emphasis added).

18. As explained in Sierra Club's Opposition to Summary Judgment, Respondents' motion is based on an erroneous legal position and any admissible factual evidentiary support contained within it fails to establish that Sierra Club is incapable of prevailing on its claims in this forum.

19. Consequently, Respondents have failed to satisfy their burden of production, let alone their burden of persuasion, and the motion for summary judgment should therefore be denied on that basis. *Marquette Nat'l Bank v. Heritage Pullman Bank & Trust Co.*, 109 Ill.App.3d 532, 535 (1st Dist. 1982) ("even though the party opposing the motion for summary judgment fails to file counteraffidavits, the moving party should not be awarded summary judgment unless the affidavits filed in support of the motion establish the judgment as a matter of law"); *Malone v. Am. Cyanamid Co.*, 271 Ill.App.3d 843, 845-46 (4th Dist. 1995) ("unless the moving party presents evidence that precludes any possible liability" and "would clearly entitle him to judgment as a matter of law," the nonmoving need not submit counteraffidavits and may instead "rely solely upon his pleadings to create a material question of fact . . . .") (citing *Motz v. Central National Bank*, 119 Ill.App.3d 601, 604-05 (1st Dist. 1983)).

20. Despite these sound arguments for denying Respondents' summary judgment

motion outright, there is a lingering risk that Sierra Club is currently obliged to respond to the pending motion for summary judgment in full, with affidavits addressing the expansive range of factual and highly technical issues that are in dispute and without the benefit of discovery.

21. To address this risk, Sierra Club moves pursuant to 35 Ill. Adm. Code § 101.516(a) and Supreme Court Rule 191(b) for an extension of time and/or a continuance of four (4) months from the date this motion is ruled on to respond to the pending motion for summary judgment.

22. This request for an extension or continuance is necessary to allow Sierra Club sufficient time to complete discovery and obtain the affidavits and/or other admissible evidence substantiating disputed factual issues relating to the pending motion that Sierra Club would otherwise be unable to procure.

23. Only with this (or a comparable) extension, coupled with a reasonable opportunity to engage in discovery, will Sierra Club be capable of preparing a complete response to Respondents' motion for summary judgment.

24. If the Board refuses to deny Respondents' motion outright, then, despite the Hearing Officer's indication that no additional extensions shall be granted, the pertinent case law demonstrates that Sierra Club should be excused from full compliance with Supreme Court Rule 191,[3] and Sierra Club's request for extension and/or a continuance set forth herein should be

[3] Supreme Court Rule 191(b) provides:

> If the affidavit of either party contains a statement that any of the material facts which ought to appear in the affidavit are known only to persons whose affidavits affiant is unable to procure by reason of hostility or otherwise, naming the persons and showing why their affidavits cannot be procured and what affiant believes they would testify to if sworn, with his reasons for his belief, the court may make any order that may be just, either granting or refusing the motion, or granting a continuance to permit affidavits to be obtained, or for submitting interrogatories to or taking the depositions of any of the persons so named, or for producing papers or documents in the possession of those persons or furnishing sworn copies thereof. The interrogatories and sworn answers thereto, depositions so taken, and

granted. *See Williams*, 316 Ill.App.3d at 692; *Jiotis*, 2014 IL App (2d) at 23, 27-30; *Hansbrough*, 141 Ill.App.3d at 549 ("a medical malpractice plaintiff should be afforded every reasonable opportunity to establish his case"); *Lamkin*, 246 Ill.App.3d at 208-209 (moving for continuance to obtain affidavits or additional discovery in opposition to summary judgment deemed prudent but not required and ruling that plaintiffs should be given an opportunity "to present a factual basis for [their] action.").

25. In support of this motion, Sierra Club submits the attached Affidavit of Kristin Henry, who is counsel on this case and an employee and representative of Complainant Sierra Club. Kristin Henry Affidavit ("Henry Aff.") at 1 (Ex. 1).

26. As provided in Ms. Henry's Affidavit, Sierra Club did comment on the FutureGen project's minor source air permit. *Id.* at 2.

27. However, Sierra Club did not appeal that permit because no mechanism for doing so is provided under Illinois and federal law. *Id.*

28. On December 9, 2013. Sierra Club filed a Clean Air Act citizen suit action against the Respondents in U.S. District Court for the Eastern District of Illinois which alleged claims premised directly on the federal Clean Air Act, 42 U.S.C. § 7401. *Id.*

29. On June 9, 2014, the federal court dismissed that case without prejudice based on the *Burford* abstention doctrine without reaching the merits. *Id.*; *Sierra Club, Inc. v. Futuregen Indus. Alliance*, 2014 U.S. Dist. LEXIS 77902, at *9-13 (C.D. Ill. 2014).

> sworn copies of papers and documents so furnished, shall be considered with the affidavits in passing upon the motion.

Mandating strict compliance with this provision would require, *inter alia*, that Sierra Club retain and disclose all expert witnesses and describe the anticipated substance of their testimony and opinions during the initial phase of this litigation, prior to any discovery being conducted and with no commensurate obligation imposed on the Defendants to do the same. This would severely prejudice Sierra Club in this litigation and is patently unfair, particularly given the cursory nature of Defendants' motion.

30. Consequently, Sierra Club has never been allowed an opportunity to address the merits of its claims asserted in its federal citizen suit in any adjudicatory forum and has never had an opportunity to engage in any discovery regarding those claims. Henry Aff. at 2.

31. As Ms. Henry's Affidavit at 2-5 and Sierra Club's Opposition to Summary Judgment explains, there are a number of legal theories encompassed by the Complaint which, with adequate discovery and supported by expert testimony, should provide Sierra Club with a sound legal basis for prevailing on the merits of its claim that a PSD permit is required for the FutureGen Project, despite the fact that FutureGen has obtained a minor source permit.

32. The first legal theory is that FutureGen project, as configured and permitted, cannot net out of PSD because the units that have allegedly been permanently retired from the existing Meredosia Energy Center (Units 1-6) and the new Unit No. 7, which comprises the FutureGen project, are not all under common ownership or control and, therefore, no netting between those sources is allowed. *See* 40 C.F.R. § 52.21(b)(3)(i))(definition of "net emissions increase"); 40 C.F.R. § 52.21(b)(1)(i)(a)) (definition of "major stationary source"); 40 C.F.R. § 52.21(b)(5) (definition of "stationary source"); 40 C.F.R. § 52.21(b)(6) (definition of "building, structure, facility, or installation")); HenryAff. at 2-3.

33. Sierra Club not been privy to any of the specific details of the sale agreement between the two Respondents and, accordingly, comprehensive discovery addressing the sale agreement between the Respondents and the fact intensive issue of common ownership and control should be allowed, so that Sierra Club will have a fair opportunity to prove that the FutureGen project lacks sufficient creditable emissions decreases to lawfully net out of PSD. Henry Aff. at 2-3.

34. The second legal theory is that the FutureGen project, as configured and permitted, cannot net out of PSD because the emission decreases from the pre-existing Meredosia Energy Center units are not "creditable" since they lack "approximately the same qualitative significance for public health and welfare as that attributed to the increase" from the project. *See* 40 C.F.R. § 52.21(b)(3)(vi)(c). Henry Aff. at 3-4.

35. Sierra Club intends to prove that the emission increases from the proposed FutureGen project will cause or contribute to NAAQS violations for sulfur dioxide (SO2) , nitrogen oxides (NOx) and/or fine particulate matter ("PM-2.5"), and that, due to substantial differences in the qualitative significance of the impacts on public health and welfare associated with these emissions increases and the emission decreases from the allegedly retired Meredosia Energy Center units, the decreases from the units at the Meredosia Energy Center, which are essential to netting the FutureGen project out of PSD, cannot lawfully be credited in the FutureGen PSD netting analysis. 40 C.F.R. § 52.21(b)(3) (vi)(c); Henry Aff. at 3-4,

36. However, Sierra Club has never had any opportunity to obtain the underlying air modeling files relating to the FutureGen project, much less to engage in any discovery relating to the input assumptions, meteorological data relied on, and emissions inputs that formed the basis for any modeling relating to the FutureGen project. Henry Aff. at 4.

37. To provide Sierra Club with a fair opportunity to prove that the FutureGen project lacks sufficient creditable emissions decreases to lawfully net out of PSD, comprehensive discovery relating to air modeling issues must be allowed. *Id*.

38. The third legal theory is that the FutureGen project, as configured and permitted, cannot net out of PSD because the net emissions increase of sulfuric acid mist ("SAM") from the project will exceed the SAM significance threshold of 7 tons per year (and the net emissions

increases from other pollutants may likewise exceed their respective significant thresholds). *Id*. at 4-5.

39. Sierra Club intends to prove this primarily with expert testimony addressing rounding errors and the lack of practically enforceable emission limits and other operational requirements which are necessary to ensure that the FutureGen project's potential to emit does not exceed pertinent significance levels. *Id*.

40. Again, no discovery has been engaged in with regard to this critical subset of issues. *Id.* at 5.

41. Accordingly, discovery addressing these issues relating to SAM emissions (as well as emissions of other PSD pollutants) should be allowed so that Sierra Club will have a fair opportunity to prove the FutureGen project will trigger PSD because the project will result in an actual emissions increase and a net emissions increase of SAM (and likely most other PSD pollutants) in excess of the applicable PSD significance level. *Id.* at 5.

42. The critical facts and other evidence necessary to conclusively demonstrate that a genuine dispute of material fact exists precluding summary judgment consistent with the three exemplary legal theories outlined above (as well as other theories encompassed by allegations in Plaintiff's Complaint) are in the possession of other persons or entities and/or must be derived from expert analysis of facts, data and information that is not yet available to Sierra Club. *Id*. at 5.

43. Sierra Club cannot procure that critical evidence without an opportunity to engage in substantial and comprehensive discovery. *Id*.

44. Sierra Club could potentially identify some of the consultants that it may ultimately

retain to testify as expert witnesses in this case but those consultants are not prepared to offer sworn testimony at this time without the benefit of reviewing the pertinent technical documentation and data and the relevant testimony from material witnesses which must be obtained from the parties, who are hostile to Sierra Club, and other entities, including, without limitation, IEPA. *Id*. at 5.

45. Similarly, Sierra Club could speculate about which third party fact witnesses might have knowledge of disputed issues of fact in this case but, without discovery, Sierra Club has no way of knowing the extent of those witnesses' testimony. *Id*. at 5-6.

46. Furthermore, as noted above, it would be extremely prejudicial to require Sierra Club to disclose all potential expert witnesses or to identify all the third party fact witnesses who have knowledge of relevant facts and to speculate about the extent of those witnesses' knowledge is at this juncture, when no discovery has taken place and no deadline for the disclosure of expert witnesses has been established. *Id*. at 6.

47. In this context, Respondents should not be allowed to force such a result by filing a premature and conclusory summary judgment motion.

48. For all the forgoing reasons and for good cause shown, Sierra Club respectfully requests that this motion be granted as requested and that Sierra Club be afforded four (4) months from the date this motion is ruled on to complete fact and expert discovery in this case before having to fully respond to Respondents' motion for summary judgment.

Respectfully submitted,

DATED: August 25, 2014

/s/ Eric Schwing (by consent)

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the matter of:

SIERRA CLUB,	)	
	)	
Complainant,	)	
	)	
vs.	)	
	)	PCB No. 2014-134
AMERENENERGY MEDINA VALLEY COGEN, LLC	)	(Enforcement)
	)	
and	)	AFFIDAVIT OF KRISTIN HENRY
	)	
	)	
	)	
	)	
FUTUREGEN INDUSTRIAL ALLIANCE INC.,	)	
	)	
	)	
Respondents.	)	

I, Kristin Henry, being duly sworn on oath, depose and state as follows:

1. I am over eighteen (18) years of age, have personal knowledge of all the matters addressed herein, and am competent to testify regarding all those matters.

2. I am an employee of the Sierra Club, the Complainant in this case.

3. I am submitting this affidavit in my capacity as Sierra Club's representative.

4. On November 8, 2013, Sierra Club submitted public comments to the Illinois Environmental Protection Agency ("IEPA") on the draft minor source air permit proposed for what IEPA referred to as the Ameren Energy Resources and FutureGen Industrial Alliance

Construction Permit for the FutureGen 2.0 Project (137805AAA) Application No.: 12020013 (hereinafter "FutureGen project.").

5. After the issuance of that minor source air permit, Sierra Club did not appeal IEPA's decision to issue that permit because Sierra Club understood that no provision of Illinois or federal law allowed for such an appeal.

6. On December 9, 2013, Sierra Club filed a Clean Air Act citizen suit action against the Respondents in U.S. District Court for the Eastern District of Illinois which alleged claims premised directly on the federal Clean Air Act, 42 U.S.C. § 7401 *et seq.*, not on Illinois state law.

7. On June 9, 2014, the federal court dismissed that case without prejudice based on the *Burford* abstention doctrine. *Sierra Club, Inc. v. Futuregen Indus. Alliance*, 2014 U.S. Dist. LEXIS 77902, at *9-13 (C.D. Ill. 2014).

8. Consequently, the merits of Sierra Club's claims asserted in its federal citizen suit in have never been addressed in any adjudicatory forum and Sierra Club has never had an opportunity to engage in any discovery regarding those claims in any forum.

9. There are a number of legal theories encompassed by Sierra Club's Complaint which, with adequate discovery and supported by expert testimony, should provide Sierra Club with a basis for prevailing on its claim that a PSD permit is required for the FutureGen Project, despite the fact that FutureGen has obtained a minor source permit.

10. Sierra Club's first legal theory is that FutureGen project, as configured and permitted, cannot net out of PSD because the units that have allegedly been permanently retired from the existing Meredosia Energy Center (Units 1-6) and the new Unit No. 7, which comprises the FutureGen project, are not all under common ownership or control and, therefore, no netting between those sources is allowed. *See* 40 C.F.R. § 52.21(b)(3)(i)(definition of "net emission

increase"); 40 C.F.R. § 52.21(b)(1)(i)(a)) (definition of "major stationary source"); 40 C.F.R. § 52.21(b)(5) (definition of "stationary source"); 40 C.F.R. § 52.21(b)(6) (definition of "building, structure, facility, or installation")).

11. Sierra Club has not been privy to the specific details of the sale agreement between the two Respondents.

12. Sierra Club needs discovery addressing the sale agreement between the Respondents and the fact intensive issue of common ownership and control in order to endeavor to prove its claim by showing that the FutureGen project lacks sufficient creditable emissions decreases to lawfully net out of PSD.

13. Sierra Club's second legal theory is that the FutureGen project, as configured and permitted, cannot net out of PSD because the emission decreases from the pre-existing Meredosia Energy Center units are not "creditable" since they lack "approximately the same qualitative significance for public health and welfare as that attributed to the increase" from the project. *See* 40 C.F.R. § 52.21(b)(3)(vi)(c).

14. To establish liability under this theory, Sierra Club intends to demonstrate, primarily through expert testimony and analysis relating to air modeling issues, that the increases from the proposed FutureGen project will cause or contribute to a NAAQS violation for sulfur dioxide (SO2) , nitrogen oxides (NOx) and/or fine particulate matter ("PM-2.5"), see 40 C.F.R. § 52.21(b)(3) (vi)(c).

15. Sierra Club contends that once this is proven, the FutureGen project will be prohibited pursuant to 40 C.F.R. § 52.21(b)(3)(vi)(c) from relying on the prior reductions in emissions from the allegedly retired units at the Meredosia Energy Center in any PSD analysis for the FutureGen project because of the substantial difference in impacts on public health and

welfare between the emission increases from the proposed FutureGen project and the decreases from the retired Meredosia Energy Center units.

16. Consequently, Sierra Club maintains that it can prove its claims against Respondents that the FutureGen project lacks sufficient creditable emissions decreases to lawfully net out of PSD through to use of air modeling analyses and related testimony.

17. Sierra Club has not had any opportunity to obtain all of the underlying air modeling files relating to the FutureGen project or to engage in any discovery relating to the input assumptions, meteorological data relied on, and emissions inputs that formed the basis for any modeling relating to the FutureGen project.

18. Sierra Club needs comprehensive discovery addressing air modeling issues in order to endeavor to prove its claim by showing that the FutureGen project lacks sufficient creditable emissions decreases to lawfully net out of PSD.

19. Sierra Club's third legal theory is that the FutureGen project, as configured and permitted, cannot net out of PSD because the net emissions increase of sulfuric acid mist ("SAM") from the project will exceed the SAM significance threshold of 7 tons per year and the net emissions increases from other pollutants may likewise exceed their respective significant thresholds.

20. Sierra Club anticipates proving this primarily with expert testimony addressing rounding errors and the lack of practically enforceable emission limits and other critical operational requirements which are necessary to ensure that the FutureGen project's potential to emit does not exceed relevant significance levels.

21. Sierra Club has had no opportunity to engage in discovery regarding these issues.

22. Sierra Club needs comprehensive discovery addressing the issues relating to SAM emissions and other PSD pollutants to endeavor to prove that the FutureGen project will trigger PSD because the project will result in emissions increases of SAM (and other PSD pollutants) in excess of the applicable PSD significance level.

23. The critical facts and other evidence necessary to fully and conclusively demonstrate that a genuine dispute of material fact exists precluding summary judgment consistent with the three exemplary legal theories outlined above, as well as other theories encompassed by claim set forth in Plaintiff's Complaint, are in the possession of other persons or entities and/or must be derived from expert analysis of facts, data and information that is not yet available to Sierra Club.

24. Sierra Club cannot procure that evidence without an opportunity to engage in discovery.

25. Although Sierra Club could potentially identify some of the consultants that it may ultimately retain to testify as expert witnesses in this action, those consultants are not prepared to provide sworn testimony at this time without reviewing the pertinent technical documentation and data and the relevant testimony from material witnesses which must be obtained from the Respondents, who are hostile to Sierra Club, and other entities, such as IEPA.

26. Similarly, Sierra Club could speculate about which third party fact witnesses might have knowledge of disputed issues of fact in this case. However, without discovery, Sierra Club has no reliable way to predicting the extent of the knowledge of those third party witnesses or whether their testimony will fully support Sierra Club's claims.

27. Moreover, at this juncture, it would be prejudicial to Sierra Club's interests

in the litigation to be forced to disclose all of its potential expert witnesses and attempt to identify all the third party fact witnesses who have knowledge of relevant facts and to engage in speculation about the extent of those witnesses' knowledge, when no discovery has taken place and no deadline for the disclosure of expert witnesses has been established.

FURTHER AFFIANT SAYETH NAUGHT.

Dated: August 25, 2014

Kristin Henry

STATE OF CALIFORNIA
COUNTY OF SAN FRANCISCO

The foregoing instrument was acknowledged before me this 25th day of August, 2014, by Kristin Henry, who is personally known to me or has produced CA LICENSE as identification and who did/did not take an oath.

WITNESS my hand and official seal, this 25TH day of AUGUST, 2014.

NOTARY PUBLIC

My commission expires: SEPTEMBER 9TH, 2015

NICHOLAS JAMES LIFE
Commission # 1951418
Notary Public - California
San Francisco County
My Comm. Expires Sep 9, 2015

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the matter of:

SIERRA CLUB,	)	
	)	
Complainant,	)	
	)	
vs.	)	
	)	PCB No. 2014-134
AMERENENERGY MEDINA VALLEY COGEN, LLC	)	(Enforcement)
	)	
and	)	
	)	
FUTUREGEN INDUSTRIAL ALLIANCE INC.,	)	
	)	
Respondents.	)	

SIERRA CLUB'S MOTION TO STRIKE AND INCORPORATED MEMORANDUM IN SUPPORT

Pursuant to Section 2-615 of the Illinois Code of Civil Procedure, 735 ILCS 5/2-615, and Supreme Court Rule 191(a), Complainant Sierra Club hereby files this motion to strike and incorporated memorandum in support and further states as follows:

1. Sierra Club filed this citizen enforcement action pursuant to Illinois Environmental Protection Act Section 31(d), 415 ILCS 5/31(d), against Respondents AmerenEnergy Medina Valley Cogen, LLC and FutureGen Industrial Alliance Inc. (collectively "Respondents") with the Illinois Pollution Control Board ("IPCB") on June 11, 2014.

2. Sierra Club's Complaint alleges, *inter alia*, that the Respondents' proposal to

construct a new boiler (Unit No. 7) at the Meredosia Energy Center in Meredosia, Illinois (the "FutureGen project"), as configured and permitted, threatens to cause air pollution and violates Section 9.1(d) of the Illinois Environmental Protection Act, 415 ILCS 5/9.1(d) (which incorporates by reference Section 165 of the Clean Air Act, 42 U.S.C. § 7475, and all associated regulations), because the project lacks a Prevention of Significant Deterioration ("PSD") permit that is required for the construction, installation, modification and operation of the proposed new unit.

3. On July 15, 2014, prior to any discovery being conducted, Respondents filed a motion for summary judgment pursuant to 35 Ill. Adm. Code 101.516, Section 2-1005 of the Illinois Code of Civil Procedure, 735 ICLS 5/2-1005.

4. Respondents' Memorandum in Support of its Motion for Summary Judgment ("Resp. Memo. in Supp.") at 4-5 contains a statement of allegedly "Undisputed Material Facts" and relies on several documents purportedly authenticated by Respondents' counsel, Renee Cipriano, Esq. which were derived from the FutureGen minor source air permitting process.

5. One of these documents is the Illinois Environmental Protection Agency ("IEPA") Responsiveness Summary for Public Questions and Comments on the Applications for Air Pollution Control, dated December 2013 ("IEPA Responsiveness Summary.") Resp. Memo. in Supp. at Ex. 3.

6. Specifically, Respondents' memorandum in support of its motion for summary judgment at 4, n. 3 provides:

> The Sierra Club provided extensive comments about the Project during the IEPA permit review process. SierraClub's written comments ("Sierra Club Comments") are filed with the Cipriano Declaration filed herewith as Exhibit 2. The Sierra Club comments included claims that the Project was subject to the PSD permit requirements. (*See* Sierra Club Comments at 2.) IEPA considered and addressed in detail the Sierra Club comments when it issued the final

> Construction Permit for the Project and, in so doing, revised the draft construction permit to account for relevant comments raised by the Sierra Club and other commenters. (*See generally* Responsiveness Summary for Public Questions and Comments on the Applications for Air Pollution Control ("Responsiveness Summary"), filed with the Cipriano Declaration filed herewith as Exhibit 3.)

7. Illinois Supreme Court Rule 19l(a) governs the content of affidavits filed in support of motions for summary judgment and requires that affidavits filed in support of such motions:

> shall be made on the personal knowledge of the affiants; shall set forth with particularity the facts upon which the claim, counterclaim, or defense is based; shall have attached thereto sworn or certified copies of all papers documents upon which the affiant relies; ***shall not consist of conclusions but of facts admissible in evidence***; and shall affirmatively show that the affiant, if sworn as a witness, can testify competently thereto.

(emphasis added).

8. Accordingly, legal conclusions and inadmissible hearsay may not be relied on to support a motion for summary judgment. *Gassner v. Raynor Mfg. Co.*, 409 Ill. App. 3d 995, 1005, (Ill. App. Ct. 2d Dist. 2011) (affidavits supporting summary judgment may not contain conclusions, opinions, unsupported assertions); *MC Baldwin Fin. Co. v. DiMaggio*, 364 Ill. App. 3d 6, 21 (Ill. App. Ct. 1st Dist. 2006) (refusing to give any consideration to legal conclusions in affidavit in summary judgment context) (citing *Geary v. Telular Corp.*, 341 Ill. App. 3d 694, 699 (Ill. App. Ct. 1st Dist. 2003)); *Kellman v. Twin Orchard Country Club*, 202 Ill. App. 3d 968, 973-974 (Ill. App. Ct. 1st Dist. 1990) (inadmissible hearsay in affidavit may not be considered in ruling on summary judgment motion); *In re Estate of Berry*, 277 Ill. App. 3d 1088, 1093 (Ill. App. Ct. 5th Dist. 1996) ("The hearsay rule prohibits introducing into evidence a written or oral out-of-court statement offered to prove the truth of the matter asserted.") (citing *People v. Lawler*, 142 Ill. 2d 548, 557 (Ill. 1991)); *see also* Ill. R. Evid. 801.

9. The IEPA's Responsiveness Summary is filled with IEPA's legal conclusions

and hearsay, all of which are inadmissible.

10. For these reasons, to the extent that Respondents' motion for summary judgment relies in any manner on any statements made in IEPA's Responsiveness Summary, Sierra Club hereby moves for the Board to strike the Responsiveness Summary from Respondents' motion in its entirety.

11. For all the forgoing reasons and for good cause shown, Sierra Club respectfully requests that this motion be granted as requested.

Respectfully submitted,

DATED: August 25, 2014

/s/ Eric Schwing (by consent)

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the matter of:

SIERRA CLUB, Complainant, vs. AMERENENERGY MEDINA VALLEY COGEN, LLC and FUTUREGEN INDUSTRIAL ALLIANCE INC., Respondents.	)	PCB No. 2014-134 (Enforcement)

CERTIFICATE OF SERVICE

I, the undersigned, certify that on August 25, 2014, I have caused true and correct copies of (1) SIERRA CLUB' S MEMORANDUM IN OPPOSITION TO RESPONDENTS' MOTION FOR SUMMARY JUDGMENT; (2) SIERRA CLUB'S MEMORANDUM IN OPPOSITION TO FUTUREGEN'S MOTION TO EXPEDITE; (3) DECLARATION OF KRISTIN HENRY; (4) SIERRA CLUB'S MOTION FOR EXTENSION OF TIME AND A CONTINUANCE TO ALLOW FOR DISCOVERY NECESSARY TO RESPOND TO SUMMARY JUDGMENT AND INCORPORATED MEMORANDUM IN SUPPORT; and (5) SIERRA CLUB'S MOTION TO STRIKE AND INCORPORATED MEMORANDUM IN SUPPORT, to be served by First Class U.S. Mail, upon the following persons in the above-captioned matter:

AMERENENERGY MEDINA ALLIANCE VALLEY COGEN, LLC
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as authorized by the Clerk of the Illinois Pollution Control Board under 35 Ill. Admin. Code §§ 101.302(c), 101.304(c).

DATED: August 25, 2014

/s/ Eva Schueller

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