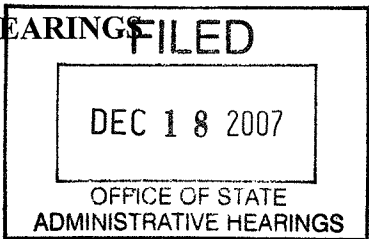


BEFORE THE OFFICE OF STATE ADMINISTRATIVE HEARINGS
STATE OF GEORGIA



FRIENDS OF THE
CHATTAHOOCHEE, INC. and
SIERRA CLUB,

Petitioners,

v.

DR. CAROL A. COUCH, DIRECTOR,
ENVIRONMENTAL PROTECTION
DIVISION, GEORGIA DEPARTMENT OF
NATURAL RESOURCES,

Respondent,

and

LONGLEAF ENERGY
ASSOCIATES, LLC,

Intervenor.

Docket No.: OSAH-BNR-AQ-0732139-60-
Howells

**MEMORANDUM OPINION AND ORDER
ON MOTIONS FOR SUMMARY DETERMINATION**

Introduction

On May 14, 2007, Dr. Carol A. Couch, Director of the Environmental Protection Division (“EPD”) of the Georgia Department of Natural Resources (“Respondent”) issued a Prevention of Significant Deterioration (“PSD”) Air Quality Permit No. 4911-099-0030-P-01-0 (“Permit”) to Longleaf Energy Associates, LLC (“Intervenor”).¹ (Pet., Ex. A). The Permit authorizes Intervenor to construct and operate a 1,200 megawatt coal fired electric generating station. On June 13, 2007, Petitioner, Friends of the Chattahoochee, Inc. (“FOC”) and Petitioner,

¹ Available at <http://www.georgiaair.org/airpermit/psd/dockets/longleaf/permitdocs/0990030final.pdf> (last visited November 20, 2007).

Sierra Club, hereinafter “Petitioners,” filed a Petition for Hearing (“Petition”) to appeal Respondent’s decision to issue the Permit.²

Procedural Background

On July 19, 2007, pursuant to OSAH Rule 15, Intervenor filed a motion for summary determination on Counts I, X, XI, and XV of the Petition. *See* GA. COMP. R. & REGS. r. 616-1-2-.15 (2007). On July 20, 2007, Respondent also filed a motion for summary determination on Counts I, X, XI, and XV of the Petition. Additionally, on July 20, 2007, Intervenor and Respondent filed separate motions for partial summary determination on Counts II, V, and VII of the Petition. On August 13, 2007, Petitioners filed a collective response to the motions for summary determination filed by Respondent and Intervenor.

A hearing on the motions for summary determination was held on August 17, 2007. After the hearing, this Tribunal issued an oral ruling granting the motions for summary determination as to Counts I, X, and XI. This Tribunal deferred ruling on the motions for summary determination as to Count XV and partial summary determination as to Counts II, V, and VII, to allow Petitioners to respond to EPD’s introduction of a memorandum in support of its position and to clarify Petitioners’ position with respect to Permit Condition 8.23.

On August 24, 2007, after consideration of the motions, the arguments presented, and Petitioners’ supplemental response, this Tribunal issued an oral ruling granting the motions for summary determination on Count XV and partial summary determination on Counts II, V, VII. The bases of this Tribunal’s rulings are set forth below.

² The Petition for Hearing was filed with the Director of EPD on June 13, 2007, and was received by the Office of State Administrative Hearings (“OSAH”) on June 20, 2007.

Summary Determination Standard

On a motion for summary determination, the moving party must show by supporting affidavits or other probative evidence that there is no genuine issue of material fact for determination such that the moving party “is entitled to a judgment as a matter of law on the facts established.” *Richie Pirkle, et al v. Env'tl. Prot. Div., Dep't of Natural Res.*, OSAH-BNR-DS-0417001-58-Walker-Russell, 2004 Ga. ENV. LEXIS 73, at *6-7 (2004) (citing *Porter, et al v. Felker, et al*, 261 Ga. 421 (1991)); GA. COMP. R. & REGS. r. 616-1-2-.15(1). *See generally Piedmont Healthcare, Inc. v. Ga. Dep't of Human Res.*, 282 Ga. App. 302, 304-305 (2006) (observing that a summary determination is “similar to a summary judgment” and elaborating that an Administrative Law Judge “is not required to hold a hearing” on issues properly resolved by summary adjudication). Once a motion for summary determination is made and supported, the opposing party may not rest upon mere allegations or denials, but must show by supporting affidavit or other probative evidence that there is a genuine issue of material fact. *Guy Lockhart v. Dir., Env'tl. Prot. Div., Dep't of Natural Res.*, OSAH-BNR-AE-0724829-33-RW, 2007 Ga. ENV LEXIS 15, at *3 (2007) (citing *Leonaitis v. State Farm Mutual Auto Ins. Co.*, 186 Ga. App. 854 (1988)); GA. COMP. R. & REGS. r. 616-1-2-.15(3).

Legal Background

Georgia law requires all air pollution sources to obtain permits from EPD before commencing construction and operation. *See* O.C.G.A. § 12-9-7(a). EPD administers its permitting program through rules and regulations adopted by the Georgia Board of Natural Resources. The rules governing air quality control are located in Chapter 391-3-1. *See generally* GA. COMP. R & REGS. r. 391-3-1-.01, *et seq.* These rules list specific requirements for various types of air permits depending on the air quality in the area of the source (i.e., whether the source

is located in an area that is in “attainment” or “nonattainment” of applicable National Ambient Air Quality Standards (“NAAQS”), and on the potential air pollution emission rates from the source. *See generally* GA. COMP. R. & REGS. r. 391-3-1-.02 (providing specific emission limitations and standards). Early County, the site of the Longleaf’s proposed coal-fired facility, lies in an “attainment area” for all regulated pollutants. This means that the air quality in the area is in compliance with state and federal air quality standards. *See* 40 C.F.R. § 81.311.

The federal Clean Air Act (“CAA”), 42 U.S.C. § 7401, *et seq.*, requires states to adopt regulatory programs for issuing a certain type of construction permit to major air pollution sources located in attainment areas. This permit is known as a “Prevention of Significant Deterioration” or “PSD” permit, because it is designed to prevent significant deterioration of air quality in areas that are currently meeting NAAQS. *See* 42 U.S.C. § 7470(1). Georgia has adopted a regulatory program for PSD permits, which the United States Environmental Protection Agency (“EPA”) has approved as part of Georgia’s State Implementation Plan (“SIP”). *See* 40 C.F.R. § 52.572. Therefore, in Georgia, the Director of EPD issues PSD permits to qualifying sources pursuant to Georgia’s rules. *See* GA. COMP. R. & REGS. r. 391-3-1-.02(7) (providing rules for the prevention of significant deterioration of air quality).

PSD permits require a number of demonstrations and conditions to ensure protection of ambient air quality standards, or NAAQS, and to restrict future air quality degradation. *See* 42 U.S.C. § 7475(a)(3) (listing requirements for PSD permit applicants). All new major air pollution sources must utilize best available control technology (“BACT”) for each pollutant regulated under EPA’s New Source Review (“NSR”) program. *See* 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52.21(j)(2) (“A new major stationary source shall apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in

significant amounts.”) (incorporated by reference in GA. COMP. R. & REGS r. 391-3-1-.02(7)(b)7). BACT is defined as follows:

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

40 C.F.R. § 52.21(b)(12); GA. COMP. R. & REGS. r. 391-3-1-.02(7)(a)2 (incorporating 40 C.F.R. § 52.21(b) by reference).

Count I

In Count I of the Petition, Petitioners allege that the Permit is invalid because EPD failed to include a BACT emission limitation for carbon dioxide (“CO₂”). (Pet. at ¶ 37). In support of their claim, Petitioners rely on 40 C.F.R. §§ 52.21(j)(2) and (b)(50). (*Id.* at ¶ 34).

Section 52.21(j)(2) provides that “[a] new major stationary source shall apply best available control technology for each *regulated NSR pollutant* that it would have the potential to emit in significant amounts.” 40 C.F.R. § 52.21(j)(2) (emphasis added); GA. COMP. R. & REGS. r. 391-3-1-.02(7)(b)7 (incorporating 40 C.F.R. § 52.21(j)(2) by reference). Thus, Section 52.21(j)(2) only requires BACT emission limitations for “regulated NSR pollutants.” *See* 40 C.F.R. § 52.21(j)(2). Section 52.21(b)(50) defines “regulated NSR pollutant” as follows:

Regulated NSR pollutant, for purposes of this section, means the following:

- (i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator (e.g., volatile organic compounds and NO[X] are precursors for ozone);
- (ii) Any pollutant that is subject to any standard promulgated under section 111 of the [CAA];

- (iii) Any Class I or II substance subject to a standard promulgated under or established by title VI of the [CAA]; or
- (iv) Any pollutant that otherwise is subject to regulation under the [CAA]; except that any or all hazardous air pollutants either listed in section 112 of the [CAA] or added to the list pursuant to section 112(b)(2) of the [CAA], which have not been delisted pursuant to section 112(b)(3) of the [CAA], are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the [CAA].

40 C.F.R. § 52.21(b)(50); GA. COMP. R. & REGS. r. 391-3-1-.02(7)(a)2 (incorporating 40 C.F.R. § 52.21(b) by reference).

Carbon dioxide does not fall into any of the Section 52.21(b)(50) categories. EPA has not promulgated a national ambient air quality standard (“NAAQS”) for CO₂, has not listed CO₂ as a regulated pollutant in any section of the CAA, and has not established any other regulations for CO₂. *See generally Massachusetts v. EPA*, 127 S. Ct. 1438 (2007) (inherently recognizing that EPA has not, to date, regulated CO₂ emissions); *see, e.g., In re: Kawaihae Cogeneration Project, PSD/CSP Permit No. 0001-01-C*, 1997 EPA App. LEXIS 8, at *58 (1997) (upholding a permitting agency’s conclusion that “there are no regulations or standards prohibiting, limiting or controlling the emissions of greenhouse gases from stationary sources . . . [c]arbon dioxide is not considered a regulated pollutant for permitting purposes.”). Likewise, EPD has not promulgated any regulations restricting or limiting the emissions of CO₂.

Carbon dioxide is not a regulated NSR pollutant as defined by Section 52.21(b)(50). Accordingly, EPD was not required by Georgia Rule 391-3-1-.02(7)(b)7 to include a BACT emissions limitation for CO₂ in the Permit. As previously determined by this Tribunal on August 17, 2007, Respondent’s and Intervenor’s motions for summary determination as to Count I of the Petition are **granted**.

Counts II, V, and VII

In Counts II, V, and VII of the Petition, Petitioners allege, in part, that the Permit is invalid because EPD failed to consider all available production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for the control of sulfur dioxide, nitrogen oxides and particulate matter. Specifically, Petitioners assert that EPD failed to consider Integrated Gasification Combined Cycle (IGCC) technology among the pollution control technologies EPD considered in the agency's BACT analysis. (Pet. at ¶¶ 44-46, 58-60, 66-68 (alleging that IGCC technology should have been included in the BACT analysis for sulfur dioxide (“SO₂”), nitrogen oxides (“NO_x”), and particulate matter (“PM”)). In support of their claims, Petitioners rely on 40 C.F.R. § 52.21(b)(12) for the proposition that EPD did not properly consider all of the technologies and techniques available for control of SO₂, NO_x, and PM. (*Id.* at ¶¶ 44-45, 58-59, 66-67). Petitioners assert that IGCC is a production process, method, system, technique, fuel cleaning treatment or innovative fuel combustion technique that EPD was required to consider. *See* 40 C.F.R. § 52.21(b)(12); GA. COMP. R. & REGS. r. 391-3-1-.02(7)(a)2 (incorporating 40 C.F.R. § 52.21(b) by reference). EPD did not consider IGCC in its BACT analysis. (Longleaf Energy Associates, LLC’s Motion for Partial Summary Determination as to Counts II, V and VII of the Petition (“Longleaf IGCC Mot.”) at 8; EPD’s Motion for Partial Summary Determination on Counts II, V, and VII of the Petition for Hearing (“EPD IGCC Mot.”) at 4).

BACT is defined as a limitation on emissions of regulated pollutants “from any *proposed* major stationary *source*” that “is achievable for *such source*...through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or

innovative fuel combustion techniques for control of such pollutant.” 40 C.F.R. § 52.21 (b)(12) (emphasis added). Thus, EPD's BACT analysis is a source-specific inquiry.

The Environmental Appeals Board describes this source-specific BACT analysis as follows:

[P]ermit conditions are imposed for the purpose of ensuring that the proposed source . . . uses emission control systems that represent BACT These control systems, as stated in the definition of BACT, may require application of “production processes and available methods, systems, and techniques . . .” to control the emissions *The permit conditions that define these systems are imposed on the source as the applicant has defined it*

In the Matter of Pennsauken County, New Jersey Resource Recovery Facility, PSD Appeal No. 88-8, 2 E.A.D. 667, 1988 EPA App. LEXIS 27, at *13 (1988) (citation omitted) (emphasis added).

In its PSD permit application, Longleaf listed its proposed source as a “pulverized coal-fired electric power generation facility” that would include two pulverized coal-fired boilers and two steam turbine generators. *See* Prevention of Significant Deterioration Permit Application for the Longleaf Energy Station, Early County, Georgia, at 1-1, 1-3 (November 19, 2004) (Longleaf IGCC Mot., Ex. D).³ Accordingly, in its BACT analysis, EPD included those processes, methods, systems and techniques that could be applied to facilities consisting of pulverized coal-fired boilers and steam generators. *See* 40 C.F.R. § 52.21(b)(12). The resulting Permit requires Longleaf to implement innovative fuel combustion techniques (low NO_x burners and over-fire air) as well as pollution control systems (selective catalytic reduction, fabric filter baghouses, and a dry scrubber) that have been and can be used on pulverized coal-fired electric generating facilities. *See* Permit at 2 (Pet., Ex. A).

³ Available at http://www.georgiaair.org/airpermit/psd/dockets/longleaf/facilitydocs/Longleaf_PSD_Applic.pdf (last visited November 20, 2007).

Because BACT is a source-specific inquiry, analysis of alternative processes that, if applied, would redefine the air pollution source that a PSD Permit applicant has proposed is not required. EPA's guidance to permitting authorities regarding BACT analysis, the New Source Review Workshop Manual (Draft) ("Draft NSR Manual"), explains this limitation on the scope of BACT analyses as follows:

Historically, *EPA has not considered the BACT requirement as a means to redefine the design of the source when considering available control alternatives.* For example, applicants proposing to construct a coal-fired electric generator have not been required by EPA as part of a BACT analysis to consider building a natural gas-fired electric turbine although the turbine may be inherently less polluting per unit product (in this case electricity). However, this is an aspect of the PSD permitting process in which states have the discretion to engage in a broader analysis if they so desire. Thus, a gas turbine normally would not be included in the list of control alternatives for a coal-fired boiler.

ENVIRONMENTAL PROTECTION AGENCY, NEW SOURCE REVIEW WORKSHOP MANUAL, B.13 (Draft, 1990) (emphasis added) (Longleaf IGCC Mot., Ex. E).

Consistent with EPA's approach in the Draft NSR Manual, the Environmental Appeals Board has repeatedly held that a BACT analysis does not require consideration of production processes that would redefine the proposed source. *See In re Kendall New Century Development*, PSD Appeal No. 03-01, 11 E.A.D. 40, 50-52 (2003) (upholding a permitting authority's decision to exclude from its BACT analysis those other production processes that would change the size and design of the proposed source) (Longleaf IGCC Mot., Ex. F); *In the Matter of Hawaiian Commercial and Sugar Company Permit No. HI 89-01*, PSD Appeal No. 92-1,4 E.A.D. 95, 99, 1992 EPA App. LEXIS 42, at *12-14 (1992) (relying on passage from the Draft NSR Manual to conclude that the state of Hawaii was not required to consider a combined-cycle power plant as an alternative to the proposed circulating fluidized bed coal plant because that alternative would redefine the proposed source); *In the Matter of: Old Dominion Electric*

Cooperative Permit Applicant, PSD Appeal No. 91-39, 3 E.A.D. 779, 1992 EPA App. LEXIS 37, at *30-32, 32 n.38 (1992) (holding that a state PSD permitting authority was not required to consider natural gas as an alternative fuel for a proposed coal-fired facility because the state believed the use of natural gas would redefine the proposed source – noting that “[t]raditionally, EPA does not require a PSD applicant to change the fundamental scope of its project....”); *In the Matter of Pennsauken County*, 1988 EPA App. LEXIS 27, at *13-14 (“Although imposition of [BACT] conditions may, among other things, have a profound effect on the viability of the proposed facility as conceived by the applicant, the [BACT] conditions themselves *are not intended to redefine the source.*”) (emphasis added).

Thus, the Clean Air Act regulations, EPA guidance and federal administrative decisions all demonstrate that EPD was not required to consider as part of its BACT analysis those processes, methods, systems or techniques that, if applied, would have resulted in the redefinition of the pulverized coal-fired steam electric generating facility that Longleaf proposed in its PSD permit application.

IGCC power plants and pulverized coal-fired power plants are distinct and separate types of power generation facilities. (Aff. of Kennard F. Kosky (“Kosky Aff.”) at ¶ 4 (Longleaf IGCC Mot., Ex. A); Aff. of James Capp (“Capp Aff.”) at ¶ 6 (EPD IGCC Mot., Ex. A)). The major difference between the two types of facilities is that they combust *different fuels* in *different combustion devices* to produce electricity. (Kosky Aff. at ¶¶ 5, 7; Capp Aff. at ¶¶ 6-7). A pulverized coal-fired steam electric generating facility burns *pulverized coal* in a *boiler* to produce steam that turns a turbine that generates electricity. (Kosky Aff. at ¶ 5; Capp Aff. at ¶ 6). In contrast, an IGCC facility burns *synthetic gas* in a jet engine, called a *combustion turbine*, that produces electricity. (Kosky Aff. at ¶ 7; Capp. Aff. at ¶ 6).

