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March 8, 2010

Ms. LaDonna Castañuela  
Chief Clerk, MC-105  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, TX 78711-3087  
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*Via Electronic Filing & U.S. Mail*

Re: TCEQ Docket No. 2009-0032-AIR; SOAH Docket No. 582-09-2045; *Application of IPA Coletto Creek LLC for State Air Quality Permit 83778, Prevention of Significant Deterioration Air Quality Permit PSD-TX-1118 and Hazardous Air Pollutant Permit HAP-18.*

Dear Ms. Castañuela:

Enclosed for filing in the above-referenced cause, please find Protestant Sierra Club's Exceptions to the Proposal for Decision.

Thank you for your attention to this mater. Please call me at (512) 637-9477 should you have any questions.

Sincerely,



Christina Mann

Enclosures

cc: Service List (*via email*)

## CERTIFICATE OF SERVICE

I hereby certified that a true and correct copy of Sierra Club's Exceptions to the Proposal for Decision was served on this the 8<sup>th</sup> day of September, 2010, by the method indicated below.



Christina Mann

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*Via Electronic Mail*

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**SOAH DOCKET NO. 582-09-2045  
TCEQ DOCKET NO. 2009-0032-AIR**

<b>APPLICATION OF IPA COLETO</b>	<b>§</b>	<b>BEFORE THE STATE OFFICE</b>
<b>CREEK, LLC FOR STATE AIR</b>	<b>§</b>	
<b>QUALITY PERMIT 83778 AND</b>	<b>§</b>	
<b>PREVENTION OF SIGNIFICANT</b>	<b>§</b>	
<b>DETERIORATION AIR QUALITY</b>	<b>§</b>	<b>OF</b>
<b>PERMIT PSD-TX-1118 AND FOR</b>	<b>§</b>	
<b>HAZARDOUS AIR POLLUTION</b>	<b>§</b>	
<b>MAJOR SOURCE [FCAA § 112(g)]</b>	<b>§</b>	
<b>PERMIT HAP-18</b>	<b>§</b>	<b>ADMINISTRATIVE HEARINGS</b>

**SIERRA CLUB’S EXCEPTIONS TO THE PROPOSAL FOR DECISION**

TO THE HONORABLE CHAIRMAN SHAW AND COMMISSIONERS GARCIA AND RUBINSTEIN:

COMES NOW, Sierra Club (Protestant) and pursuant to the rules of the Commission presents these exceptions and proposed revisions to the proposal for decision (PFD) submitted by Administrative Law Judges (ALJs) Newchurch and Wilfong.

The ALJs’ proposal for decision and order recommends that the Texas Commission on Environmental Quality (TCEQ) issue the draft permit and grant the application with the recommendation to lower the total Particulate Matter (PM)/PM<sub>10</sub> from .032 lb/MMBTU to .025 lb/MMBTU. Sierra Club supports the recommendation to lower the total PM /PM<sub>10</sub> limit, but urges the Commission not to issue the final permit until many other deficiencies are first addressed. Sierra Club urges the Commissioners to either deny or remand the application for further evaluation of BACT and MACT limits in accordance with both state and federal law and policy.

The Applicant, IPA Coletto Creek, bears the burden of proof on all applicable statutory and regulatory matters. See, 30 Tex. Admin. Code §§ 55.210(b) and 80.17(a). Thus, the

proposed findings of fact and conclusions of law address many issues on which Sierra Club either did not present evidence or provide legal argument. Sierra Club's exceptions are therefore limited in scope to specific issues, but Sierra Club is not waiving its objections to issues not addressed below.

### **Response to the ALJs' Analysis of the Role of Federal Law in this Proceeding**

Sierra Club disagrees with the ALJs' analysis of the role of federal law in this proceeding. Sierra Club is not proffering a radical administrative law theory based upon an un-nuanced understanding of the supremacy clause. Sierra Club does not need to rely upon the supremacy clause because, in fact, TCEQ has an *agreement* with the federal government on how the State of Texas will issue Prevention of Significant Deterioration (PSD) permits. That agreement is embodied in the State Implementation Plan (the SIP). EPA approval of the Texas SIP negates any interpretations or policies that the State might otherwise follow to the extent they are at variance with EPA's interpretation and applicable policies. 54 Fed.Reg. 52823, 52824 (Dec. 22, 1989). Respectfully, the Administrative Law Judges have disregarded TCEQ's obligation to adhere to certain basic federal Clean Air Act requirements set forth in federal law, regulations, policies, and case law, including decisions of the U.S. EPA's Environmental Appeals Board (EAB).

TCEQ is required to follow and enforce basic federal Clean Air Act standards when it implements the *federal* PSD program. This onus extends to the State Office of Administrative Hearings (SOAH) in its role to properly apply applicable law in this contested case hearing. Sierra Club understands that SOAH attempts to issue proposals for decision and recommend findings of fact and conclusions of law that comply with perceived "precedent" as established by prior rulings and long standing policy at the Commission. But, to the extent those prior rulings

and long standing policy are applied as part of TCEQ's administration of the federal PSD program, state policy may not trump more stringent federal Clean Air Act law and policy.

The ALJs accurately note that TCEQ has adopted by reference many federal laws and regulations. Regardless of whether TCEQ's adoption transforms those adopted federal laws into state laws, EPA and TCEQ have an agreement (the SIP) that TCEQ may apply state law and policy to TCEQ's administration of the federal program, *but only* in manner no less stringent than the federal requirements. For example, in the 1992 approval of the SIP, EPA relied on a September 5, 1989, Texas Air Control Board (TACB) letter explaining "EPA decisions regarding PSD program requirements" would be implemented by the State of Texas.<sup>1</sup>

With respect to the *best available control technology* review, Texas committed in its PSD SIP revision submittal (that was approved in 1992) to implement BACT consistent with EPA Administrator orders responding to Title V operating permit petitions, EPA Environmental Appeals Board (EAB), and federal court decisions. EPA recently submitted a comment letter on March 1, 2010,<sup>2</sup> in a rulemaking proceeding before the TCEQ, which explains that EPA expects TCEQ to fully implement any SIP approved BACT requirements in accordance with all federal regulations, guidance, and policy, including any EPA Administrator orders responding to Title V operating permit petitions, EPA Environmental Appeals Board (EAB) decisions, and federal court decisions.

In determining whether the TCEQ and Applicants have fulfilled their obligations under federal law, the ALJs cite *Public Utility Commission of Texas v. Gulf States Utility Company* for

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<sup>1</sup> 57 Fed. Reg. 28093, 28096 (June 24, 1992) (Approval and Promulgation of Implementation Plan State of Texas Prevention of Significant Deterioration).

<sup>2</sup> See Attached March 1, 2010 Comment letter, "EPA Comments on Rule Project Number 2010-00S-116-PR,"

the proposition that an agency's interpretation of its own rules is entitled to deference.<sup>3</sup> The ALJs' citation of this case omits a key caveat of the PUC decision, explicitly recognizing a standard of review for state courts for implementation and interpretation of federal law:

The standard for reviewing the Commission's interpretation of its regulations that were promulgated to implement *federal* law, as well as for reviewing the Commission's interpretation of *federal* regulations, might well be less deferential. However, in the absence of any requests from the parties to use a different standard, we apply the deferential standard enunciated in the text to all of the Commission's interpretations in the present case.<sup>4</sup>

The proposal for decision erroneously concludes:

Thus, even if a TCEQ rule conflicted with an EPA rule or the FCAA...the TCEQ must follow its rules for purposes of determining whether the Application in this case should be granted. Given that, there is no need for the ALJs or the Commission to consider the Protestants' federal-supremacy arguments in this case.<sup>5</sup>

The ALJs' conclusion is erroneous for the reasons explained above. In addition, even if TCEQ interpretations of federal rules or rules promulgated pursuant to or incorporating federal law are entitled to deference, such deference is not absolute. Thus, even if the standard described in *PUC* applies to state rules arising from or incorporating federal law, an agency interpretation of a rule that "is plainly erroneous or inconsistent with the regulation" may not stand.<sup>6</sup> In order to determine whether TCEQ's interpretation of its rules passed pursuant to or incorporating federal law is plainly erroneous or inconsistent with the regulation, ALJs are clearly required to evaluate any underlying federal law which forms the basis for the State law.

Moreover, when TCEQ's interpretation of a rule promulgated pursuant to or arising from federal law is inconsistent with the EPA's longstanding interpretation of that rule (or similar

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<sup>3</sup> PFD at 9 (Citing *Public Util. Comm'n of Tex. v. Gulf States Util. Co.*, 809 S.W.2d 201, 207 (Tex. 1991)).

<sup>4</sup> *Public Util. Comm'n of Tex. v. Gulf States Util. Co.*, 809 S.W.2d 201, 207 n.10 (Tex. 1991).

<sup>5</sup> PFD at 9.

<sup>6</sup> *Public Util. Comm'n of Tex.*, 809 S.W.2d at 207.

rules), this inconsistency is at least relevant to the ALJs' inquiry into whether the TCEQ's interpretation is permissible. While an agency's longstanding policy has been traditionally afforded an amount of respect by the courts, it is not entitled to the same deference as agency interpretations of formally adopted rules.<sup>7</sup> With respect to guidance documents and general statements of policy, the ALJs' reliance on the PUC decision is misplaced.

## **Greenhouse Gases**

### *Summary*

The ALJs excluded all references and testimony regarding the emissions and impacts of greenhouse gases (GHGs) on the basis that such information was not relevant. The PFD states:

The Commission has no rules regulating emissions for purposes of avoiding or reducing global warming. Also, it has consistently declined to regulate CO<sub>2</sub> *ad hoc* through the state preconstruction or PSD permitting programs. [Internal citation omitted] Under those circumstances, the ALJs concluded that the global-warming evidence offered by Protestants was not legally relevant. PFD at 20.

Sierra Club excepts to both reasons offered by the ALJs as a basis for their decision to exclude CO<sub>2</sub> testimony. First, the ALJs' statement that "[t]he Commission has no rules regulating emissions for purposes of avoiding or reducing global warming," is simply not correct.<sup>8</sup> It has been and continues to be Sierra Club's position that evidence regarding greenhouse gases is directly relevant under State law. These State law provisions are set out and

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<sup>7</sup> *Alaska Dept. of Environmental Conservation v. EPA*, 540 U.S. 461, 487-88 (2004) (Citing *United States v. Mead Corp.*, 533 U.S. 218, 234, 121 (2001); *Washington State Dept. of Social and Health Servs. v. Guardianship Estate of Keffeler*, 537 U.S. 371, 385, 123 (2003)).

<sup>8</sup> As explained below, Texas law does address CO<sub>2</sub>. Sierra Club excepts to the implication that for testimony to be relevant there must be a specific rule, the purpose of which is to avoid or reduce that specific pollutant. No such reference is made to any of the pollutants regulated by TCEQ in the primary statutory requirements in this proceeding, TEX. HEALTH & SAFETY CODE § 382.0518. There is no reason, and certainly no explanation offered by the ALJs why a separate standard would apply to CO<sub>2</sub>.

discussed below.<sup>9</sup> As to the second basis for the ALJs' decision to exclude testimony, consistent Commission actions, Sierra Club acknowledges the Commission has thus far not chosen to proactively address the overwhelming evidence or impacts associated with the uncontrolled release of GHGs. The Commission, however, has not made consistent rulings declining the issues presented in Sierra Club's testimony or briefing in this matter. The Executive Director has weighed in on numerous occasions through ad hoc interpretations of Commission rules and actions. As evidence of consistent Commission actions, the ALJs cite to numerous final orders resulting from contested case hearings.<sup>10</sup> Citation of these multiple orders (each containing hundreds of findings) to support a decision that there is a Commission pronouncement that TCEQ will not regulate CO<sub>2</sub>, grossly conflates Commission actions with Executive Director interpretations and actions in individual contested matters.

*CO<sub>2</sub> is relevant under state law*

State law allows for consideration of CO<sub>2</sub>, and even though the Applicant and the Executive Director chose not to present evidence in their direct cases, this does not bar Protestants from doing so. Under the Texas law, CO<sub>2</sub> is (1.) an emission, (2.) an air contaminant, and (3.) an air pollutant. The key provision of the Texas CAA directly governing this case is Tex. Health & Safety Code § 382.0518, set out below in pertinent part:

§ 382.0518. PRECONSTRUCTION PERMIT.

(a) Before work is begun on the construction of a new facility or a modification of an existing facility that may emit air contaminants, the person planning the construction or modification must obtain a permit or permit amendment from the commission.

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<sup>9</sup> The ALJs will see that the arguments set out on State law are the same arguments presented in the September 24, 2009, *Protestant Sierra Club's Responses to the Objections and Motion to Strike Sierra Club Testimony and Exhibits, filed by the Applicant and Executive Director*.

<sup>10</sup> See footnote 64 in the proposal for decision, which includes the *Executive Director's Response to Comments* in this matter.

(b) The commission shall grant within a reasonable time a permit or permit amendment to construct or modify a facility if, from the information available to the commission, including information presented at any hearing held under Section 382.056(k), the commission finds:

(1) the proposed facility for which a permit, permit amendment, or a special permit is sought will use at least the best available control technology, considering the technical practicability and economic reasonableness of reducing or eliminating the emissions resulting from the facility; and

(2) no indication that the emissions from the facility will contravene the intent of this chapter, including protection of the public's health and physical property.

(Emphasis added.)

Under subsection 382.0518(a), this section applies to "a new facility ... that may emit air contaminants," and subsection (b) conditions the grant of a permit on a finding that there is "no indication that the emissions from the facility will contravene the intent of this chapter ... ."

Air contaminants is a defined phrase in the Texas CAA.

"Air contaminant" means particulate matter, radioactive material, dust, fumes, gas, mist, smoke, vapor, or odor, including any combination of those items, produced by processes other than natural. TEX. HEALTH AND SAFETY CODE § 382.003(2).

Thus, any "gas" created by non-natural processes - including CO<sub>2</sub> generated by this power plant - under the plain language of the definition is an "air contaminant." The distinction between "air pollution" and "emissions of air contaminants" is clarified by the Legislature's definition of "air pollution" for purposes of Chapter 382:

"Air pollution" means the presence in the atmosphere of one or more air contaminants or combination of air contaminants in such concentration and of such duration that:

(A) are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property; or

(B) interfere with the normal use or enjoyment of animal life, vegetation, or property. TEX. HEALTH AND SAFETY CODE § 382.003(3).

An "air contaminant" is any man-made substance, including a gas, emitted into the air. A contaminant becomes air pollution if its presence or duration "may tend to be injurious" to

protected values. Therefore, under these definitions, any emission that can be shown to be man-made and found to pose risks falls within the prescriptive provisions of Section 382.0518. Such emissions must be reduced insofar as "technical practicability and economic reasonableness" allow (under subsection (b)(1) and then, weighed against their potential for harm under subsection (b) (2)).

CO<sub>2</sub> emitted by a power plant is a gas that, in these circumstances, does not arise from a natural process. It thus is an "air contaminant" under the Texas CAA's plain language. Subsection 382.0518(b)(2) requires the decision-maker to evaluate whether "the emissions from the facility" will violate the purposes of the Texas CAA, including "protection of the public's health and physical property." The statute plainly requires - and thus makes relevant - an inquiry into what effects the facilities "emissions" will have on health and property. Other provisions of the Texas CAA also direct agency attention to "emissions" and "air contaminants" - Section 382.002 (the "policy and purpose" section: "safeguard the state's air resources from pollution by controlling or abating air pollution and emissions of air contaminants consistent with the protection of public health, general welfare, and physical property"); Section 381.011 ("control of air contaminants by all practical and economically feasible methods").

Evidence concerning the impacts of IPA's CO<sub>2</sub> emissions is relevant to the Commission's overall decision on whether or not to issue the air permit. The Texas Health and Safety Code states that the Commission shall consider the reasonableness of the emissions:

In issuing an order and making a determination, the commission shall consider the facts and circumstances bearing on the reasonableness of the emissions, including:

(1) the character and degree of injury to or interference with the public's health and physical property;

- (2) the source's social and economic value;
- (3) the question of priority of location in the area involved; and
- (4) the technical practicability and economic reasonableness of reducing or eliminating the emissions resulting from the source.

TEX. HEALTH AND SAFETY CODE § 382.024.

Protestant's CO<sub>2</sub> and climate change evidence goes directly to the reasonableness of the emissions, and the Commission is required to consider those facts. Nothing in the statute or rules limits consideration of facts and circumstances bearing on the reasonableness of the emissions.

Additionally, the Legislature in § 382.0205 provided rulemaking powers to the TCEQ to deal with "special problems" for "air contaminants as necessary to protect against adverse effects related to ... climatic changes, including global warming." Carbon dioxide is the prime man-made greenhouse gas ("GHG") contributing to the increasing risks associated with climate change, and thus, once again, has been directly identified by the Legislature as an "air contaminant" under Texas law.

Further, the TCEQ itself - in a rule listing air contaminants - expressly included carbon dioxide as one such contaminant:

Unauthorized emissions - Emissions of any air contaminant except carbon dioxide, water, nitrogen, methane, ethane, noble gases, hydrogen, and oxygen that exceed any air emission limitation in a permit, rule, or order of the commission or as authorized by Texas Clean Air Act §382.0518(g). 30 TEX. ADMIN. CODE § 101.1(107).

The cited definition lists air contaminants, includes CO<sub>2</sub> in its list, and prescribes which emissions will not be considered "unauthorized" for the purpose of other, related rules.<sup>11</sup> This rule does not say that CO<sub>2</sub> is unregulated, and when read in the context of other provisions of the Texas CAA, it is clear that even these 'unauthorized emissions' could cause air pollution.

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<sup>11</sup> This definition is related to a series of others that describe actions that must, under agency rules, be taken if an "unauthorized emission" occurs. See 30 Tex. Admin. Code § 101.1, subsections (28), (72), (88), (91), (109) and (110).

Furthermore, because the cited definition contemplates the possibility that an emission level of carbon dioxide could exceed an "air limitation in a permit," the TCEQ adopted a definition that explicitly contemplates the possibility that CO<sub>2</sub> could be limited by an "emission limitation in a permit."

The statutes - and the cited TCEQ rule - make it clear that CO<sub>2</sub> has been established to be an "air contaminant" in Texas law. It is also an "emission" under the ordinary meaning of that term, and, given the current state of scientific knowledge about the effects of CO<sub>2</sub> concentrations in the atmosphere, an "air pollutant" as well.

### **BACT Determinations**

As a threshold matter, Sierra Club reminds the ALJs and the Commission that the requirement to satisfy BACT under 30 TEX. ADMIN. CODE § 116.111(a)(2)(C) does not incorporate the SIP-approved definition of BACT that must be applied in all PSD permitting actions. That applicable definition of BACT is:

"an emissions limitation \*\*\* 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. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 C.F.R. Parts 60 and 61. \*\*\*." 40 C.F.R. § 52.21(b)(12).

The PSD program in Texas identifies the definition of Best Available Control Technology (BACT). See 40 C.F.R. § 52.2270. Texas's adoption of this BACT definition was crucial to EPA's approval of the State's PSD program. 54 Fed. Reg. 52,823, 52,825 (Dec. 22, 1989). Without any explanation, TCEQ deleted this incorporation of the federal BACT

definition from its regulations in the Texas Administrative Code in 2006. 31 Tex. Reg. 538 (Jan. 27, 2006). EPA has never approved this SIP revision. Therefore, according to 42 U.S.C. § 7416 (Retention of State Authority), 40 C.F.R. § 52.21(b)(12) is the definition of BACT that Texas must apply in implementing the State's PSD permitting program. See 40 C.F.R. § 51.105; *General Motors v. U.S.*, 496 U.S. 530, 540 (1990). In fact, when the EPA approved other 1998 Texas Administrative Code revisions into the Texas SIP, it specifically withheld approval of this definition of BACT. 67 Fed. Reg. 58,697, 58,700 (Sept. 18, 2002).

Sierra Club supports the ALJs' recommendation to lower the Total PM/PM<sub>10</sub> limit in the proposed IPA permit to that found in the mostly recently issued Texas permit for a solid fuel fired boiler. However, lowering the total PM/PM<sub>10</sub> limit will not cure the deficiencies in a record that should support the Applicant's, the Executive Director's, and ultimately the ALJs' recommendations on the BACT limits (including PM) for the criteria pollutants.<sup>12</sup> Although permit limits in recently issued permits clearly represent a floor from which to start a BACT analysis, BACT represents an emission limit arrived at through a decision-making process which *should* create an extensive record that goes beyond a mere review of recently issued permits. The Applicant did not conduct and the ED did not require a proper BACT determination for the NAAQS criteria pollutants, including PM<sub>10</sub> and PM<sub>2.5</sub>.<sup>13</sup> An adequate record that either the ED or the Applicant has correctly followed any guidance in compliance with federal and state law does not exist. The record is clear that the ED's review was limited to TCEQ's guidance and BACT definition, which has only been approved for minor sources

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<sup>12</sup> There are several "criteria" pollutants: Carbon Monoxide, Lead, Particulate Matter with a diameter of less than 10 micrometers, Particulate Matter with a diameter of less than 2.5 micrometers, Nitrogen Oxides, Ozone and Sulfur Oxides.

<sup>13</sup> The Applicant attempted to establish compliance with the PM<sub>2.5</sub> NAAQS by establishing compliance with the PM<sub>10</sub> NAAQS. However, the record does not establish that a BACT analysis was completed with respect to PM<sub>2.5</sub>. Sierra Club excepts to the ALJs' conclusions that the appropriate BACT was conducted for PM<sub>2.5</sub>.

### *Continuous Emissions Monitoring*

Sierra Club excepts to the ALJs' conclusions regarding PM CEMS. An essential component of the BACT analysis must be an evaluation of the corresponding averaging periods including the method for monitoring. Even Mr. Fraser, Applicant's expert, testified that the more frequent the monitoring, the more stringent the BACT limit.<sup>14</sup> The BACT analysis for each criteria pollutant should thoroughly critique the frequency of monitoring. Appropriately, the draft permit mandates that the pollutants NO<sub>x</sub>, SO<sub>2</sub>, and CO are to be measured on a continuous basis using continuous emissions monitors (CEMs).

However, neither the proposal for decision or order recommends the Applicant only be required to conduct a single stack test for any PM monitoring once a year, and possibly allowing testing **once every three years**.<sup>15</sup> In doing so, the ALJs unreasonably disregard the technical testimony and exhibits related to CEMS presented by Dr. Armendariz on 1) the technical feasibility/widespread availability of PM CEMS<sup>16</sup> and 2) use of PM CEMS in the **exact same industry**.<sup>17</sup> The ALJs instead rely on the repeated statements that PM CEMS are not mandated by specific law; PM CEMS only measure the filterable portion of PM; and a concern about lack

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<sup>14</sup> See Mr. Fraser's live testimony. Tr. at Page 334, lines 16-25.

<sup>15</sup> See Draft Permit, Special Condition 29.

<sup>16</sup> See Dr. Armendariz's Direct Testimony at Page 32. "PM CEMS are available from multiple vendors.  
o PCME Ltd. is currently advertising a unit called the DT991.  
o MSI Mechanical Systems is currently advertising a unit called the MSI BetaGuard PM.  
o SICK MAIHAK is currently advertising units called the RM210 and the FWE200."

<sup>17</sup> See Dr. Armendariz's Direct Testimony at Page 33. "According to a recent report, there are numerous current and upcoming installations on PM CEMS on power plant stacks, including Tampa Electric Company, Virginia Electric Power Company, Wisconsin Electric Power Company, South Carolina Public Service Authority, Illinois Power Company/Dynegy Midwest Generation, Inc., and Minnkota Power Cooperative, Inc./Square Butte Electric Cooperative." EPA has established a performance standard (PS-11) for the PM CEMS that should be used to demonstrate compliance at the proposed unit.

of relative accuracy of the PM CEMS. However, this analysis ignores the expert opinion evidence that PM CEMS are appropriate and feasible to measure and provide assurances of compliance with the PM/PM<sub>10</sub> permit limit.<sup>18</sup> In fact, EPA has established a performance standard (PS-11) for the PM CEMS that should be used to demonstrate compliance at the proposed unit. The ALJs' conclusion that there are sufficient "functional shortcomings" to not require the use of PM CEMS is not supported by the record.

As part of a BACT review (a technology forcing, case by case analysis conducted to establish permit limits), it is appropriate to consider technologies which may not have been previously required if the use of those technologies establishes a more stringent BACT limit. A permit limit that requires the continuous measurement of PM emissions is more stringent than one that requires measurement through a single stack test once per year (or possibly once every three years). A *proper* BACT analysis ensures that applicants and permitting authorities do not simply rely on regulations such as the New Source Performance Standards or previous permits which have already established specific emission limits or the technologies required to achieve specific emission limits. Therefore, it is not adequate to dismiss PM CEMS as an option for this permit by establishing that use of PM CEMS is not a permit term in a previously issued permits for coal fired power plants or that no specific rule exists which mandates the use of PM CEMS for coal plants. Although not a specific requirement, the use of PM CEMS is a condition that must be imposed after a proper BACT review is conducted.

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<sup>18</sup> Dr. Armendariz's Direct Testimony at Page 32. "In the case of a coal-fired PC boiler like the proposed CC2 unit, which utilizes a baghouse system to capture particulate matter, I would expect most of the particulate matter that makes it through the baghouse and is sent out the stack to be smaller than 10 microns in diameter. Baghouse systems will preferentially remove particles larger than 10 microns with very high efficiency. So, for the proposed unit, I would expect a very tight correlation and substantial overlap between PM and PM<sub>10</sub>. A continuous emissions monitor designed to sample and measure PM would necessarily provide the information needed to demonstrate continuous compliance with a joint PM/PM<sub>10</sub> permit limit."

Curiously, the PFD and proposed order also do not address the criticisms that regardless of PM CEMS availability, a once per year or once per three years stack test for any criteria pollutant is inappropriate. Sierra Club cannot see how such infrequent testing is protective of the public or provides TCEQ with any real ability to enforce the PM limits.

## **Air Quality Impacts**

### *Meteorological Data and Road Emissions*

Sierra Club excepts to the ALJs' conclusions regarding the facts presented by Sierra Club related to air dispersion modeling. The Applicant ought to model worst case conditions in order to demonstrate the proposed emissions will have an acceptable impact to human health and the environment. And it is the Applicant's burden to demonstrate that the impacts will be protective. It is counter-intuitive to criticize a witness for comparing modeling results reached using antiquated meteorological data (Ms. Sears' evaluation of the two sets of pre-ASOS data) to the modeling results achieved using the most recent meteorological data (ASOS data). Ms. Sears' comparison merely demonstrates that there is likely a uniform divide between predicted impacts from modeling conducted using NWS data collected manually versus NWS data collected via the ASOS network. Her opinion that using the ASOS data is more appropriate than using the pre-ASOS data is not the result of data shopping, but the result of following EPA's guidelines. The very fact that a meteorological data set shows increased impacts, demonstrates that worst case conditions were not modeled.

Sierra Club excepts to the ALJs' conclusions regarding road emissions. EPA's air quality modeling procedures require consideration of all sources of emissions. SOAH's conclusions are troublesome given 30 Tex. Admin Code §116.160(d) requires approval from the EPA Administrator whenever TCEQ departs from EPA's air quality modeling procedures. A blanket

exception to the requirement to model all sources would require approval from the EPA Administrator and the record does not demonstrate that such approval has been sought or granted.

*Ozone Analysis- IPA Coletto Creek is Not De Minimis for VOCs or Ozone*<sup>19</sup>

Both IPA and the ALJs agree that CC2's proposed VOC emissions would fall below the established de minimis level, which eliminates any need to further study CC2's potential impact on ozone.<sup>20</sup> The ALJs go further and state that given the de minimis VOC emissions the Protestants' other ozone objections are moot.<sup>21</sup> This is incorrect for a couple reasons: 1) the VOC emissions from the CC2 project are above de minimis, and 2) an ozone analysis is required.

Since the CC2 project will cause a significant increase in emissions, the project is classified as a major modification to the existing Coletto Creek Power Station.<sup>22</sup> IPA correctly identified the PSD significant rate for a modification to an existing major source as 40 tpy for VOC.<sup>23</sup> In fact, TCEQ's rules on PSD review state that the significance threshold for ozone is 40 tpy of VOC **or** NOx.<sup>24</sup> IPA will emit more than 40 tpy of VOCs. IPA will emit more than 100 tpy of NOx. IPA's emissions of NOx and VOC are of such quantity that an ozone analysis is required.

Additionally, TCEQ rule 30 Tex. Admin. Code § 116.160(c)(2) incorporates 40 C.F.R. § 52.21(i), which according to the Applicant specifies when an ozone analysis is required<sup>25</sup> and it provides: "No *de minimis* air quality level is provided for ozone. However, any net emissions

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<sup>19</sup> Sierra Club and EDF are presenting identical arguments related to the ALJs' conclusions on VOCs and ozone.

<sup>20</sup>PFD pg. 94.

<sup>21</sup>Id.

<sup>22</sup>IPA Ex. 3, pg. 1-5 or IPA0000021.

<sup>23</sup>Id. at 3-5 or IPA0000043.

<sup>24</sup> 30 Tex. Admin. Code § 116.12(18) (incorporating 40 C.F.R. § 51.166(b)(23)); *See Also* 30 Tex. Admin. Code § 116.12(17) (A major stationary source that is major for VOCs **or** NOx is considered to be major for ozone). (emphasis added).

<sup>25</sup>Applicant's Brief in Reply to Closing Arguments, pg. 59.

increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to PSD would be required to perform an ambient impact analysis, including the gathering of ambient air quality data.”<sup>26</sup> There is no dispute that CC2 will emit more than 100 tpy of nitrogen oxides so an ozone analysis is required.

The TCEQ guidance document that the Applicant relies on to support its de minimis argument, as binding above and beyond the requirements found in rule, was last updated in 1999 and even then it states that the “8-hour form of the [ozone] standard is not compatible with the 100 tpy threshold [for VOCs].”<sup>27</sup> The 1999 guidance document without any explanation uses 100 tpy of VOC as a threshold for an ozone analysis. Moreover, and most critically, this TCEQ guidance document conflicts with 30 Tex. Admin. Code § 116.160(c)(2); 40 C.F.R. § 52.21(i), which apply to net emission increases of 100 tpy of VOCs or NOx. Finally, it is clear that EPA through its comments on the CC2 project thought an ozone analysis was required.<sup>28</sup> The ALJs are incorrect that an ozone analysis is not required because the VOC emissions are de minimis. The VOC emissions are not de minimis and an ozone analysis is required.

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<sup>26</sup>40 C.F.R. § 52.21(i)(5)(i), n. 1.

<sup>27</sup>Applicant’s Ex. 30, pg. 32 (emphasis added).

<sup>28</sup>EDF Ex. 38, “[W]e wish to work with TCEQ to facilitate an appropriate ozone impact analysis for Coletto Creek Unit No. 2.”

**Conclusion**

For the reasons stated above, the application should either be denied or remanded to the Executive Director so that the Applicant may remedy the deficiencies in the application. The following Findings of Fact should be stricken, as IPA has not met its burden on the corresponding issues and/or the record does not support the finding: 24, 26, 29, 31, 32, 33, 35, 37, 76, 77, 78, 79, 87, 88, 89, 90, 188, 187, 198, 201, 202, 203, 222, 223, 236, and 237.

The following Conclusions of Law should likewise be stricken because the record does not support the conclusion: 28, 29, 31, 38, 46, 47, 48, 49, 50, 51, 56, 57, and 58.

Respectfully Submitted,

**ENVIRONMENTAL INTEGRITY PROJECT**

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**ATTORNEYS FOR PROTESTANT  
SIERRA CLUB**

**EPA Comments on Rule Project Number 2010-00S-116-PR**

**March 1, 2010**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

MAR 01 2010

Ms. Patricia Duron  
Office of Legal Services (MC 205)  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

RE: EPA Comments on Rule Project Number **2010-005-116-PR**

Ms. Duron:

Thank you for providing us the opportunity to review and comment on the proposed revisions to the Texas Administrative Code (TAC) Title 30, Chapter 116.160. In general, we are supportive of this proposed rulemaking, but we would like to provide the enclosed comments for your consideration.

Please note that our comments do not constitute final determinations concerning approvability of the revisions to the Texas SIP. We are providing these comments to assist TCEQ in the development of the regulations and to outline our expectations should these rules be approved into the State Implementation Plan (SIP). We look forward to working with the TCEQ as you move forward in responding to these comments and finalizing the revisions to the Texas SIP. If you have any questions, please call Jeff Robinson of my staff at (214) 665-6435.

Sincerely yours,

A handwritten signature in black ink, appearing to read "C. Edlund".

Carl E. Edlund, P.E.  
Director  
Multimedia Planning & Permitting

Enclosure

cc: Mr. Richard Hyde, TCEQ  
Mr. Steve Hagle, TCEQ  
Ms. Stephanie Bergeron Perdue, TCEQ

## Enclosure

### **TCEQ Proposed Revision to 30 TAC 116.160 to Incorporate the Definition of BACT and Provisions for Permit Review Regarding PSD Review for Projects that Become Major Stationary Sources or Major Modifications Solely Because of a Relaxation of an Enforceable Limitation on the Source's or Modification's Capacity to Emit a Pollutant**

#### **Rule Project No. 2010-005-116-PR**

#### **Background.**

On February 1, 2006, the TCEQ submitted amendments to 30 TAC 116.160 to EPA as a SIP revision to Texas PSD SIP. These amendments included removal of certain references to federal definitions and requirements regarding “best available control technology” or “BACT” as it relates to PSD, and the permit review regarding PSD review of projects that become major stationary sources or major modifications because of a relaxation of an enforceable limitation on the source's or modification's capacity to emit a pollutant. On September 23, 2009, EPA proposed disapproval of these revisions to the Texas SIP. See 74 FR 48467, 48472, September 23, 2009. TCEQ has proposed amendments to 30 TAC 116.160 to eliminate these deficiencies.

#### **EPA Comments on the Proposed Changes.**

TCEQ proposes to revise §116.160(c)(1)(A) to add a reference to 40 CFR 52.21(b)(12) – definition of “best available control technology.” The reinstatement of this definition appears to satisfy the concerns at 74 FR 48472 concerning the removal of BACT from the currently approved PSD SIP.

TCEQ further proposes to revise §116.160(c)(2)(C) to incorporate the requirements of 40 CFR 52.21(r)(4) which relate to the PSD review of projects that become major stationary sources or major modifications because of a relaxation of an enforceable limitation on the source's or modification's capacity to emit a pollutant. The reinstatement of this requirement appears to satisfy the concerns at 74 FR 48472 concerning the removal of 40 CFR 52.21(r)(4) from the currently approved PSD SIP.

TCEQ further proposes to revise §116.160(c)(2)(A) to cross-reference 40 CFR 52.21(j), which implements the definition of BACT. Although TCEQ has not historically included this reference in its PSD rule, the proposed addition is proposed because it complements the reinserted definition of BACT. The addition of the 40 CFR 52.21(j) requirements appears to satisfy the concerns of a clear distinction between Minor NSR SIP BACT and PSD SIP BACT.

#### **EPA Related Observations on TCEQ's Three Tier BACT Analysis Guidance Memorandum.**

As you know, best available control technology is defined in the Federal Clean Air Act as “an emission limitation based on the *maximum degree* of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major

emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.”

Consequently, it is essential that the Texas PSD SIP, all applicable TCEQ guidance and forms, and most importantly, implementation of the Texas PSD SIP, on a permit-by-permit basis, demonstrate that each emissions limitation established as PSD BACT reflects the maximum degree of reduction, unless a rigorous site-specific analysis of energy, environmental, and economic impacts justifies a less stringent emissions limitation.

After the 1992 approval of the Texas PSD SIP (with TCEQ’s BACT guidance memorandum), TCEQ issued its 2001-revised Three Tier BACT Analysis guidance memorandum. This guidance appears to have dropped the core criteria, in particular ensuring that the permit writers know to review the most stringent control technology (and associated emission limitation) and provide a detailed rationale if it were not selected.

It is our understanding that TCEQ staff has been instructed to conduct a thorough analysis of BACT, including the most stringent available control technology. However, we have ongoing concerns because TCEQ has not yet revised the Three Tier BACT analysis guidance to ensure its clarity. Also, the State committed in its PSD SIP revision submittal (that was approved in 1992) to implement BACT related decisions given through EPA Administrator orders responding to Title V operating permit petitions, the EPA Environmental Appeals Board (EAB), and Federal courts. We are concerned that the State may not be following through with this Texas PSD SIP commitment. Potential examples include BACT analysis based on cleaner fuels, Integrated Gasification Combined Cycle consideration, and BACT for PM<sub>2.5</sub> emissions.

First, we request that the TCEQ revise its BACT guidance memorandum and take it through the SIP regulatory process for adoption and submittal to EPA for approval as a SIP revision to the Texas PSD SIP. We believe the appropriate time for such rulemaking is when TCEQ is proposing the NSR and NSR Reform regulatory changes. The TCEQ then would submit the revised BACT guidance demonstrating how case-specific BACT analyses will be implemented in Texas when your revised NSR and NSR Reform rules are submitted to EPA for revision of the State Implementation Plan.

Further, to ensure transparency of TCEQ’s evaluation and implementation of the PSD BACT requirements, TCEQ’s BACT analysis for each PSD permit application must detail how TCEQ arrived at its BACT decision and be included in the Preliminary Determination Summary document prepared by TCEQ permit writers. This Preliminary Determination Summary must accompany the draft PSD permit sent to public notice. This should include the technical and economic analyses prepared to support TCEQ’s BACT determination.

In conclusion, we expect the TCEQ to fully implement any SIP approved BACT requirements in accordance with all Federal regulations, guidance, and policy, including any EPA Administrator orders responding to Title V operating permit petitions, EPA Environmental Appeals Board (EAB) decisions, and Federal court decisions.