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NATURAL RESOURCES DEFENSE COUNCIL
ENV. APPEALS BOARD

November 26, 2007

By Hand

Ms. Eureka Durr
Clerk of the Board
Environmental Appeals Board
U.S. Environmental Protection Agency
1341 G Street, N.W., Suite 600
Washington, DC 20005

Re: In the Matter of ConocoPhillips, PSD Appeal No. 07-02

Dear Ms. Durr:

Enclosed please find an original and 5 copies of Petitioners' Supplemental Reply Memorandum in Support of Petition for Review in the captioned matter, filed pursuant to the Board's Order dated November 6, 2007.

Very truly yours,

Ann Alexander

Enc.

cc: attached service list (via facsimile and overnight mail)

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

IN THE MATTER OF:)
CONOCOPHILLIPS)
COMPANY)

APPEAL NUMBER: 07-02
APPLICATION NUMBER: 06050052
FACILITY ID NUMBER: 119090AAA

NOTICE

PLEASE TAKE NOTICE that I have sent, by hand, to the Clerk of the Environmental Appeals Board an original and 5 copies of a SUPPLEMENTAL REPLY MEMORANDUM IN SUPPORT OF PETITION FOR REVIEW on behalf of Petitioners American Bottom Conservancy and Environmental Integrity Project, a copy of which is herewith served upon each of the representatives identified in the attached service list.

Respectfully submitted,



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November 26, 2007

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**BEFORE THE ENVIRONMENTAL APPEALS BOARD
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**SUPPLEMENTAL REPLY MEMORANDUM IN
SUPPORT OF PETITION FOR REVIEW**

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PRELIMINARY STATEMENT

Petitioners submit this supplemental reply memorandum concerning Points III (failure to conduct appropriate best available control technology (“BACT”) analysis), IV (enforceability), and V (failure to include BACT greenhouse gas limits) of the Petition, pursuant to the Environmental Appeals Board’s (“EAB” or “Board”) order.¹

Both the procedural and substantive responses presented by Illinois Environmental Protection Agency (“IEPA” or the “Agency”) and ConocoPhillips (collectively, “Respondents”) miss the mark entirely by failing to address the specific circumstances of this Petition: after the close of the comment period, IEPA added a severely weakened version of available flare control measures to the final permit without conducting appropriate BACT analysis. That failure – as well as IEPA’s failure to include required greenhouse gas emission controls – affords Petitioners the right to raise these issues, and requires a remand to address them.

With respect to the flare control BACT claim (Point III), Respondents’ waiver argument ignores settled law that new conditions added to a final permit may be challenged initially on appeal. Moreover, Petitioners made abundantly clear in their comments the precise nature of their concern: since IEPA’s BACT analysis failed to appropriately consider flare control measures that are successfully being used elsewhere, that analysis is inadequate. That same concern was raised in the Petition, and is never specifically addressed by Respondents. Although they assert (incorrectly, per Point IV) that the *outcome* of IEPA’s analysis – *i.e.*, the permit limits and conditions purportedly constituting BACT – is reasonable, they make no real effort to show that the Agency

¹ On November 6, 2007, the Board accepted for filing Petitioner’s reply addressed to Points I and II of the Petition, both concerning the Responsiveness Summary (“RS”), and granted permission for a reply concerning the remaining points to be filed by November 26, 2007.

reached that outcome through appropriate top-down BACT analysis. The Clean Air Act (“CAA” or the “Act”) does not allow conclusory claims of reasonableness to substitute for solid, systematic evaluation of available control measures.

Given the inadequacy of the BACT process by which IEPA identified the additional flare control measures included in the final permit, it is not surprising that Respondents cannot explain away the serious substantive inadequacies in the enforceability of those provisions, as described in detail in the Petition (Point IV). Respondents extensively rehash the contents of the added provisions, but neither of them address with specificity the critical terms of these provisions *omitted* by IEPA from what Petitioners presented in their comments, *i.e.*, the enforcement-enabling procedures required in the BAAQMD² and SCAQMD regulations and implemented at the Shell Martinez refinery. Their overall message, reduced to its essence, is that since IEPA did something rather than nothing, Petitioners have no cause to complain.

With respect to IEPA’s failure to establish BACT limits for greenhouse gas emissions (Point V), Respondents cannot escape the fact that IEPA expressly acknowledged in its RS that Petitioners tacitly raised the central, defining issue of the status of greenhouse gases as “regulated pollutants” for purposes of BACT. Neither can they successfully deny that carbon dioxide (CO₂) has, in fact, been regulated under the CAA since 1993. For these reasons, the Board should remand the permit with an order that IEPA conduct BACT analysis to establish a limit for greenhouse gas emissions.

² Abbreviations used in this memorandum are defined in the Petition unless otherwise specified.

I. Petitioners Raised in Comments and Supported on Appeal Their Claim that IEPA Failed to Conduct Appropriate Top-Down BACT Analysis for Flare-Related Emissions

A. Petitioners' BACT Analysis Claims Were Raised During the Comment Period and/or Pertain to Conditions Newly Added to the Final Permit

Respondents assert that Petitioners failed to raise in comments the issue of IEPA's failure to perform appropriate BACT analysis set forth in Petition Point III, and that the issue is therefore waived. They are wrong in multiple respects. First, Petitioners' comments laid out clearly and in detail the control measures that IEPA failed to consider in identifying BACT in the draft permit, and addressed those same control measures in the Petition. Second, the Petition is grounded in IEPA's failure to employ BACT analysis to support its decision to include only a truncated version of those control measures in the final permit – a claim that could not by definition be raised until after the final permit was issued. And third, IEPA effectively acknowledges that Petitioners responded to its purported decisionmaking rationale to the extent they could decipher it from the cryptic references scattered throughout the RS.

1. The BACT Claims Were Raised in Petitioners' Comments

Respondents both assert, albeit in inconsistent and linguistically muddled ways, that Petitioners changed their argument from a contention in their comments that IEPA's BACT analysis was deficient, to a contention in the Petition that BACT analysis was not conducted at all. See Respondent IEPA's brief at 27 (acknowledging that Petitioners submitted comments criticizing "the BACT analysis that [IEPA] performed," but not alleging "failure to perform an appropriate BACT analysis," such that the latter claim in the Petition is waived); Respondent ConocoPhillips' brief at 20 (arguing that Petitioners

comments “challenged only the adequacy of IEPA’s analysis,” but did not allege that “IEPA failed to conduct a BACT analysis altogether”).

This argument cannot survive even a cursory review of the comments and Petition themselves. The comments lay out in detail the available technologies and methods that Petitioners believe should have been considered in IEPA’s BACT analysis. Under Section II of the comments, entitled “Flaring operations don’t meet CO BACT ... requirements,” Petitioners expressed concern that IEPA’s PSD review “failed to evaluate the most stringent technologies available, which prevent entire flaring events and thus achieve the maximum degree of emissions reductions.” Comments (Petition Ex. 2) at 10-11. Under the subsection headed, “There are numerous methods for preventing flaring events and lowering emissions which were not evaluated for the CORE Project” (Comments at 16), Petitioners listed methods and work practices that “have been put in place at existing refineries,” pointed out that “no analysis of such methods was provided for the CORE project despite the requirement found by IEPA that flares meet BACT,” and cited SCAQMD and BAAQMD regulations that require these measures (Comments at 17). Under the subsection entitled “BACT . . . should be at least as stringent as the equipment and practices in place at the Shell Martinez, California refinery” (Comments at 18), Petitioners described the flare reduction practices implemented at Shell Martinez and argued that these practices should have been evaluated as part of BACT. Subsequent subsections provide additional detail concerning results achieved by methods implemented elsewhere, and the types of information that should have been considered in the CORE project BACT analysis but were not. Comments at 19-30.

After IEPA implemented only a severely watered-down version of the recommended measures in the final permit, without meaningfully explaining in the RS its decision to excise large portions of them, Petitioners filed the Petition contending that the flare control measures and numeric CO limits identified in the comments had *still* not been appropriately considered in a top-down BACT analysis. See Petition at 12 et seq. The recommended control measures – and Petitioners’ concern that these control measures should have been fully evaluated as part of IEPA’s BACT analysis supporting the numeric limits and control measures imposed in the permit – did not change between the comments and the Petition.³ Indeed, it is hard to imagine how Petitioners could have been more clear about the nature of their claim in either document. In both cases, the forcefully expressed concern was that IEPA did not comply with the core BACT permitting requirement that the *best* available technology and practices be fully evaluated in the manner required by law.⁴

³ Respondents now claim that the comments did not assert with sufficient specificity the claim in the Petition that the numeric CO limits, in addition to the narrative flare control measures, needed to be evaluated through top-down BACT analysis that took into account the BAAQMD and SCAQMD requirements and their implementation at Shell Martinez. IEPA Response at 43, ConocoPhillips Response at 26. This argument ignores the unified nature of the concern expressed in Petitioners’ comments regarding IEPA’s failure to appropriately evaluate available control measures in establishing permit conditions. In addition to pollutant-specific critiques, the comments address IEPA’s overall failure to support its emission control requirements – both numeric limits and narrative operational mandates, for both CO and volatile organic materials (“VOM”) – through appropriate New Source Review analysis (BACT or LAER). The comments argue that the numeric CO limit proposed by the Applicant was unsupported through BACT analysis; and respond to the Applicant’s contention that CO and VOM control are mutually exclusive by stating that flare prevention measures are “the best method to prevent both VOM and CO emissions,” and that “[s]uch methods were not evaluated at all in the CORE project application.” Comments (Petition Ex. 2) at 12. Although Petitioners were unable to obtain specific data concerning the CO emissions achieved at Shell Martinez (which IEPA should have done), they plainly took the position in the comments that any such limits must be set with reference to what is achievable using the work practices defined in the cited regulations and employed at Shell Martinez.

⁴ The nature of the legally required BACT analysis, including the applicable regulations and recommended implementation procedures described in the NSR Manual, is set forth in the Petition at 12 et seq. and discussed infra in Sections I.B.2 and 4.

Contrary to the distorted reading given it by Respondents,⁵ the Petition never alleges that no BACT analysis at all was performed. It states that the BACT analysis performed was not appropriate. See Petition at 12 et seq. (emphasis added) (section following heading, “IEPA’s Failure to Engage in *Appropriate* BACT Analysis Violated the Clean Air Act and Implementing Regulations”). Neither the comments nor the Petition deny that IEPA engaged in some sort of analytical thought process (however flimsy it may have been) in arriving at the draft permit requirements that it identified as “BACT.” The question raised by Petitioners in both the comments and the Petition is whether calling that thought process “BACT analysis” renders it legally sufficient, as defined in the CAA regulations and NSR Manual. For the reasons set forth in those documents, it clearly was not.

2. The BACT Claims Were Appropriately Raised Initially on Appeal to the Extent They Addressed the New Conditions Added to the Final Permit

The heart of the issue set forth in Petition Point III was that, although IEPA had elected to adopt some of Petitioners’ recommended control measures in its BACT determination, IEPA’s decision to reject significant aspects of those control measures was not supported by top-down BACT analysis. See Petition at 13 (“Although the draft permit set emissions limits for the new flares . . . , it did not do so through top-down analysis as defined in the regulations and NSR manual”). Thus, since Petitioners were addressing new conditions added to the final permit, the CAA regulations and extensive Board precedent allow those claims to be raised in the first instance on appeal (although

⁵ ConocoPhillips’ characterization of the Petition in support of this claim is particularly misleading. Its Response claims that the Petition “repeatedly accuses IEPA of ‘fail[ing]’ and ‘refus[ing]’ to conduct a BACT analysis.” ConocoPhillips’ Response at 20. However, by citing only these two isolated words, Respondent masks the fact that the Petition consistently alleges not that IEPA failed and refused to conduct *any* BACT analysis, but that it failed and refused to conduct *appropriate* top-down BACT analysis – exactly the claim raised in Petitioners’ comments. Petition at 12 et seq. (repeatedly alleging that IEPA declined to “engage in top-down BACT analysis”).

here, as discussed above, they were raised to the extent known in the comments as well). 40 C.F.R. § 124.19(a). See In re Rockgen Energy Center, 8 E.A.D. 536 (EAB 1999) (issues not raised in comments may be raised on appeal to the extent they “concern changes from the draft to the final permit decision”); accord In re Jett Black, Inc., 8 E.A.D. 353 (EAB 1999).⁶

3. Petitioners Specifically Addressed the Few
Limited Explanations Provided by IEPA in the RS

Respondents justify IEPA’s failure to specify and explain the new provisions added to the final permit by claiming that it was sufficient merely to bury those explanations in passing references in the RS. See IEPA Response at 16 et seq., ConocoPhillips Response at 11 et seq. Now, IEPA argues that Petitioners should be disqualified from raising their claims because they allegedly failed to ferret out all such references to the changes in the RS and respond to them. IEPA Response at 57, 63.

Leaving aside the dubious fairness implications of that strategy (addressed in the previously submitted portion of this reply memorandum), Petitioners did in fact succeed in identifying what appeared to be the central response by IEPA in the RS to Petitioners’ concerns. IEPA acknowledges that Petitioners responded in depth to their blanket rejection of “[s]etting a limit [on flaring] in terms of annual emissions of flaring,” which appeared (although it was difficult to discern) intended to address Petitioners’ overall

⁶ IEPA complains at one point that Petitioners’ contention that IEPA had inappropriately concluded that “BACT analysis and limit-setting is generally inappropriate” in the flaring context was not raised in Petitioners’ comments. IEPA Response at 25. This assertion is remarkable given that the contention was based specifically on a statement made by IEPA *in the RS*. See Petition at 16 (quoting and discussing relevant RS language). See also IEPA Response at 47 (arguing that Petitioners should have raised in comments their argument by analogy that startup, shutdown and malfunction events are not automatically exempt from BACT, despite the fact that this argument was made in response to the referenced RS statement). IEPA’s reliance upon Petitioners’ prescience regarding the substance of documents not yet issued is inconsistent with settled law.

concern that emissions limits – which were established in the permit for both BACT and LAER pollutants – had not been established based on reductions achievable through the recommended control measures. IEPA Response at 43, Petition at 16. They make much, however, of Petitioners’ failure to specifically discuss another passing reference in the RS, suggesting in general terms that circumstances differ at the Shell Martinez refinery sufficiently to justify failure to require comparable controls in the CORE project. IEPA Response at 62-63, citing RS (Petitioners’ Exhibit 6) at 31-32. While it had not been immediately obvious to Petitioners that this thin reference was intended as a full-scale rationale for gutting the recommended control requirements – it reads in actuality more like a generalized rejection than a rationale – Petitioners discussed that reference at length in the previously-submitted portion of this reply brief once that intention became evident, and explained why it makes no sense. IEPA asks, in essence, that the Board reward it for failing to provide the required clear rationale for its changes by penalizing Petitioners for not uncovering all of their buried references, a clearly inappropriate result.

B. Respondents Present No Information Indicating that IEPA Identified BACT Requirements Through Appropriate Top-Down BACT Analysis

In arguing that IEPA’s means of identifying BACT requirements was sufficient, Respondents present a series of obvious and uncontroverted propositions (e.g., that flaring limits for individual events are inappropriate, and work practices are more appropriate than end-of-pipe controls), excuses (e.g., that the fact gathering requested by Petitioners would be too difficult, and Petitioners should have done it themselves), irrelevancies (e.g., that the purported BACT limits are “proper” and “rational,” even though not derived through appropriate BACT analysis), and out-and-out confusion (IEPA’s attempts to extract a meaningful rationale for its decision from the RS).

None of these scattered arguments do the one thing necessary to respond to the Petition: present a basis to conclude that the Agency did, in fact, conduct appropriate top-down BACT analysis as the basis for its flare control requirements and numeric limits on flaring CO. Regardless of how “reasonable” the subject permit conditions might arguably be, what other good things the permit may contain, and how hard IEPA believes it would have been to do more, the fact remains – and is nowhere specifically denied by either Respondent – that IEPA did not identify the relevant permit limits through BACT analysis methods appropriate for assuring compliance with the CAA, as described in the NSR Manual.

1. Identifying the Generic Uncontroverted Proposition that Control Measures Must be Feasible and Safe Does Not Constitute Top-Down BACT Analysis

In arguing that the Agency’s analysis was sufficient, Respondents state that the Agency consulted the RACT/BACT/LAER Clearinghouse (“RBLC”) and determined that minimizing flares are a better means of controlling CO emissions than add-on controls. IEPA Response at 31, ConocoPhillips Response at 21. They further point out, citing Board authority, that BACT limits must be achievable and may include a reasonable margin of safety. IEPA Response at 45-46. Finally, they argue extensively that the final permit does, in fact, contain flare control measures aimed at reducing CO emissions by minimizing flaring. IEPA Response at 49, 58-68 (summarizing the flare control measures added to the final permit); ConocoPhillips Response at 23-25.

Petitioners disagree with none of these propositions. And none of them pertains to the question of whether the Agency conducted appropriate analysis to identify BACT.

With respect to the Agency’s point that flare minimization is a better means of controlling CO from flares than add-on controls, Petitioners not only do not disagree, but

expressly made that very point in their comments. The comments state, “Preventing flare events completely or minimizing the quantities of gases burned in the flares is the best method to prevent . . . CO emissions.” Comments (Petition Ex. 2) at 12. Thus, IEPA’s statement that Petitioners “appear to suggest that the Permit should have included short-term BACT limits during flaring events as well” (IEPA Response at 50) – which would only be achievable through add-on controls – is simply false. Petitioners are in complete agreement with IEPA as to the *form* that CO emissions controls should take – i.e., work practices that minimize flares coupled with an annual flaring emission limit. Where they take issue is that they believe the annual CO limits should reflect what is actually achievable when the BACT flaring minimization practices are put into place – rather than, as here, being completely unsupported by any visible analysis.

Petitioners likewise do not disagree with the generic proposition that BACT limits must be achievable, and need not in every instance be based on one-time attainment of an emissions level at a particular source. IEPA Response at 45-46, citing In re Knauf Fiber Glass, GmbH, 9 E.A.D. 1 (EAB 2000) and In re Three Mountain Power, LLC, 10 E.A.D. 39 (EAB 2001). In any event, since Petitioners were not able to obtain specific data regarding the annual CO emissions achieved at the Shell Martinez refinery and other relevant sources (which, as discussed below, was appropriately the job of the Agency), the contention is irrelevant here. Petitioners are making the far more straightforward and unassailable point that IEPA had the obligation, under the CAA BACT regulations, to actually find an annual emissions limit that *would* be consistently achievable if the appropriate flare minimization practices were followed; and that the limited data available to Petitioners suggest that this achievable limit is substantially lower than the

one that IEPA set.⁷ Petition at 15. Although the permit sets annual CO limits for flares, the Agency presents nothing to suggest that those limits were actually arrived at through an appropriate BACT evaluation process.

Finally, Petitioners do not dispute the obvious proposition that IEPA added flare control measures to the final permit, and have acknowledged that these measures constitute an improvement over the draft permit. Petition at 17. However, Respondents' laundry list of additional measures that were added (IEPA Response at 49, 58-68, ConocoPhillips Response at 24) in no way demonstrates that these measures actually constitute BACT, explains why the more complete and enforceable measures recommended by Petitioners are not BACT, or demonstrates that IEPA followed appropriate BACT analysis procedures in so concluding.

IEPA complains, after setting forth its list of added permit conditions, that Petitioners "fail to consider the comprehensive program established by Illinois EPA," and that "[t]aken as a whole," the permit contains sufficient flare verification measures.⁸ IEPA Response at 62, 65. However, the standard for BACT compliance is not whether IEPA identified a suite of permit conditions that are overall beneficial, viewed at a

⁷ As discussed *infra*, both Respondents assail Petitioners for having noted that extrapolations from available VOM emissions data at Shell Martinez suggest that CO emissions there are also lower than the CO limits set by IEPA in the final permit, since Petitioners did not succeed in obtaining the actual CO emissions data from that facility. See Petition at 15, IEPA Response at 41, ConocoPhillips Response at 26. However, the point of this reference was not to recommend a specific lower emissions limit – that is the Agency's job, not Petitioners' – but only to point out that the faulty BACT evaluation process likely resulted in an emission limit that was too high.

⁸ As discussed *infra*, IEPA's argument that "[p]recision in the quantification of emissions from flaring that does occur does not directly further the Permit's purpose of eliminating flare events" (IEPA Response at 63) is specious, as enforceability is at the heart of the CAA major source permitting program. 42 U.S.C. § 7661c(a).

distance “comprehensively” and “taken as a whole.” The standard is whether the Agency identified the *best* available control measures using appropriate analytical methods.⁹

2. Applicable Law Requires That the Agency, Not Petitioners, Gather and Evaluate the Necessary Information to Identify BACT

As discussed in the Petition, the five-step top-down BACT process described in the NSR manual requires as Step 1 that the permitting agency “identify all available control technologies”; as Step 2 that it “eliminate technically infeasible options” through appropriate technical analyses; and as Step 3 that it establish and rank the “control effectiveness” of the available technologies. Petition at 12-13, citing NSR Manual at B.5 et seq.

The Responses to the Petition, however, reflect a view that it was Petitioners’ job rather than IEPA’s to perform these information-gathering and analytical steps; and that failure to do so excuses the Agency from further BACT analysis. Sprinkled throughout the Responses are repeated contentions that Petitioners rather than the Agency should be held accountable for completing the BACT analysis of the more stringent measures they identified and obtaining all associated documentation. See IEPA Response at 39-40 (complaining that Petitioners did not “provide any data relating to the levels of flaring that would occur to the various types of control measures for flaring as recommended by

⁹ Indeed, IEPA’s purported explanation of the new final permit conditions in its Response to Point III evinces a shaky understanding of the specifics of both their purpose and their shortcomings. For example, in responding to Petitioners’ concern that the flare control requirements applicable to the new flares could be evaded simply by routing flare gases through the existing flares (Petition at 18), IEPA provides the non-sequitur response that the existing flares “would not be impacted by the CORE project as they were not being physically modified or changing their operation.” IEPA Response at 67. IEPA entirely misses the actual point of Petitioners’ concern, which is that *because* no changes are being made to the existing flares – *i.e.*, they are not being made subject to the control requirements being required of the new flares – the Applicant should not be able to route CORE project gases through them. The Response is silent concerning Petitioners’ proposed solution – again, drawn from the BAAQMD regulations – of requiring that the gas recovery system be dedicated to the new CORE project flares. Id.

the Petitioners,” and stating, “Nor is the Illinois EPA under an obligation to gather additional information”); *Id.* at 30-31 (complaining that petitioners failed to present data quantifying CO emissions from flares at the Shell Martinez refinery); ConocoPhillips Response at 26-27 (same); IEPA Response at 66 (as discussed *supra*, complaining that, in arguing for application of the BAAQMD regulatory requirement of obtaining sampling results at the flare header rather than using calculations based on distant measurement, Petitioners failed to provide “supporting fact” demonstrating that the BAAQMD method is in fact more accurate); IEPA Response at 68 (complaining that, in arguing for dedicated flare gas recovery system to ensure that gases are not routed through the existing flares, Petitioners failed to present “one scintilla of evidence” that this practice would actually occur and, if it did, that emissions would increase).

IEPA’s evident view of the BACT process – that it need only conduct top-down analysis to identify the best technology if commenters hand them the necessary information on a platter – is not consistent with what the law requires. Petitioners did what public commenters can appropriately be expected to do, which is to call information to the Agency’s attention indicating that its review was incomplete and that important information and analyses were missing. Their comments – and subsequently the Petition – identified a series of flare control measures required elsewhere by law, and demonstrated that they are successfully being used in other major refineries. The information Petitioners were able to obtain during the comment period – demonstrating that one type of emissions, VOM, had been decreased to levels significantly below the annual limits set in the permit, and that rough extrapolations from that data suggest that the permit CO limits are inappropriately high as well – ought to have prompted the

Agency to obtain information regarding CO emissions at the Shell Martinez refinery flares, and perform its own calculations to determine whether similar results would be achievable at the Applicant's refinery. Instead, IEPA and the Applicant assail Petitioners for not having done that work themselves.

Similarly, when presented with information that other refineries are being required to employ a method that ensures direct sampling results rather than extrapolative calculations, IEPA should have evaluated the control effectiveness of this method pursuant to Step 3 of top-down BACT. Instead, it assails Petitioners for not having proven that sampling is more accurate than extrapolation. And when presented with information that their permit conditions as written contain a potentially significant loophole that would allow the Applicant to avoid the new flare control measures altogether by simply re-routing gases through the existing flares, IEPA should have confirmed whether that loophole existed and, if so, plugged it. Instead, IEPA complains that Petitioners failed to actually prove that the Applicant would be likely to take advantage of it.

The Board should reject IEPA's blame-shifting approach to regulation.¹⁰ The Agency must be required to evaluate the measures recommended by Petitioners using the BACT analysis steps enumerated in the NSR Manual.

¹⁰ IEPA's Response also evinces the strange view that its responsibility in BACT analysis, to the extent it had any at all, was merely to gather data to include in the administrative record, and not to actually evaluate that data to determine whether BACT had appropriately been identified. See IEPA Response at 39-40 (concerning the question of who is responsible for information regarding CO emissions from flaring, states that the Agency is not "under an obligation to gather additional information for inclusion in the Administrative Record"); *Id.* at 55 (stating that the "unified premise of Petitioners' argument is that the Illinois EPA failed to have before it certain information when it permitted the project"). In fact, the "unified premise" of Petitioners' BACT argument is not that the Agency did not have enough information before it, but rather that the Agency failed to evaluate even the information that it did have.

3. IEPA Fails to Explain Away the Conclusory and Insufficient Responses Contained in the RS

Despite IEPA's failure to specify and explain the changes to the final permit, and the more general failure of the RS to adequately explain the Agency's analysis underlying its permit decision, the Petition addresses the limited responses contained in the RS and explains why they are insufficient to justify the Agency's failure to comply with BACT requirements. Specifically, Petitioners addressed IEPA's statement in response to Petitioners' comment regarding the necessity of numeric limits for flaring, in which it stated, "Setting a limit in terms of annual emissions for flaring, in the manner proposed by this comment, would potentially act to prohibit flaring when it was appropriate. . . It would set an absolute, enforceable limit on the extent of flaring that could occur at the refinery independent of the actual circumstances at the refinery in a particular year." Petition at 16, citing RS (Petition Ex. 6) at 13.¹¹ Petitioners observed that this statement makes little sense given that the final permit actually *does* set an annual limit for flaring, and remarked that the Agency's statement can best be interpreted as a general reluctance to establish BACT limits for flares. They furthermore noted that the unpredictable "upset" nature of flaring does not diminish the need for quantifying emissions reductions (either through setting numeric limits or specifically establishing the expected reductions) from work practices in accordance with the Board's decision in In re Indeck-Elwood, LLC, PSD Appeal 03-04 (September 27, 2006). Petition at 13.

¹¹ IEPA makes much of the fact that its statement was in response to a comment specifically regarding VOM emissions rather than CO emissions. IEPA Response at 43. However, as discussed supra n. 3, the discussion of setting emissions limits for CO and VOM was necessarily unitary as a technical matter. The generalized nature of IEPA's statement – regarding the propriety of setting any limit "of annual emissions of flaring" – reflects that fact.

Additionally, when it became evident that Respondents intend to rely upon a passing RS reference to the lower flaring emissions expected at Wood River as a justification for not requiring additional measures to ensure lower flaring emissions (RS at 31), Petitioners addressed the irrationality of that response in the initial portion of this reply memorandum. See Partial Reply Memorandum in Support of Petition for Review – Responsiveness Summary Issues (“RS Reply”) at 10-11.¹²

Respondents’ attempts to bolster the thin justifications in the RS only succeed in enhancing their irrationality. IEPA claims that it merely meant to say that the annual emissions reductions achieved at Shell Martinez are an inappropriate benchmark for establishing limits for the CORE project. IEPA Response at 44. Yet it makes no attempt to define what *would* be an appropriate means of establishing numeric limits on CO emissions from flares, or to specifically identify the analysis used to establish the numeric CO limits for flaring set forth in the final permit. Id. Indeed, a few pages later, it appears to revert back to Petitioners’ interpretation of the RS statement – i.e., that annual emissions limits or other quantification are inappropriate for flare emissions – in complaining that “it is unclear how the Petitioners’ [sic] believe emission reductions expected from work practices applied to new process emission units should be quantified given that process upsets and flaring events are sudden and unpredictable.”¹³ IEPA Response at 51.

¹² As discussed supra, in view of Respondent’s failure to specify changes to the final permit and provide reasons for them beyond a few buried references in the RS, Respondents’ suggestion that Petitioners should be penalized for not having deciphered all of those reasons from its cryptic RS references is inappropriate.

¹³ IEPA also appears to misunderstand, as noted supra, the type of flaring emission limits that Petitioners have identified as being required. The Agency states that it is unreasonable “to require the emission reductions expected to be achieved *during* a flaring event by work practices to be quantified when the purpose of the relevant work practices is to assure effective combustion of gases that are released during the event whereas the function of other work practices is to prevent and minimize the occurrence or reoccurrence of the flaring events at other times.” IEPA Response at 51-52 (emphasis added). Leaving

With respect to the requirement articulated in Indeck-Elwood that emission reductions from work practices minimizing upset events must be quantified, IEPA explains technical differences between coal-fired power plant upset events (which they argue generally result from failures of add-on pollution control equipment) and refinery flaring events (which they argue result from failures involving the associated process unit).¹⁴ IEPA Response at 51. This is a distinction without a difference, and IEPA offers no further explanation of its significance.¹⁵

Finally, Respondents relentlessly quote and place enormous reliance on IEPA's suggestion in the RS that the full array of BAAQMD and SCAQMD regulations aimed at reducing flaring events need not be applied to the CORE project because measures are being taken to reduce flaring events. See IEPA Response at 61, 63, 70, 75, 79, 84; ConocoPhillips Response at 28, 30, 35. As discussed in the RS Reply, this argument is not only factually unsupported, but is also circular and makes no sense on its face.¹⁶

At a more fundamental level, this argument reflects a basic misunderstanding of the essential role of effective monitoring and measurement in reducing emissions, as the quoted language specifically references the BAAQMD and SCAQMD monitoring requirements. The suggestion that monitoring measures are not necessary if flare

aside deficiencies in this chain of logic (it is not at all clear why the existence of one set of work practices precludes quantification of emissions reductions achieved by the other), Petitioners are not in any event arguing that emission reductions achieved *during* an individual flaring event be separately quantified, only that reductions achieved through flare minimization be quantified on an annual basis in the form of an annual flaring CO emissions limit.

¹⁴ IEPA also argues that this argument was not raised in comments and therefore waived. As discussed supra note 5, the reference to the requirement articulated in Indeck-Elwood that upset emissions are subject to BACT and their reduction through work practices must be quantified was in response to a statement made in the RS suggesting to the contrary. See Petition at 16-17 (statement responds to RS at 26, where agency claims that "any further discussion about whether a particular flaring event was avoidable will occur after the event has occurred" rather than in permitting evaluation made prior to the event).

¹⁵ The Response references "predictive factors" involved in startup and shutdown, without further explanation or any acknowledgment that unpredictable shutdowns are associated with unplanned outages; and makes no reference to malfunctions, which are inherently unpredictable. IEPA Response at 51.

¹⁶ See RS Reply at 10-11.

reduction measures are in place is necessarily grounded in the idea that there is no causal relationship between effective monitoring and emission reduction. IEPA expressly articulates this view throughout its response, arguing that “[p]recision in the quantification of emissions from flaring that does occur does not directly further the Permit’s purpose of eliminating flare events” IEPA Response at 63, 80.

This dismissive perspective on the significance of monitoring measures is consistent with neither the NSR Manual (at B.56, Petition at 21) or the CAA. Congress has recognized that emission controls are meaningless and ineffective without reliable means in place of ensuring they are complied with and measuring the achieved reduction in emissions. CAA § 504(a) (concerning Title V permits) requires that each permit “shall include enforceable emission limitations and standards ... and such other conditions as are necessary to assure compliance with applicable requirements.” 42 U.S.C. § 7661c(a).

USEPA has acknowledged:

In the absence of effective monitoring, emissions limits can, in effect, be little more than paper requirements. Without meaningful monitoring data, the public, government agencies and facility officials are unable to fully assess a facility’s compliance with the Clean Air Act.

Initial Brief of USEPA, Appalachian Power Co. v. EPA, No. 98- 1512 (D.C. Cir., Oct. 25, 1999) quoted at 71 Fed. Reg. 75422, 75425 (Dec. 15, 2006) (emphasis added). See also RS Reply n. 9 (quoting USEPA Administrator, “We have also found that quality, accurate environmental monitoring data is essential in making good, quality decisions”).

As both a matter of law and practical logic, flare control measures are meaningless if there is no means of making sure they are in place and working. As noted in the RS Reply, Shell Martinez representatives found that good monitoring and rigorous

root cause analysis were essential in achieving a low level of emissions from flaring. Id. at 11.

4. Deference to Administrative Expertise Does Not Extend to
Excusing a Permitting Agency From BACT Analysis Requirements

The Responses are grounded in repeated assertions that IEPA's evaluation was technically competent, and therefore deserves deference by the Board. See IEPA Response at 33 (the Agency's permit decision results from "a proper exercise of its technical judgment"); IEPA Response at 59-60 (asserting that Petitioners' claims are merely a "conflicting opinion" with IEPA concerning "a technical determination"; and that IEPA's determination deserves deference because it is "rational and supportable"); ConocoPhillips Response at 23 (numeric CO limits in the final permit represent "a well-reasoned policy judgment" by IEPA); Id. at 27 et seq. (section headed, "The emission control measures are reasonable").

Technical deference, however, does not constitute a license to ignore BACT analysis requirements. The CAA and regulations define the legal parameters of a BACT determination, see CAA § 169(3), 42 U.S.C. § 7479(3), 40 C.F.R. § 52.21(b)(12), and the NSR Manual "provides a framework that assures adequate consideration of the regulatory criteria and consistency within the PSD permitting program." In re Prairie State Generating Station, PSD Appeal No. 05-02 (EAB March 25, 2005). See In re Steel Dynamics, Inc., 9 E.A.D. 165, 183 (EAB 2000) (top-down BACT analysis "is frequently used by permitting authorities to ensure that a defensible BACT determination, involving consideration of all requisite statutory and regulatory criteria, is reached").

The BACT analysis process outlined in the NSR manual – and the legal requirements on which it is based – afford some technical latitude to a permitting agency

following them. The agency may use reasoned technical judgment to determine whether a control technology is available, feasible, technically effective, and cost effective. See Petition at 12-13, citing NSR Manual at B.5 et seq. But an agency does not have the option under the law to simply throw out the BACT process altogether and make what it considers to be a “proper” technical judgment based on criteria not found in applicable law. That, however, is precisely what IEPA has done here. Presented with evidence of more stringent measures than those being imposed by the draft permit, it watered down those measures into a far less effective form based on thin reasoning and without benefit of legally-required BACT analysis. Likewise, in setting numeric BACT emission limits for CO from flares, IEPA provided no quantitative analysis of any kind.

II. Petitioners Raised in Comments and Supported on Appeal Their Claims that the Flare Control Measures in the Permit are Not Practicably Enforceable

Respondents' arguments concerning the claims raised in Point IV of the petition concerning the Agency's failure to ensure that the final permit is enforceable are addressed in large part in the preceding section. Although Petitioners' Point III claim that IEPA failed to follow BACT procedures is separate from its Point IV claim that the permit is substantively inadequate, nonetheless the lack of sufficient monitoring, observation, and sampling requirements in the permit is in substantial part attributable to the Agency's failure to follow proper analytical procedures to find the best available means of assuring enforceability. Petitioners will therefore not reiterate their arguments from the previous section, but will reference and apply them as appropriate here.

A. Petitioners' Claims Were Raised During the Comment Period and/or Pertain to Conditions Newly Added to the Final Permit

As discussed in the previous section, Respondents' claims that Petitioners failed to sufficiently address the RS in their Petition are fundamentally flawed in that the provisions at issue were newly added to the final permit. Accordingly, the Petition represented the first opportunity to comment on them. It is settled law that new issues may be raised initially on appeal with respect to new permit conditions. See 40 C.F.R. § 124.19(a); In re Rockgen Energy Center, *supra*; In re Jett Black, Inc., *supra*. Here, the concerns raised by Petitioners related to ways in which the *newly-added* conditions reduced the efficacy of the regulations and control measures in use elsewhere on which they were purportedly based. See Petition at 21 *et seq.*

In any event, as further discussed in the previous section and the RS Reply, the RS was woefully inadequate in describing the newly-added conditions, and offered no meaningful justification for having issued them in gutted form.¹⁷ See RS Reply at 7-11. Specifically, it failed to explain why the recommended testing requirements were issued without equipment accuracy and methodology requirements; why the flare minimization plan was issued without technical data requirements or provision for public comment; why the monitoring requirements were issued without essential accuracy protocols; and why the observational requirements were crafted in a manner to allow a vast number of flaring events to go unobserved. Id. It thus makes little sense for Respondents to complain that Petitioners did not address their justifications for the new provisions in the RS, as they provided Petitioners with essentially nothing to address.

¹⁷ For the reasons described in the previous section, the assertion that extensive monitoring measures are unnecessary because flaring will be minimized does not constitute a reasoned justification.

B. Respondents Present No Information Demonstrating that the Newly Added Flare Control Measures are Meaningfully Enforceable

In a manner similar to their response to Point III, Respondents address Point IV not with specific responses to the technical concerns raised in the Petition, but rather with a recitation of the newly-added conditions followed by an argument that they are adequate when viewed as a comprehensive whole – and not scrutinized too closely in detail. IEPA argues that it is unfair of Petitioners to “isolate portions of the Permit in lieu of considering the comprehensive program established by the Illinois EPA to determine compliance, thereby, giving the appearance that the Illinois EPA’s response was somehow inadequate.” IEPA Response at 89. In a similar vein, IEPA complains that petitioners are focused on “minutia in permitting detail,” and that the Board should not look too closely at it. *Id.* at 88.

As was the case with the BACT analysis requirement, the fact that the Agency is afforded a measure of technical discretion in permitting does not mean that discretion is unfettered. Enforceability requirements are at the heart of the CAA, see 42 U.S.C. § 7661c(a), and the Agency may not evade them simply by requesting that the Board review provisions ensuring enforceability by holding them at a distance and squinting. The responses to Point IV fail entirely to actually address the specific, numerous, and highly significant enforceability deficiencies set forth in the Petition. And as in the Responses to Point III, even the generalized recitation of monitoring measures offered in response to Petitioners’ concerns evinces substantial confusion regarding what those measures actually do and why Petitioners believe them to be inadequate.

1. Respondents Fail to Address the Inadequate Flaring Observation Requirements

The Petition identified the following deficiencies with regard to the flaring observation requirements in the new permit conditions: failure to require both video and operator monitoring, with the result that monitoring will be non-existent in the likely frequent event that operators are “engaged in tasks essential to the event” or their safety may be compromised; requiring operator observation to commence only 45 minutes after a flaring event has started; and not requiring observational monitoring for any events of less than 30 minute duration, leaving a large number of smoking events lasting less than 30 minutes to go unobserved. Petition at 22-23. None of these problems are present in the applicable BAAQMD regulation.

Respondents state that any deficiencies in the observational monitoring requirements should not be of concern because there will be continuous monitoring requirements in place as well. IEPA Response at 75-76, ConocoPhillips Response at 33. Leaving aside the severe deficiencies in the permit’s monitoring methodology identified by Petitioners (addressed infra), this response fails to appreciate the substantially divergent purposes of continuous monitoring and flare observation. While monitoring determines that a flaring event has occurred, observation serves the separate, additional function of immediately alerting plant personnel of the event so they can act promptly to make operational changes. Flare smoking, the most immediate and obvious sign of a flaring event, is not detectable through continuous monitoring. ConocoPhillips notes in addition that operator monitoring must be conducted in accordance with EPA Method 22.

ConocoPhillips Response at 33. In so doing, however, it fails to specify – because it cannot – how Method 22 will overcome the specific deficiencies identified by Petitioners.

2. Respondents Fail to Address the Lack of Equipment Accuracy Requirements

The Petition identified the following deficiencies with regard to ensuring equipment accuracy in the new permit conditions: failure to set detection limits, require monitoring equipment to meet standard test method requirements, require measures to verify equipment accuracy, limit equipment downtime, or set conservative assumptions for calculating emissions during downtime. Petition at 23. All of these requirements are contained in the applicable BAAQMD regulation.

IEPA responds first, that “[p]recision in the quantification of emissions of flaring that does occur does not directly further the Permit’s goal to eliminate flaring” (IEPA Response at 80) – a response that not only tacitly acknowledges the imprecision inherent in the current permit condition monitoring requirements, but flies in the face of the critical role of monitoring accuracy in ensuring effective emissions reductions as discussed in the previous section. The Agency responds next that the permit requires that records be kept of operation and maintenance of the monitoring and testing equipment at issue (Id.) – without even attempting to explain how this requirement addresses the problems identified by Petitioners. IEPA further responds that the provisions at issue are “similar to” those contained in an earlier ConocoPhillips consent decree (Id. at 80-81) – without explaining specifically what those “similar” provisions do, if anything, to address the issues described in the Petition, or whether the provisions in the consent decree even constitute BACT. Finally, IEPA states that Petitioners’ concerns with regard to equipment accuracy are flawed because “the accuracy or precision of a determination

does not affect the feasibility of making such determination. It merely affects the accuracy or precision of the determination.” IEPA Response at 82. In other words, so long as the Applicant is measuring something, it is of no consequence whether the measurements are accurate. That philosophy, suffice it to say, does not enhance Petitioners’ confidence in the enforceability of the permit.¹⁸

3. Respondents Fail to Address Deficiencies in Methodology

The Petition identified the following deficiencies with regard to methodology in the new permit conditions: failure to ensure that monitoring occurs at the flare header (instead of less accurate upstream measurement supported by extrapolative calculations) and failure to specify the required frequency of sampling. These requirements are contained in the applicable BAAQMD regulation.

IEPA responds that the permit requires the Applicant to “either continuously monitor the flow, hydrocarbon and sulfur content of the waste gas to each Delayed Coking Unit flare or must determine the operating parameters of the Delayed Coking Unit and flares in order to calculate the flow and composition of waste gas to the flares.” (IEPA Response at 85). This statement is, in essence, an accurate restatement of the problem identified by Petitioners: that the permittee is inappropriately given the option of simply calculating flare emissions through extrapolation rather than actually measuring them at the flare header.

¹⁸ IEPA also picks up on the Petition reference to the fact that inaccurate measurements of flare emissions will make it impossible to ascertain not only whether CO emission limits are being complied with, but NO_x and VOM emission limits as well – arguing, evidently, that the fact that multiple types of emissions beyond those directly pertinent to CO PSD limits are involved removes these enforceability issues from the Board’s jurisdiction. IEPA Response at 82-83. Notwithstanding the fact that the enforceability deficiencies will have a detrimental impact on control of pollutants in addition to CO, the fact that PSD-permitted CO emissions are at issue places the matter squarely within the Board’s jurisdiction.

The monitoring provisions at issue, Permit Conditions 4-7-8.1(c) and (d), read as follows:

- c. The Permittee shall continuously monitor each affected unit associated with the Delayed Coking Unit for the occurrence of flow of waste gases, other than normal flow of purge gas and leakage from “closed” pressure relief valves, to the affected unit.
- d. The Permittee shall continuously monitor either: 1) The flow and hydrocarbon and sulfur content of waste gas to each affected unit associated with the Delayed Coking Unit; or 2) The operating parameters of the Delayed Coking Unit and affected units as needed for the flow and composition of waste gas to the affected units to be determined.

Subsection (c) is merely a requirement that the flow of gases be monitored, not their content. Subsection (d) allows the permittee to choose whether to 1) measure hydrocarbon content, or 2) simply estimate it. Subsection 2) provides no guidance as to how the estimate is to be performed – and most significantly, as Petitioners have pointed out, no guidance as to where the sampling on which the estimate is based is to occur, and how often it must be conducted to support the estimate. The permittee is essentially given carte blanche to structure the estimation process to obtain the result it wants.

Under the permit condition as written, the permittee could take an upstream measurement, assume that the upstream gases do not go to the flare, and subtract them; or it could take a one-time measurement of gas concentration and use it as a constant assumption, without taking into account variation over time. Simply put, the permit is not enforceable until and unless IEPA establishes meaningful monitoring methodology – which it could have done merely by implementing methods in place elsewhere provided to them by Petitioners.¹⁹

¹⁹ IEPA responds in addition by citing recordkeeping requirements (IEPA Response at 85-87) – essentially a non-sequitur given that recordkeeping is only as useful as the actual results being documented.

Moreover, these continuous monitoring provisions are additionally deficient because they apply only to the Delayed Coking Unit, and not to other aspects of the CORE Project that will be associated with flaring. The CORE Project involves many more components of the Applicant's facility than just the new Delayed Coking Unit. See the Permit (Petition Ex. 4) at 7 (listing processing units associated with the Project). The Permit specifically describes affected units from which the Project will cause an increased flow of gases to the flares, but which are not subject in any way to any of the continuous monitoring requirements that apply to the Delayed coking Unit flare under the Permit. For example, the permit states at Section 3.4.3, "Debottlenecked Flares," "Emissions from the following existing flares, which will be debottlenecked (*i.e.*, *experience an increase in gas flow to the flare*) shall not exceed the following limits. . . ." Permit at 11.²⁰ The continuous monitoring provisions also do not address increased flow to the flares associated with planned and unplanned startup, shutdown, and malfunctions at units other than the Delayed Coking Unit.

III. Petitioners Raised in Comments and Supported on Appeal Their Claims that the Permit Must be Remanded Because it Lacks a BACT Limit for Greenhouse Gases

A. Petitioners' Claims Were Raised During the Comment Period

Respondents both argue that Petitioners' arguments in Point V concerning the need for BACT emission limits for greenhouse gases were waived by failure to raise it in comments. IEPA Response at 95 *et seq.*, ConocoPhillips Response at 39 *et seq.* Both Respondents also acknowledge, however, that Petitioners' comments contain an

²⁰ As discussed *supra*, although IEPA asserts that the existing flares are subject to control measures "similar to" those contained in an earlier ConocoPhillips consent decree (IEPA Response at 80-81), the Agency fails to actually describe those "similar" measures or specifically compare them to the measures in the Permit.

extensive discussion of the need for the Agency to include greenhouse gas emissions in evaluation of the CORE projects emissions. Id.

The fact remains that IEPA expressly and appropriately acknowledged that “[t]reating emissions of CO₂ and other greenhouse gases as regulated air pollutant [sic] . . . is effectively being requested” by Petitioners’ comments. Regardless of context, IEPA was by its own admission on notice of the legal issue at the heart of Petitioners’ argument, which is that CO₂ is a pollutant “subject to regulation” for purposes of 42 U.S.C. § 7475(a)(4). Accordingly, the issue has not been waived.

B. Respondents Have Failed to Demonstrate Why the Permit Should Not Be Remanded for Lack of a BACT Limit for Greenhouse Gases

1. A BACT Limit is Required Under a Straightforward Reading of the CAA

The substantive dispute in the Petition and Responses can be reduced largely to one fundamental question: whether IEPA may avoid including in the CORE Project PSD permit a BACT emission limit for CO₂. The answer is no, and the reasoning involves a straightforward reading of the Act.

The CAA requires that a PSD permit must include a BACT emission limit for “each pollutant *subject to regulation* under this chapter emitted from, or which results from” the facility. 42 U.S.C. § 7475(a)(4) (emphasis added). In 1990, Congress added § 821(a) to the CAA (42 U.S.C. § 7651k note; Publ.L. 101-549, 104 Stat. 2699), which expressly regulates CO₂ by making it subject to monitoring requirements. That provision states, in relevant part:

Monitoring. – The Administrator of the Environmental Protection Agency shall promulgate regulations within 18 months after the enactment of the Clean Air Act Amendments of 1990 to require that all affected sources subject to the Title V of the Clean Air Act *shall also monitor carbon dioxide emissions* according to the same timetable as in Section 511(b)

and (c). The regulations shall require that such data shall be reported to the Administrator. The provisions of Section 511(e) of Title V of the Clean Air Act shall apply for purposes of this section in the same manner and to the same extent as such provisions applies to the monitoring and data referred to in Section 511.²¹

Approximately 14 years after EPA adopted its § 821 regulations²² to regulate CO₂ emissions, the Supreme Court on April 2, 2007 held that CO₂ and other greenhouse gases are “pollutants” under the plain language of the CAA. Massachusetts v. EPA, 549 U.S. 1438 (2007).

The conclusion from this sequence of events could not be more straightforward. Two decades ago, Congress ordered in CAA § 165(a) that BACT be required for each pollutant “subject to regulation.” Thirteen years later, in § 821(a), Congress ordered USEPA to establish rules regulating CO₂. The only reasonable reading of these two statutory mandates in harmony is that a BACT emission limit is required for CO₂.

This is true regardless of whether USEPA makes a determination in the future, pursuant to Massachusetts v. EPA, to set limits on CO₂ emissions in addition to the monitoring requirements currently in place pursuant to § 821. Thus, IEPA’s concern that the § 165(a) “subject to regulation” language cannot be interpreted to mean merely “prone to regulation” not yet promulgated (IEPA Response at 100-108), and ConocoPhillips’ essentially identical concern that this language does not encompass subject matter for which regulation is merely authorized but not yet promulgated

²¹ According to the Reporter’s notes, these references to Title V are meant to refer to Title IV, and the references to Section 511 are meant to refer to Section 412.

²² USEPA’s § 821 regulations, which were finalized on January 11, 1993, require CO₂ emissions monitoring (40 C.F.R. §§ 75.1(b), 75.10(a)(3)); preparing and maintaining monitoring plans (40 C.F.R. § 75.33); maintaining records (40 C.F.R. § 75.57); and reporting such information to USEPA (40 C.F.R. §§ 75.60-64)). 40 C.F.R. § 75.5 prohibits operation in violation of these requirements and provides that a violation of any Part 75 requirement is a violation of the Act.

(ConocoPhillips Response at 43-50), does not address the fundamental fact that CO₂ is *already* subject to regulation under § 821 and its associated rules.

2. IEPA's Interpretation of Section 165 is Wrong and Entitled to No Deference

Notwithstanding the straightforward statutory scheme described above, IEPA (supported by ConocoPhillips) takes the position that the term "regulation" in § 165 does not include the § 821 regulations, since those regulations are merely "diminutive reporting or recordkeeping requirements." IEPA Response at 100, ConocoPhillips Response at 50-51. ConocoPhillips asserts that in § 165 Congress intended (although it did not so specify) "regulation" to mean only "a statutory or regulatory provision that requires actual control of emissions." ConocoPhillips Response at 51. Neither Respondent, however, offers any plausible basis for this interpretation of the word "regulation," and the rationale used to defend the interpretation is fundamentally flawed.

i. The § 821 Information Gathering and Reporting Requirements are Regulations

Respondents, notwithstanding IEPA's heavy reliance on dictionary definitions (IEPA Response at 101), are urging the Board to ignore the plain meaning of the word "regulation." Under the most basic canon of statutory interpretation, words should be given their plain meaning. Webster's Dictionary defines "regulation" as (a) an authoritative rule dealing with details or procedure; (b) a rule or order issued by an executive authority or regulatory agency of a government and having the force of law." See Merriam-Webster Online, available at <http://mw1.merriamwebster.com/dictionary/regulation> (last visited November 16, 2007). IEPA does not dispute that the § 821 rules are authoritative rules dealing with details and procedures or that they have the force of law. Nor could the Agency advance such an argument. Rules on information

gathering, record-keeping, and data publication have long been recognized as falling within the conventional understanding of the word “regulation.” Buckley v. Valeo, 424 U.S. 1, 66-67 (1976) (record-keeping and reporting requirements constitute regulation of political speech).

Second, IEPA’s attempt to discredit the significance of information-forcing regulations, such as § 821 regulations, as “diminutive” regulations (IEPA Response at 100) is facially incorrect. Information gathering and reporting regulations have long been effective tools in the United States’ history of addressing air pollution and pollution generally. The USEPA’s Toxics Release Inventory (“TRI”), for example, is widely considered one of the most successful and effective programs in USEPA’s history. The simple information disclosure regulations of the TRI have independently led to dramatic reductions in pollution levels across multiple media from sources that are forced to monitor and report their emissions. See, e.g., Frances M. Lynn et al., *The Toxics Release Inventory: Environmental Democracy in Action 5* (1992) (report prepared for USEPA Office of Toxic Substances).

More generally, information gathering and reporting regulations are some of the most successful and frequently applied regulations in the history of administrative law, and date back to the early railroad industry “sunshine commissions” of the mid-nineteenth century. Other examples abound, including at the Securities and Exchange Commission which relies almost entirely on information gathering and reporting regulations to accomplish its mandates. See generally Thomas K. McGraw, *Prophets of Regulations: Charles Francis Adams, Louis D. Brandeis, James M. Landis, Alfred E. Kahn* (Harvard University Press, 1986).

The § 821 regulation requires detailed monitoring, record-keeping, and reporting requirements under the acid rain program. That § 821 regulates CO₂ and is a “regulation” should be the end of the matter: “It is well established that ‘when the statute’s language is plain, the sole function of the courts – at least where the disposition required by the text is not absurd – is to enforce it according to its terms.’” Lamie v. United States Tr., 540 U.S. 526, 534 (2004).

ii. The term “subject to regulation” is not ambiguous

IEPA fails to point to any ambiguity in the CAA that would provide authority to deviate from the plain meaning of “regulation.” Absent ambiguity, the Board must interpret the CAA according to its plain language: “If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.” Chevron v. NRDC, 467 U.S. 837, 842-43 (1984). Congress use the same term “regulation” in §§ 165 and 821, and “generally, ‘identical words used in different parts of the same statute are. . . presumed to have the same meaning.’” Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Dabit, 547 U.S. 71, 86 (2006), quoting IBP, Inc. v. Alvarez, 546 U.S. 21, 34 (2005).

iii. Congress Established Different Terms for “Actual Control of Emissions”

If Congress had intended the PSD program to be limited to pollutants for which the CAA established “actual control of emissions” (ConocoPhillips Response at 50), then it would have used one of the terms it uses elsewhere in the CAA for this specific purpose. Specifically, Congress stated that the “terms ‘emission limitation’ and ‘emission standard’ mean a requirement established by the State or the Administrator *which limits the quantity, rate or concentration of emissions of air pollutants. . .*” 42 U.S.C. § 7521(f)(2) (emphasis added).

Congress then used the terms “emission limitation” and “emission standard” throughout the CAA when it intended to limit actual emissions. See, e.g., 42 U.S.C. § 7651(a)(2) (“Each utility unit subject to an annual sulfur dioxide tonnage emission limitation under this section . . .”); 42 U.S.C. § 7651d(a)(1) (“This percentage reduction shall be determined by comparing any proposed high altitude emission standards to high altitude emissions. . . .”); 42 U.S.C. § 7617(a)(7) (“any aircraft emission standard under section 7571 of this title”). Thus, if Congress had wanted to limit the PSD program to pollutants that were subject to “actual control of emissions,” it certainly knew how to do so. The fact that it did not do so in § 165 reveals that Congress had no such intention.

iv. Congress Has Exempted Certain Pollutants – But Not Carbon Dioxide – From the PSD Program

As part of the 1990 Amendments, Congress adopted new regulations for carbon dioxide in § 821 and a long list of hazardous air pollutants in § 112. However, at the same time that it established a broad exemption for hazardous air pollutants from the PSD program, Congress did not establish a similar exemption for CO₂. See CAA § 112(b)(6) (codified at 42 U.S.C. 7412(b)(6)). Congress’ action underscores that it did not intend to narrow the definition of “pollutant subject to regulation” beyond the newly-created exclusion for hazardous air pollutants.

3. Alabama Power Co. v. Costle Forecloses Respondents’ Attempts to Redefine the Meaning of “Regulation”

In Alabama Power Co. v. Costle, the D.C. Circuit held that § 165 “applies PSD and BACT immediately to *each type of pollutant regulated for any purpose under any provision of the Act. . .*” 636 F.2d 323, 403 (D.C. Cir. 1979) (emphasis added). The

court went on to explain that the language in § 165 is unambiguous and thereby deprived USEPA of the ability to deviate from that language:

[W]e review two regulations of EPA that define which pollutants are subject to PSD and BACT review. One regulation exempts from PSD and BACT each pollutant not emitted in sufficient amounts The other *applies PSD and BACT immediately to each type of pollutant regulated for any purpose under any provision of the Act* and [we] affirm on the second.

The . . . *language in the above sections would not seem readily susceptible to misinterpretation.* In each instance, any source that qualifies with regard to any applicable pollutant as a “major emitting facility” under the statute’s definition of such a source, is subject to “any . . . applicable emission standard” or “standard of performance” under the Act, and to pollution controls for “any pollutant in any (geographic) area” subject to PSD and for “each pollutant subject to regulation” under the ACT which are thereby comprehended by the statute. The language of the Act does not limit the applicability of PSD only to one or several of the pollutants regulated under the Act.

[T]he plain language of section 165 in a litany of repetition, provides without qualification that each of its major substantive provisions shall be effective after August 1977 with regard to each pollutant subject to regulation under Act, or with regard to any “applicable emission standard or standard of performance under” the Act. As if to make the point even more clear, the definition of BACT itself in section 169 applies to each such pollutant. *The statutory language leaves no room for limiting the phrase “each pollutant subject to regulation”*

Id at 403-406 (footnotes and citations omitted).

Under Alabama Power, the permitting agency’s task is limited to reading through the Act and identifying the pollutants regulated “for any purpose.” 646 F.2d at 404. The case leaves no discretion for IEPA to limit the scope of pollutants subject to the PSD program and exclude carbon dioxide from the list of “regulated” pollutants. Under Chevron, once a court determines that statutory language is unambiguous, a permitting

agency cannot attempt to redefine the language to mean something wholly different. 467 U.S. at 842-43.

ConocoPhillips cites to Alabama Power for the proposition that PSD applies to pollutants for which “an emission standard has already been promulgated.” ConocoPhillips Response at 49. Because CO₂ is already regulated under the CAA § 821 regulations, Petitioners agree with the Applicant on this point.

4. The Cited EAB Cases Do Not Support Respondents’ Position

The two Board cases cited by IEPA in support of its argument, In re Kawaihae Congeneration Project, 7 E.A.D. 107, 132 (EAB 1997), and Inter-Power of New York, Inc., 5 E.A.D. 130, 151 (EAB 1994) (IEPA Response at 112), are inapplicable and irrelevant. In Kawaihae Congeneration Project, the petitioners did not argue that CO₂ is regulated under the Act or that the PSD permit should have included a CO₂ BACT emission limit. Not surprisingly, the Board does not reach the merits of CO₂ regulation in that decision. Id. at 132. In Inter-Power of New York, the petitioners filed their petition on November 25, 1992, i.e., three months before EPA adopted the Section 821 acid rain monitoring rules regulating CO₂ emissions. 5 E.A.D. 130, 151 (EAB 1994). See 58 Fed. Reg. 3701 (January 11, 1993) (Final Rules, Acid Rain Program: General Provisions and Permits, Allowance System, Continuous Emissions Monitoring, Excess Emissions and Administrative Appeals). Thus, the Board was correct in its Inter-Power decision that CO₂ was not a regulated pollutant at the time the Inter-Power PSD permit was issued.

5. USEPA Has Created a Broad Regulatory Definition of “Any Pollutant Subject to Regulation” That Includes All Pollutants Subject to Any Regulation

Respondents cite in support of their arguments both USEPA’s brief submitted concerning PSD regulation of CO₂ in In re Christian County Generation, LLC, PSD Appeal No. 07-01 (filed September 24, 2007) (ConocoPhillips Exhibit 5) (“USEPA Brief”), and a single document that emerged in the wake of the CAA’s 1990 Amendments, a memorandum dated April 26, 1993 from Lydia N. Wegman of USEPA’s Office of Air Quality Planning and Standards to USEPA’s Air Division Director for Regions I-X (the “Wegman Memo”). IEPA Response at 108, ConocoPhillips Response at 39, 45.

However, to the extent USEPA’s position deserves any deference, that deference should be given to the position articulated in USEPA’s rules, which, unlike the one guidance document that IEPA references, have been subject to notice and comment procedures. Throughout the past thirty years, USEPA’s PSD regulations have used language describing the pollutants covered by this program as expansively as the CAA’s language in § 165.

In 2002, USEPA amended its interpretation of the phrase “subject to regulation under the Act” to exclude hazardous air pollutants consistent with Congress’ command twelve years earlier. USEPA substituted the phrase “regulated NSR pollutant” for “any pollutant subject to regulation under the Act” and provided a regulatory definition of the new term. The regulations explicitly excluded hazardous air pollutants. At the same time, USEPA listed, in a non-exclusive form, some of the pollutants covered by the PSD program:

The 1990 Amendments to the CAA . . . exempted [hazardous air pollutants] . . . from the PSD requirements in part C. In our 1996 Federal Register Notice, we proposed changes to the regulations . . . to implement this exemption . . . *Pollutants regulated under the Act and not on the list of HAP, such as fluorides, TRS compounds, and sulfuric acid mist, continue to be regulated under PSD . . .* [T]oday we are taking final action to promulgate these provisions.

67 Fed. Reg. 80239-40 (2002) (emphasis added).

In the USEPA Brief, USEPA points to the absence of carbon dioxide on this list as evidence that the agency has a long-standing position that CO₂ is not a regulated pollutant. Yet USEPA's failure to include CO₂ on this list is unsurprising. While it is true that in 2002 CO₂ had already been *regulated* under § 821 for nine years, USEPA at that time did not consider CO₂ to be a *pollutant*, as it subsequently made clear in its Massachusetts v. EPA arguments and public comments. See 68 Fed. Reg. 52922, 52926 (2003). Moreover, the preamble list begins with a term that is non-exclusive, "such as." See, e.g., Rust v. Sullivan, 500 U.S. 173, 181 (1991); 17 U.S.C.A. § 101 (the term "such as" is "illustrative and not limitative").

The Wegman Memo cannot withstand any scrutiny after the Supreme Court's ruling. In 1993, shortly after the agency adopted § 821 regulations, a USEPA official issued the Wegman Memo concluding that CO₂ is not a pollutant for purposes of the CAA Title V program. The Memo makes the points that CO₂ is not a pollutant and that the term "subject to regulation" means something more than the requirements of § 821. See IEPA Response at 108-09. The Wegman Memo's conclusion on the first point has been rejected by the Supreme Court in Massachusetts v. EPA. The second point should be rejected because it contradicts the plain language of the CAA and the PSD regulations, and its attempt to narrowly define the expansive term "regulation" is foreclosed by

Alabama Power, 636 F.2d 323. The Board should defer, if at all, to the USEPA's expansive definition of "subject to regulation" contained in its regulations rather than a 15 year old internal memorandum that is legally unsupportable.

CONCLUSION

For the foregoing reasons, we respectfully request that the Board review and remand IEPA's permit issued to ConocoPhillips for the CORE Project.

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Respectfully submitted,



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