

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

In re:)	
)	
Steel Dynamics, Inc.)	PSD Appeal Nos. 99-4
)	and 99-5
PSD Permit No. CP-183-10097-00030)	
)	

**ORDER DENYING THE UNION'S
MOTION FOR RECONSIDERATION**

By motion dated July 5, 2000, the United Association of Plumbers and Steamfitters, Local 166, and its members ("Union") seek reconsideration of three issues decided by the Environmental Appeals Board ("Board") in the above-captioned matter. The disputed issues involve: (1) the absence of continuous compliance requirements for nine natural gas-fired preheaters and dryers that will emit nitrogen oxides ("NO_x") into the atmosphere; (2) the lack of continuous emissions monitoring requirements for the proposed steel mill's emissions of NO_x and sulfur dioxide ("SO₂"); and (3) the failure to include stack test averaging times and sampling durations in the proposed mill's permit. For the reasons explained below, we deny the Union's motion.

A. *Venting Multiple Emission Units Through a Single Stack*

First, the Union claims the Board erred in its treatment of the petitioners' arguments with respect to the enforceability of NO_x emissions limits placed on nine natural gas-fired preheaters and dryers. As the Union points out, Steel Dynamics, Inc.'s ("SDI's") permit contains no compliance

requirements for the nine units, which are vented through a single stack. Union Motion at 2. The Union charges that the Board “reframed” the issue it had raised from an absolute failure to require any compliance demonstration to an “unrebuttable general understanding that low-NO_x burners should easily achieve [best available control technology (“BACT”)] limits, obviating the need for compliance demonstration.” *Id.*; see *In re Steel Dynamics, Inc.*, PSD Appeal Nos. 99-4 & 99-5, slip op. at 79-80 (EAB, June 22, 2000), 9 E.A.D. _____. According to the Union, in reaching its decision on this issue, the Board erroneously relied on extra-record facts introduced by Amici and failed to address the arguments the Union raised. The Union therefore asks the Board to “reconsider its decision and either decide the issue the Union initially raised -- the validity of a categorical exemption from practical enforceability -- or alternatively, * * * consider [the Union’s] argument that low-NO_x burners inherently are unreliable and, thus, must be monitored to assure compliance.” Union Motion at 4-5.

Some procedural background is necessary to understand this issue. In response to comments on the issue, the Indiana Department of Environmental Management (“IDEM”) had contended that: (1) emissions from the nine units would constitute only a small fraction of total NO_x emissions from the mill, and thus stack testing to demonstrate the units’ compliance was not necessary; (2) no operational parameters could be measured to demonstrate continuous compliance with the NO_x emissions limits; (3) it is in SDI’s “best interest to assure that [the nine units] are operating properly such as to prevent unnecessary natural gas consumption”; and (4) IDEM could always require stack testing if needed. ATSD at 70. In its petition for review, the Union countered IDEM’s contentions by arguing: (1) there are no small source exemptions from the requirement to achieve BACT limits; (2) the combined

emissions venting through the common stacks are, in fact, not small; and (3) several operating parameters, such as fuel flow, firing rate, and furnace temperature, could be monitored to demonstrate compliance. Union Pet'n at 43.

IDEM responded to the Union's petition by reiterating that stack testing could be required if necessary and that "there are no measurable operational parameters to demonstrate continuous compliance other than operating the low-NO_x burners properly[,] which is in SDI's best economic interest." IDEM Resp. at 36. IDEM also stated:

[T]he NO_x limit for each [of the nine] unit[s] is an expression of the emission factor used in the calculation of each unit's potential to emit when the low-NO_x burners are in use. Because the permit does not seek to restrict the potential to emit NO_x, operational limitations are unnecessary.

Id. (citations omitted).

Amici contended that IDEM's latter argument (quoted above) was "slightly misleading." Amici stated:

Practical enforceability is required because these limits constitute BACT for these emission units; the potential to emit for the required control technology is not determinative. The rationale underlying [IDEM's] argument, however, is more persuasive. IDEM has argued that stack testing for the collected emissions of these small burners is not justified, and no operational parameters correlated to emissions are available. ATSD at 70. Amici believe Petitioners have not adequately addressed IDEM's claim that the use of low-NO_x burners alone adequately demonstrates compliance, given the relatively small contribution of NO_x from these sources and the general understanding that low-NO_x burners should easily achieve the BACT limit for these sources.

Amici Brief at 36. Amici added further that “Petitioners have not rebutted IDEM’s claim that, as a technical matter, the enforceability of these limits may not be critical because as long as low-NO_x burners are in use, the 0.10 lb/MMBtu limit will be achieved on a continuous basis.” *Id.* at 35.

The Union replied to IDEM’s and Amici’s assertions by arguing in its reply brief that use of low-NO_x burners alone does not guarantee that compliance with BACT limits is assured. Moreover, as detailed in the Board’s June 22, 2000 decision, the Union offered a number of factual scenarios challenging the concept that use of low-NO_x burners alone is enough. *See Steel Dynamics*, slip op. at 79-80 n.62 (quoting Union Reply at 35). In ruling on this issue, the Board did not consider the Union’s fact examples on the grounds that they were raised too late in the proceedings to warrant our review. *See id.* The Union now claims that we erred in doing so, because the idea that low-NO_x burner use alone ensures compliance was not reasonably ascertainable from the materials in the record, and thus the Union had no opportunity to respond to that idea until after it was raised in IDEM’s and Amici’s briefs. Union Motion at 3.

We find it difficult to accept the Union’s argument that the rationale advanced during briefing -- that operation of low-NO_x burners should achieve the BACT limit for these sources -- was unascertainable during the public comment period. Even absent some prior explicit statement by IDEM to this effect, the rationale flows naturally from the permit itself, which relies on low-NO_x burners as the primary control strategy for NO_x at these emissions units. *See* Permit § D.3. Thus, in our view, the Union was duty bound to raise concerns about the capacity of low-NO_x burners to achieve compliance

with the relevant BACT limit during the public comment process and, having failed to do so, cannot raise them here.

Moreover, IDEM stated in the response-to-comments document that it is in SDI's best interest to ensure the proper operation of the nine emissions units. *See* ATSD at 70; *Steel Dynamics*, slip op. at 78, 79-80 n.62. Despite the presence of this assertion in IDEM's response to comments, neither the Union nor Citizens Organized Watch ("COW") challenged it in their petitions for review of SDI's permit. Petitioners could have, but did not, maintain that "proper operation" of such units must include the elements identified in the Union's reply brief -- i.e., initial tuning of the burners on installation to ensure the appropriate blend of fuel and air is achieved; performance verification after tuning; periodic maintenance and retuning to forestall performance degradation due to plugging, corrosion, and deposit formation; and so on -- or any other elements, for that matter.

In light of the foregoing, we do not agree that the assertion regarding the capacity of the low-NO_x burners to achieve compliance with the BACT limit is unsupported by facts in the record, and we do not find demonstrable error in our decision that the Union could have raised these issues earlier. *See In re Knauf Fiber Glass, GmbH*, PSD Appeal Nos. 99-8 to -72, Order on Motions for Reconsideration at 3 (EAB, Feb. 4, 2000) ("Reconsideration is generally reserved for cases in which the Board is shown to have made a demonstrable error, such as a mistake of law or fact.").

Even if we were to consider the maintenance/performance examples the Union raised in its reply brief, our holding on this issue would not change. The Union provided no data or other evidence to support its factual scenarios regarding potential low-NO_x burner plugging, corrosion, tuning needs, and the like. *See* Union Reply at 33-36. Mere assertions of potential problems, without more, are not enough to overcome IDEM's clearly expressed statements that operating the low-NO_x burners properly will be in SDI's best interests (i.e., to minimize consumption of natural gas). *See* ATSD at 70; IDEM Resp. at 36. The Union failed to carry its burden of proving that IDEM committed clear error or abused its discretion in handling this issue, and thus the Board did not err in upholding IDEM on this ground. *See, e.g., In re Maui Elec. Co.*, PSD Appeal No. 98-2, slip op. at 19 (EAB, Sept. 10, 1998), 8 E.A.D. ___ (review denied where petitioner did not challenge or explain the clear error in permit issuer's reliance on data in report); *In re Envotech, L.P.*, 6 E.A.D. 260, 295-96 (EAB 1996) (review denied where permit issuer denies possessing waste documentation and petitioner provides no evidence that such documentation exists).

B. *Continuous Emission Monitoring for SO₂ and NO_x*

Second, the Union claims the Board's decision is erroneous because it does not address an issue raised in the Union's petition, namely that IDEM failed to respond to a comment that continuous emission monitors ("CEMs") should be used "where feasible." Union Motion at 5-6. We do not agree that IDEM failed to respond to a comment on this issue, nor do we think our decision erroneous as charged. In its response to comments, IDEM devoted quite a bit of attention to the CEMs issue, explaining in detail its position that certain factors must be in play to justify the use of CEMs. In

particular, IDEM argued that CEMs are required only where: (1) a control device is used; (2) information on emissions is limited; and (3) emissions could adversely affect air quality. *See* ATSD at 50-51. By setting forth these conditions for CEMs' use, IDEM implicitly rejected the broad view of the comment that CEMs should be required wherever feasible.¹ *See id.* Because the Union has not pointed to a demonstrable error in our treatment of the CEMs issue, reconsideration of the issue is denied.

C. Permit Limits for EAF Emissions of NO_x, SO₂, and PM

Finally, the Union claims the Board erred in declining to grant review of IDEM's failure to include in SDI's PSD permit specific averaging times and sampling durations for the EAF stack tests. IDEM had explained in the response-to-comments document that SDI would be required to prepare a stack testing protocol that ensures tests are run during normal operating periods and are at least one hour in duration. ATSD at 29. IDEM had also noted that steel mills historically have used tap-to-tap stack test runs, which can last as long as ninety minutes. *Id.* The Board found no clear error or abuse of discretion in IDEM's treatment of this issue. In so doing, we stated:

Petitioners offer no evidence that stack test durations of at least one hour or tap-to-tap runs of ninety minutes are inadequate to obtain reasonable assessments of facility performance. Instead, they argue only that the "conditions" of source tests should be

¹Moreover, we are not convinced that this issue -- i.e., that IDEM failed to respond to a comment that CEMs should be used where feasible -- was even raised in the Union's petition. Indeed, our review of the petition reveals a number of arguments focused on rebutting IDEM's three conditions for CEMs' use, but the petition does not contain a clear charge that IDEM erred because it failed to respond to a comment that CEMs should be used where feasible. *See* Union Pet'n at 48-52.

specified in the permit because “high variability of emissions has been alleged” due to the diversity of products to be manufactured by this mill.

Steel Dynamics, slip op. at 104.

The Union now claims the Board erred in stating that the Union offered no evidence that stack tests of an hour or ninety minutes are inadequate to obtain a reasonable assessment of facility performance. In its comments on the draft permit, the Union had stated:

The electric arc furnace is a noncontinuous batch process with high heat-to-heat variability in the emission rates of all criteria pollutants. In this situation, averaging times are essential to assure that the full range of variability in emissions is captured during the source test. Because permit limits are expressed in terms of pounds per hour, rather than pounds per ton, the more usual metric, a 1-hr source test could be conducted during a low-emitting heat. Alternatively, the source test could be conducted over a long time period, averaging out routine spikes and excursions. Both situations would bias the results, making it appear that the EAF is in compliance when it is not.

Union/Fox Cmts at 31. In this way, the Union claims it demonstrated that SDI could circumvent the permit limits. Union Motion at 7. The Union further notes that the Board used these examples in its remand of one “very similar issue in this case, the lb/ton versus lb/hr issue.” *Id.*

The Union is correct in noting that we relied on its examples, among others, in our evaluation of the dual limits issue. However, in parsing through the myriad of complex, competing, and/or overlapping arguments on the issues in this case, we construed the Union’s examples, quoted above, as bearing most directly on the dual limits issue rather than supporting an independent need to specify stack test averaging times and sampling durations in SDI’s permit. Indeed, it appeared to us that the fundamental issue identified -- the absence of dual limits or other permit conditions that would ensure

compliance at all levels of operation -- would be addressed by adding production limits or other conditions to the permit.

Even if we were to have construed the Union's two examples in the way the Union now urges, we still would not have been persuaded that IDEM clearly erred or abused its discretion in its treatment of the stack test protocol issue. As we indicated in our original decision and reiterated in our response to IDEM's motion for reconsideration of that decision, the Union's (and Amici's, for that matter) concerns about ensuring continuous compliance at all levels of operation must be readdressed by IDEM on remand. *See Steel Dynamics*, slip op. at 81-88. Specifically, the revised permit must contain either dual limits or other conditions that will protect against the types of permit abuses described by the Union in its comments and petition (and by Amici in their briefs). We fully expect that IDEM will comply with these requirements on remand. Thus, we do not believe that a failure to reconsider the averaging time and sampling duration issues will lead, as the Union fears, to "otherwise undiscovered permit violations," Union Motion at 7, nor do we believe it was clear error here for IDEM to defer specifying the stack testing protocol until a later date.

In sum, we do not find a demonstrable error in our treatment of these issues, and thus reconsideration is denied.²

²Citizens Organized Watch ("COW") filed a response to IDEM's and SDI's motions for reconsideration that supports the Union's response to those motions. In addition, the COW filing raises new arguments about the State Implementation Plan for Indiana and about potential NO_x nonattainment (continued...)

So ordered.

ENVIRONMENTAL APPEALS BOARD

Dated: 8/02/00

By: _____ /s/
Kathie A. Stein
Environmental Appeals Judge

²(...continued)

status for Whitley County and Allen County, Indiana. These arguments will not be considered in this setting. *See* 40 C.F.R. § 124.19(g) (motions for reconsideration of Board orders “must set forth the matters claimed to have been erroneously decided and the nature of the alleged errors”).

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order Denying the Union's Motion for Reconsideration in the matter of Steel Dynamics, Inc., PSD Appeal Nos. 99-4 and 99-5, were sent to the following persons in the manner indicated:

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Dated: 8/02/00

/s/

Annette Duncan
Secretary