

BEFORE THE ENVIRONMENTAL APPEALS BOARD
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

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ORAL ARGUMENT

IN THE MATTER OF: :
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:
VULCAN CONSTRUCTION : PSD Appeal No.
MATERIALS, LP : 10-11
:
PERMIT NO. 91806 AAB :
:

Tuesday,
December 14, 2010

Administrative Courtroom
Room 1152
EPA East Building
1201 Constitution Avenue, NW
Washington, DC

The above-entitled matter came on
for oral argument, pursuant to notice, at
10:30 a.m.

BEFORE:

THE HONORABLE KATHIE A. STEIN
Environmental Appeals Judge
THE HONORABLE ANNA L. WOLGAST
Environmental Appeals Judge

THE HONORABLE CHARLES SHEEHAN
Environmental Appeals Judge

APPEARANCES:

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ALSO PRESENT:

Eurika Durr, Clerk of the Board

T-A-B-L-E O-F C-O-N-T-E-N-T-S

Call to Order 4

Oral Arguments:

Petitioner, Sierra Club,

David C. Bender, ESQ. 5

Environmental Protection Agency

Region V, Gerald T. Karr, ESQ. 29

Respondent Vulcan Construction

Materials, Joshua R. More, ESQ. 45

Rebuttal:

Petitioner, Sierra Club,

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1 P-R-O-C-E-E-D-I-N-G-S

2 10:31 a.m.

3 MS. DURR: The Environmental
4 Appeals Board of the United States
5 Environmental Protection Agency is now in
6 session for oral arguments in re Vulcan
7 Construction Materials, LP, Permit No. 91806
8 AAB, PSD Appeal No. 10-11. The Honorable
9 Judges Charles Sheehan, Kathie Stein and Anna
10 Wolgast presiding.

11 Please turn off all cell phones
12 and no recording devices allowed. You may be
13 seated.

14 JUDGE STEIN: Good morning. We're
15 hearing arguments this morning in the matter
16 of in re Vulcan. And as I understand it,
17 Sierra Club will proceed first and wants to
18 reserve five minutes for rebuttal. And I also
19 understand that Counsel for IEPA and for
20 Vulcan may want to re-allocate their total of
21 30 minutes.

22 Why don't the Counsel introduce

1 themselves and state who you're representing?

2 And then we'll begin.

3 MR. BENDER: Good morning. David
4 Bender representing Sierra Club.

5 JUDGE STEIN: Thank you.

6 MR. KARR: Good morning. Gerald
7 Karr on behalf of the Illinois EPA.

8 JUDGE STEIN: And how long do you
9 intend to talk, sir?

10 MR. KARR: I've gone through my
11 argument a couple of times. Probably 20
12 minutes of the half hour.

13 JUDGE STEIN: Okay.

14 MR. MORE: Good morning, Your
15 Honor. Josh More from Schiff Hardin on behalf
16 of Vulcan Constructions Materials.

17 I've agreed to cede as much time
18 of my 15 minutes to the Agency.

19 JUDGE STEIN: Thank you. Mr.
20 Bender, you may proceed.

21 MR. BENDER: Good morning, Your
22 Honor. I'm here on behalf of the Petitioner

1 Sierra Club. The petition in this case raises
2 four issues that I intend to cover here this
3 morning.

4 First, that the PM2.5 analysis
5 done by Illinois EPA was both procedurally and
6 substantively deficient. Second, that the
7 pre-construction monitoring done and relied on
8 by Illinois EPA was deficient. Third, that
9 the NOx expressed as nitrogen dioxide analysis
10 BACT analysis and the carbon monoxide fact
11 analysis was deficient. And lastly, that due
12 to the facts in this case, Illinois EPA should
13 have analyzed the impacts of the Vulcan Plant
14 on one-hour NOx measuring the air quality
15 standards.

16 The first issue, Your Honor, is
17 the Illinois EPA added late in the process for
18 this permit a PM2.5 analysis after the close
19 of public comment which was a significant and
20 substantial addition to the record without
21 providing an opportunity for the public to
22 comment on that analysis. Both the act and --

1 JUDGE STEIN: And could I stop you
2 there?

3 Do you understand that the
4 footnote and chart are included to address
5 both BACT applicability as well as ambient air
6 quality analysis?

7 MR. BENDER: Your Honor, I believe
8 you're referring to footnote 102 in the
9 response of the summary?

10 JUDGE STEIN: Yes.

11 MR. BENDER: I understand that to
12 be the Agency's response on at least the
13 ambient air quality standard analysis. In the
14 preceding couple of pages I believe there is
15 some discussion in that responsiveness summary
16 of PM2.5 and PM10 surrogacy. And so, that may
17 also be part of the Illinois EPA's on the BACT
18 issue.

19 Your Honor, as I was saying, the
20 Act and 5221 require an opportunity for the
21 public to comment on the ambient air quality
22 analysis of the plant. That analysis for

1 PM2.5 was done well after the close of public
2 comment. And again, the Sierra Club nor
3 anyone else in the public had an opportunity
4 to comment on that analysis.

5 JUDGE STEIN: Am I correct that
6 the statute only requires that to the extent
7 that it's part of the ambient air quality
8 analysis that that be available for public
9 comment? Or does the BACT analysis also have
10 to be available at the time of the hearing?

11 MR. BENDER: Your Honor, I believe
12 Section 7475(a)(2) requires public comment on
13 a number of things including both the ambient
14 air quality standard and the BACT analysis,
15 and certainly the Sierra Club's position that
16 the public should be allowed to comment on the
17 BACT analysis in addition to ambient air
18 quality standards.

19 JUDGE STEIN: As I understand it,
20 the stay of the grandfathering provision
21 expired perhaps some time in September. What
22 effect if any does that have on your arguments

1 about the surrogacy policy?

2 MR. BENDER: Your Honor, the basis
3 for Illinois EPA's decision was to not -- let
4 me back up. In the preliminary draft permit,
5 the position of the Illinois EPA was to rely
6 on the surrogacy policy which changed in the
7 decision issued in April where the Illinois
8 EPA was not to rely on it. And now if the
9 stay has been lifted, the Agency should go
10 back and re-do its analysis if it intends to
11 rely on those provisions of 5221. They were
12 adopted in May of 2008 and have been stayed
13 and the stay may have expired.

14 So our position, Your Honor, is
15 that the Agency's analysis and the basis for
16 a permit needs to be on what the Agency said
17 the basis for its decision was. And at the
18 time of the April Illinois EPA decision, that
19 was to not rely on a surrogacy.

20 In addition, the Administrator's
21 decisions that we have cited in both the
22 Trimble County Title 5 petition and the Cash

1 Creek Title 5 petition suggests that even when
2 a surrogacy analysis is used or a surrogacy is
3 used for PM2.5, it requires more of a record
4 than Illinois EPA created in this case. It's
5 not simply stopping with PM10 and ignoring
6 PM2.5 altogether.

7 JUDGE SHEEHAN: Could you go into
8 some detail into why you think the record in
9 that respect is deficient?

10 MR. BENDER: Your Honor, we're
11 responding specifically to the surrogacy --

12 JUDGE SHEEHAN: Right.

13 MR. BENDER: -- the record for the
14 surrogacy issue.

15 JUDGE SHEEHAN: Right.

16 Louisville Gas & Electric Trimble
17 County Power Station Title 5 decision and the
18 Cash Creek decision go into what is required
19 generally. It summarizes the case law of the
20 D.C. Circuit as well as the Administrator's
21 opinion and was required for surrogacy. And
22 in that, the Administrator discusses the need

1 to document a ratio or proportion between PM10
2 and PM2.5 and how that ratio or proportion
3 between those two species of particulate
4 matter are affected by pollution controls and
5 other operating conditions; fuel changes,
6 pollution controls, operating variability.

7 And in this case, all that
8 Illinois EPA has done in the record is to make
9 an assertion that there's a correlation, but
10 it's not clear what the basis for that
11 assertion is. And in fact, from what little
12 there is in the record on this issue, it
13 appears that that correlation differs
14 depending on where pollution controls are
15 involved and what pollution controls are
16 involved.

17 And I'm referring specifically to
18 the discussion of Teflon fabric filter bags
19 and the footnote 102 in the Responsiveness
20 Summary and related discussion there where the
21 Agency talks about assuming that if fabric
22 filters are in place, 100 percent of the

1 particulate matter will be PM2.5 and that none
2 of it will be PM or just PM10 which is
3 different. My understanding from that
4 discussion is that that's different than pre-
5 pollution controls. And so there has not been
6 the type of record that the Administrator's
7 decision seemed to require which is
8 documenting what the ratio is between those
9 two species and how that ratio may change with
10 pollution controls and other operating
11 variability.

12 JUDGE STEIN: Vulcan makes some
13 arguments in its brief which seem to raise
14 questions about whether the technical issues
15 that served as basis for the initial surrogacy
16 policy in the Seitze memo still exist today.
17 And they argue in particular that until SILs
18 are established and other kinds of monitoring
19 requirements are established that those
20 technical issues still exist. And I'm
21 wondering if you could respond to that?

22 MR. BENDER: Yes, Your Honor, I

1 understand that that argument was made. I'm
2 not sure how Vulcan would connect that to a
3 BACT analysis because a SIL is not required
4 for a BACT analysis, nor is a monitoring
5 concentrations required for a BACT analysis.

6 What is required for a BACT
7 analysis is an understanding of emission rates
8 with pollution controls in place and all the
9 variable pollution controls or possible
10 pollution controls in place. And I believe
11 that the Administrator's decisions in the
12 Trimble County Title 5 petition decision and
13 Cash Creek's recognized that most of the
14 technical issues involved in PM2.5, direct
15 PM2.5 regulations, had been resolved.

16 JUDGE STEIN: I have one more
17 question which perhaps I'll direct also to
18 Illinois. But are you aware of any place in
19 the record where there was a finding of
20 completeness for this permit application as of
21 July 15, 2008?

22 MR. BENDER: I'm not aware.

1 JUDGE STEIN: Okay. Is Sierra
2 Club contending that because of the failure
3 for that completeness determination that in
4 any event Vulcan isn't entitled to avail
5 itself of the surrogacy policy?

6 MR. BENDER: Your Honor, it's
7 Sierra Club's position that the permit
8 decision by Illinois EPA was based on not
9 using surrogacy policy. If it intends to use
10 surrogacy policy, it should have expressly
11 done that or should go back and do that and
12 then that decision and that record can be
13 reviewed.

14 It's also Sierra Club's position,
15 Your Honor, that even if the surrogacy policy
16 is followed, the record here is insufficient
17 to justify the use of a PM10 as a surrogate.

18 And on that note too, the memo
19 that we've cited in our briefs by Stephen Page
20 regarding PM2.5 NAX analysis suggests ways
21 that a surrogate of PM10 may be used. And
22 there are a few options, none of which were

1 followed by the Illinois EPA in this case.

2 Again, Your Honors, the
3 significant change between relying on
4 surrogacy which is to say what Illinois --

5 JUDGE STEIN: And I actually think
6 we're pretty familiar with the surrogacy
7 issues unless anybody else has any other
8 questions on that. We're going to have a
9 number of questions for EPA and Vulcan on
10 that. But I think we understand these
11 arguments pretty well.

12 MR. BENDER: Okay. Your Honor, I
13 would like to just point out then one problem
14 with the PM2.5 analysis done. And that is in
15 footnote 102 of the response to the comments.
16 And it appears also in Exhibit G to Vulcan's
17 response brief.

18 In that analysis, what it appears
19 that Illinois EPA has done to assess PM2.5
20 ambient air impacts is to take the PM10
21 modeling results, extract from those modeling
22 results the impact of four emission points on

1 the Vulcan property, apply a ratio from what
2 appears to be a ratio from AP42 emission
3 factors to designate part of those emission
4 impacts as PM2.5 impacts, and then added it to
5 a baseline from a regional monitor.

6 And there are a number of problems
7 with that analysis. First, it excludes a
8 significant contributor to a cumulative PM2.5
9 impacts. And that's the other sources in the
10 area around Vulcan. Those modeled impacts
11 which are required to be part of a cumulative
12 impacts model were excluded from Illinois
13 EPA's model.

14 JUDGE STEIN: But if this Board
15 were to remand the permit on this issue for
16 among others failure to subject that analysis
17 to public comment, I take it you would then
18 have the opportunity to raise your issues with
19 that analysis?

20 MR. BENDER: That's correct, Your
21 Honor.

22 So the issues we have with the

1 modeling are both substantive and procedural
2 in that we did not have an opportunity to
3 raise them before. It also goes to one of the
4 requirements in the case law on when new
5 public comment is required. And that's when
6 there are questions about the additional
7 information and analysis that's added to the
8 record after the close of public comments.

9 JUDGE STEIN: Okay.

10 MR. BENDER: The other problem
11 with the PM2.5 analysis that shows up in
12 footnote 102 and in Vulcan's Exhibit G is that
13 the background concentration used for PM2.5
14 annual is in some ways a manufactured number.
15 The Agency did not have a full year's worth of
16 data for the monitor for it to use which was
17 the Bradewood monitor. And so, it created an
18 annual impact for one of the years based on
19 some ratios for other data. That's
20 problematic to Sierra Club for a number of
21 reasons. It doesn't meet quality requirements
22 for effective monitoring, and there's no

1 reason not to use a site-specific monitor or
2 the --

3 JUDGE STEIN: Does that go only to
4 the PM2.5 analysis or does that also bear on
5 your second argument dealing with regional
6 monitoring?

7 MR. BENDER: There's an overlap,
8 Your Honor. The second issue dealing with
9 regional monitoring certainly covers PM2.5.
10 It also covers the other burden.

11 And on that issue, the Illinois
12 EPA argues that the modeling guidelines,
13 ambient air modeling guidelines, do apply but
14 insist that the requirements of those
15 guidelines were met for all of the criteria.
16 The problem with that is that there isn't
17 basis in the record other than Illinois EPA's
18 assertions that that's the case to support
19 those conclusions.

20 JUDGE STEIN: Well, they say they
21 rely on this extensive regional network that's
22 been well established in Illinois. And what's

1 wrong with that approach?

2 MR. BENDER: Your Honor, the
3 guidelines set forth the times when a regional
4 monitor can be used, when it meets three
5 factors -- the location, data quality and
6 currentness. And really, the two issues here
7 are the location and the data quality.

8 There is some discussion on which
9 location criteria should apply, whether it's
10 Case 1 or Case 2 that's set forth in the
11 guidelines. Both Illinois EPA and Vulcan
12 argue that this should be a Case 1 situation
13 because Vulcan is in an area that's generally
14 free from impacts of other sources. And so it
15 should not be required to follow the location
16 criteria in Case 2 or the even more stringent
17 criteria in Case 3.

18 Where again there's no record
19 other than Illinois EPA's assertion that this
20 location meets Case 1, there's nothing in the
21 record to support that.

22 JUDGE SHEEHAN: But there is this

1 validity to have this extensive series of
2 networks that have been in place for years.
3 This network is SIP approved which is not
4 insignificant. The record refers to the
5 Bradewood, the Joliet, Midlothian monitoring
6 sites.

7 It sounds as if the state may be
8 making a pretty strong case here. And then
9 I'll note footnotes 215 and 216 in the record
10 seem very thick and rich with numerical detail
11 about why these monitors provide appropriate
12 data here. So I don't see the deficiencies
13 that you're very generally alluding to.

14 MR. BENDER: Well, Your Honor, a
15 couple of things.

16 The data quality requirement is
17 specific. There are specific requirements for
18 PSD monitoring data quality which are
19 different and more stringent than the
20 requirements for monitoring use for SIP
21 planning and attainment of emissions which is
22 what I understand Illinois' series of monitors

1 to be.

2 And just the fact that Illinois
3 EPA's monitors have been approved for SIP
4 planning purposes does not mean that they meet
5 the more stringent requirements for PSD
6 monitoring. And specific to PM2.5, when we
7 actually look at what the data was, it's clear
8 that it doesn't meet it, that there's an
9 entire year missing from the three years that
10 Illinois EPA purports to rely on for PM2.5
11 annual monitoring.

12 And because there is no record,
13 it's unclear to the public whether that could
14 be said of the other data as well. Other than
15 Illinois EPA's insistence that the data
16 quality is sufficient, that evidence isn't in
17 the record for the public to be able to assess
18 whether that statement is true or not. Again,
19 especially concerning since we know it's not
20 true for PM2.5.

21 JUDGE STEIN: What evidence have
22 you pointed to in the record that suggests

1 that contrary to IEPA's conclusions that this
2 in fact falls under Case 1 of the monitoring
3 guidelines versus Case 2? That's the first
4 part of my question.

5 The second part is why doesn't the
6 permitting authority with its technical
7 expertise have a discretion to determine that
8 it is in fact Case 2 or more appropriately
9 treated there under the guidelines?

10 MR. BENDER: Your Honor, to answer
11 both of your questions, first, the Sierra Club
12 has pointed to a number of things. First, the
13 ambient air modeling inventory includes a
14 number of sources in the vicinity around the
15 plant. Second --

16 JUDGE STEIN: Do you know how
17 significant those sources are?

18 MR. BENDER: We know, Your Honor,
19 only for PM10 that those sources are very
20 significant. And this requires a comparison
21 between the project summary, which is the
22 statement of basis in this case which is

1 Sierra Club's Exhibit 5. I believe on page 5,
2 there's a table of the annual and 24-hour PM10
3 impacts from both Vulcan and the nearby
4 sources.

5 And then in Exhibit G -- Vulcan's
6 Exhibit G -- you have when Illinois EPA
7 extracted which of those impacts are
8 attributable to Vulcan for annual and 24-hour
9 PM10, you have Vulcan-based sources
10 contributing about a third of the total
11 impact, which means that the other nearby
12 sources around the Vulcan plant are
13 contributing about two thirds of the maximum
14 model concentration for PM10. That's --

15 JUDGE STEIN: Do you know how much
16 that is in total?

17 MR. BENDER: I'm sorry, Your
18 Honor?

19 JUDGE STEIN: Do you know how much
20 that is in total from the other sources? If
21 you don't have it readily available, you can
22 --

1 MR. BENDER: Your Honor, I do. In
2 the private summary, the annual PM10 result
3 was 14.9.

4 JUDGE STEIN: Okay.

5 MR. BENDER: And the annual PM10
6 from the Vulcan facilities was 3.8, which
7 leaves 11.1 that's attributable which is more
8 than two thirds which is attributable to the
9 other sources.

10 And there's a similar proportion
11 for 24-hour.

12 JUDGE STEIN: Okay.

13 JUDGE WOLGAST: What practical
14 impact would that have had on Illinois'
15 analysis if in fact they had analyzed it as
16 Case 2 rather than Case 1?

17 MR. BENDER: Using the analysis
18 that Illinois EPA did for PM2.5 which we
19 contend is problematic for other reasons --
20 but just using that analysis, Your Honor, if
21 you essentially triple the impact from Vulcan,
22 it would be a violation of the ambient air

1 quality standards. Or if you incorporate that
2 11.1 from area impact, add it to the impacts
3 --

4 JUDGE WOLGAST: You're saying that
5 would have exceeded the incumbent?

6 MR. BENDER: It would exceed the
7 max.

8 JUDGE WOLGAST: Okay.

9 JUDGE STEIN: I see you've got
10 about three minutes left. So perhaps we
11 should cover -- or I guess almost four minutes
12 -- we perhaps should move to the two remaining
13 issues.

14 MR. BENDER: Yes, Your Honor.
15 Thank you.

16 On the BACT issue, the issue here
17 -- and Sierra Club is not arguing in this case
18 that safety factors which are built into the
19 BACT limits for NOx and for CO, that those
20 safety factors can never be used in any
21 circumstances. The argument in this case that
22 Sierra Club has raised is that the record in

1 this case doesn't support either the use of
2 safety factors or the use of the specific
3 safety factors that were included.

4 In response to comments, the
5 Sierra Club submitted results for NOx and CO
6 emissions from other facilities. The Illinois
7 EPA said you can't compare kilns. One kiln is
8 not the same as others and they emit at
9 different rates. So the important data points
10 are the emissions from the stack test done at
11 the Vulcan mill before it was shut down in the
12 late '90s.

13 Those results are 3.45 for NOx,
14 4.76 for CO. And then Illinois EPA says we
15 need to add a substantial safety margin. And
16 therefore the BACT limits are 4.5 and 11.48.

17 JUDGE SHEEHAN: Well, then why
18 can't you consider data from other sources
19 that have been operational for a while and
20 presumably have some light to shed on what
21 might occur at Vulcan, like in this case the
22 Cutler and Arkansas Lime Facilities --

1 MR. BENDER: Your Honor --

2 JUDGE SHEEHAN: -- for NOx?

3 MR. BENDER: -- the analysis needs
4 to be what's the variability in any single
5 plant's operation? It's not as Illinois EPA
6 contends each plant emits at a different rate.
7 But the fact that one plant emits at one rate
8 and another emits at another rate does not
9 mean that any one plant's operations vary
10 significantly from day to day or hour to hour
11 which is what a safety factor is supposed to
12 -- if done correctly -- is supposed to
13 capture. All that the record shows here is
14 that different plants emit at different rates.

15 JUDGE SHEEHAN: Well, isn't it
16 relevant to consider what might happen at
17 other plants that have been in the business
18 for a while? Is that something that Illinois
19 should not look at at all or should look at
20 and give different weight to than they gave
21 here?

22 MR. BENDER: It can look at, Your

1 Honor, but needs to look at not one test and
2 one date at a different plant. It needs to
3 look at what's the operating range of those
4 different plants.

5 In contrast to what was done by
6 Illinois EPA here and the Board's recent
7 Russell City decision, in that case the Bay
8 Area Air Quality Management District looked at
9 individual plants and then how those plants
10 vary over time and set safety margins to
11 account for what it determined was the kind of
12 natural variability in any one plant's
13 operation. But that equivalent data was not
14 available, and the Illinois EPA didn't look at
15 anything similar to that for this plant.

16 JUDGE SHEEHAN: Well, consider the
17 fact that the heat rate here was different
18 than the other two facilities and this was
19 dolomitic lime which is different, and this is
20 pebble lime they're producing which is
21 different. What about the relevance of those
22 factors?

1 MR. BENDER: Well, those are
2 factors that Illinois EPA gave for not really
3 considering or for discounting the experience
4 at the other plants.

5 If it were shown in the record
6 that any single plant -- Vulcan or any other
7 one -- has wide ranges in emission rates that
8 are unavoidable and natural to its process
9 even with the controls in place, that is
10 something that we're not contending cannot be
11 looked at. What we're saying is that that's
12 not what happened in this case, and that's not
13 the record in this case.

14 I see I'm out of time, so unless
15 you have other questions?

16 JUDGE STEIN: No further
17 questions.

18 MR. BENDER: Thank you.

19 JUDGE STEIN: Mr. Karr?

20 MR. KARR: Good morning, Your
21 Honors. Gerald Karr on behalf of the Illinois
22 EPA.

1 And to answer your one question, I
2 do not see the Notice of Completeness in the
3 record as well. I looked for it and could not
4 find it.

5 JUDGE STEIN: So does that mean if
6 there's no Notice of Completeness in the
7 record, then in fact under no circumstances
8 would Illinois be able to take advantage of
9 the so-called grandfathering provision which
10 only apply to plants as I understand it for
11 which there was a determination of
12 completeness as of July 15, 2008?

13 MR. KARR: That may be right. I'm
14 not sure. But they didn't take advantage of
15 that as borne out in their responses of
16 summary. They went through the additional
17 analysis because of the stay and the
18 grandfathering and looked at it from that
19 perspective as well. And in doing so -- as
20 you said you've well aware of the surrogacy
21 policy -- and I think they have made the tie
22 or the correlation between PM, PM10 and PM2.5.

1 This analysis that they do for the PM2.5 I
2 think is well within their bounds to do.

3 JUDGE STEIN: Then why isn't the
4 Sierra Club right that an analysis of ambient
5 air quality or an analysis on 2.5 that you do
6 after the public comment period has closed
7 needs to under the Board's precedent and then
8 under the provisions of the Clean Air Act be
9 subject to public comment?

10 MR. KARR: Because in this
11 instance, they're not really -- it is an
12 analysis of 2.5. But what they've done prior
13 to and what has been commented on kind of
14 subsumes that analysis. They looked at the
15 nature of all the emissions from the plant.
16 And --

17 JUDGE STEIN: I understand that
18 most of the analysis that you did was in fact
19 subject to public comment. But I'm concerned
20 specifically about the 2.5 analysis which the
21 Board's precedents on this are quite clear.
22 The statute is quite clear that this kind of

1 analysis has to be made available to the
2 public at the time of public comment.

3 JUDGE WOLGAST: And just to be
4 clear going back to my earlier question, was
5 the analysis included in the chart directed
6 solely at ambient air quality analysis or also
7 BACT compliance?

8 MR. KARR: I believe it was with
9 BACT compliance as well.

10 JUDGE WOLGAST: Okay.

11 JUDGE SHEEHAN: Even though the
12 chart is titled something differently, it
13 speaks about ambient air quality impacts. It
14 doesn't sound like BACT to look at the
15 phraseology with which you entitled footnote
16 102.

17 MR. KARR: Yes. The way I
18 understand it, it was meant to be for both.

19 JUDGE STEIN: Okay. Well, leaving
20 aside this public comment question, how is it
21 that the analysis that was done in I guess
22 what's now Exhibit G squares with the

1 Administrator's determination and I guess
2 what's known as Trimble County or Louisville
3 Gas depending upon how you -- I mean, that
4 would suggest very strongly that a very
5 detailed analysis that perhaps goes well
6 beyond the scope of the analysis that was done
7 in the wake of the public comment -- post-
8 public comment period -- really -- while it
9 may take a step doesn't really go the full way
10 that's contemplated by the Administrator's
11 decisions? How would you respond to that?

12 MR. KARR: Your Honor, I think
13 that because this is such a technical issue
14 that the Illinois EPA did the best they could
15 with what they had at that time in trying to
16 balance what was out there and trying to
17 determine whether or not the grandfathering
18 would be part of it or not. And the chart was
19 what they could come up with to answer that
20 issue or to address that issue through this
21 whole process. This has been a six-year
22 process from application to permit. And they

1 were just trying to do the best they could
2 with this highly technical issue at the time.

3 JUDGE SHEEHAN: But balancing is
4 one thing. And it sounds good in theory, but
5 we need the record to support some firm and
6 factually-based foundation that Louisville
7 Trimble calls for and other Agency documents
8 as well.

9 And your comments seem very
10 threadbare and very general. Proposed plan is
11 an ideal situation to use PM10 as a surrogate
12 for 2.5. I'm reading from page 37. There is
13 a direct correlation between 2.5 and 10, a lot
14 of very general, high altitude statements
15 without any basis at least here in the record
16 for the numbers or the data that back those
17 statements up for this facility, not just in
18 general. What about this facility?

19 MR. KARR: And again, I guess what
20 I could point to is the response in the
21 summary that we've talked about. And the
22 footnote 102 and the page 40 and a little bit

1 before that is the extent of what the Agency
2 felt supported their position on this part of
3 the permit.

4 JUDGE STEIN: Wouldn't the
5 Agency's position have perhaps been more
6 complete had there been an opportunity for the
7 public to comment on that analysis? I mean,
8 you're suggesting to me that it's a technical
9 issue. And I don't disagree that it's a
10 technical issue. But at the same time,
11 perhaps the Agency could have benefitted from
12 public comment from other technical experts.

13 There are other ways of trying to
14 make this analysis and obviously what may be
15 a somewhat newer situation, but that was the
16 whole purpose of the public comment process is
17 to be sure that this kind of analysis was
18 subject to the light of day and that the
19 Agency before it made its final decision could
20 benefit from having that analysis subject to
21 scrutiny by a broader group.

22 MR. KARR: I probably wouldn't

1 disagree with that statement.

2 I guess next I'd move to the pre-
3 construction monitoring of the ambient air
4 quality.

5 JUDGE STEIN: Right. And I think
6 in this particular area, the Board is really
7 interested in the basis for the Agency's
8 determination that this fell into Case 1 of
9 the monitoring guidelines versus Case 2. So
10 if you could direct your remarks to that
11 issue, that would be quite helpful.

12 MR. KARR: I would allude to what
13 the Board has previously alluded to -- this
14 network of monitoring that's been established
15 in the state, the fact that this was a
16 facility that's located in a rural area, a lot
17 of the impacts that the monitoring is meant to
18 focus on is more for the urban setting.

19 The data is currently showing that
20 the air quality is improving in the area of
21 the facility as well. So I think they felt
22 they had sufficient representative data to

1 show that this facility would not cause any
2 adverse impacts on the ambient air quality.

3 Again, I guess it was appropriate
4 for them to use this representative data that
5 focusing on the site-specific or project-
6 specific data wouldn't give them the
7 information that they would need to reach the
8 decision they reached, and that they felt by
9 using the regional data, they were better able
10 to evaluate the impacts of the facility on the
11 air quality.

12 JUDGE STEIN: The Case 1 example
13 which allows for the use of regional
14 monitoring networks as I understand it is not
15 intended for cases of multi-source emissions.
16 And that's right in the guidelines. And what
17 I'm struggling with is that there is data in
18 the record that Sierra Club has pointed to
19 which would appear to be circumstances of
20 multi-source emissions. And I'm looking for
21 how IEPA or Vulcan responds to that data to
22 show that notwithstanding what would appear to

1 be multi-source emissions, it's still
2 appropriate to use the regional monitoring
3 data. And that I think is something that
4 would assist the Board in its deliberations.

5 MR. KARR: Okay. And again, I
6 think that the NSR manual allows the agency to
7 use this regional data regardless of the
8 localized data that you reference. I think
9 it's just in their discretion to use that and
10 that they have felt that that was better
11 representative than to address the situation
12 that arose here.

13 JUDGE SHEEHAN: But do you concede
14 there are many other sources in the general
15 area so that it is the dreaded multi-source
16 area situation?

17 MR. KARR: I don't know that I
18 would concede that there's many. This is more
19 of a rural area. Many I think is a little
20 extreme.

21 JUDGE SHEEHAN: Some?

22 MR. KARR: Some. There are some.

1 Yes.

2 Then turning now to the
3 Petitioner's position that the Illinois EPA
4 erred in setting BACT limits for the NOx and
5 the CO and the issue of safety factors. The
6 whole idea I guess behind BACT is that you
7 want to set limits that well maybe not the
8 highest are limits that are consistently
9 achievable. And that's I guess where the
10 focus of safety factors come in.

11 The Sierra Club cited the one
12 stack test that took place at this facility
13 back in 1999. So those should be the emission
14 limits for these pollutants. That was a
15 different configuration of the facility that
16 exists that was being permitted.

17 JUDGE STEIN: But hasn't IEPA
18 conceded in its response to comments that that
19 stack test is relevant data and perhaps the
20 most relevant data for at least beginning the
21 analysis of what should be the BACT limits for
22 this facility? I mean, I'm troubled by a 240

1 percent compliance margin in the CO context
2 without what I can tell data to support that
3 margin.

4 MR. KARR: Right.

5 JUDGE STEIN: There is an
6 explanation. But it's devoid of the detailed
7 analysis that would allow this Board to make
8 a determination of why we should approve a
9 BACT limit for CO that's 240 percent larger
10 than a stack test at this very facility.

11 JUDGE WOLGAST: And also I think
12 it might be helpful if you could sort of walk
13 us through how the Agency got to a 240 percent
14 margin of safety.

15 MR. KARR: Sure. To answer Judge
16 Stein's question first, the stack test is data
17 from one day at one time for a configuration
18 that doesn't now exist. So the Agency felt
19 comfortable that yes, they can consider that,
20 but because it's not what they were permitting
21 in the exact sense that they didn't think that
22 that would be the appropriate limit. And to

1 get the 240 percent margin, they looked at
2 other sources and also have the requirement in
3 the permit for the downward adjustment after
4 there's an operational history here for BACT
5 for NOx.

6 JUDGE SHEEHAN: But you say you
7 look at other sources I presume you mean the
8 Bellefont and Greenmont, Pennsylvania sources.
9 But there's indication whether the sources are
10 representative or not. Maybe they're at the
11 extreme high end and the broad range would
12 take the safety factor margin way down way
13 below 240. So why should we just focus on
14 these two facilities that seem to be very
15 isolated, out of context examples?

16 MR. KARR: I think because they're
17 using that along with the original stack test
18 in '99 to come up with a number --

19 JUDGE SHEEHAN: I know you're
20 using that. But why should you use that?

21 MR. KARR: Well, because that is
22 what's available to them at the time of the

1 permitting.

2 JUDGE SHEEHAN: There were no
3 other stack tests from any other facilities
4 available but these two that were at the very
5 high end of the range?

6 MR. KARR: I cannot answer that
7 question.

8 JUDGE SHEEHAN: I think the
9 question that threads through a lot of our
10 questions is you have the test data, and then
11 you could range over the test data for the
12 safety factor at 10 percent or 20 or 100 or
13 200 or 300. Why do you land at 30 percent
14 over for NOx and 240 percent over for CO? Why
15 do you come down exactly at those spots for
16 those two pollutants and not at other spots?

17 MR. KARR: Again, I guess I would
18 just say that that's the analysis that they
19 developed based on the data they had with the
20 idea that you want a setback at a level that's
21 consistently achievable. You don't want to
22 have them constantly going up and over the

1 limits.

2 JUDGE SHEEHAN: But I don't think
3 there's an analysis for both of those
4 pollutants. All that you say by way of
5 explanation is that we set them at these
6 higher safety factor places to handle
7 operational variations which sounds like cover
8 for a lack of analysis. You could use that
9 sentence -- that utterance for any facility at
10 any place. It doesn't seem tied at least in
11 the record to Vulcan. That's our problem.

12 MR. KARR: Okay. And again, what
13 I would say is that they used the data they
14 had to reach those levels.

15 The fourth issue, which I don't
16 know that Sierra Club totally got to, but that
17 the Illinois EPA failed to ensure the
18 facility's emissions do not cause or
19 contribute to a violation of the one-hour NOx,
20 I would first off venture that this issue is
21 not preserved for appeal. Given the issue of
22 whether or not it was reasonably

1 ascertainable, this was a proposed rule. The
2 rule did become final the day after the permit
3 was issued. But the Sierra Club's claim that
4 it was not reasonably ascertainable I don't
5 think is supportable.

6 JUDGE WOLGAST: Well, let's assume
7 for purposes of argument that you're right
8 about that point.

9 If hypothetically the Board were
10 to remand the permit back to IEPA in a manner
11 or for reasons that required the Agency to re-
12 issue the permit -- the permit is re-issued
13 hypothetically in 2011 -- wouldn't the one-
14 hour NOx standard apply to a permit issued in
15 2011?

16 MR. KARR: I believe it would but
17 they have the date it was issued -- I guess
18 there's the whole issue -- the issue of when
19 it's issued versus when it's final, when it's
20 effective. Here we're operating with a permit
21 that was issued prior to that.

22 JUDGE WOLGAST: Right. And I'm

1 speaking to a post-remand issuance.

2 MR. KARR: Well, even if it is on
3 remand, I think the Illinois EPA did determine
4 that because they would not violate the annual
5 NO2 NOx that it would not violate the one-hour
6 NOx as well. They did make that statement in
7 the response in the summary on page 77.

8 JUDGE STEIN: I don't think we
9 have any further questions for you.

10 MR. KARR: Thank you, Your Honors.

11 JUDGE STEIN: I think the
12 remaining time we'll give to Counsel for
13 Vulcan.

14 MR. MORE: Thank you, Your Honor.
15 Josh More on behalf of Vulcan Construction
16 Materials.

17 I'd like to answer the last
18 question posed regarding the re-issuance of
19 the permit and whether or not that would
20 require the application of the NO2 NOx. I
21 believe it would not.

22 If you remanded the permit to

1 address issues other than the one-hour NO2,
2 the re-issued permit is not subject to being
3 opened with respect to the one-hour NO2. U.S.
4 EPA recently addressed this issue in its PSD
5 BACT guidance which I have a copy of I'd like
6 to present to you all with respect to the
7 greenhouse gas question which is analogous in
8 this situation.

9 U.S. EPA determined that a permit
10 that was issued before January 1, 2011, but
11 yet becomes final after an appeal is not
12 subject to greenhouse gas permitting.

13 JUDGE WOLGAST: Am I wrong -- I
14 mean, I have read that guidance. And am I
15 wrong in saying that it doesn't address the
16 question I posed that specifically a remand of
17 a permit that then has to be re-issued?

18 MR. MORE: It doesn't address that
19 specifically. But I would suggest that a re-
20 issued permit is not a brand new permit in a
21 sense because it doesn't open or subject that
22 permit to a public comment on all of the other

1 issues that have been addressed and resolved.

2 It would only subject that permit to public
3 comment on the issues that were remanded and
4 were re-opened. And in this instance, it
5 would not be one-hour NO2 standard. In fact--

6 JUDGE STEIN: Well, how does that
7 work then? If hypothetically we were to
8 remand on this PM2.5 issue and say you need to
9 take public comment. So you go out and take
10 public comment on that and if hypothetically
11 there's another remand issue on the compliance
12 margin and we direct IEPA to take public
13 comment on that, then the Agency only re-
14 issues part of the permit? Isn't there just
15 one permit determination?

16 So that in that circumstance, you
17 would in fact be issuing the permit in 2011
18 which I think as Judge Wolgast pointed out is
19 different from the scenario that was outlined
20 in the PDS guidance which doesn't talk about
21 a re-opening of the public comment period or
22 a re-issuance of the permit. It talks about

1 a permit that was issued in pre-2011 that then
2 goes up on appeal to the Board and is silent
3 about the outcome.

4 MR. MORE: It is silent about the
5 outcome with respect to a Board rule and the
6 impact that that would have on subjecting that
7 permit to the greenhouse gas requirements.

8 Nonetheless, when a permit is re-
9 issued based on a remand, it's still not open
10 to public comment on all the issues. The
11 Sierra Club would not have the opportunity
12 to--

13 JUDGE STEIN: But isn't the
14 determinative period of time when the permit
15 is issued by the permitting authority --

16 MR. MORE: Yes.

17 JUDGE STEIN: -- not the breadth
18 or the narrowness?

19 MR. MORE: Yes. But I don't
20 believe that when the permit is re-issued that
21 -- the final determination with respect to all
22 other issues was made when the permit was

1 initially issued. The re-issued permit, the
2 final determination is being made with respect
3 to only that issue that it was remanded.

4 JUDGE STEIN: But at the time a
5 permit is issued, doesn't the permitting
6 authority need to impose the requirements that
7 are in effect at that time?

8 MR. MORE: Yes, it does.

9 JUDGE STEIN: And so, leaving
10 Vulcan aside, if IEPA were to issue a permit
11 to another facility in 2011, they would need
12 to comply with the NO2 standard, correct?

13 MR. MORE: Yes. IEPA would need
14 to do a BACT analysis for the NO2 standard.
15 That's correct.

16 JUDGE SHEEHAN: So what about the
17 situation where you have a new permit issued
18 in 2011 that has the NOx NAX standard, and
19 this permit here, say it's remanded and it
20 takes two years to come back, that permitting
21 occurring one or two years after the one that
22 you just said would have the NOx NAX in it

1 would not have to have a NOx NAX limit?

2 MR. MORE: I believe that the
3 permit would not have to address the one-hour
4 NO2 standard.

5 JUDGE SHEEHAN: Even though it
6 comes a year or two after a permit that does
7 apply the one-hour rule?

8 MR. MORE: Right. Because the
9 Agency's final determination with respect to
10 the one-hour NO2 was made prior to the
11 effective date of that rule.

12 JUDGE STEIN: But the language
13 that appears in the Agency's documents that
14 we've looked at uses the word "issuance." And
15 I haven't heard anything that you've said here
16 today that suggests there wouldn't be a new
17 issuance of the permit.

18 In other words, if a case goes
19 back for a remand that requires a re-opening
20 of the public comment, you know leaving aside
21 what happens if you weren't re-opening public
22 comment, but I believe in that circumstance

1 wouldn't that be a re-issuance of the permit?

2 MR. MORE: It would definitely be
3 a re-issuance of the permit. I cannot quibble
4 with that.

5 JUDGE STEIN: Okay.

6 MR. MORE: I'd also like to
7 address the question about the monitoring, and
8 doesn't that footnote 102, is that a BACT
9 analysis. I believe it's an air quality
10 analysis. That's how they've titled it. The
11 BACT analysis and the remainder of the
12 response in summary discuss at length that the
13 BACT analysis with respect to PM2.5 was
14 performed and it was determined that the
15 filter -- the bag house with the Teflon
16 filter, which is a state-of-the-art filter, is
17 the appropriate technology, BACT technology,
18 for the facility to address PM2.5.

19 JUDGE SHEEHAN: I'm looking at the
20 record page 37 where you say that the filters
21 are the best devices for control of fine
22 particulate. I see the sentence, but I don't

1 see any reference to the data supporting that
2 sentence.

3 MR. MORE: There's a footnote that
4 talks about -- well, that discusses filtration
5 as the best technology for PM2.5. And
6 Illinois EPA as the technical entity it is
7 confirmed that the Teflon lining is in
8 addition to a bag house requirement to the
9 typical filter.

10 JUDGE SHEEHAN: I think you're
11 referring to footnote 96 probably that that's
12 addressed in terms of niche apps in MAX, not
13 in terms of BACT like we have here.

14 Plus, the Louisville Trimble
15 decision specifically I think at page 44
16 looked very darkly on filters and bag houses
17 as being effective control technology. Have
18 you considered Louisville's own pronouncement
19 on filters and bag houses?

20 MR. MORE: It's a different
21 facility, a different type of operation.
22 Illinois EPA went to an extensive analysis on

1 what is the appropriate BACT technology here
2 and determined that a filter --

3 JUDGE SHEEHAN: But I'm looking
4 for the extensive analysis. I don't see any
5 more than this conclusory sentence on page 37.

6 MR. MORE: Oh, well, there's the
7 project summary. It contains a whole
8 discussion on the BACT analysis where they
9 compared is an SCR the appropriate technology
10 or not. They ruled that out.

11 JUDGE SHEEHAN: Where in the
12 record are you referring to?

13 MR. MORE: I'm referring to the
14 project summary which is re-attached to our
15 petition as Exhibit J, I believe it is --
16 Exhibit H. Excuse me.

17 JUDGE SHEEHAN: H.

18 MR. MORE: In that, they do a
19 whole BACT analysis. And there's also as the
20 permittee, Vulcan performed a BACT analysis
21 and provided it to Illinois EPA. And that
22 is--

1 JUDGE STEIN: That's the November
2 of 2008 analysis?

3 MR. MORE: Yes, ma'am.

4 JUDGE STEIN: Okay.

5 MR. MORE: Exactly. Yes, Judge.

6 Where we go through and we discuss
7 is SCR available technology for this facility
8 and determined it is not. And working with
9 IEPA, they agreed and determined that a
10 filtration system was appropriate here.

11 And the facility also agreed to
12 upgrade its particulate matter handling
13 equipment to address fugitive PM emissions.

14 JUDGE WOLGAST: So is it your
15 position that if you're using the most up-to-
16 date technology for whatever application we're
17 talking about, you don't need to do any
18 further statistical analysis in terms of
19 whether this would be equivalency between PM10
20 and PM2.5 and whether there should be some
21 different analysis for PM2.5?

22 MR. MORE: I believe it's a

1 factor, but I do not believe its outcome
2 determinative.

3 JUDGE WOLGAST: Okay.

4 MR. MORE: And in this instance,
5 the Illinois EPA looked at the type of
6 facility, the type of operation, the type of
7 emission and came to the conclusion that PM10
8 and PM2.5, there was a correlation such that
9 an emission specific limitation was not
10 warranted in this instance.

11 JUDGE SHEEHAN: Correlation
12 between 10 and 2.5 for this facility or just
13 generally? Because again, your comments speak
14 in terms of generalities, not Vulcan in terms
15 of the correlation.

16 MR. MORE: I believe that they
17 said for this facility. If I recall, the
18 quote is "This facility is a perfect example
19 of PM and there being a correlation between PM
20 and PM2.5."

21 JUDGE SHEEHAN: That's I guess my
22 problem. You use words like "appropriate" and

1 "generally speaking" the presumption should
2 apply that the surrogacy works here. But it's
3 very hard to find any real hard core data as
4 Louisville requires to support your claims.

5 MR. MORE: Yes. I think Exhibit G
6 also supports that. And in Exhibit G,
7 Illinois EPA did a PM2.5 analysis. And they
8 assumed with respect to that analysis that all
9 of the PM10 emissions from the main, from the
10 facility -- from the kiln -- 100 percent of
11 those PM emissions were PM2.5 emissions. So
12 with respect to its analysis, it was extremely
13 conservative.

14 It then used the AP42 factor that
15 Mr. Bender referred to only with respect to
16 the ancillary operations.

17 JUDGE SHEEHAN: Why couldn't you
18 just use 2.5 and not even worry about 10? If
19 you have the data for 2.5, why not just
20 measure 2.5? Why have to go through the
21 surrogacy hoop at all?

22 MR. MORE: Illinois EPA didn't

1 look at the PM2.5 data until the surrogacy
2 policy was stayed. So it was I believe that
3 Illinois EPA in response to the stay of the
4 surrogacy policy and in response to Sierra
5 Club's comments looked and did a specific
6 PM2.5 analysis, decided to do a conservative
7 approach by assuming that all of the PM10 from
8 the boiler and the kiln itself was PM2.5 and
9 applying the standard AP42 factor with respect
10 to the ancillary operations to calculate the
11 PM2.5 emissions that would likely occur from
12 this facility. Because the facility hasn't
13 been operating since 2003.

14 JUDGE STEIN: Why shouldn't that
15 analysis be subject to public comment?

16 MR. MORE: Because it's an
17 outgrowth of the comment -- public comment.
18 And it's not a new justification. It's a
19 continuation.

20 If every time someone comments and
21 Illinois EPA does a new analysis and that then
22 re-opens the public comment period, it's

1 conceivable that the public comment period
2 could go into perpetuity.

3 JUDGE STEIN: But doesn't the
4 statute require that the ambient air quality
5 analysis be available at the time of the
6 public comment period?

7 MR. MORE: It does require that
8 the analysis performed be available. And at
9 the time during the public comment period,
10 Illinois EPA relied upon the surrogacy policy.
11 Towards the expiration of the public comment
12 period -- actually after the public comment
13 period -- the surrogacy policy was stayed. So
14 they went further and did the PM2.5 analysis
15 to confirm --

16 JUDGE STEIN: Right. But at that
17 point, why didn't they before issuing the
18 permit make that analysis, re-open the public
19 comment period or provide further opportunity
20 before they issued the permit? I mean, what
21 is the argument?

22 I mean, I understand your concern

1 about the iterative process and obviously
2 wanting to come to closure. But in
3 retrospect, wouldn't it have made more sense
4 to take the extra month or two, subject it to
5 public comment rather than be all the way up
6 here and now we're having a debate about
7 whether you need to re-open the public comment
8 period?

9 And we'll see how that debate gets
10 itself resolved. But particularly in light of
11 the statutory language, it's a very
12 substantial issue.

13 MR. MORE: Well, I believe that
14 the case law suggests that the re-opening is
15 only required if the new information is a
16 substantial change in the justification for
17 the underlying permit condition.

18 JUDGE WOLGAST: Well, I think that
19 does raise another question. One is is this
20 the first instance of data underpinning the
21 general conclusions of equivalency of PM2.5 to
22 PM10? And if so, that's not necessarily

1 conforming or confirming something that was
2 there. It's some brand new sort of data
3 points and analysis that never existed before.
4 Is that wrong?

5 I'm asking from a record
6 perspective is that wrong?

7 MR. MORE: I think that from a
8 record perspective, this appears to be the
9 first data comparison between PM10 and PM2.5.

10 Nonetheless, I don't believe it's
11 the first instance of assessing whether or not
12 a PM2.5 emission limit needs to be included in
13 the permit. I believe it is an outgrowth of
14 the comment and the --

15 JUDGE STEIN: But isn't IEPA
16 basing its conclusions at least in part on
17 that analysis?

18 MR. MORE: I don't think there's
19 anything in the record that suggests that. In
20 fact, each response to comment with respect to
21 the PM2.5 analysis that the Sierra Club made,
22 Illinois EPA repeatedly talks about the fact

1 that there's a correlation between the two.
2 They're applying that technology that conforms
3 with PM2.5.

4 I cannot recall seeing one comment
5 in here where they rely upon the PM2.5
6 analysis in Exhibit G as the justification for
7 their permit decision, nor has Petitioner
8 cited one fact in the response comments or the
9 entire record that shows that Illinois EPA
10 specifically relied upon the PM2.5 analysis in
11 determining that the PM2.5 emission limit
12 should be set or expressed as PM and PM10.

13 I'd like to also address, if I
14 may, the CO and the NOx question; whether or
15 not the safety margins are appropriate. And
16 in this instance, there was some concern with
17 a 240 percent increase over the 1999 stack
18 test.

19 I think it's clear that the 1999
20 stack test while a factor was not outcome
21 determinative. It's one test from 1999 at a
22 period of time when the plant was operating in

1 a much different configuration. For example,
2 Vulcan Construction Materials is installing a
3 pre-heater. The pre-heater will impact the
4 heat rate of the facility such that when you
5 impact the heat rate, you adversely impact
6 your NOx rates.

7 And as we all know, there's an
8 inverse correlation between NOx and CO. To
9 get a lower NOx, you have to operate at a
10 lower temperature which has an adverse impact
11 on CO. Conversely, if you have a higher heat
12 rate, you will get a higher NOx but in turn
13 you will get a lower CO.

14 In this instance, this facility
15 has a much lower heat rate -- I'm sorry -- has
16 a higher heat rate. Therefore, we see a
17 higher NOx requirement. Okay? And so, we are
18 at a point in time where we needed this higher
19 CO limit.

20 The Illinois EPA looked to other
21 facilities, other CO limits that had been
22 issued and determined that this limit was

1 within the range of lime kilns that had been
2 issued. In fact, Petitioner comments
3 extensively with respect to the NOx limit and
4 points out that other facilities have lower
5 NOx limits than that being imposed upon Vulcan
6 and justifies the request for a lower limit
7 based on other facilities.

8 The Illinois EPA -- it's relevant
9 what limits are applicable at other
10 facilities. That's why there's the BACT/LAER
11 Clearinghouse. It's an appropriate mechanism
12 for determining what are the technologies and
13 the emission limitations for various
14 facilities. And in this instance, these
15 emission limits fall within the range of that
16 that's being applied at lime facilities across
17 the country.

18 JUDGE SHEEHAN: But it's very
19 difficult to find why those other facilities
20 are really on all fours with Vulcan. You name
21 them. You say they have the higher rates. We
22 don't have any sense of the range of other

1 facilities who perhaps have lower rates. We
2 don't know whether or not Vulcan is similar to
3 Greenmont or Bellefont. It sounds like you're
4 just throwing out a conclusion that you want
5 us to accept out of deference but not giving
6 us the thread that would connect your safety
7 factor with the realities on the ground at
8 Vulcan. That's what we need.

9 JUDGE STEIN: I mean, I think to
10 pick up what Judge Sheehan is saying, I think
11 what we're missing in this record in a number
12 of instances is the significance of the
13 crucial facts that IEPA relied on to make its
14 judgments.

15 It may well be that a safety
16 factor of 240 percent or 30 percent could be
17 justified. But we can't tell because we don't
18 know what particular facts IEPA relied on.
19 And I'm not suggesting that to get to those
20 conclusions. You know that they looked at
21 something, but there's not enough that's been
22 committed to paper in the written analysis for

1 us to be able to fully evaluate that analysis.

2 MR. MORE: I would respectfully
3 disagree. And the reason I say that is I
4 don't think your case law suggests that they
5 have to provide every single fact that they
6 relied upon. They need to provide sufficient
7 information for you to deduce that there's a
8 rational basis for their decision.

9 And in this case, they talk about
10 the other facilities that they looked at.
11 They compared the operations at those other
12 facilities. They looked at the 1999 stack
13 test from this facility. They looked at the
14 BACT analysis that Vulcan performed and
15 determined that these numbers were appropriate
16 for this facility. And in fact, based on that
17 analysis, determined that a ratchet down is
18 required with respect to NOx. And when you
19 lower NOx, you must allow for a higher CO
20 emission.

21 And so, I think one can connect
22 the dots without all the dots being presented.

1 I think your case law suggests that that's
2 available.

3 JUDGE STEIN: Thank you.

4 MR. MORE: Thank you.

5 JUDGE STEIN: Mr. Bender,
6 rebuttal?

7 MR. BENDER: Your Honor, in my
8 remaining time, I just wanted to address a
9 couple points made and then discuss the NO2

10 DR. SCHWEBKE: One-hour issue
11 that I did not get a chance to raise the first
12 time.

13 First in response to Illinois EPA
14 and Vulcan's comments that Illinois EPA
15 selected fabric filters as the best control
16 for fine particulate in the PM2.5 BACT
17 analysis, I realize that that statement is
18 made in the response to comments. We've not
19 been able to find in the record what the basis
20 for that statement is. That's a conclusion
21 after step 2 or step 3 in a top-down BACT
22 analysis which would require identifying what

1 all the alternatives are and ranking them to
2 be able to make that conclusion. And we're
3 not aware of anywhere in the record where that
4 information exists.

5 Second, I think that it is clear
6 that Illinois EPA did rely on its PM2.5
7 analysis for surrogacy, and they said they
8 exist in the response to comments, and on its
9 footnote 2 in response to comments to issue
10 the permit. In fact, I heard Counsel for
11 Illinois EPA agree with that statement here
12 this morning when asked if they relied on the
13 surrogacy law or the rule, and the answer was
14 no. They did their analysis of PM2.5 for
15 their final decision.

16 Additionally on the heat rate
17 issue, I think there is some confusion in the
18 record on what this heat rate issue is with
19 the lime kiln with the new design. My
20 understanding from the description of the
21 record is that the heat rate is actually
22 improving because of pre-heaters added so the

1 plant is more efficient, burns less fuel per
2 ton of stone in and lime out, which actually
3 has the effect of positively affecting or
4 reducing emissions, not as Vulcan suggests
5 here has the impact of increasing emissions.
6 And I think Illinois EPA in its response to
7 comments says that a number of times that it
8 actually expects emissions to be lower when
9 expressed in tons or pounds per unit of input.

10 Your Honors, on the issue of one-
11 hour NO₂, to answer a question of whether a
12 remand on another issue requires consideration
13 of one-hour NO₂, Sierra Club's position is
14 that it does. And for two reasons.

15 First, the Act in '94 or '74/'75
16 and 40 CFR 5221(a) speak in terms of
17 commencing construction. For PSD permitting
18 purposes, that's the time point that matters
19 the most. And in this case, that will not
20 occur under the hypothetical if there's a
21 remand until after the remand.

22 And the statute and the regulation

1 are clear that construction cannot commence
2 unless and until the permittee has
3 demonstrated that it will not cause or
4 contribute to a violation of any ambient air
5 quality standards. That speaks in terms of
6 length of construction in the presence of any
7 ambient quality standards then in place.

8 The second reason that Sierra Club
9 says that under the hypothetical analysis be
10 required is in 40 CFR 124.19(f)(1). That
11 speaks and says specifically when a filed
12 permit decision is made.

13 In cases such as this where
14 there's been review by the Board, there's
15 three circumstances when the final decision is
16 made. If there's a remand, it's made either
17 after review again after remand, or if the
18 Board's decision says that no additional
19 review is required after remand. That speaks
20 specifically to situations such as this as to
21 when the final permit decision is issued. And
22 consistent with the statute, that should be at

1 the time of the final permit issuance, that
2 should ensure compliance with all then
3 effective ambient air quality standards.

4 And this issue is extremely
5 important as the PM2.5 one is for Sierra Club
6 because the ambient air quality standards are
7 the heart of the Clean Air Act. They're the
8 health-based standards -- air quality
9 standards.

10 And contrary to the response by
11 Vulcan and comments by Illinois EPA that there
12 was an analysis by Illinois EPA that shows
13 compliance with the one-hour NO2 standard, we
14 actually read that analysis to say the
15 opposite. That analysis is in Exhibit I to
16 Vulcan's brief.

17 And the Agency does a very rough
18 analysis. We're not contending it's a
19 sufficient analysis. But what their
20 conclusion is is that the one-hour impacts
21 from Vulcan alone will be 68, or a little bit
22 over 68 parts per billion out of a standard

1 that's 100. That's not including any area
2 sources in the cumulative impacts analysis.
3 And that's not including background
4 concentrations which we know in our reply
5 based on EPA's online available data for
6 design values that when 68 is added, not even
7 including the impacts from other area sources,
8 just once Vulcan's impact is added to
9 background concentration, it results in a
10 violation of the one-hour standard.

11 I see my time is up. So unless
12 you have questions, thank you, Your Honors.

13 JUDGE STEIN: Thank you. I would
14 like to thank all Counsel for their argument.
15 It's been extremely helpful to the Board. And
16 we will take the argument into consideration
17 as well as the briefs. I think it's been
18 helpful in clarifying some issues for us.

19 And the hearing now stands
20 adjourned.

21 MS. DURR: All rise. This session
22 of the Environmental Appeals Board now stands

1 adjourned.

2 (Whereupon, at 11:43 a.m., the
3 hearing was adjourned.)

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In the matter of: Vulcan Construction Materials

Before: Environmental Appeals Board

Date: December 14, 2010

Place: Washington, DC

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