fraction.

JUDGE SHEEHAN: If there are no further questions on that issue, can we turn to your increment argument, increment consumption? I'll begin with Question E.

The scheme set out you've certainly reflected in the NSR Manual is that increments are set after a baseline is set. And the baseline, 775, is nailed down. And then emissions after that consume increment or if emissions come offline after that time, the increment pot can grow.

Page 10 of the manual, C-10 of the manual, says that emission increases that consume increment are those occurring after the baseline is set, not before. Your argument seems to be that you measure the actual emissions after the baseline, and then all of the emissions pre-baseline and post-baseline consume increment. Thus, you come up with a figure around 16,000 tons of increment consumed by the WEPCO-PIPP plant.

Can you explain your theory of how the increment principle works in the PSD world?

MR. BENDER: Yes, Your Honor. The Act and the PSD rule distinguish between the major source baseline data and the minor source baseline data, and between the major sources and minor sources. And it says, the plain language is that the actual emissions as defined by the cross-references -- the regulatory definition -- from a major source constructed after the baseline data consumes increment. And that the only two possible definitions of actual emissions are the 24-month annual average or the potential to emit.

And what we're saying in this case is DEQ did not do that. And what they claim to have done is say I've taken the difference between a single year, 1973, and another single year, 2006, taken the difference and determined that to be the amount of emissions from the -- entities' Preque Isle plant that consumes increment. And that's not the

definition of -- that doesn't fall within any of those definitions of actual emissions. And it doesn't fall within the research review manual's discussion either.

JUDGE SHEEHAN: That's not quite -- we'll get to that. That's not quite what I was asking.

Say, for example, you had a facility in 1970, say, and maybe 7 units of pollution, and the baseline was set in 1975. Sometime after that, there was a modification and another three -- additional three units of pollution were emitted. Would your argument be that the increment consumption at that point -- post-1975 -- was 3 units or 10, pulling in the original 7 as well?

MR. BENDER: It would be the 24 months before the relevant data. And I think the relevant data is why that baseline is established. So --

JUDGE SHEEHAN: So would the modification increment consumption include

emissions that were set, that were included in the original baseline, or not?

MR. BENDER: Maybe I'm not understanding, I'm sorry. The original baseline, are you referring to it as the '73 emissions or the '75 emissions?

JUDGE SHEEHAN: The seven units of pollution that were included in the original baseline. Would those seven units be included in the increment calculation post-baseline? Or would it just be the additional three that increase after the seven, after the baseline is set?

MR. BENDER: It would be all.

JUDGE SHEEHAN: All 10?

MR. BENDER: All 10.

JUDGE SHEEHAN: Then what happens to the -- you're double counting? Because the seven went into the original baseline, so you counted them then and now you count them as increment-consuming as well, so they're counted twice?

MR. BENDER: Well, the regulation says that they're not in the baseline, so they'd be increment -- those emissions from -- and the way the regulation reads is the actual emissions from the source. And it's not the modification. The regulations says the actual emissions from the source are outside the baseline in consumed increments. So they wouldn't be -- I think to answer your question, they wouldn't be in the baseline and increment consuming. They just wouldn't be in the baseline.

JUDGE SHEEHAN: My question was that they were in the baseline. They were alive and well. They were out there at the time the baseline was calculated. So it seems natural that they would be having been included in the baseline. What would the baseline encompass if not actual emissions as of that point, as of 1975?

MR. BENDER: And the way Congress defined it is it's a concept that is -- whatever the -- it should be the air quality in the area

or the modeling representative of the air quality in the area, but then there's provisions or provisos to that. And some things are subtracted from the baseline if certain events occur. And one of those events is construction, which is then defined to include a modification. So a source that is -- a major source that is constructed or modified after '75 is, by that definition, not within the baseline concentration.

JUDGE SHEEHAN: But if there was -- yes, go ahead.

JUDGE WOLGAST: Are you saying then that you would recalculate the baseline at that point as well as the increment? When you have a modification post-establishment of the baseline, are you saying you'd recalculate the baseline?

MR. BENDER: Conceptually, that's what happens. But I would note that when the modeling is done for the PSD permitting, the modeling is just of the increment and it's compared to whatever the increment is. And so

there's a list of sources that are increment-consuming. Their emissions are modeled, and then that total from the increment-consuming source list is then compared to the increment. I'm not aware that the actual baseline concentration is a number that's calculated. It's a calculation of increment-consuming sources compared to the increment. So if a source is modified after -- a major source is modified, major modification, it qualifies as construction.

JUDGE WOLGAST: But one thing I'm having trouble with is at the point that they establish the baseline, then an increment is calculated based on then-available new potential emissions that is the delta between the baseline and then the max itself to ensure that the area stays in attainment. The increment then -- I'm just -- I'm having a lot of trouble with the fact that when you pull any new facility or any new modification that then gets sort of taken out of the pre-baseline and then moved over to

the other side of the ledger, in my mind, increment would not have been calculated the way it was, if in fact all of those emissions now are moving from one side of the ledger to the other side of the ledger.

MR. BENDER: I think -- to answer your question, the increment is established in the regulations. For example, a 24-hour SO2 is 5 microns per cubic liter. When a permit application comes in, the permit applicant identifies what's called map sources. All sources will be modeled for map compliance.

It also identifies PSD increment-consuming sources. And those PSD increment-consuming sources are then used to run a separate and additional modeling result. And that modeling result is compared to the increment, the 5 microns. And so what you're doing is you're just making your PSD increment-consuming sources list more inclusive by including those sources that major modifications -- major modified sources

that were modified after the baseline date.

That source would be included in that modeling runs of the PSD sources. Then that result is compared to the increment threshold, so it'd be the 5 microns, for example, in the class 1 monitor.

JUDGE REICH: I go back one step. I understand, I think, the significance of whether something was in or not in based on -- but how is the baseline calculation used? What is the significance of the number you would generate by generating a baseline calculation?

MR. BENDER: I see my time is up, Your Honor. I think that answer in the way that I understand it is these permit applications and analysis are wrong is that the baseline does not figure. The application doesn't identify what the baseline was.

It only identifies what the increment consumption is and then compares that to the --

JUDGE REICH: So you're saying whether

this was still included or backed out of the baseline wouldn't have any real significance? The only real significance is whether it's counted towards the increment.

MR. BENDER: Right. The significance of it is whether or not it counts towards which sources -- consumed increment are included in that --

JUDGE REICH: Right. But it's a focus on consuming increment, not being or not being part of the baseline.

MR. BENDER: Right. I don't think identifying what that baseline was as a number in 1975 or today is critical or -- I don't even know that it's looked at. Instead, what it's focused on the amount of increment and how much will exist. Thank you.

JUDGE SHEEHAN: I think I'd like to hold you up for a few more minutes if I could, a few more areas yet to go through. Modeling? You seem to be arguing that the -- to take an example, PM and SO2, that the average periods

used for the permit limits, permit limits, to align with the NAAQS and increment standard limits in average periods, that the PM and SOX average periods in the permit were generally longer, more hours than the very short NAAQS increment standard time periods.

The response to comments by NMU is certainly not very detailed. But in their brief, they make the argument that they did do the calculation that you asked for after all and it came up with 87 pounds per hour. And that reflects short-term emission limits. What's wrong with that?

MR. BENDER: The 87 pounds per hour is not an hourly limit and it's not a maximum theoretical emission. Instead, it's taking the 24 -- my understanding it's taken a 24-hour limit or the 24-hour emissions, assuming the.2 pounds per million BTU SO2 limit, for example, and dividing it by 24. So it assumes that the 24-hour limit is actually a 1-hour limit, enforceable on a 1-hour period, but it's not.

You know, within that 24-hour period, the source could still comply with the 24-hour average and have double the hour emission rates as long as it made up for that during the 24-hour period by reducing operations or burning of cleaner fuel, such as wood. There's no protection in the limits of a certain average because the limits aren't enforceable that short-term --

JUDGE SHEEHAN: So what they claim is a 1-hour limit, you're saying is in reality a 24-hour limit?

MR. BENDER: That's correct. When you look at the permit, Your Honor, there's for PM -- or SO2, for example, there's a 30-day and a 24-hour limit. There's no hour limit, there's no 3-hour limit, which is different from what many permitting sources or permitting agencies do. And I think we included one example as an exhibit where the agency will set limits -- a 30-day limit, an annual limit maybe, 24-hour limit, and a 3-hour limit -- and it will model each of those for the relevant mass and

increment. And that's consistent with the NSR Manual that says model with the maximum, either the maximum physical capacity or the enforceable limit, when there is an enforceable limit that corresponds to the average in the period.

JUDGE SHEEHAN: Thank you. Lastly, turning to the Class 1 increment issue.

MR. BENDER: Yes.

JUDGE SHEEHAN: The NSR Manual sets out a 1-microgram limit as far as a trigger for the Class 1 analysis goes. You seem to think that's -- I guess you argue in your brief it's unlawful. Is there any limit existing in your mind that's so low that no analysis needs to be done, or any distance so great from the source to the area of impact, the Class 1 impact area, that would not require the Class 1 analysis to be done?

MR. BENDER: I think the act prohibits any contribution to a violation. So I think under the act, that's the only option.

If your question is whether

actively speaking, is there anything that's de minimis, that there's such a low concentration, I think if there is, it's much lower than what was actually modeled for this plant. This plant model had a 0.42 microns per cubic meter for 24-hour SO2. That's over 8 percent of the relevant increment. When the EPA has proposed in the past to do significant impact levels by rule, it has used a metric of 4 percent of the relevant increments. So based on that standard, which I think is still too high, even based on that metric, this is still double that.

JUDGE SHEEHAN: So it's less than half of what the NSR Manual sets out, but it's still in your mind unacceptable?

MR. BENDER: That's right, Your Honor. The NSR Manual, and I note that it's included in a footnote in the NSR Manual, but the NSR Manual is 24-hour 1-micron standard. It's 20 percent of the entire increment for all increment-consuming sources in an area where

there are numerous power plants. And there's two power plants of numerous units at each in Marquette, Michigan. There are mining operations there. There's this boiler and there are power plants in Northern Wisconsin as well. I mean, when you include all of those, all of those increment-consuming sources, it's certainly foreseeable.

JUDGE SHEEHAN: What about the practical reality here that the state did contact the federal land managers at Seney and Isle Royale, both of whom said we don't have a problem.

MR. BENDER: I think that was the for the AQRV analysis, Your Honor. And the AQRV analysis and the increment analysis need to be run separately. And there's no authority in the act or in the regulations or in any guidance I'm aware of for the federal land manager to waive the increment analysis. The act is pretty clear that to be able to obtain a permit, the applicant has to demonstrate compliance with

increment. They cannot cause or contribute to a violation of increment.

JUDGE SHEEHAN: So you're saying that the state did not provide all the information to the land managers at Seney and Isle Royale?

MR. BENDER: What I'm saying is that the state did not conduct an increment analysis to know whether or not the increment was violated or not. Based on the model concentration that they did run, the screening model, it showed 8 percent, which is a pretty significant number for the entire increment in that Class 1 area to know whether the increment itself has been violated or not. Just didn't run that model to know.

JUDGE REICH: Okay, thank you. Mr. Gordon?

MR. GORDON: Good morning.

JUDGE REICH: Good morning.

MR. GORDON: I'd like to reserve 5 minutes of the 30 minutes that I'm allotted for rebuttal.

Your Honors, Petitioner identifies a whole range of issues on which they disagree with the conclusions of the Michigan Department of Environmental Quality. And I think it's important to remember before we get into the specific issues what the standard of review here is. And that is that they have to demonstrate that there's been a clear error.

I think when we delve into each of the individual issues, you'll find that there actually hasn't been any demonstration of clear error. In fact, when you look at them carefully, they haven't actually shown any issue at all. They've simply demonstrated that they don't agree with the way the DEQ went about its analysis.

There are a whole host of issues. I'm going to present them, if it would please the Court, in the order in which they were arranged, if that's fine with you.

JUDGE SHEEHAN: As sort of a general

backdrop question, the very first page of the application said that the intention was for the CFB to operate 100 percent on wood. Then per an addendum several months later, you also repeated that general thought that the primary fuel would be wood. Then you turned to the fact sheet in the permit and you see, as was earlier indicated, coal 22 days per month. Wood obviously seven or eight days. How do you square not necessarily a legal issue, but how do you square the proclamation of your intention to use so much wood, and then, in reality, seems to be anything but?

MR. GORDON: I think the basis for the mix of coal and wood that are to be burned at the facility and on which the SO2 emission limits are based is based on two factors: One, it's based on the limited storage capacity for any fuel at the facility, be it wood or coal; and two, it's based on the reality that the wood fuel deliveries during those winter months will be disrupted.

JUDGE SHEEHAN: But if we turn in that regard to storage, Mr. Kucera, could you put up the facility design document submitted by the state here? There's the facility.

Let me ask you questions, if I may, Mr. Gordon, about that. In the center near the bottom, you see the wood silo capacity, which appears to be a fairly large area compared to the coal silo, which is above and to the left of the wood silo, the little square building? The storage area for wood generally, including the silo and to the right, the handling building and the wood hopper, appear much larger than the coal storage area. Is that accurate that there's a lot more capacity to store wood than coal, as seems to be reflected here in this design?

MR. GORDON: Well, I think the question is how many days of capacity it is. And what the university submitted in its permit application was that the storage capacity at this site for coal and for wood is a three-day

fuel supply for each of those separately. Three days fuel supply of wood.

JUDGE SHEEHAN: Your papers did not say separately. It said three days fuel supply without any differentiation between them.

MR. GORDON: Their permit application indicates that there's two silos, and that it is a three-day supply for wood and a three-day supply for coal. And I don't know on this map, on this schematic, does it indicate that the wood silo building is of a larger area than of the coal silo, coal storage area? It is a silo.

Yes. I think the question is, is there anything in the record to demonstrate that the capacity is less than a three-day storage capacity, as represented? And DEQ --

JUDGE SHEEHAN: Well, let's talk about capacity. If you look to say Lot 19 up there at the top and to the left -- Mr. Kucera, could you slide, yes, to the left just to Lot 22, which is the large area. If you could slide it the other -- there we go. So Lot 19 and Lot 22 appear

both vast and empty. The area around the Ripley Heating Plant in the top right corner has a buffer to the top and right, but also appears large and vacant. Why is it that the storage capacity is so stringent and constricted, as you indicate, when your own map seems to indicate anything but?

MR. GORDON: Frankly, I don't know if it's fair to conclude that those large -- those maps are vacant, to be honest with you. I think --

JUDGE SHEEHAN: There's nothing on them like there is in the rest --

MR. GORDON: There's nothing on them represented in this schematic, but in this diagram --

JUDGE SHEEHAN: Well, that's the record you gave us. What else do we have to go from?

MR. GORDON: I think it's based on the representation of the university as to the diagram represents what's at the Ripley Fuel

Heating Plant.

I don't think they endeavored to try to show what's on other lots. As I read their application, they're not diagraming and indicating every structure on adjacent lots.

JUDGE SHEEHAN: Well, it certainly raises the question -- there was no way that evidently the university really attempted to really clarify for us the true facts on the ground there. And what they did give us appears to show that there's a lot less storage capacity.

MR. GORDON: I don't think so. I think the representation on the record is that the capacity of what is for storage for each of those fuels is three days. The DEQ examined it. It looked at that issue and that -- there's nothing to contradict that other than, I suppose, a potential surmise that maybe you could have something on some adjacent lot. But that's not -- there's nothing in the record to actually demonstrate and overcome to show that

there was clear error in that regard.

JUDGE SHEEHAN: Well, it could well be that it's true there is a three-day storage capacity for the areas denominated for storage. But it doesn't mean that there aren't other areas available for storage that simply weren't used.

MR. GORDON: You know, I suppose we could speculate that there, you know, someplace a block away, two blocks away, there may be. As to what that would mean in terms of reconfiguring the plant in terms of being able to then have a conveyor to actually have the wood from a facility two blocks away, a storage facility two blocks away, being able to feed that into the boiler, those are all issues that, frankly, were not presented in the record. I think the question here is --

JUDGE REICH: Well, who's burden is it? I mean, if a central part of the BACT analysis relates to storage, is there really someone like Sierra Club's burden to find and

make arguments for additional storage or is it not your burden as the permit issuer to explore what possibilities exist for storage that would allow for a more stringent limit and make a determination as to whether those possibilities are there or not?

MR. GORDON: I think when you apply that question to this case, the burden is on the Sierra Club here. Here, the record demonstrates the permit application --

JUDGE REICH: I'm not talking about the appeal stage. I'm talking about at the basic permit issuance stage.

MR. GORDON: Permit issuance stage. The information presented to the DEQ is that the capacity of storage at this facility is three days of wood here.

JUDGE REICH: And you have no independent obligation to verify that information?

MR. GORDON: No, DEQ reviewed it and considered whether there was room for more

storage capacity at this facility.

JUDGE REICH: So you did consider whether there was room for more? You did an independent analysis to that and that independent analysis is part of the record?

MR. GORDON: I think what DEQ -- it shows that the DEQ reviewed it, reviewed their permit application. The response to comments says that based on the review of it, they were satisfied that in fact, that was the capacity. In those circumstances, I think it's incumbent upon the Petitioner to say no, there's something wrong with that. You didn't actually look at X, Y, and Z. And if you had looked at X, Y, and Z, there would be clear error.

JUDGE REICH: Do you know --

MR. GORDON: And they haven't done that here.

JUDGE REICH: Is there anything in the record that actually is an analysis, or is there just the recitation that you looked at it and reached this conclusion?