ORIGINAL

BEFORE THE

ILLINOIS POLLUTION CONTROL BO

ALTON PACKAGING CORPORATION,)
)
Petitioner,)
)
vs.) PCB 85-
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

The following is a transcript of a hearing held in the above-entitled matter at the Alton City Hall, Council Chambers, 1st floor, 101 East Third Street, Alton, Illinois, on Monday, January 6, 1986, commencing at the hour of 9:30 o'clock a. m.

BEFORE:

Richard J. Doyle, Hearing Officer

APPEARANCES:

Messrs. Martin, Craig, Chester & Sonnenschein, by Richard J. Kissel, Esq., 115 South LaSalle Street, Chicago, Illinois 60603 appeared for the Petitioner;

William D. Ingersoll, Esq.,
Attorney, Environmental Protection
Agency, Enforcement Programs,
Division of Air Pollution Control,
2200 Churchill Road, Springfield,
Illinois 62706, appeared on behalf
of the Respondent.

ALSO PRESENT:

John Shrock, Environmental Protection Specialist with Illinois Environmental Protection Agency, Air Resource Analysis Section, Division of Air Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706.

David J. Kolaz, P. E. Manager, Ambient Air Monitoring Section with the Illinois Environmental Protection Agency, Division of Air Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706.

Patrick D. Dennis, P. E., Senior Analysis Engineer with the Environmental Protection Agency, Permit Section, Division of Air Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706.

ALSO PRESENT:

Walter H. Franke, P. E., Illinois Environmental Protection Agency, Regional Supervisor, Field Operations Section, Division of Air Pollution Control, 2009 Mall Street, Collinsville, Illinois 62234.

Jeff Benhanek, District Engineer with Illinois Environmental Protection Agency, Field Operations Section, Division of Air Pollution Control, 2009 Mall Street, Collinsville, Illinois 62234.

Edward M. Pyatt, Director of Environmental Protection, Alton Packaging Corporation, a wholly owned subsidiary of Jefferson Smurfit Corporation, #10 Cut Street, P. O. Box 276, Alton, Illinois 62002.

Patrick E. Lynch with Lynch Engineering, Inc., 10 Lookout Lane, Springfield, Illinois 62704.

John P. Bradley, Vice-President Environmental Group, Murray & Trettel, Inc., Certified Consulting Meteorologists.

INDEX

WITNESSES:

Petitioner's Exhibit No. 1 marked for identification on Page 45. On Page 96 not asked to be admitted, but Hearing Officer asked that it be copied so it is part of the transcript.

Hearing Officer Doyle: Okay, if everybody is ready we will proceed to deal with matter in hearing.

This is a hearing before the Illinois Pollution Control Board, case of Alton Packaging Corporation, Petitioner, vs. the Illinois Environmental Protection Agency, PCB 85-145.

This will be a hearing on the Permit Appeal filed by Alton Packaging Corporation against the Illinois Environmental Protection Agency.

This hearing will take evidence on the issue of whether the Environmental Protection Agency properly denied the application for an Operating Permit requesting a variance filed by Alton Packaging Corporation.

This is, for the record, Monday, January 6, 1986. It is 9:43 a.m. as we commence this hearing at the City Hall, Council Chambers, in Alton, Illinois.

My name is Richard J. Doyle. I am an attorney from East Central Illinois area, and I am serving as Hearing Officer here today.

What I would like to do is have the parties introduce themselves beginning with the attorney for Alton Packaging Corporation.

If you would, Mr. Kissel, as you introduce

yourself, would you also introduce any other parties you have with you today?

MR. KISSEL: Certainly. My name is Richard J. Kissel with the firm of Martin, Craig, Chester & Sonnenschein, representing Alton Packaging Corporation.

With me is John R. Bradley with the firm of Murray & Trettel, Inc. He is a consulting meteorologist and modeler for us. Also present is Patrick E. Lynch of Lynch Engineering, Inc., Springfield, Illinois.

To his right is Edward M. Pyatt, with Alton Packaging Corporation. I am not sure of his title.

MR. PYATT: Environmental Director.

MR. KISSEL: Environmental Director of Alton Packaging Corporation.

HEARING OFFICER: Thank you. Then, if you would, Mr. Ingersoll, do the same for the Illinois Environmental Protection Agency.

MR. INGERSOLL: I am William D. Ingersoll. I am an attorney with the Illinois Environmental Protection Agency, Enforcement Programs, Division of Air Pollution Control.

With me is Patrick D. Dennis, Senior Analysis Engineer with the Environmental Protection Agency.

Permit Section, Division of Air Pollution Control.

Also here is David J. Kolaz, Manager of Ambient Air Monitoring Section with the Illinois Environmental Protection Agency, Division of Air Pollution Control, and John Shrock, Environmental Protection Specialist with the Illinois Environmental Protection Agency, Air Resource Analysis Section, Division of Air Pollution Control.

Visiting with us is Walter Franke and Jeff Benbenek of the Agency's Collinsville Regional Office.

HEARING OFFICER: All right. Okay, I take it by introduction that we have had, that there is no one else present, and, for the record, I would indicate that this is an open hearing but there is not any other interested parties present at this time.

If there are any that come in, gentlemen, I will take the opportunity to further explain what this hearing is about and give any interested or proper member of the public an opportunity to participate in this hearing.

While there are rules of evidence that have to be observed, this will be basically an informal procedure.

We will try and keep it as informal as

possible so everyone conducts themselves properly, so that we can get in as much evidence for the Board to make its decision on as possible.

As you may know I am sure, but for any other members of the audience, my job is not to determine the merits of this issue, but to make sure that all relevant evidence is presented and a record is made for the Pollution Control Board to read in making a decision.

With that, if there are no questions, I will ask if either of the parties, beginning with Mr. Kissel, have any opening statements.

MR. KISSEL: Yes, we have a very brief opening statement. As you properly characterized it, at least in part, this is an appeal by the Alton Packaging Corporation of a Permit which was denied on August 27, 1985.

The Permit was originally applied for on January 25, 1983, and it was for the operation of two ... lers at the Alton Packaging Plant in Alton, Illinois, B... lers 6 and 7.

The record of the Illinois Environmental Protection Agency contains the various applications and documentation within the Agency's files concerning that

Permit application and its ultimate denial.

The Permit was denied on two grounds, first that Boilers 6 and 7 were supposed to meet an emission standard of 1.6 pounds per million of BTU of sulfur dioxide.

It is Alton Packaging's position that the 1.8 pounds per million BTU standard is not applicable to Boilers 6 and 7 as of this date because of other proceedings that are pending which stayed the application of that rule.

The second basis for denial of the Permit by the Agency was an alledged excursion of the twenty-four hour SO 2 standards, during 1984, and alledged excursion of the SO 2 twenty-four hour standard on the basis that Boilers 6 and 7 as the Agency characterized it appeared to be the major contributor to this violation.

It is Alton Packaging's position that whether Alton Packaging was a contributor or not a contributor is not the basis on which the Agency can deny a Permit, but they must have in the record that this will occur in the future, and the record does not contain that.

Indeed, the modeling done by the Agency subsequent to that alledged excursion will demonstrate

that it was not a predictive model, and, therefore, cannot be used as the basis for denial of the Permit.

We therefore request that the Pollution Control Board reverse the decision of the Agency denying the Permit and remand it to the Agency with instructions to issue the Permit.

HEARING OFFICER: Thank you. Do you have any opening remarks, Mr. Ingersoll?

MR. INGERSOLL: Yes. It is the Agency's contension that it is reason number 1 basically that the operation of Alton Packaging's Boilers Numbers 6 and 7 are at a level of greater than 1.8 pounds of SO 2 per million BTU's of heat input.

The applicability of that Standard is not stayed at this time for Alton Packaging.

Alton Packaging did have an automatic stay of that provision pursuant to a timely filed Variance Petition. However, that Variance matter has been dismissed by the Pollution Control Board and stay denied.

The second reason that the Agency gave for denying the Permit is that Alton Packaging's operation of its Boilers Numbers 6 and 7 caused an exceedance of the National Ambient Air Quality Standards for sulfur

dioxide in the Alton area during December of 1984, and while the model that was done was not intended to be predictive, that it did provide adequate evidence that future operation of these boilers could very well indeed cause future exceedances.

That's all.

HEARING OFFICER: All right. Let me ask a couple of questions of each of you gentlemen to see if we can establish the issues here a little more clearly.

As to your last point, Mr. Ingersoll, when you indicate that the model was not intended to be predictive, but that it indicated these boilers could very well cause exceedance in the future, why do you feel, what is your position with regard to what the burden of the EPA is in that regard, if any?

In other words, do you feel you have to show there is a predictive model or that this particular test is, in fact, -- does, in fact, show there will be an exceedance by Alton Packaging?

MR. INGERSOLL: No, I don't feel we do. I feel that model provided adequate basis for expert opinions to be drawn by Agency staffers, and those opinions resulted in "Reason Number 2" for the Permit Denial.

HEARING OFFICER: So your position is that any model, regardless of what it may have been intended for, if it can result and does result in experts of the Illinois Environmental Protection Agency making the determination that it is possible that these boilers would exceed limits in the future, that that is a sufficient basis for --

MR. INGERSOLL: I just feel that if it is reasonable for Agency experts to draw the conclusions that were drawn then -- let me back up on this.

I think that our Agency people have reviewed the analysis and they have reasonably relied on that based on the information of that analysis to conclude that there may very well be exceedances in the future.

I think that their reliance upon that analysis was reasonable.

I would have to point out that with that argument in mind, that the burden does, indeed, rest on Ilco Packaging Corporation to show that the Agency's Permit denial was unreasonable.

HEARING OFFICER: All right. That was the point I was really trying to delineate. Once you make a prima facia showing in that regard, your position is the

burden is on them to prove it was not an unreasonable determination by your experts?

MR. INGERSOLL: I think the initial burden is on them to cast some doubt upon the reasonableness of those conclusions.

HEARING OFFICER: Then as to the question of whether the Standard should be applicable because of whether this is or is not a pending matter, I take it, Mr. Kissel, from your pleadings that your position is that the Standard is not applicable because even though the proceedings, the prior proceedings that you eluded to and that Mr. Ingersoll eluded to were dismissed and a stay denied, that because every avenue of appeal is not exhausted, that they are still pending, is that your position?

MR. KISSEL: Yes, in essence, yes. There were two proceedings before the Pollution Control Board which the Board dismissed we believe wrongfully.

We have filed our petition for review in that matter and it is now pending in the Fifth District Appellate Court.

Also as part of that case we have filed with the Fifth District a Motion asking that the County

one, recognize that the automatic stay provision is still in effect, because it is our position that stay, that the automatic stay provision remains in effect until all avenues of review are exhausted, or secondly, if they [illegible] the position that such automatic stay does not remain in effect as a matter of law, that the court grant our Motion for staying the applicability of the 1.8 pounds per million BTU SO 2 ruling pending the appeal before that court.

As of the other day, we received a response from the Agency which was filed with the court, and the court has not ruled on that Motion as of yet, so it is our position that the Agency improperly relied on the 1.8 pounds rule as we'll call it because of the fact that the rule is not applicable to the emissions from Boilers 6 and 7 at the Alton Packaging facility.

HEARING OFFICER: I take it then, Mr. Ingersoll, that the position of the Illinois Environmental Protection Agency is that that does not keep those matters pending for the purpose of making the rule inapplicable, because once the Board has dismissed and stayed a denial, that that is the end of it even though it is on appeal?

MR. INGERSOLL: I am not saying that.

HEARING OFFICER: All right.

MR. INGERSOLL: I am just saying at this time no Motion for Stay has been granted before the Appellate Court.

HEARING OFFICER: All right. Okay. Fine. I didn't mean to put anybody on the spot, but I thought we should try and get the record as clear as possible, or at least in my mind as clear as possible, as to where some of the issues will fall, or at least fall here to me.

Mr. Kissel, I will let you proceed with your case.

MR. KISSEL: Yes. I would like to make sure we have as a part of this record of this proceeding today the complete Agency record which was filed with the Pollution Control Board on October 16, 1985, consisting of 28 defined exhibits that was filed with the Pollution Control Board and attested to or submitted by Mr. Ingersoll as an employee of the Environmental Protection Agency.

HEARING OFFICER: Do you have any objection to that, Mr. Ingersoll?

MR. INGERSOLL: No. I would feel that the Agency records were already part of the record in these

proceedings.

HEARING OFFICER: Yes. I tend to agree, but I will specifically order the clerk to include a complete agency record as part of this record, that being the record as described that was filed October 16, 1985, with the Pollution Control Board. It will be a part of this record.

MR. KISSEL: I have previously served on Mr. Ingersoll, and pursuant to his agreement, a notice requesting two persons from the Illinois Environmental Protection Agency to be presented to give testimony in our case.

Those two people are John Shrock and David Kolaz. I would like to call Mr. Shrock.

HEARING OFFICER: Mr. Shrock, would you raise your right hand, please and be sworn?

(Whereupon the court reporter swore in Mr. Shrock.)

JOHN SHROCK,

called as a witness on behalf of the Petitioner, being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

QUESTIONS BY MR. KISSEL:

Q Would you identify yourself?

A My name is John Shrock.

Q By whom are you employed?

A The Illinois Environmental Protection Agency.

Q What position do you hold with them?

A I am an Environmental Protection Specialist. I perform air quality modeling, reviews, that sort of thing.

Q How long have you been so employed?

A Approximately ten years.

Q And what are the day to day kind of things that you do for the Illinois Environmental Protection Agency?

A Oh, I do air quality modeling studies for the purpose of developing regulations, and State Implementations plan showings.

I also perform reviews of air quality

showings that are done by consultants for the purpose of Permits.

Q Does anybody work for you? Do you have anybody reporting to you?

A No, I do not.

Q I would like to show you what has been marked as Exhibit 5 in the Agency record (indicating).

A Yes.

Q And ask you to identify that.

A Yes. This is a study which I performed and completed in May of 1985.

Q And what is that study of?

A Essentially it is a study of the excursions which occurred at the Barton School monitor on November 6th and 7th, and November 25th and 26th of 1984. These were 30 2 excursions.

Q Do you know what excursions they were, what Standard was involved?

A The primary Standard for sulfur dioxide.

Q Which Standard?

A The Ambient Air Quality Standard.

Q 3 hour, 24 hour?

A 24 hour Standard it was.

Q All right. Did you perform more than one study concerning those excursions?

A Well, this report constitutes a single study.

Q And that is the only report, or is that the only report concerning your conclusions on your study with regard to the excursions in November of 1984?

A Yes.

Q What was the purpose of that study?

A The purpose was to try to determine the cause of the excursions.

Q Was it the purpose of the report to do any predicting as to at what levels of emission the boilers at Alton would operate that would cause or would interfere with the attainment or maintenance of Air Quality Standards, Ambient Air Quality Standards?

A No.

MR. KISSEL: That's all I have.

MR. INGERSOLL: I will reserve further questions for my case in chief.

HEARING OFFICER: All right. I have no questions at this time.

MR. KISSEL: Thank you. The second person

is Mr. David Kolaz.

HEARING OFFICER: Mr. Kolaz, come up and be sworn.

(Whereupon the court reporter swore in Mr. Kolaz.)

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DAVID J. KOLAZ,

called as a witness on behalf of the Petitioner, being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

QUESTIONS BY MR. KISSEL:

Q Would you identify yourself for the record, please?

A My name is David Kolaz.

Q By whom are you employed, Mr. Kolaz?

A I am employed by the Illinois Environmental Protection Agency.

Q What is your position with the Agency?

A I am Manager of the Ambient Air Quality Monitoring Section.

Q And what are your duties as Manager of the Ambient Air Quality Monitoring Section?

A My duties include budgeting, [illegible]

resources to individual monitoring projects, general overview of the monitoring and planning of the air monitoring network, review of the procedures and quality assurance program. We have to ensure that the air quality data is valid.

Q Are you familiar with alleged excursions that occurred in Alton in November of 1984?

A I am familiar with several aspects of those excursions, yes.

Q I show you what has been marked as Exhibit 6 and is a part of the Agency record in this matter (indicating).

Q Would you tell me what that is?

A Yes. I would like a couple of minutes to look at it, to review this.

Q Certainly.

A The entire Exhibit 6 includes several documents of which the first portion is what I am familiar with.

Q All right. What are you familiar with? Just identify it for the record.

A The first portion of this exhibit is the Air Quality Bulletin put out by the Ambient Air

Monitoring Section which involved a review of the excursions of the 24 hours sulfur dioxide standard which occurred in Alton in November of 1984.

Q The Air Quality Bulletin, how many pages does that involve?

A That involves the first six pages of Exhibit 6.

Q Thank you. What is an Air Quality Bulletin?

A It is a report which involves our analysis of an important environmental situation. We call it a bulletin because we make every effort to put it out in a timely fashion immediately after the occurrence, and it includes what I will call a quick analysis of the situation. It may not include every technical aspect that would be useful to include in an analysis.

Again, the purpose being to get it out as quickly as possible to the people who would be interested in such a situation.

Q What did that Air Quality Bulletin tell everybody about the Alton area?

A What it told the people who read the report was that the wind direction during these exceedances

were consistent and that they came from a very definable wind direction.

Q Well, what were the alleged excursions in the Alton area? What were they and when did they occur?

A The first excursion began on November 6th and continued for 24 hours through November 7th. It began at 1900 hours or 7:00 o'clock in the evening on November 6th and continued through seven o'clock on November 7th, and the value the the first exceedance I believe was .148 parts per million. Let me take just a moment to verify that. Yes, that is correct, .148.

The second exqursion began on November 25th at ten o'clock according to this, at ten o'clock in the morning. Let me verify that. Yes. That is ten o'clock Central Standard time. That would be local time last November, and that continued through eight o'clock in the evening on November 26th.

That included more than 24 hours. The highest 24 hour period in that time was .139 parts per million sulfur dioxide.

Q What is the ambient air quality Standard for 24 hour SO 2?

A The Standard as presented in the Federal

Register is .14 parts per million.

Q The standard is measured in parts per million?

A That's right. That is correct.

Q It is not measured in micrograms per cubic meter?

A Right. The measurements are made in terms of parts per million.

Q So that if I was to want to know whether there was an excursion of an Ambient Air Quality Standard, I would look to the parts per million reading rather than micrograms per cubic meter?

A That is the way we do it. That is the way most people do it. In the Federal Register there is in parentheses the reference to micrograms per cubic meter.

Q But you, from your background and experience, parts per million is the way you would make the determination?

A That is correct.

Q Okay. Did you tell me what that was, .14 parts per million?

A That is correct.

Q An excursion, 24 hour alleged excursion

On November 6th and 7th was .143 parts per million?

A That is correct.

Q And the one on November 15th throuth the 26th was .159 parts per million?

A That is correct.

Q You performed some kind of test to get to this parts per million number, do you not?

A I am not sure I understand the question.

Q Well, there is a test that is sued to determine what the parts per million of sulfur dioxide is in the sampled or monitored material, correct?

A Correct.

Q Can you briefly describe that test without going into great detail?

A There are several different approved methods for measuring sulfur dioxide. The method that we used is called pulsed fluorescent.

In that method sulfur dioxide, I should say ambient air is pulled into the instrument and a light is pulsed on causing certain specific wave length of light to impact the molecules of air that are pulled into the sampler.

The sulfur dioxide absorbs that light energy.

When the light is then pulsed off, it emits that energy as it degrades down to its original ground state.

When that energy is emitted, it is detected by a photo multiplier tube which relates that energy that is released to a specific concentration of sulfur dioxide.

Q That test was performed on these two samples?

A That is correct.

Q All right. Does that test have a range of accuracy?

A Yes.

Q What is it?

Q Well, it depends upon a number of factors. There is not an absolute accuracy that applies to every situation.

Q Take the test on November 6th and 7th, what was the range of accuracy of that test?

A I'm not sure that the question is clear enough that I could answer it.

Q What is a range of accuracy?

A What is a range of accuracy?

Q Yes.

A Well, it would be a specific range of values that a person has defined as containing the true measurement that a person is interested in.

For example I could say what is the accuracy of a -- back up a minute. Say we had a scale here and we were weighing each person in this room. I could say that I want to know with 50% confidence that I have truely measured the weight of a given person.

Their weight might be, according to the scale, one hundred fifty pounds. If I want to be 50% sure that I have their true range, the accuracy might be plus or minus five pounds, so I could be 50% sure.

If I wanted to be 95% sure that I was aware of the range of weights that that person might actually weigh, that value might be plus or minus ten pounds.

Q Let me ask you this question then. In your business of doing sampling and monitoring and testing the results, what is the range of accuracy that is acceptable to the United States Environmental Protection Agency?

A It is difficult to answer that question. If I can, I would like to explain why. The United States

Environmental Protection Agency does not actually have an accuracy figure which defines the validity of the data for usage which we put it to. They have an accuracy figure which is a guideline that they would like all the Quality Assurance Programs to strive for.

Q What is that?

A Plus or minus 20% for accuracy.

Q Do you have a range of accuracy or margin of error that you apply to your monitoring results?

A We have an accuracy figure which we use for planning purposes. I am using accuracy right now in a loose sense. We allow the instruments to drift approximately 10% before we recalibrate them.

That, in a sense, is an accuracy figure, but in the pure sense is not comparable to that plus or minus 20% figure.

Q Do you recall your deposition being taken in this matter Mr. Kolat?

A Yes.

Q You were asked these questions and gave those answers.

HEARING OFFICER: Give us the date and time of the deposition.

MR. KISSEL: Yes, the deposition was taken on November 25, 1985, at 11:00 a.m. at the offices of the Illinois Environmental Protection Agency, correct?

A That is correct.

HEARING OFFICER: The witness was under oath then?

MR. KISSEL: Were you under oath?

A Yes.

Q All right, the question, "Do you have a range of accuracy or margin of error that you apply to your monitoring results?"

"Answer: Yes. We have an accuracy for that."

"Question: What is your range of accuracy for that?"

"Answer: U. S. E. P. A. guidelines, what they consider to be acceptable is plus or minus 15% at the 95% probability limit. Ninety-five percent of the time it would be within 15%."

Is that a correct statement?

A That is the statement that I gave, and subsequent to that as I reviewed the guideline document, I was attempting to recall from memory during the deposition,

- the figure for accuracy is plus or minut 20%. The figure for precision is plus or minus 15%.

Q If you were to give your deposition again and be asked that question, you would say 20% at the 95% probability?

A For accuracy, yes.

Q For accuracy, all right. If you have a test which shows .148 parts per million, at the 95% confidence level or probability, what would be the range then at the 20% number?

A Are you interested in this specific situation?

Q Yes, sir.

A Okay, if I could refer to some notes that I have, that would refresh my memory. If not, I can answer that question.

Q Answer the question.

A Keep in mind the figures I am quoting [illegible]ly in error because I don't have my notes.

HEARING OFFICER: May I interrupt here? If at any time you cannot answer the question without refreshing your recollection, let's make this clear on the

record and make it clear to counsel, all right, rather than any inaccuracy because you don't have them?

A All right. I think I can pretty well recall them.

MR. KISSEL: Go ahead.

A I looked at the precision values that we run each week at the monitor in Alton, and all our sulfuric dioxide monitors in the State.

I looked at the quarter which just preceeded the quarter when the excursion occurred which would have been the third quarter of 1984.

I looked at the fourth quarter of 1984. I looked at the first quarter of 1985, and combined all of that precision data.

That would end up with approximately thirty-five different precision checks which I felt would give a reasonably good measure of the air range of the data for that entire time period.

I concluded from that data, at the 95% probability limit, would range anywhere from minus 9% low, underestimating the true concentration, to approximately 5% overestimating the concentration.

Q Applying that number, those numbers to

the .148 parts per million, what is the range then from the 9% to the higher number?

A I have to get my calculator.

Q Do you multiply 9% times .148 and subtract that number?

A Yes. No, no, excuse me. You've got that turned around. What I am saying, the number .14 might be 5% high.

Q Okay.

A So we would multiply it by 5% and subtract it. The .148 might be 9% low, so we would multiply that by 9% and add it to .148.

During that three-quarter time period there was, at that specific monitor, there was more of a tendency to be underestimating.

MR. KISSEL: I move to strike his answer as not being responsive to my question. I did not ask anything about that particular monitor.

HEARING OFFICER: I will allow that Motion. Strike that portion of testimony.

MR. KISSEL: That's all I have.

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CROSS EXAMINATION

QUESTIONS BY MR. INGERSOLL:

Q Mr. Kolaz, do United States Environmental Protection Agency guidelines provide for adjustment of the recorded values based on accuracy and precision checks?

A The United States Environmental Protection Agency guidelines specifically say that the contrary is true, that the measured data is not to be corrected for any measurements of precision or accuracy, either directly corrected or corrected in performing evaluations to determine attainment of a Standard.

MR. INGERSOLL: I have no further questions at this time.

HEARING OFFICER: I have a couple of questions here for clarification.

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QUESTIONS BY THE HEARING OFFICER:

Q You have indicated the Standard is .14 parts per million. Do they carry that out to just are to assume that is .140?

A NO, they don't --

MR. KISSEL: I object to the question on the basis it calls for a legal conclusion on his part.

The Standard says .14.

MR. INGERSOLL: It will be our argument that it means .14999999. That is our argument. I did not ask him that question because I believe that is a legal conclusion.

HEARING OFFICER: Let me rephrase the question to you. The Standard as it is listed anywhere you seen it published or as passed is just .14, is that correct?

A That is correct.

Q And you have seen nothing or any indication anywhere of any explanation of that Standard other than the listing of it itself?

A I have seen explanations of the Standard also.

Q Where have you seen that?

A United States Environmental Protection Agency guideline documents.

Q And what do they say?

A They say that for entertaining compliance with the Standard, the earliest level at which a Standard would be exceeded would be .145 parts per million, and that that is because that would be rounded up to .150.

In other words the standard itself is written as .14 parts per million implies two significant digits of accuracy.

Q Can you clarify again, please, how you arrived at the conclusion that the reading of .140 in this particular instance might be 5% high and might be 9% low? How did you arrive at those conclusions?

A Each week at our monitoring sites we introduce a standard value of sulfur dioxide which is incorporated into a device which allows us to generate a concentration with very high accuracy.

We then determine the instrument's response to that known input value, and the results are called our precision check.

During the three-quarter period I earlier described, I had thirty-five such checks to evaluate. Using a statistical formula which the United States Environmental Protection Agency has in the Code of Regulations under 40 CFR, Part 58, Appendix A, I calculated the 95% probability limits.

Thereby I determined that the results we reported could be anywhere from 9% low to 5% high.

HEARING OFFICER: Thank you. That's all

I have.

HEARING OFFICER: Any further questions?

MR. KISSEL: None.

HEARING OFFICER: You may step down.

MR. KISSEL: That's all I have. I conclude our principal case.

HEARING OFFICER: Mr. Ingersoll, do you have any witnesses you want to present?

MR. INGERSOLL: Yes. Could we have a recess first?

HEARING OFFICER: Sure. What do you want, five minutes or ten minutes?

MR. INGERSOLL: Fifteen minutes.

HEARING OFFICER: Fifteen minutes. We will take a recess until 10:49. Thank you. We are adjourned temporarily.

(Whereupon a recess was had.)

HEARING OFFICER: Well, I think we can [illegible]. It is ten minutes till eleven. I think, Mr. Ingersoll, you had the floor.

MR. INGERSOLL: I would like to call Mr. [illegible] back to the stand.

DAVID J. KOLAZ,

called as a witness on behalf of the Respondent, being previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

QUESTIONS BY MR. INGERSOLL:

Q Mr. Kolaz, could you give us a brief description of your educational background after high school?

A I have a Bachelor of Science Degree in Aeronautical and Astronomical Engineering from the University of Illinois, and a Master's Degree in Environmental Engineering from Southern Illinois University at Carbondale.

Q You stated previously you were employed by the Illinois Environmental Protection Agency I believe you stated. Restate your position.

A I am Manager of the Air Monitoring [illegible].

Q Okay. How long have you been Manager [illegible] Section?

A I believe that it has been about eight years.

Q And where were you employed before that?

A I worked for the Environmental Protection Agency before that time as a Data Analysis Unit Manager, prior to that time I worked in the Permit Section.

Q And what was that, Data --

A Data Analysis Unit, not Section, excuse me, Manager.

Q What were your functions and duties in that unit?

A In that unit the primary responsibility was to acquire the ambient monitoring data from our network in Illinois and edit and validate that data as necessary, and analyze that data to determine trends, and other factors that might be of interest to Agency employees.

Q What are your functions and duties in your present position?

A Well, one of my major functions is budget preparation and resource allocation to make sure we have adequate resources to do the job that we have to do.

I am also responsible for reviewing the

extent and disposition of our ambient air monitoring network to make sure it meets all our goals as well as the goals of the United States Environmental Protection Agency, and I also review the procedures that we use to recover that data, and make sure that the Quality Assurance Program that we have in place is resulting in valid data.

Q Have you reviewed the data, I mean precision accuracy data as well as the reported data from the Barton School monitor for SO 2 in Alton, Illinois?

A I reviewed that data specifically for the period of time that included the excursions in November of 1984.

Q The figures that you gave Mr. Kissel earlier, I believe minus 9% to plus 5%, was that with regards specifically to the Alton monitor?

A Yes, those figures that I earlier reported were specifically for that site. I did not include data from our other sulfur dioxide sites.

Q Has that monitor performed satisfactorily?

A Yes. I mean, there have been times when we found it necessary to recalibrate the monitor because after operating for a period of time any instrument

begins to drift out of tolerance limits.

Whenever that occurred, we have gone out in a reasonable amount of time and recalibrated the monitor.

Q Was that monitor calibrated in November of 1984?

A Yes it was.

Q Do you recall the date?

A Yes. It was November 27, 1984.

Q Describe the results of that calibration.

A Yes. At that time I should point out, at that time we recalibrated the monitor not because it had drifted outside of our specifications, but because we had just measured two exceedances of the sulfur dioxide standard.

We wanted to be absolutely certain that the monitor was operating properly and there was not a malfunction.

Our precision data, as I mentioned earlier we run each week, indicated that the monitor may be reporting data that is five to 6% lower than we were actually reporting, so on November 27th we performed a calibration.

What we do is we introduced a known

amount of sulfur dioxide into the monitor. We performed a reset calibration which means before we make any adjustments to the monitor, we introduce five values of sulfur dioxide and then evaluate its response to that.

After that is done we then adjust the monitor to get it up to its optimum range. The reset calibration found that the values over the range of input points were anywhere from five to I believe 10% low.

Q This was on November 27th?

A November 27th, yes.

Q Meaning what?

A Well, meaning that the data that we were reporting was slightly, a slight underestimate of what was there, although again the 95% confidence limit there is always a possibility that there would be an over-prediction.

Q All right.

A If we take the reset calibration at its face value, it confirmed the results of the weekly precision check and again showed that the results were underestimated.

Q To assist in the record, could you explain the difference between accuracy and precision?

A Okay.

Q This is just to help augment the record here.

A I will explain it. Since we have been talking about accuracy and precision as we use it in the Illinois Environmental Protection Agency, I will define it in that sense rather than the general sense that it is sometimes used.

The United States Environmental Protection Agency requires in the Code of Federal Regulations, Title 40, Part 58, Appendix A, that each Agency run a precision check once every two weeks.

What this involves is the introduction of a known value of sulfur dioxide into the monitor in order to determine how it responds to that known concentration, and the range of values that we must introduce is somewhere in the range of .07 to .1 parts per million.

What we have been introducing into our [illegible] is a value of approximately .09 parts per million. [illegible] than run it once every other week, we have been running the precision checks in all of our sites in the State each week. We have done this since about 1980.

The difference between the precision check,

and the accuracy check is that the accuracy check is run at three levels rather than just the one.

The requirements are we run the accuracy check once per year at each site, and that we do an accuracy check at 25% of our sites each quarter.

Q All right.

A Now, maybe I have not actually explained what precision accuracy is. I only explained how we run the checks.

The idea of the precision check is that if we were to have monitors running side by side, the monitors would not read exactly the same.

The amount of air you would have between the two monitors would be measured by the precision check, so if I say the precision is plus or minus 5% at the 95% confidence limits, that means if I have two monitors that are running side by side, I would expect 95% of the time they would be reporting the same value.

That does not say anything about the accuracy of the monitors are askew 10% low, they still may be reporting the same value, but the value may be 10% low.

The accuracy check is supposed to be a measure of how accurate the data is, that is, whether it is

askewed high or low.

Now, the problem with those definitions is that the precision check in reality, the way the United States Environmental Protection Agency requires it to be run, is a measure of accuracy, and in the past I have compared precision values to our accuracy values, and also to our calibration values, and that is why earlier when I was explaining the precision calibrations I really used it as an accuracy figure when I explained to the Hearing Officer that the results we reported may be 9% low to 5% high. That is really an accuracy description.

Q Okay. Thank you.

MR. INGERSOLL: I have no further questions.

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CROSS EXAMINATION

QUESTIONS BY MR. KISSEL:

Q Mr. Kolaz, precision checks were made on the Barton School instruments were they not?

A That is correct.

Q Was a precision check made on the instruments on November 1st?

A I would have to look at my notes to see if that is the case.

Q Where are your notes?

A (Indicating).

Q Would you get them, please?

A Yes.

HEARING OFFICER: Bring any other notes you have with you that you may need.

MR. KISSEL: Can I see what you have?

A (Indicating).

MR. KISSEL: I suppose we ought to mark this as an exhibit.

(Whereupon the reporter marked for identification purposes Petitioner's Exhibit No. 1.)

MR. KISSEL: In order to know what the precision checks were from October 24th through November 27th, you need some documentation to refresh your recollection, is that correct?

A Yes. If you are going to ask me specific questions about the results, yes.

Q I show you what has been marked as Petitioner's Exhibit Number 1 for identification (indicating). It is dated this date, PCB 85-145. Tell me what that is.

A It is a handwritten note made on a scratch pad that lists precision results of the sulfur

dioxide monitored in Alton from October 24, 1984, through November 27, 1984.

Q And whose handwriting is that?

A This is Bob Swinford's.

Q Where was that taken from, do you know?

A This was taken from our formal records of the precision checks.

Q Was that done under your supervision and control, taking it from the records and putting it down there.

A Yes. I verify the accuracy of those numbers.

Q Those numbers are accurate as far as you are concerned?

A That is correct.

Q Is that document necessary for you to recall what those numbers are?

A Yes.

Q Okay. It shows 10/24 and next to that it says -5. 6. What does that mean?

A That means that the instrument's response to our sulfur dioxide precision check was 5.5% lower than the value that was actually input into

the monitor.

Q So the Board completely understands this, if the number that was reported was one hundred -- .1 parts per million say, what would the precision check have shown it to be?

A It would be about, oh, ninety-four parts per million.

Q So it would be lower?

A Right.

Q It would askew it to the lower side?

A I may have misunderstood your question, excuse me. Could you repeat it?

Q Would you explain -- there are two numbers involved here, right?

A Yes.

Q One is what the monitor shows and one is what the precision check shows, is that correct?

A That is correct.

Q And if the monitor showed .1 parts per million and the precision check showed minus 5.5%, what would that mean?

A All right, that would mean the .1 parts per million value reported from the monitor was 5.5% lower

than the value that was input, which would mean the value that was input would be something like .106.

Q All right. The first excursion that you testified to occurred on the 6th and the 7th of November, 1984, is that correct?

A That is correct.

Q All right. Now, the last precision check done before that time was when?

A According to Petitioner's Exhibit 1 it was on November 1st.

Q Okay. What do your notes show and what do you recollect the precision check to show at that time?

A The precision check at that time showed +5.5%.

Q So what was being shown at the Barton School monitor according to the precision check on that date were values higher or lower?

A Were values higher on November 1st than what was being input into the monitor.

Q All right. That was the last precision check done prior to the alleged excursion on November 6th and November 7th, is that correct?

A That is correct.

Q All right, so that would mean on that date, if the reported value from the monitor was .1 according to this precision check, what would it really have been?

A It would have been about .094.

Q So it would have been lower?

A Yes.

Q Allright.

MR. KISSEL: Thank you. That's all I have.

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REDIRECT EXAMINATION

QUESTIONS BY MR. INGERSOLL:

Q First of all is the figure for November 1st an anomaly within the range of precision checks made between the November 27th calibration and the prior calibration?

A It appeared to be an anomaly when I first looked at the data. My reason for saying that, by referring to Exhibit 1, we have six precision checks which are shown. In all of the precision checks showing a negative value, they range from negative 3.3% to negative 6.6%.

Q Could you give the dates and the figures for each of those?

A Yes. October 24th was negative 5.5%. The following check was plus 5.5%, followed by a negative 3.3%.

Q Give the dates.

A November 1st was +5.5%. November 8th was negative 3.3%. November 15th was negative 6.6%. November 21st was negative 6.6%. November 27th, the day of the recent calibration, it was negative 5.5%.

The positive 5.5% on November 1st does not fit with the overall pattern of the other precision checks.

Q To what do you attribute that?

A I reviewed the strip chart, from the chart for that date from the site, and noticed the base line of the instrument had drifted up just prior to the precision check which is a normal situation to have a slight drift in the base line.

However, it drifted up just prior to the precision check, and then shortly thereafter, after twelve hours, had drifted back down to what it had been before.

The problem with that is that all of our data is recovered from this site by way of the telephone lines through a computerized telemetry system.

In operating that telemetry system we input a stable base line into the computer, so when the base line drifts like this it can cause some anomalous data to be reported.

The +5.5% that was reported was not consistent with the base line information that we had been using, and, therefore, because the base line had drifted up on that particular day, and because we were using a lower base line than we should have been on that specific date, the +5.5% precision check result.

However, since this is a normal situation to have a slight drift and we would consider this to be a slight drift, 5% may sound like a lot but when you report a one hundred, or .1 parts per million, it is not much drift. It is only two to three parts per billion, [illegible] to include that precision check in our overall calculations of the precision for that site.

Q Okay. Now, these precision checks and this information that you have, would this cause you -- I am conditioning this on it is consistent with United

States Environmental Protection Agency guidelines -- would this data cause you to change or amend your reported values?

A No it would not.

MR. INGERSOLL: Thank you. I have no further questions.

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RECROSS EXAMINATION

QUESTIONS BY MR. KISSEL:

Q The 5.5%, Mr. Kolaz, is a real number that is included in the Agency's records for November 1st, right?

A Yes.

Q That has not been changed, right?

A No, that has not been changed.

MR. KISSEL: Okay. Thank you.

MR. INGERSOLL: Thank you.

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QUESTIONS BY THE HEARING OFFICER:

Q On the calibration you spoke of on November 27th, that was an accuracy check, right?

A No, that was not a formal accuracy check, no, meaning it was done the same way an accuracy

check would be done, but it was not considered to be an accuracy check for purposes of the Federal Regulations.

Q Okay. You did everything you would have done in any other accuracy check except you just did it specially on this instance, is that what you are saying?

A Right. There are two other factors that were different.

Q What were those factors?

A One is that during an accuracy check, the person who performs the accuracy check is not the same person as the one who normally maintains the site.

In this particular case it was the same person though. Secondly we used a different calibrator than was used to calibrate the monitor earlier.

The calibrator was never involved in the process. I have not checked, but I am pretty sure that this would not have been the case also.

The calibrator would have been certified the same way the accuracy calibrator would have been certified, but would not be unique.

Q In that instance you said you introduced five values.

A Yes.

Q That would be the same as you would do at an accuracy check?

A In an accuracy check we would introduce just three values.

Q All right. Insofar as the impeachment type of questioning done of your prior deposition, to clarify the record, you are saying now that the accurate information is that the United States Environmental Protection Agency recommends that you be plus or minus 20% for accuracy, is that right?

A That is correct.

Q And your explanation is simply you misspoke without having the information in front of you on the prior deposition, is that what you were explaining?

A That is correct.

Q In your earlier testimony you had indicated that the wind direction was consistent and very definable. I believe that was in your original testimony with regard to these tests and what you found.

A Yes.

Q What is the significance of that, if anything?

A Well, to me the significance was that ...

there was a specific source or group of sources that was contributing to the problem, the problem being the elevated sulfur dioxide values, and that normally when this occurs, it occurs with a very persistent wind direction and sometimes with very stable atmospheric conditions, and since at least the persistent wind direction was present, it led us to believe it was due to a specific operating condition at one or more facilities, sulfur dioxide emitters which were upwind of our monitoring site.

Q And do your other Agency records that are part of the record that was filed October 16th, which I don't have in front of me, do they contain an analysis of how you arrived at the conclusion that Alton Packaging Corporation was involved in this violation?

MR. INGERSOLL: I have to object. I don't believe Mr. Kolaz ever testified that Alton Packaging was a cause or contributor to the violation. His testimony was predominantly with the monitoring system.

HEARING OFFICER: All right. Let me just ask you, Mr. Ingersoll, is there testimony or is there information in the other record with regard to that aspect?

MR. INGERSOLL: I feel that there is. I will put Mr. Shrock on. He is the person responsible for the modeling analysis.

If you wish to delve into it, I'm sure he can explain.

HEARING OFFICER: Well, I don't want to tell you how to conduct your case, but this is not the same type of hearing as one might have in a court of law, and my understanding is that as the Hearing Officer I do have an obligation to try and make sure that the best evidence is brought forward in these matters, and that the record is extremely clear and accurate, so as to allow the Board to make a reasonable and proper decision.

I leave it to you as to whether you feel there is sufficient evidence to show the connection to Alton Packaging, but I do think that is an aspect which is vital to this case.

MR. INGERSOLL: I too agree. It was my intention to call Mr. Shrock next.

HEARING OFFICER: All right. I have no further questions of this witness as far as clarification is concerned.

MR. KISSEL: I have none.

MR. INGERSOLL: None.

HEARING OFFICER: Okay, you may step down.

MR. INGERSOLL: I would like to recall Mr. Shrock.

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JOHN SHROCK,

called as a witness on behalf of the Respondent, being previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

QUESTIONS BY MR. INGERSOLL:

Q Would you briefly outline your educational background, Mr. Shrock?

A Yes. I have a Bachelor's Degree in Physics and Psychology, and a Master of Science Degree, both from Indiana University at Bloomington.

Q What is the Master's Degree in?

A Environmental Science.

Q Okay, thank you. When did you receive that Master's Degree?

A In 1976.

Q And when did you start working for the Illinois Environmental Protection Agency?

A In the Fall of 1976.

Q And what position did you take at that time?

A I began working in the same unit within the Air Pollution Control Division that I work for now. We had undergone a name change, but essentially we do dispersion modeling.

Q Could you describe what that entails?

A Yes. We run computer dispersion models usually for the purpose of determining allowable emission rates which are necessary for maintaining National Ambient Air Quality Standards.

That is a partial description of what we do. We also do special dispersion studies, as well as studies which involve air quality monitoring, for the purpose of determining proper emission rates and proper ways to use different types of models.

Q And you have been involved in this air modeling dispersion field since 1976?

A Yes.

Q And I believe, as you mentioned, before you were responsible for preparing what is incorporated into the record as Agency Exhibit 5 entitled Modeling

analysis of the SO 2 excursions which occurred November 6th through 7th, and the 25th through the 26th, of 1984, in Alton, Illinois, is that correct?

A Yes.

Q What conclusion did you draw from your analysis of the information that you had before you?

A Okay, what we were able to conclude was that Alton Packaging contributed in a dominant way to both of those excursions, and we did this by using state of the art dispersion model, real meteorology, in other words, wind direction and speeds, etc., which occurred during both of those excursion periods.

Those were matched with actual emissions data which was collected by our field personnel from individual facilities which we thought might have been able to contribute to those excursions.

The model that was used was industrial source complex model. It was selected because with that we could input variations and terrain, variations in hourly emissions data, as well as variations in hourly meteorological data.

Q In your professional opinion was Alton Packaging a major contributor to the two exceedances

excursions of the Ambient Air Quality Standard for SO 2 in Alton in November 1984?

MR. KISSEL: I object to the question. The record must speak for itself. This is a Permit appeal hearing.

To the extent that the record says that or does not say that, it speaks for itself, and it cannot add to it at this time.

MR. INGERSOLL: I think what is being asked here is for an expert opinion. I think that a proper foundation has been laid for him to answer to a reasonable degree of scientific certainty if he can do so.

MR. KISSEL: My objection goes to the Board's position that a Permit appeal is supposed to be on the record before the Agency.

The testimony at this time has been to clarify what has been said and what is in the record, but if, and to the extent that this question asks for an opinion beyond what is already in the record, it cannot as a matter of Board law be introduced in this proceeding.

MR. INGERSOLL: I would contend that this matter, this question merely clarifies or augments the conclusions stated in the study that was done by Mr. Shrock

and which is already part of the Agency record.

I want to make it clear to the Board these are his opinions. This was not a vague study done by the Illinois Environmental Agency as an entity. It was done by Mr. John Shrock an employee of that Agency.

HEARING OFFICER: He may answer.

A Please repeat the question.

MR. INGERSOLL: In your professional opinion, was Alton Packaging a major contributor to the two exceedances of the Ambient Air Quality Standard for SO 2 in Alton in November 1984?

MR. KISSEL: Same objection. Also it is a leading question to his own witness.

HEARING OFFICER: Go ahead and answer the question.

A The answer is yes. It is my opinion that Alton was the major contributor to both of those excursions in November of 1984, that is, Alton Packaging.

MR. INGERSOLL: Okay. I believe before that you discussed the predictive or non-predictive nature of the study that you did. Was it designed to be predictive?

A Air quality models, they -- it was designed to predict what happened, or try and simulate

what happened on those two days. It was not designed to predict what allowable emission limits would be possible limits for any facility in the area to protect the National Ambient Air Quality Standards, but you could draw some conclusions from the results of that study about what might happen in the future based on what occurred on those two days.

MR. KISSEL: I object to any testimony on this witness' part as to the predictability or what conclusion can be drawn. That is totally outside of the record, and if the Agency's position at this hearing is to allow that kind of testimony, they are changing the law and changing the evidence that is to be allowed in Permit proceedings before the Board.

HEARING OFFICER: Well, I don't have the entire record in front of me. It was not supplied to me, so I'm going to allow him to answer subject to that objection, based upon the assumption that he is testifying with regard to matters, the factual basis of which is set forth in the records previously filed by the Agency.

MR. INGERSOLL: In your report did you make any conclusions with regard to possibility of future exceedances?

A Yes, I did.

Q Could you describe those conclusions?

A I concluded that it may be possible in the future that excursions at the Barton School monitor may be possible in the future if Alton Packaging Corporation is allowed to operate at the limits they were operating during the previous two excursions.

I base that primarily on the fact that the meteorology which occurred during those two days was really not in any way unusual, that you would expect similar meteorology to occur in the future, and if Alton Packaging Corporation operates at the same levels, you could expect future excursions.

The one further point that I would like to make is that other facilities in the area could have been operating at higher rates, but were not operating at their allowables during those excursions.

Q Would you expand on that?

A Well, Laclede Steel, they could have been operating at higher emission rates and were not. Illinois Power was only operating during one of the excursions.

Q When were these conclusions made by you?

A They were made during the study which I concluded. The are a part of Exhibit 5.

MR. INGERSOLL: Okay. Thank you. No further questions.

MR. KISSEL: I object to the whole line of questioning. Since it is being allowed in the record, I would like to proceed with some examination.

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CROSS EXAMINATION

QUESTIONS BY MR. KISSEL:

Q Mr. Shrock, please define the exact conditions under which you would anticipate, as a result of your modeling study, that there would be excursions of the National Ambient Air Quality Standards as a result of emissions from Alton Packaging Corporation.

A Those conditions would include wind speeds and directions which were similar on the days of the excursions in November of 1984, and Alton Packaging Corporation operating at the emission rates which were similar to those on those two days.

Q What about velocity, stack gas velocity is that significant?

A Yes. That is one of the input parameters

to the model.

Q You said you would anticipate excursions of the National Ambient Air Quality Standards if Alton Packaging Corporation's boilers operated during times of identical wind speed and direction.

A Similar wind speed and direction.

Q Similar wind speed and direction, and same emission rate?

A Similar.

Q When you say similar emission rate, what do you mean?

A Probably an emission rate in excess of five pounds per million BTU's.

Q Under five pounds per million BTU's they would not cause an excursion?

A I cannot say that. I cannot nail down an exact emission rate. The study was not really designed to do that. That is a different type of air quality study.

Q Similar wind speed and direction, similar emission rates. What else?

A Well, of course similar stack parameters which includes temperature and exit velocity.

Q Anything else? What about meteorological conditions?

A Well, that's what we talked about, similar meteorological conditions.

Q I thought you said wind speed and direction. You did not say meteorological.

A Those are inclusive of meteorological conditions. They are probably the prime two parameters that would be of concern.

Q So besides wind speed and direction, emission rate and stack parameters. What other factors would have to occur at the same time for you to say that this would be predictive of an interference with attainment and maintenance of Ambient Air Quality Standards?

A I am saying that those items would be sufficient to draw the conclusion that in the future you may experience excursions at the Barton School monitor.

Q All right. Based upon your study here, which is what we are talking about, no other modeling studies that you know of but this study, this is what you are basing your opinion on, is that correct?

A Yes.

Q If you had a different wind speed and

direction, and Alton Packaging was emitting 6.2 pounds per million BTU's, could you predict an Ambient Air Quality Standard violation?

A Well, of course if you have a different direction -- what I am talking about is a specific point at the Barton School monitor.

If there is a different direction, if the plumb is transported in a direction different --

Q Are you not really saying it is your opinion that if the identical conditions occurred here, or higher conditions in terms of emissions, you would presume there would be an exceedance of the Ambient Air Quality Standards, is that not really what you are saying?

A I am saying under similar conditions you may expect exceedances of the Ambient Air Quality Standards.

Q Did your modeling actually predict an exceedance?

A Yes it did.

Q Where?

A At the Barton School.

Q NO, show me where it says there will

be an excursion in there in Exhibit 5, show me the language where it says there will be an excursion (indicating).

A The modeling was accomplished for the two excursion periods, and -- just a second and I'll find the figures.

Okay, I'm sorry, I made a mistake. A value greater than the 24 hour Standard was not predicted by this study, but there were two excursions, and given the data we had as input, which did not include background SO 2 or SO 2 from small sources, we were able to get good correlations with the monitor data, and we were able to also show that Alton Packaging Corporation did contribute to those violations.

Q So the Board understands, the study on which you are now saying there may be some future violations in and of itself did not predict that there would be an exceedance of the National Ambient Air Quality Standard at the Barton School, is that correct?

A I'm sorry you have to repeat that.

HEARING OFFICER: Read back the question.

(Whereupon the reporter read the last question back.)

A That study was not able to explain

all of the SO 2 concentration which was measured at the Barton School monitor.

What it did do was show that Alton Packaging Corporation was the predominant contributor on those two days.

Q Mr. Shrock, I am not talking about a predominant contributor. You are now going beyond that and saying you are putting a predictive nature into this modeling effort.

I am trying to ask you the question of, the fact is that this effort in and of itself, Exhibit 5, did not predict an excursion of the National Ambient Air Quality Standard at the Barton School, is that correct? It is yes or no.

A The results of the modeling did not predict an excursion.

MR. KISSEL: That's all I have got.

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REDIRECT EXAMINATION

QUESTIONS BY MR. INGERSOLL:

Q Based upon your education and experience in this field, what do you think would have been the impact at the Barton School monitor on those specific

dates, if the other sources in the area of Alton Packaging Corporation were operating at their permitted maximum emission rates?

MR. KISSEL: I object. We are taking this far beyond the Permit appeal. If the Agency wants to do that, I suggest that before they do it they look back at the history of their dealings in Permit appeals.

We are now asking the witness to speculate beyond what he has done in a Permit record. We have gone much much farther, and this will be, indeed, a precedent setting case before the Board if this testimony is allowed.

MR. INGERSOLL: I disagree in that Mr. Shrock has been shown to be an expert in this field. He has a great deal of experience.

You have attacked conclusions that he did make in a study that is part of the Agency record, and I am merely trying to strengthen the showing of Mr. Shrock's basis for his conclusion.

MR. KISSEL: Mr. Ingersoll, Hearing Officer, and Board, all I am suggesting to anyone who accepts this evidence is that as far as I am concerned it broadens, if it is accepted and allowed, it broadens the

nature of a Permit appeal, and would allow me to go into examining this man in far greater detail than we have done in this matter.

MR. INGERSOLL: I have merely questioned him with regard to conclusions he did make that are reported in the record.

MR. KISSEL: NO, that was not your question.

HEARING OFFICER: Let me hear your question again. Restate it, or does she have to go find it?

MR. INGERSOLL: I'll try. Based upon your education and experience -- read the question back.

(Whereupon the court reporter read the question back.)

HEARING OFFICER: I'm going to sustain the objection to that question, I do think, in part, because the answer would be speculative.

MR. INGERSOLL: I have no further questions then.

MR. KISSEL: I have none.

HEARING OFFICER: Okay, let me ask you a little further, so it is clear, on the record, as to the basis of this testimony.

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QUESTIONS BY THE HEARING OFFICER:

Q You have testified in your opinion that one can anticipate further exceedances because, - and you tell me if anything I am saying is not accurate here, - because the meteorology was not unusual those days, and, therefore, you could anticipate it happening again if Alton Packaging Corporation operates at the same levels as they were at that time, is that your testimony?

A Yes, Alton Packaging.

Q And when you say the meteorology was not unusual those days, can you, in layman's terms, explain what you mean by that statement?

A Just that the wind speed and the direction, that is, the wind is coming from, were not statistically unusual. You know, if you look through the meteorological data which I have not done, and I don't know with what frequency you could expect that persistent [illegible], but that could be done, there was nothing [illegible] that was unusual conditions.

Q Meteorology, the phrase includes a lot [illegible] that?

A Yes. It includes things like the

turbulence of the air at the time, the temperature is a fairly minor variable.

Q All right. That is one of the things I was wondering. I may be trying to anticipate questions that the Board would have which maybe they would know better than to ask, but not being an expert on the subject, in other words, any of those items you did not mention you are saying they are of minor concern?

A They are of much less importance than the wind speed and wind direction, especially when you are looking at the source monitor combination.

Q Was there anything of an unusual nature regarding any of these other aspects of meteorology? You have talked, of course, about the wind speed and direction, emission rate, similar emissons rates, and similar stack parameters as part and parcel of those things. Is there anything else?

A Not that I am aware of.

HEARING OFFICER: Okay. I have no other questions.

MR. KISSEL: I do have a follow-up question to what you asked.

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RECROSS EXAMINATION

QUESTIONS BY MR. KISSEL:

Q You used the point that this wind speed and direction and meteorology was not unusual. How often would it occur in a five year period?

A I don't know.

Q Well, would it occur 5% of the time, 10% of the time, 50% of the time, 100% of the time?

A I cannot say.

Q How do you know it is unusual or not then?

A Well, basically from my experience of working with five years composit meteorological data, there is nothing, the wind speeds were not so high as to be considered unusual, and the direction, of course, --

Q It is not just a question of one, another, and another, it is a combination of them at the same time, is it not, wind stability?

A Yes. There has to be a certain amount of persistence with those conditions.

Q You are familiar with the Murray & Trettel study with regard to Alton Packaging with regard to this area, correct?

MR. RISSEL: I object to the basis that it is a matter of Agency record. I certainly don't believe a Permit Engineer without any experience in modeling and other things or anything except looking at Permit applications can now speculate as to what he thought were the reasons why he did something in the past. That is impossible to cross examine this witness on in that kind of testimony. If he didn't put it in the record, then it is not relevant to this proceeding.

HEARING OFFICER: He may answer as to the basis of his recommendation. It may be relevant to other factors.

A There were two reasons for the recommendation.

MR. INGERSOLL: All right. For clarity sake, are these reasons stated in the Permit Denial letter of August 27, 1985?

A Yes they are.

Q Did you draft that letter?

A Yes I did.

Q Okay. Could you state the reasons that were given there?

A First the emission rate from the

coal fired boilers was in terms of the 2 pounds emission limits for these sources, the 1.8 pounds per million BTU limit.

Secondly, on the basis of a study done by the Agency's Air Quality Planning Section, the Alton Packaging boilers were the major contributor to an ambient air quality violation in November of 1984.

Q And you said that the Alton Packaging Boilers 6 and 7 emitted sulfur dioxide in excess of 1.8 pounds per million BTU's of heat input. Where is that information contained or where did you get it?

A The information came from Alton Packaging Corporation and it was -- the company has been furnishing that information to the Agency on an annual basis.

Q Is that information contained in the Agency record?

A Yes it is.

Q Is there any information in the Agency record or the Agency files, application, what have you, Permit application, what have you, to indicate that Alton Packaging's operations of the Boilers 6 and 7 would not be in violation of the 1.8 pounds Standard?

A [illegible] there is not any.

Q Is there any information contained in those records which would indicate that Alton Packaging would not, in the future, cause exceedances of the Ambient Air Quality Standards?

MR. KISSEL: I object to the form of the question. We are getting into speculation also.

HEARING OFFICER: I will sustain the objection. Rephrase the question.

MR. INGERSOLL: Has Alton Packaging provided any information upon which you could determine that it would not cause future exceedances of the National Ambient Air Quality Standards for sulfur dioxide?

A No, there has not been any information provided.

Q Is reason number 2 stated in the Permit Denial letter sufficient independently to warrant a denial of a Permit?

MR. KISSEL: I object to the form of the question. We are getting into speculation which again goes far beyond what this proceeding is supposed to do.

HEARING OFFICER: Are you asking him, Mr. Ingersoll, with regard to the rules and regulations, in other words, if that is a sufficient basis?

MS. INGERSOLL: I will rephrase the question.

HEARING OFFICER: Okay.

MS. INGERSOLL: Is the reasons stated as number 1 in the Permit Denial Letter sufficient in and of itself for you to recommend a denial of the Permit?

MR. KISSEL: Object. Calling for a legal conclusion, and also going into his mind.

HEARING OFFICER: I'm going to allow him to answer the question.

A Yes. Yes it is.

MR. INGERSOLL: And about reason number 2 that you stated, in your experience at the Agency, would that reason in and of itself be sufficient for you to recommend denial of a Permit?

MR. KISSEL: Same objection.

HEARING OFFICER: Same ruling.

A Yes it would.

MR. INGERSOLL: Okay. I have no further questions.

CROSS EXAMINATION

QUESTIONS BY MR. KISSEL:

Q Mr. Dennis, did I understand you to say that you saw nothing from Alton Packaging Corporation concerning modeling studies and emission rates and things like that, is that right?

A No, I don't think that was the question. It was whether information had been provided to show that no future ambient air problems would result.

Q You never saw anything like that?

A To clarify that, there have been studies submitted but not as part of a Permit, but these studies have not been accepted either by the Board or by the Agency.

Q Mr. Dennis, do I understand that you are aware that Alton Packaging has done some modeling studies to show relationships between its emissions and Ambient Air Quality Standards, were you aware of those when you went through this Permit appeal process?

A Certainly.

Q Or Permit process?

A Certainly.

Q Did you review them?

A I read through them. It was not my

responsibility to review the modeling part of it, no.

Q So you knew they existed and you reviewed them, right? You looked at them?

A I looked at them, yes.

Q All right. Do they form a part of the Agency record?

A They are not included in the record, no, not to my knowledge.

Q Why not?

A Well, I did not include them on the advice of counsel.

Q I see. What other things did you review that are not in the record?

A Could you be more specific?

Q Well, let me ask you this question. Did you review anything else concerning Alton Packaging Corporation when you made the decision or recommendation on the Permit on this case, or Permit application, other than what is in the record before the Pollution Control Board?

A I glanced through the file which is quite a thick file, and there was large quantities of material that had no relevance on the decision.

Whatever material was relevant to the Permit decision was included.

Q. Would not the modeling studies done by Alton Packaging Corporation concerning the relationship between emissions and Ambient Air Quality Standards, would that not be relevant here in this proceeding in the case where you are alleging a relationship between emissions and Air Quality Standards?

A That was submitted as part of a Variance Petition to the Board.

Q But you were aware of it, were you not?

A I was aware of it.

Q You knew it existed?

A Yes.

Q You could walk in, get it, look at it, could you not, and you did look at it, did you not?

A Well, it is already information the Board is aware of by its knowledge.

Q Do you considered that a part of this proceeding?

A It is not part of the record, no.

Q But you say the Board is aware of it. Does that mean you believe it should be a part of this

proceeding?

MR. INGERSOLL: I will object. That calls for a legal conclusion.

MR. KISSEL: I think we are into a really strong area here. We have a Permit Review Engineer.

MR. INGERSOLL: You had 60 days to augment the record which you have not bothered to do.

MR. KISSEL: Let me suggest here we have a Permit Engineer who has reviewed documents that he has not included in a record before the Pollution Control Board. I think that is relevant.

MR. INGERSOLL: I agree with you that part is relevant, but the question you put to him as to whether he believes certain documents should be a part of the record I think is not relevant.

MR. KISSEL: The reason for that question, Mr. Hearing Officer, was that it sounded like he believed that it already was part of the record. He said the Board was aware of it which implied to me he did not have to put it in the record because it should already be a part of this record. I thought he said that.

HEARING OFFICER: He clearly answered with the understanding it is not part of the record. What you

think should or should not be is not relevant, but within his domain. Put another question.

MR. KISSEL: All right. Would you not believe that a modeling study on emissions and relationship to Ambient Air Quality Standards would be relevant in this situation where you have denied a permit on the basis of the relationship between emissions and Ambient Air Quality Standards?

A It would be relevant if it were in a final form and were accepted by both parties as a final document that we want that could be accepted, and none of the modeling studies to my knowledge have been acceptable yet.

Q What would have to happen for it to be acceptable?

MR. INGERSOLL: Objection, calls for a legal conclusion.

HEARING OFFICER: I don't know really until I hear you answer that question. I will let him answer it.

MR. KISSEL: I'm trying to find out myself. I don't know about this process.

A Well, there are a number of modeling

guidelines that have been set forth in several documents by the United States Environmental Protection Agency, a rule change particularly, one that /lter packaging would have to submit modeling and adhere to those guidelines in order to be acceptable to the United States Environmental Protection Agency, and, therefore, acceptable to the Illinois Environmental Protection Agency.

Q You are aware of this modeling study done by Murray & Trettel for Alton Packaging Company, are you not? You did look at it, right?

A I looked at what materials were submitted as part of the Variance Petition.

Q Is there a formal Agency process by which that would be accepted or not accepted as a study?

A It was submitted to the Board.

Q I'm talking about the Agency now. Is there a formal Agency process which says we accept this study?

A In some instances there are if it is a study done as part of a Permit application, and then a final acceptance would be granted and a Permit issued.

Q Knowing what you do about this effort, is there a formal process for this particular study to be

accepted or not accepted by the Agency?

A There is not in this case, now because the proper form was the Board for the rule change.

Q Was this study not accepted, stamped "We do not accept this study" by the Agency?

A I don't recall exactly what communication would have been made, I don't know.

Q Well, if you have a modeling study, you are reviewing a Permit application, the modeling study is relevant to that. You said you would not accept it, you would not review it because it was not accepted I mean.

My question was, who and when and how was it not accepted?

A Well, the Board dismissed the Variance case, so the Board did not accept it.

Q Did anybody at the Agency say "We do not accept this study?"

MR. INGERSOLL: I object. It calls for hearsay.

HEARING OFFICER: If he knows he may answer.

A I don't recall any specific communication.

that went to the company.

Q All right. Do I understand that the only reason you did not consider this is because the Board dismissed the other proceeding and, therefore, you deemed that to be not accepting the study?

A I think that is the major reason, yes.

Q So it has nothing to do with the Agency accepting the study or not accepting it, it's what the Board did?

A Well, I don't think I would say that. I would not say it has nothing to do with it. The Permit action was based on two reasons, and the study was not sufficient to overrule the information that we had.

Q This record that we have here (indicating), you have obviously reviewed it, have you not?

A Yes.

Q This Agency record?

A Yes I have.

Q Does that contain all the correspondence between the Agency and Alton Packaging Corporation concerning the Permit application?

A Well, going back to the initial application, in this case 1983, I think it does.

Q So if there was a letter requesting information in this file and there is no response, it me...is there was no response, right?

A Yes, I think that is true.

Q So that if you look at Exhibit 3 (indicating), do you recognize that?

HEARING OFFICER: This is Exhibit 3 in the Agency record?

MR. KISSEL: Yes, I'm sorry, that's right.

A Yes.

Q You recognize it?

A Yes.

Q Describe it for the record.

A This is a letter from Mr. Pyatt of Alton Packaging to Mr. Franke of the Agency responding to a letter of July 22, 1985.

Q Is there any request in that letter from Mr. Pyatt to the Agency?

A Mr. Pyatt is requesting information on all of the SO 2 emission sources in Alton and Wood River areas, as well as meteorological data from the Alton monitor site for the month of November, '84, to enable him to review the air quality exceedances presumably.

Q Was that letter ever responded to?

A I don't know if it was or not.

Q Well, if there is no letter in the file you gave me and none before the Board responding to that, does that mean it was not responded to?

MR. INGERSOLL: I object to the question, it is overly broad.

HEARING OFFICER: The question has been asked and answered previously I think.

MR. KISSEL: I'm getting him to affirm this specific letter is all.

HEARING OFFICER: I think he answered he does not know other than the fact he presumes all of the record is included from '83 on, so I think that is as much answer as can be anticipated from him, and I will sustain the objection.

MR. KISSEL: That's all.

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REDIRECT EXAMINATION

QUESTIONS BY MR. INGERSOLL:

Q Mr. Dennis, did you review the modeling report that Mr. Kissel mentioned in preparing the recommendation which I see in the agency record as

Exhibit 27.

A. Only noting that the Variance case had been dismissed by the Board.

MR. INGERSOLL: Thank you. No further questions.

HEARING OFFICER: No questions of this witness. Well, I would like to ask you one question.

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QUESTIONS BY THE HEARING OFFICER:

Q Various reference has been made to certain studies or information that is not in the record. Did you rely upon any of these studies in reaching the conclusions or recommendations that you testified to? Do you understand my question?

A Yes I understand your question. The recommendation that I made relied upon the study that was performed by the Agency's own modelers, as well as information on the coal usage.

Q Those are all part of the record?

A That is correct.

Q So my question was, did you rely upon any of the studies or information that is not in this record to reach any of your conclusions or recommendations?

A NO I did not.

HEARING OFFICER: Thank you. I have no other questions. Are there any other questions by the parties of this witness or any other witnesses? You may step down.

There is no indication there is any questioning of any of the parties present, and there being no one else present in the audience other than parties previously introduced, I entertain any brief closing remarks if you care to make them, Mr. Kissel.

MR. KISSEL: Well, I would like to suggest that we get some time to brief this rather than go through closing remarks.

There is some new issues that came up today. I think that there is enough intricate legal problems here that I would like to get about thirty days to file a brief, and then the Agency can respond if they would like.

HEARING OFFICER: I will give you thirty days to file a brief.

MR. INGERSOLL: And twenty-one after that.

HEARING OFFICER: Twenty-one following receipt of the brief for response by the Agency, after

which the record will be closed.

MR. KISSEL: I would like -- off the record.

(Whereupon a discussion was had off the record.)

HEARING OFFICER: Make a statement on the record regarding all that.

MR. KISSEL: I would like to ask that the time for filing the brief begin from the date we receive the official transcript from the court reporter.

Then everything would flow from that. I agree on behalf of Alton Packaging to extend the decision date to accommodate this additional time.

HEARING OFFICER: In other words all times would run in the same way they would otherwise by the rules, beginning from the date that you submit your brief and he submits his answer.

MR. KISSEL: Yes.

HEARING OFFICER: All right. Prior waivers are on file I think.

MR. KISSEL: Yes.

HEARING OFFICER: Any objection to that, Mr. Ingersoll?

MR. INGERSOLL: No. I don't have any.

HEARING OFFICER: We will do it on that presumption, we do have a stipulation I mean. We do have an exhibit. Petitioner's Exhibit 1, Are you moving to have this admitted, Mr. Kisse.?

MR. KISSEL: No. I don't need it to be admitted. It was done to refresh his recollection. It is not evidence in and of itself. The testimony he gave from it is adequate in the record as far as I am concerned.

MR. INGERSOLL: Okay.

HEARING OFFICER: All right. I would like the exhibit copied and supplied to her in any event so it is part of the transcript, and return the original to David Kolaz.

I'm going to make a finding that each of the witnesses who were called and who testified today, that specifically, of course, being Mr. Patrick Dennis, Mr. John Shrock, and Mr. David Kolaz, were credible witnesses, and by that I would indicate that they showed basis for their opinions, and their education backgrounds, and experience to justify their testimony.

The statement of their credibility does not indicate a statement of whether I agree or disagree with the conclusions they may have reached, but simply

that they are credible witnesses who honestly and openly presented themselves and testified to the best of their ability in the most straightforward manner today.

That is my finding of credibility.

Mr. Kiessling, thank you.

HEARING OFFICER: Anything else you can think of we may have overlooked?

MR. KIESSLING: No. We don't have any members of the public.

HEARING OFFICER: This hearing comes to a conclusion then at 12:15. Thank you very much.

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STATE OF ILLINOIS)
) ss
COUNTY OF MADISON)

JACQUELYN L. KITTEL hereby certifies that she is the Certified Shorthand Reporter who reported in shorthand the proceedings had in the above-entitled matter, and that the foregoing is a true and complete transcript of said proceedings.

JACQUELYN L. KITTEL
Certified Shorthand Reporter
Registered Professional Reporter
Notary Public in and for the
County of Madison, State of Ill.

My Commission expires March 12, 1986.

ALTL SO2
Precision

10/24	-5.5 %
11/1	+5.5
11/8	-3.3
11/15	-6.6
11/21	-6.6
11/27	-5.5

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Petitioner's Exh. #1
R. L. Stetler 1-6-85 (PCB 85-143)