PETERS TOWNSHIP PUBLIC HEARING

MAY 2, 2011, 7:30 P.M.

COUNCIL MEMBERS:

Chairman Robert Atkison - At Large

Vice Chairman Monica R. Merrell - District B

David M. Ball - District A

James F. Berquist - District D

Robert Lewis - At Large

Gary J. Stiegel, Jr.-At Large

ALSO PRESENT

Mr. Silvestri

Mr. Zuk

Mr. Johnson

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(Monday, May 2, 2011, 7:30 p.m.)

CHAIRMAN ATKISON: Good evening, ladies and gentlemen. Welcome to continuation of the public hearing held on March 21, 2011. Roll call, Mr. Silvestri.

(All Council present)

(Pledge of Allegiance recited)

CHAIRMAN ATKISON: The purpose of this hearing is to accept additional comments on the proposed curative amendment challenging the validity of the Peters Township Zoning Ordinance regulating funeral homes and crematories filed by te Audia Invest Group, LLC.

This hearing has been advertised in the Observer Reporter on April 18th and 25th, on township bulletin boards, the website cable television. A copy of the proposed ordinance and prior transcript was available on the website.

Council will not be taking action on the proposed ordinance this evening. If the hearing is closed this evening, action will be taken at the May 23rd regularly scheduled Council meeting.

I would like to note this is a continued hearing and for purposes of efficiency, if you have

testified before, you do not -- we do have those comments and they need not be repeated again.

We will be asking Mr. Johnson, our solicitor, to coordinate the order of the testimony to ensure efficiency and the proper order for compliance with proper legal procedures.

Prior to Mr. Johnson taking on this role, I will ask the township manager if he has any additional things to be placed in record.

Once Mr. Johnson has completed coordination of the necessary testimony, we will then open the comments to the audience for additional testimony. Mr. Silvestri.

MR. SILVESTRI: Thank you, Mr. Atkison, I do have a few items to be placed into the record. First, there is a report titled Evaluation of Funeral Home with Crematory Variance Request, Part 2 dated April 2011 from Dr. Stanley Penkala.

There is a letter from Jerry McDevitt, attorney of resident plan dated April 26 requesting to be a party to matter. There were a number of emails received over the weekend and today that would be included.

They are one from Cheryl Ferris dated May

2nd, these are all in essence opposed. One from Willard and Karen Martin dated May 1st. Fedor R. Salva dated May 1st. Susan and George Anderson dated May 1st. David Miller dated May 1. Lynn Williams dated April 29.

We also received a packet from the applicant which everybody has before them. Mr. Johnson.

MR. JOHNSON: Thank you, Mr. Silvestri. I believe at the conclusion of the first hearing we left the record open in order that Ms. Ribar could present additional testimony or pursue whatever cross-examination she sought at this time relative to witnesses that had been presented. Do you have anything else that you want to present at this time, Ms. Ribar?

MS. RIBAR: Not with respect to the witnesses that testified at the last hearing. We are a bit unclear whether this hearing was intended to just remain open Dr. Penkala to have the opportunity to review the revised report that CEC submitted the morning of the hearing.

MR. JOHNSON: No, we are not limiting scope of the hearing.

MR. LEWIS: In fact, I thought part of the reason we were having the continuation was your challenge to want an opportunity to cross-examine some

of the people that testified before.

MS. RIBAR: After reviewing the transcript, we see no need to cross-examination.

MR. JOHNSON: Do you have anything else you want to present at this time?

MR. RIBAR: We do.

MR. JOHNSON: Not barring you from presenting stuff you know, as a response to whatever may arise out of the hearing.

MS. RIBAR: We do, do you want that to occur now?

MR. JOHNSON: Yes.

MS. RIBAR: First some housekeeping issues that I did want to address with regard to the transcripts from the March 21st hearing. I understand that was adopted as the official transcript. But it also includes attachments that pertain to the March 28 regular Council meeting which are not related to the crematory with one exception, just merely one indication on page 10 of a stack about this high of a continued hearing.

So, we just wanted to make sure those were not supposed to be attached as part of the official transcript but that was perhaps an oversight or error of

some kind.

MR. SILVESTRI: Correct, what Council received as the official transcript was purely the transcript. That is what they acted on. What happened was after the hearing you had asked for a copy of the transcript as well as other additional information. I think my staff put that all together in a document to you.

MS. RIBAR: Okay. Also, some of our exhibits were not listed on an April 4st posting on the township website, as applicant exhibits, specifically Exhibits 1, 2, 3 and 5 from the binder that we had presented at the last meeting were not included. I think maybe because the drawings were large and Exhibit 5 was something that was a township exhibit. But just to be clear for the record, we wanted to make sure that the binder that consisted of the 39 numbered and indexed exhibits be part of the record as the official applicant exhibits. And we did give a copy of that to the court reporter.

As Mr. Silvestri noted, we also have additional exhibits to present tonight numbered 40 through 47 which we will go through as we proceed.

As a question for you, Mr. Johnson, do you

intend to have Dr. Penkala speak as to his updated report?

MR. JOHNSON: I believe that is easier for that purpose.

MS. RIBAR: Would you like --

MR. JOHNSON: If you concluded your case in chief.

MS. RIBAR: Well, part of the case in chief is in response to Dr. Penkala's report. Mr. Macoskey did some revised modeling at the suggestion of Dr. Penkala.

MR. JOHNSON: We will have Dr. Penkala testify now.

MS. RIBAR: If you mean just temporarily until we can proceed after that?

MR. JOHNSON: Yes.

MS. RIBAR: Yes, thank you.

MR. JOHNSON: Dr. Penkala, you have an updated report?

DR. PENKALA: Yes, I received the revisions to the CEC report the morning of the last meeting and had a chance to review that since and submitted a summary of the observations I made on that.

And there is obviously room for them to come

back with addendums and additional work relative to what they had done to this point.

I'm not going to go over a lot of the technical details. In summary, my conclusions and recommendations effectively say that the CEC-2 report did a credible job of applying Screen 3 to the proposed crematory facility. They considered Simple Terrain, Building Cavity Downwash and Complex Terrain.

I indicated the need for better documentation on the estimated exit gas flow rate. I indicated that the PE -- the Pennsylvania DEP requirements for particulate and SO2 emission rates ought to be met by the proposed installation. Based on the information that was, additional information that was contained in the addendum.

And I indicated that the CEC revision report demonstrated that all HAPS species passed the EPA risk concentration screen with the exception of Chromium VI. And I further indicated that the potential reasons that that particular chemical did not need meet the standard is possibly related to the lack of estimated emission, estimates, or lack of credible emission estimates of that particular species in the testing that was provided such that additional data might document Chromium VI

emissions would pass those screening tests.

Implicit in that statement is that mercury specifically met all of the criteria the EPA set forward as far as screening. Even with the maximum estimates of mercury emissions per case treated by a crematoria.

I did indicate that the screening should compare the maximum hourly concentrations against the EPA risk screening concentrations without recourse to estimated hours of operation because there effectively was no way of credibly limiting the source to an operating schedule without significant additional controls on the issuance of a permit.

The final recommendation or summary was that the proposed installation, if it could not meet the risk screening criteria using Screen 3 or another EPA-approved screening model, demonstration of accepted concentrations might require recourse to refine modeling more closely represents the site meteorology and dispersion conditions.

So, in my opinion it comes down to a regrettable lack of good estimates of the emissions that could take place during the crematory process. And that is a function of essentially the literature presented to date not having sufficient cases and estimates of those

species that were subjected to the EPA screening.

The modeling itself for the most part demonstrates compliance, with the exception of as I mentioned the Chromium VI. However, the data itself has implicit indications that the emissions of some of these species exhibit considerable variability. In the case of cadmium, for instance, there is a factor of 100 difference between the highest and lowest estimates on three tests that were presented that had cadmium numbers.

So we have uncertainty in the input data, therefore, we will have uncertainty in the output modeling results.

That's pretty much the extent of the evaluation I presented.

MR. JOHNSON: Thank you, Dr. Penkala. Your report of April 21st has been put into the record. Ms. Ribar, do you have any questions of Dr. Penkala?

MS. RIBAR: Yes.

EXAMINATION

BY MS. RIBAR:

Q. Dr. Penkala, with regard to Chromium VI, are you aware of any better data that is available?

A. No.

Q. And you had stated that there is a regrettable lack of good estimate of emissions as a function of the literature presented to date and that would be literature available to yourself and to your profession in general, that is not just limited to data we presented to you, correct?

A. That's correct. And I should comment that I did not do a literature search to determine the existence or lack thereof of any addition information.

Q. So you are not aware of any additional information?

A. Correct.

Q. As far as the specific estimates for these chemicals, would you agree that it is what Mr. Macoskey did in his various reports is based on the best available data that is out there?

A. Well, to the extent that the EPA source that he used is supposedly the most credible source, that's true. I don't know whether the crematory associations, and so forth, have produced any additional numbers or credible numbers to augment that information.

Q. We do have somebody here from Matthews that can address that. But before we get to that issue, your last conclusion in your part two report stated that

there may be more refined modeling that is necessary. Would you find that helpful if the underlying information was the same?

A. No.

Q. Again, I don't want to get overly technical, but as far as the chromium numbers and the difference between the EPA screening and the test results from the modeling, can you summarize what that difference is?

A. I don't have the exact numbers in front of me, but --

Q. Would you consider it to be significant, close?

A. It was close. It was so close that I believe it is well within the variability I would assign to that chromium emission factor in the first place.

Q. Given the variability and the limited information that is available and how close the numbers were, would you recommend to Council that they deny this application on the basis of that one test for chromium?

A. I'm not going to put myself in the position of making a decision for them.

Q. What is your opinion?

A. My opinion is that that should not disallow passing or allowing the permit.

MS. RIBAR: Thank you.

MR. LEWIS: If I try to understand what you said, my reasoning, it would not be grounds in itself to reject the application?

Correct.

MR. LEWIS: Is that a good way of saying it?

A. Yes.

Q. And Dr. Penkala, just to be clear, other than Chromium VI which is on the borderline there, all of the other materials and chemicals that were tested exceed the EPA testing thresholds, correct?

A. They do not exceed.

Q. I'm sorry, the are within the EPA?

A. They are within the thresholds. Of course, most of them have the same problems with variability as the Chromium VI with the exception of mercury. Mercury appears to be the most documented and best estimated emission factor so that the results that came out of the screening for mercury are credible and indicate compliance.

Q. And to be clear then, the DEP does not require the specific testing in connection with its permit application?

A. That's correct, they only require the particulate and the SO2.

Q. And you noted that this would meet the particulate and SO2 emission rates?

A. Yes.

Q. You also noted in your first report that as part of the requirement for the permit, the crematory has to be operated in a manner that does not cause air pollution as defined by the PA DEP?

A. Yes.

Q. And if I can point Council to tab 44, I have included the excerpt from the PA code section which defines air pollution. And Dr. Penkala, would you agree that air pollution there, do you have a copy of that?

A. No, I don't.

Q. Would you agree that that definition, I don't want to read it into the record, but would you agree that that discusses air pollution in terms of quantity of chemicals in air concentration that are harmful?

A. Yes.

Q. And you had made the point to this Council on prior, on a prior occasion that the presence of chemicals alone is not enough, that it is the quantity issue that actually governs whether something is toxic?

A. Yes.

MR. ARCURI: I have a question. Can

something constitute air pollution and not be toxic under that definition?

A. Yes. Well, actually the definition says public health, safety or welfare or is or may be injurious to human, plant or animal life or to property and so forth. So, potentially a release which could damage vegetation could be air pollution or which could cause buildings to corrode.

MR. ARCURI: What happens if it is just an odor.

A. And includes odor as a function of welfare, human welfare.

Q. And if the crematory was operated in violation and caused air pollution to be emitted, then its permit could be revoked, right?

A. As far as I know. That is a legal question I would say.

Q. But you had noted as a condition of getting the permit it be operated in a way that does not emit air pollution?

A. Correct.

MS. MERRELL: Could I ask a question, Dr. Penkala. Do you know of any circumstances when the EPA has authorized or permitted a township to impose an

environmental bond on a company? From what I'm hearing from your statement you are saying that the threshold of chemicals meet the DEP standards at this point. But, from the way you wrote your report it seems like there could be potential for that not to be the case.

So would there be any situation which you would, a township would require a bond to make sure that the building stayed within those limits?

A. On air pollution, I'm not sure. I know on other things such as mining and such, there are bonds that are required. Restoration after strip mining, things of that nature.

MR. BALL: If I may ask a question. The data that is cited in your study and in your review, is that from equipment that is similar or the same as the proposed equipment?

A. The information that is presented by CEC came from equipment that is documented to be very similar to the proposed, and in some cases, it came from crematories for which there is no documentation as to whether it was similar or not. Unfortunately, it is hard to track down exactly what the conditions were in a lot of these cases.

MR. BALL: You make a statement it says

that, this is on page four, the third to last paragraph, it says this is very sketchy information on which to evaluate any source.

A. The reasons for that were the lack of documentation that was available from the original sources. The information was provided by, in the CEC report and it was apparently the best available. The lack of documentation was not the problem with CEC. It was a function of the people that put together those original sources.

MR. BALL: Are you aware of any local or similar facilities that have been monitored, actually monitored for emissions in this area?

A. No. Monitoring is a very expensive operation procedure. And for the low level of emissions from this sort of a source, it would be even more expensive than let's say monitoring emissions from a fast food place.

MR. BALL: We are making a lot of seems to be extrapolations as to what potential output is. What is the, how do you determine the species loading in your assumptions? Or doesn't that make a difference, you just are concerned with the output?

A. In the test data that was presented there were estimates made of the species loading. I don't know who

made those estimates. And I don't know the, I will say the accuracy of those estimates. In some cases it was simply average case loading. In some cases it was more tightly defined which would give you a better measure of the quality of that data.

MR. BALL: And then you indicated in the fourth paragraph on page four that some of the EPA test data comes from 1999 when your its, use your words, it is likely not to have computer control combustion process of the newer equipment.

A. That was a speculation. I have no indication one way or the other as to whether they had computer control of the temperature, the secondary chamber at the time. But --

MR. BALL: But would it --

A. It would affect the emissions.

MR. BALL: It would be a reasonable assumption that with computer control combustion equipment that you would probably expect better results than non-controlled?

A. The emissions would be better controlled. The potential for odor would be reduced considerably. The potential for smoke would be reduced considerably.

MR. BALL: You discuss at some length

conversions between average cubic feet per day and standard cubic feet. And I understand the difference certainly between the two, but --

A. Correction, actual cubic feet.

MR. BALL: Actual. Is there anything in not seeing all the data converted to CFM that would lead us lead us to a false conclusion of some kind here?

A. As long as you know the temperature and the volume at that temperature, you can make an evaluation of what the standard cubic feet is.

MR. BALL: Okay.

MS. RIBAR: And I think you raise some good points because in particular the Chromium VI numbers came from a 1992 study. And I think that even Mr. Penkala has recognized that the Power-Pak II unit that the applicant is proposing here is the best available technology that is on the market today.

Some of those test results may be significant and different, but again, we are faced with a lack of information and can only use what is out there, and what the EPA test results are or others that -- Mr. Macoskey can attest to. But the technology has advanced. The units are better. And I think it is really important to note there is no specific testing

requirement by either the EPA or the DEP. So a lot of this technicality that we are getting into back and forth here is speculation on some level because the EPA has determined that no specific test is required. The DEP does not require specific stack testing, nor does the DEP require site specific evaluation for these units because they already determined they are safe when operated correctly. And they do have follow-up and inspections to confirm that those are continually operated correctly under the permit requirements.

MR. BALL: It would seem to me that the manufacturer of this equipment has probably addressed these same questions in the past. And it would seem that it would probably have been to their advantage to collect some data somewhere, and I'm kind of surprised there is not a set of specific data related to this equipment. Unless they intend to address that.

MS. RIBAR: We have Paul Matthews here from, Paul Rahill from Matthews. And he is the president of the Cremation Division of Matthews International which is the manufacturer of the unit that is proposed here.

Mr. Rahill has authored several of the articles that are in your binder with particularly numbers 18, 19, 20, 21, 22, 23, 24 and 26. So he has a

lot of history and information with regard to these units and the industry in general.

MS. MERRELL: Could I ask for clarification from Mr. Penkala? You made a comment the EPA considers this safe. Is safe the correct term or is it within legal limits of toxicity?

A. In EPA evaluations safe means that you do not have a risk to sensitive population groups from a particular threat. It is not, effectively they are setting the limits. Effectively they evaluate and reevaluate the limits on a routine basis based on additional health studies that have taken place since the last evaluation.

As a result, for instance, particulates have changed since the original Clean Air Acts were passed and roughly every five years they have a more stringent standard.

I volunteer my time with the Allegheny County Health Department in the evaluation of their state implementation plan. We are currently working on PM 2 and a half. I previously worked on PM 10 and total suspended particulate state implementation plans. And they are looking now at an even more stringent particulate standard.

MS. RIBAR: Thank you.

MS. MERRELL: Thank you.

MR. JOHNSON: Before you speak, do you have a report of April 21st that has been offered for the record is a review of the March 18th report that was commissioned by the applicant. And this is in response, correct?

A. Yes, it is.

MR. JOHNSON: At the end of your report you noted several conclusions and recommendations and I was specifically, I would like to specifically refer you to conclusion number 2 which says estimated exit gas flows rate in CEC-2, the second report, needs better documentation than, quote, per vendor, quote, perhaps by reference to ACFM values from the four stack tests used to estimate the exit gas temperature. Can you perhaps elaborate on that?

A. Okay. In the first report that CEC presented, they had a particular value for the exit gas flow rate, the temperature of those gases, and came up with the buoyancy of the stack gases and the exit gas velocity as a result.

In the revision they had a revised exit gas temperature based on these four stack tests that I, that

were presented, and used that temperature. However, they referenced an exit gas volume of value that just said okay per vendor, 2000 ACFM at such-and-such a temperature per vendor, referencing the vendor.

And my comment was simply maybe you should just, since you use the average of the temperatures from those four stack tests, you should also use the average of the exit gas flow rates from those four stack tests, or some other estimate.

The unit is supposed to operate with the residence time of one second in the secondary chamber and 1800 degrees at that point given the volume from the secondary chamber and one second radius you come up with a volumetric flow rate at that point which would then decrease down to an actual standard cubic foot, I'm sorry, actual cubic foot per minute emission at the temperature that was documented to be occurring. That would have been one way to do it.

They used a particular number. I was just saying it should be better documented. There was no attempt to impugn the data, it was just I thought it ought to have a little more documentation.

MR. JOHNSON: What about your conclusion number four that the revised report does not, and I'm

paraphrasing, CEC-2 does not demonstrate that all the HAPS species passed the EPA risk concentration screen, specifically Chromium VI is the only species that does not pass.

A. That is what I discussed in terms of, by the numbers, Chromium VI had a concentration that was very close to the screening level for Chromium VI. But I also mentioned that because of the poor quality of the input data from the stack test and the only stack test that reported Chromium VI numbers, that I believe that to be a technical difference that likely could be eliminated if there was better data for Chromium VI.

All of the other species were below the EPA risk standard, and specifically mercury was well below the EPA limit and mercury is the best estimated emission rate.

MR. JOHNSON: When you make reference to screening tests, what are you referring to?

A. The EPA has essentially a list of all potential hazardous air pollutants with concentrations that relate to a particular threat of those species to cancer. And by comparing against those numbers, the emissions lower than those particular risk concentration numbers would protect the population against a risk of cancer of one

in a million.

MS. MERRELL: Could I ask another clarifying question?

A. Yes.

MS. MERRELL: You talk about comparing maximum hourly concentrations, and then in the paragraph that Mr. Johnson referenced about the plume buoyancy in this version in talking about the shorter period of time or quicker period of time in which the gas is exited. Is there a concentration issue there as far as the velocity that it comes out of the stack? Would that factor into the comparison that you made over a continued period of time? Would there be a different concern about that?

A. I'm not sure if I understand your question.

MS. MERRELL: If I understood what you talked about, the fact that the gas stays in the chamber 4/10ths of the second instead of the required one second.

A. No, no, no. The required one second is a standard. The unit is capable of putting air through at a certain amount. If it were to put air through at that high of a flow rate, then it would result in a residence time on the order of 4/10ths of a second.

However, like anything else, if you try to mow the lawn and your mower only goes at five feet a second or something like that, then you can't go ahead and push it at 10 feet a second and expect it to do as good a job.

So that is where the residence time consumed. You need the one second residence time to eliminate smoke and odor.

MS. MERRELL: That was my analogy. I was trying to get an understanding because when you talk about a plume, I think it of something going out. So if it comes out of the tube faster, the same difference of a straw, either you put something in a straw and let it drip out or put it up to your mouth blow it out, it comes out at a higher velocity.

A. That's correct.

MS. MERRELL: So if it is going up faster, is there a concern about the concentration.

A. Actually, if you are pushing more air through than the concentration it will be further diluted. However, if it doesn't have the proper residence time, then you won't be combusting everything as fully as it should be. So it is a balancing act and that is where the computer control allows the unit to maintain the

1800 degrees at the one second residence time to efficiently make it work right.

MS. MERRELL: Thank you.

MR. BALL: You indicated that the EPA's screening numbers, threshold numbers all relate to cancer risk. Is that what you said?

A. Pretty much, yes.

MR. BALL: Are any of the other, are any of the pollutants or species listed in, on the list, do any of them carry other dangers other than cancer?

A. There -- well, I'm not a toxicologist in the sense that I don't know what all of those were related to. I do know that you can have materials enter your body in different ways. It could be that some of these risks are related to damage to other organs other than through cancer. It could be damage to liver, kidney, whatever that would be more acute than a chronic injury like cancer.

MR. BALL: We heard, I think we heard some testimony at the last hearing that there were, there was hazard from certain chemicals for renal failure, for various other physiological problems. And I'm just wondering if we are using one criteria which is cancer risk when we ought to be also looking at some other

criteria.

A. The EPA list is supposed to be looking at the critical risk for whatever that particular hazard, this air pollutant is. So if the thing causes renal failure and it also causes cancer, then the concentration that would produce its effect at the lowest concentration, the lower of the concentrations would be the one they would use for screening.

MR. MACOSKEY: Excuse me, can I add something to that? My name is Chris Macoskey. The CEC author of the report. In response to your question, sir several of the constituents are non-carcinogenic, and several are carcinogenic. When one does health evaluation, there are two criteria.

There is the generally speaking the one-in-a-million cancer risk which we talked about, there is also a hazard quotient which is generally one for non-carcinogens.

So, when you are evaluating health risk with something like hydrogen chloride which is not a carcinogen but it can be an irritant. You would be comparing it to a hazard quotient as opposed to the one-in-a-million cancer risk.

MR. STIEGEL: Did you look at those.

MR. MACOSKEY: Oh, yes, that all part of those.

MR. BALL: Thank you.

MR. JOHNSON: Anything else you want to put in the record?

MS. RIBAR: Chris, can you elaborate on what the results were, briefly?

MR. MACOSKEY: Well, yeah, all of the evaluations of the non-carcinogen showed that there was no, that they were below the hazard quotient of 1 -- wasn't any from the non-carcinogen. The only constituent that was of concern as Dr. Penkala pointed out was the accidental Chromium VI was marginally in excess -- the health risk.

MS. RIBAR: What do you mean by marginally?

MR. MACOSKEY: Oh, slightly over, where the acceptable risk is one in a million, it was 1.4 times 10 to the minus six, slightly over the one threshold.

MS. RIBAR: So, one in 1,400,000?

MR. MACOSKEY: One in a million, 1.4 in a million as opposed to one in a million.

MS. RIBAR: Mr. Ball, I believe you had asked about why there was no more recent testing. I believe Mr. Rahill we would introduce can address that.

BY MS. RIBAR:

Q. Can you introduce yourself please and give the Council a brief background on your experience at Matthews?

A. My name is Paul Rahill, R-A-H-I-L-L. I am president of Matthews International Cremation Division.

Matthews is a local Pittsburgh company since 1850. My experience has been in the design and manufacturing and testing of cremation equipment. I have been employed in this profession since 1975.

Q. And with regard to Mr. Ball's question about the testing, why aren't there more specific, more recent test results?

A. The, there is very accurate current test information on the common emissions associated with crematories which would be particulate emissions, SO2, carbon monoxide, Inconel, other very common emissions. Those that we don't have quantitative current data on would be the type of items that are on that National Commission's inventory database that they refer to for the modeling that they do.

The reason we don't test for those is that nobody has requirements for them. So, there is no need to test for them. So, when it is required on the rare occasions

where modeling like this is done, we all use the EPA's database for that information.

Q. And would you consider Chromium VI not to be a common, is that an accurate to say it is not a common emission from cremations?

A. I can't think of one instance in North America where that is a regulated emission on a crematory.

MR. BALL: What is the source of that so that --

A. It can be, we had this discussion, it is, there are trace elements in almost everything organic. But in that test that is referred to in 1992 I think is where it came from, that was from source in California. It could be from the wooden coffins that were used at the time, the particleboard caskets. Other than that, I'm not sure where it would come from.

MR. BALL: I have seen it associated with coal fire electric plants, and I don't see any coal in this place.

A. No, no. But if you look at the trace elements contained in the human body, very minute traces.

BY MS. RIBAR:

Q. Do you know what substance was used in that 1992 cremation that has been an issue here?

A. The type of equipment?

Q. The equipment and what else was cremated with the body?

A. I don't know what was cremated with the body. It might be documented in the original test documents, but the equipment was an All Furnace crematory unit which is a very old model at the time it was tested. We actually acquired that company back in the 90s. We don't even manufacture that style of cremation equipment, it is all been replaced with newer technology.

Q. There was some question at the last hearing about what types of chemicals, substances and items are placed in the units for cremation. Can you give some detail on that?

A. Well, typically according to the Cremation Association of North America and their data, typically cremations are conducted in cardboard containers. 82 percent of all cremations are in some type of cardboard container.

About ten percent use wood caskets. And five percent use some sort of particleboard. And the remaining three percent are probably some sort of a body bag from a hospital or some type of unit like that.

The industry has made some changes over the

years, especially as regard to the 1990 Clean Air Act. They voluntarily eliminated chlorinated plastics from the manufacture of caskets, for instance. So there were questions back in the 1990s about HCI emissions and that was an easy fix for the industry just to eliminate using chlorinated plastics. They also stopped using soft metals for orientation a lot of caskets were being cremated. So the industry has taken proactive steps towards eliminating emissions.

BY MS. RIBAR:

Q. Dr. Penkala, one additional question for you. You had stated that the screening should compare maximum hourly concentrations against the EPA risk screen. I want the Council to be clear on what that means. Can you explain the maximum hourly concentrations?

A. Maximum hourly concentration effectively would be the number that would apply were the operation of this particular unit to take place essentially 8,760 hours per year, effectively assuming that the maximum that under all conditions would be covered by that particular number.

It is simply a measure of let's say safety to do that rather than to make estimates on what the actual operating conditions and times would be since

effectively you can say well, concentration is 100, but if I only operate 10 percent of the year I have it down to 10 and effectively by adjusting your hours of operations you can meet any standard you wish.

Q. And the 8,000 plus hours, would that be a 24/7 operation?

A. Yes.

Q. So that would not account for the warmup period cool down period and removal of remains, if you are operating 24/7 --

A. If that is outside the two hour circle for actual cremation, that is correct.

Q. So that is assuming a two hour cycle 24 days, 24 hours a day, 7 days a week, 365 days a year?

A. Yes.

Q. Do you know if it is possible for a unit to be operated that much?

A. I would say it is impossible for a unit to be operated that much.

MS. RIBAR: If I can have a minute? If I could have a minute to make sure that Chris doesn't want to address anything else Dr. Penkala raised. Can we take a break, two minutes?

CHAIRMAN ATKISON: Two minutes. Then we

will take testimony from the audience.

MR. JOHNSON: Mr. Atkison, we've received a written request from Mr. Jerry McDevitt to intervene in this matter. He is a resident in the nearby vicinity. I know that Alice Mitinger and John Kamin are also here on behalf of clients who, although we have not received a written request, they have notified me they intend, are requesting to intervene as a party to this proceeding. So I would suggest that when Ms. Ribar is finished with her presentation that they be given an opportunity to --

CHAIRMAN ATKISON: Short break.

MS. RIBAR: Thank you.

(Recess held)

MS. RIBAR: Before we close our case in chief, there was a lot of testimony at the last hearing regarding concerns with devaluation of property surrounding the funeral home and crematory. I would like to present an additional witness to you, Brian Kelly of Kelly, Reilly, Nell & Barna Associates, Inc. to address that in particular.

BY MS. RIBAR:

Q. State your name.

A. Good evening, my name is Brian Kelly, I am a real

estate appraiser with the firm Kelly, Reilly, Nell & Barna & Associates located in 3535 Boulevard of the Allies, Oakland.

Q. Can you just give a brief educational background and work experience, please.

A. I have been appraiser for 20 years. I am a general certified appraiser. I also am a member of the Appraisal Institute and I hold the MAI and SRA designations with the Appraisal Institute.

Q. Mr. Kelly's resume is attached as tab 40 on the supplemental documents that we have given to you this evening.

Mr. Kelly, are you familiar with this specific location at 3287 Washington Road?

A. I am.

Q. Did you visit the site prior to this evening?

A. I did. Very, very well.

Q. Explain what experience you have with this area?

A. I have appraised numerous buildings up and down Route 19 directly surrounding the subject property as well as I have been involved in residential appraisals all throughout Peters Township.

Q. So you are very familiar with Peters in general and you are very familiar with this specific location?

A. I am.
Q. When did you visit the site?
A. Well, I have been there appraising properties there for the past 20 years, so, but I did actually go and look at the property from all angles one day this week.
Q. And if you were to give an opinion as to a neighboring property owner as to the value of their property after this funeral home would be installed, what would that opinion be?
A. Well, the funeral home itself would not have any impact on the market value of the surrounding properties.
Q. Are you talking commercial and residential?
A. I was talking residential. There is other commercial properties surrounding both sides, residential would have no impact on value.
Q. And the residential properties that were there, just to clarify, were those there before or after the commercial properties on Route 19?
A. The residential properties were built, I believe slightly after the property in question. I believe that building was probably constructed in early 1990s. The houses in question maybe in the late 1990s, or early

2000s.

Q. Any chance that building could be there prior to 1990?

A. Yes.

Q. Okay. Like you said it was there since the 1990s?

A. No, I don't know when it was constructed, I didn't have history on the property.

Q. So it is your opinion then, what about the crematory, does installation of the crematory into the funeral home change your opinion?

A. No, I appraised a number of funeral homes with crematoriums in them as well. I have appraised houses surrounding funeral homes as well as crematoriums and there has never been any discussion on the impact of a crematorium to the property.

Q. Have those all been in the Pittsburgh area?

A. Yes, Western Pennsylvania.

Q. Any questions?

MR. ARCURI: How would you know if there was a crematorium in the neighborhood?

A. Well, it is a funeral home and there are very few crematoriums, so really as a property owner you don't know if it is there unless you are specifically --

CHAIRMAN ATKISON: Folks come on. That is grade school stuff. Okay? I'm serious. Be respectful.

MR. ARCURI: I forgot my train of thought.

CHAIRMAN ATKISON: Sorry, not my fault.

MR. ARCURI: I know.

CHAIRMAN ATKISON: You were saying how would you know there is a crematorium.

MR. ARCURI: Right, when you would value residential property, how would you know that there was a crematorium within so many feet of it, so many miles of it, how would you ascertain that?

A. I don't, it is not required to. I'm looking at the house residential dwelling and I look at things surrounding that property that would impact the value of the property. Therefore, you know, in this particular instance if there is residential housing, commercial, front and on the backside of it, then you are looking at retail uses that surrounds that property. So, that is what you are looking at.

MR. STIEGEL: So you are looking at this property with the assumption that if somebody going into the home would have no idea there is a crematorium there?

A. Not unless they are looking for it. You are

buying the.

Home you are looking to see what surrounds it.

MR. STIEGEL: If there was a sign on the building saying crematory, would that change your opinion on the value of it?

A. No.

MR. ARCURI: When were you retained to provide your opinion here tonight?

A. I'm not sure the exact date, maybe two, three weeks ago.

MR. ARCURI: How much are you being paid for your opinion?

A. I'm being paid on an hourly basis based on my time.

MR. ARCURI: And how much is that an hour?

A. Is that relevant to the case?

MR. ARCURI: I'm asking a question, I think you have to answer.

MR. JOHNSON: It is relevant.

A. I'm being paid $175 and hour. As I said, I have been a professional for 20 years. I hold the MAI and SRA designations which are covered by the Appraisal Institution.

MR. ARCURI: What other pieces of commercial

property can you specifically state that you have appraised in Peters Township in the last five years?

A. I can't specifically state them because of confidentiality with my clients. But I will tell you within direct view of that property there is probably three or four, maybe more. Actually, one directly across the street.

MR. ARCURI: Car dealership?

A. I can't tell you which one, I have, it. If you owned the property, you wouldn't want me to disclose what I have done for you as well.

MR. BALL: How many properties have you, how many residential properties have you appraised where you specifically knew that there were crematories in the area?

A. I can't recall, as an appraiser I really never looked for a crematorium before. I discussed it with funeral home owners, owners of crematories before this case. And that is the extent of what I have known about crematories in funeral homes.

MR. BALL: But you did make the statement that a crematory being located there would not impact property value.

A. No, because you have to, you are looking to see

what the impact on that retail corridor will have on my house, if I would buy that property. Is that going to impact the value of my house having those retail properties surrounding me.

MR. ARCURI: What about a fast food restaurant, let's say you had a house and it was right behind a fast food restaurant, would the fact that the fast food restaurant there affect the value of that residential home?

A. Again, I haven't done a specific study on a fast food restaurant, therefore, I cannot tell you what the fast food would have opposed to an office building.

MR. ARCURI: Well, let me ask you a question, if you had two houses and they were both identical and one was smack next to Burger King and one was 20 miles away, in a purely traditional residential, wouldn't there be an impact on the value?

A. There is negative impact on value, that is called external obsolescence, that is your property being affected by surrounding properties.

MR. ARCURI: Right.

A. And that would have direct impact on the house that is immediately beside it as opposed to one that is 20 miles away.

MR. ARCURI: Thank you.

MS. MERRELL: The way you have just described the situation, that would exist with the residences located directly above that opposed to the crematorium.

MS. RIBAR: I think it is important to note that there is commercial there regardless of what it is. Correct me if I'm wrong, I think your testimony is the impact of the commercial district is not affected by the different types of commercial uses that go in there, commercial, whatever is allowed, the commercial is allowed?

A. Correct.

MR. STIEGEL: I think there is a negative stigma that goes along with burning bodies as opposed to selling Halloween masks.

MS. RIBAR: That is why we are here.

MS. MERRELL: I think the other concern I have is similar to the concern raised about the other data, that there is a limited amount of data that you are looking at. You haven't actually evaluated or appraised houses next to crematoriums or not that you knew of. So, I'm trying to understand, I understand your comment about the commercial corridor.

I'm just trying to understand the relevance of your testimony. I believe you are well qualified, but you haven't convinced me that you actually looked at the data, specific type of data.

A. I understand. In fact, I did interview several funeral home owners and the specific case was a property crematorium down in Lawrenceville where I interviewed the owner of the D'alessandro Funeral Home in Lawrenceville and I asked him if there has ever been any opposition to his property being adjacent to residential housing. And the comment he gave me was, the gentleman that lives behind that facility said to him, you know, which is 25 feet behind his property, that it is closer for me to go when I die. So he had no negative.

MS. RIBAR: You make a good point, I think to clarify the issue, you can certainly ask Mr. Kelly his opinion if he were to appraise the homes behind the property right now, would that change once the funeral home is installed, and I think he already said in his opinion is no.

MS. MERRELL: Once the funeral home is installed isn't exactly the question. Once the funeral home and crematorium.

MS. RIBAR: I asked that as well.

MS. MERRELL: The funeral home is not the issue.

A. All right, the opinion would be if it were toxic or an issue with the environmental hazards to the surrounding houses then there would probably be a negative impact on value. But as has been discussed and what I have learned throughout the case there is no negative, there is no impact, environmental impact.

MS. MERRELL: When you do your appraisals, I' sorry to interrupt, when do you appraisal, you do an evaluation based on comparables.

A. Yes.

MS. MERRELL: And various factors. Do you, what validity or what percentage of the assessment is emotional, what people perceive, perception perhaps, perception is the correct term?

A. You are saying what is the as Mr. Arcuri said, what would the impact be of a house that is situated ed adjacent to a retail center as opposed to a house three blocks over in the subject plan, there would be an impact. Because nighttime you see retail lights, you see cars. So, I don't know if you call it emotional, but you, it would be based on surrounding uses.

MS. MERRELL: Thank you.

MR. SILVESTRI: You interviewed some funeral home directors and their opinion is that the funeral home has no affect on the value of adjoining property, is that the essence of your testimony?

A. No, the question was, was it, the crematorium has had impact on the surrounding uses as well.

MR. JOHNSON: You ever appraised a residential property that is adjoined to a crematory.

A. Probably. I appraised thousands of properties in my life.

MR. JOHNSON: You don't know you have done that?

A. Absolutely, I have. I know a specific instance where I have.

MR. JOHNSON: Did you take the crematory into consideration in making the appraisal?

A. No.

MR. JOHNSON: Why not.

A. Because it didn't, it wasn't an issue nobody had brought up, the buyer of the property, the seller, the broker, nobody had made it part of the analysis.

MR. JOHNSON: For purposes of the appraisal, isn't perception important to you?

A. Absolutely. But again --

MR. JOHNSON: You don't think there is a negative perception that goes along with the crematory?

A. I didn't find that it did. In my opinion there is no negative impact on value.

CHAIRMAN ATKISON: Okay.

MS. RIBAR: We rest.

MR. JOHNSON: I previously identified that Mr. McDevitt and Ms. Mitinger and Mr. Kamin is here on behalf of either themselves or clients. Do you have any understanding how you should proceed and what order you want to precede?

MR. McDEVITT: I don't have any understanding but I will certainly be glad to go first. I don't know what your format is.

My name is Jerry McDevitt, I am a resident of Peters Township since 1987. I live on 110 Sherborne Drive, and I am a lawyer. And I'm here to represent my personal interests. I have a presentation I wish to give you later, but I do have some questions that I would like to ask the last witness and perhaps Dr. Penkala.

The cross-examination will be by definition not complete because the data that you need to understand what is going on is not before the Council

which I will develop for you later.

But if I may, I would like to ask Mr. Kelly, the last witness a few questions. Just a few questions for Mr. Kelly.

BY MR. McDEVITT:

Q. You indicated you work by the hour?

A. Yes, sir.

Q. How many hours did you spend on this appraisal?

A. It has been 20 years of experience as well as reading the documents.

Q. Sir, that is not my question.

A. I don't have the document here with me.

Q. My question is since you were retained for purpose for which you came here today --

A. I do not --

Q. Let me finish my question. How many hours did you spend studying that?

A. I do not have it documented here with me.

Q. Ten?

A. I do not have it here.

Q. 20?

A. I don't have the number.

Q. What have you charged here today?

A. Zero.

Q. Zero. I take it you disagree with the last person they brought in here who tried to tell everybody residential values would actually increase if a crematorium is put in?

A. I --

MS. RIBAR: I object. There was no such testimony from an expert witness. That was a comment that I made based on the Penn State study presented to you where that comment was specifically noted there was a specific notation in that study that some property values surrounding that crematory did increase.

Q. I'm referring to witness they brought in for Audia Group that came in here and testified in one of the more laughable segments the property values would actually increase if the crematorium was present. I will rely on Council's memory for that.

Now you said, sir, that you don't consider this fact the crematorium is next to houses would have a negative impact because I think you said there is no environmental impact, right?

A. From what these gentlemen have said.

Q. You are relying solely on that?

A. Yes, I am not an engineer, I don't study these things, it is not my profession, I'm a registered real

state appraiser.

Q. If there is a negative impact on the property value, then I think your view would change, correct? Let me rephrase that. If, in fact, the science is wrong here and there is a negative impact, then your opinion would change, I take it?

A. I would have to do the analysis. Could be.

Q. And are you familiar with Fannie Mae?

A. I am.

Q. I dug out, sir, an official appraisal that I got when I bought my home in 1999. Would you care to guess what one of the questions is that they ask you on the official appraisal?

A. If there is any environmental impact?

Q. Let me be specific and read it for you, sir. Page 1, adverse environmental conditions such as but not limited to hazardous waste, toxic substances, present in the improvements, on the site, or in the immediate vicinity of the subject property. How would you answer that question?

A. If it has been proven that there are no environmental problems with the surrounding properties, I would answer no.

Q. Is the reason that question is asked is because

the answer to that if there are environmental conditions present that affects the appraisal in a negative way?

A. I think that has specifically to do with that property. Do you have 55 gallon drums on your property, do you have propane tanks? That is what that question is pertaining to.

Q. That is what you read that to mean?

A. Yes, sir.

Q. It says, present in the improvements, on the site or in the immediate vicinity of the subject property.

A. Right.

Q. What do you consider to be the immediate vicinity of the crematorium?

A. If it is environmentally hazardous to that property, then.

Q. How about the house right behind it?

A. Has it been proven to be an environmental hazard to the property?

Q. Within 150 feet, do you consider that to be within the immediate vicinity of the crematorium?

A. Sure.

Q. If that crematorium is spewing out methyl mercury, would you want your children to breathe that?

A. I don't know anything about methyl mercury, sir.

Q. Do you have any idea of what the value of the properties are?
A. I have a range.
Q. What would you guess they are?
A. Ranging from 350 to a million.
Q. To a million. Do you think somebody who is going to put down a million dollars for a home has no choices but to buy a place next to a crematorium?
A. They are looking at the surroundings and they are not going, they are going look at retail corridor this that this property surrounds.
Q. If you spend a million bucks, sir, on your dream house --
A. You are not going to build it into a retail area.
Q. Let me finish the question then I will give you the privilege of answering.
A. Yes, sir.
Q. If you are going to spend a million dollars on your dream house, sir, are you going to go look around and see if you find one located next to crematorium?
A. I am going to look in an area that doesn't back up to a retail corridor.
Q. But you would --
A. To build a million dollar house.

Q. You wouldn't look for a house that had a crematorium present, would you? And if you had children, you knew there were risks associated with that, would you put your children in that environment? You sir?

A. I'm not familiar with what the environmental hazards are, so I can't answer the question.

Q. Well, if you knew that mercury was coming out of there and mercury is a powerful neurotoxin and any exposure creates a risk to that child, would you buy that house?

A. No, if it were proven to be detrimental to their health, I would not.

Q. I'm sort of curious now, if you are marketing these houses, with all this, somebody comes to you now says I'm interested in a property on Sussex, are you going to tell them about this? Are you going to tell them there say crematorium down there, just so you know, or are you not going tell them?

A. If it has no impact on value, there is no reason to tell them about it.

Q. So you wouldn't tell them?

A. No.

Q. You would not tell a prospective buyer that there

is a crematorium?

A. There is no reason to tell them.

Q. And have you ever walked down Sussex?

A. Yes.

Q. Do you know which way the wind blows?

A. Every way.

Q. Have you ever turned the corner at Sherborne and walked down Sussex?

A. Probably.

Q. Blow your hair back? Seriously?

A. I didn't recognize, I have no idea.

Q. Do you know which way the prevailing winds are from the crematorium stacks?

A. From various different directions, I bet.

Q. Did you bother to look?

A. No.

Q. Did you bother to ask?

A. There was no reason to.

Q. Have you ever worked for Houston Harbaugh before?

A. Yes.

Q. How many times?

A. Various times.

Q. Did you ever work for Ms. Ribar before?

A. I have.

Q. How much money have you made working for her?

MS. RIBAR: I'm sorry, this is really --

Q. Goes to bias. Bias is always material.

A. It is because I'm a qualified professional.

Q. That begs the question. Bias is always material. How much money have you made working for Ms. Ribar doing this sort of things.

MS. RIBAR: I can answer that --

Q. I didn't ask you, I asked him.

A. I can't recall. It has been many years.

Q. How many times?

A. 20.

Q. 20. This is the 20th time you have testified in matters involving --

A. I have not testified, I have done different properties for different reasons.

Q. No further questions at this time.

MR. JOHNSON: I have been requested by other counsel if they could also participate and cross-examine these witnesses. I think that is appropriate way to proceed. So with that in mind, Alice Mitinger is here and John Kamin is here on behalf of their clients.

I would suggest that they be permitted to participate at this point.

Mr. Kamin, can you identify your client and are you asking to be intervene as parties to this matter?

MR. KAMIN: My name is Jonathan Kamin, K-A-M-I-N. I'm with the law firm of Goldberg Kamin and Garvin, our address is 1806 Frick Building, Pittsburgh, PA 15219. I'm here on behalf of the residents of Sussex Drive.

Specifically, I can list all nine of them for you but they are basically run the 200 block of Sussex Drive and they are within, the closest is within less than 500 feet to the property. I think the further is right around 800 feet from the subject. I will provide, I have spoken with Mr. Johnson. It is our request to intervene as a party. We believe we have standing under, because we have a material property interest that is within the vicinity of the property.

So specifically the Bellicini's are the closest to the property. They are probably within probably 400 feet.

MR. JOHNSON: On that basis I would recommend Mr. Kamin be recognized on behalf of the client parties to the matter.

MR. ARCURI: He will supply us a list.

Q. I will supply all nine for you.

MR. ARCURI: Okay.

MR. JOHNSON: All right.

BY MR. KAMIN:

Q. Mr. Kelly, you are an MAI, is that correct?

A. I am.

Q. Can you briefly explain to Council what that means?

A. I'm a member of the Appraisal Institute. I have been through peer review. I have taken a two-day comprehensive. I went through, I created a demonstration report which was provided to the Institute and was provided a passing grade.

I have thousands of hours of experience which is required in order to become MAI. I completed all those in 19 -- mid 2000s. I can't remember what year I had my MAI, since 2000, mid 2000.

Q. As far as your work on this specific property, can you describe briefly again because I don't think it was clear, what was the work you did to go ahead and analyze the property.

A. I have read some of the documentation that was provided to me from some of the professionals. I have also interviewed several funeral home directors both

with crematoriums and without. And I reviewed some of the past appraisals that I have done in areas that had crematoriums.

Q. So you haven't done any specific study that would tell what the value or the impact of the value was of the crematorium on a particular piece of property, you merely reviewed your database, correct?

A. I have. I have not done a specific study.

Q. Now to do eye specific study, I want to outline the scope and I want you to tell me if this is what would be required do a professional appraisal report on the value. You would first have to go ahead and identify properties that were surrounded by crematoriums, correct?

A. Correct.

Q. And after you had identified those properties, you would have to go ahead and make an analysis as to whether that crematorium operated at this same level or the same type of equipment as the one that is proposed, correct?

A. Correct.

Q. Then after making that analysis, the next thing you have to do is you have to look for sales of property that occurred surrounding the crematorium, correct?

A. Correct.

Q. And then to determine if there was an impact on the value of those specific properties, you would have to look and see whether they have resold after a crematorium had been put into the neighborhood, correct?

A. Correct.

Q. So you would have to look at the property before a crematorium coming in and then you have to look at the value of the property after the crematorium came in?

A. Yes.

Q. And then in order to establish that value you also have to go ahead and do, so you need two sales of the same property, is that correct?

A. Of similar properties.

Q. Okay, so two sales of similar properties within a reasonable time period that would be both before and after, is that correct?

A. Correct.

Q. And then in order to go ahead and determine whether or not the crematorium had any value, you would then have to go ahead and look at the local municipality to see if there were any building permits that had been pulled, if there had been any changes in assessments or alterations to the property, correct?

A. Correct.
Q. And only after determining that there were no alterations to the property you would then compare the first sale with the second sale to see if there was a change in value?
A. Correct.
Q. So, so far I have accurately described what appraisal methodology would be to determine whether or not a new land use had an impact on value, is that correct?
A. Depending on the scope you asked me to provide, that would be what you could do to that extent.
Q. And as part of that analysis, you would need more than one sale, you need multiple sales to test as to whether or not that impact was related to the crematorium, is that correct?
A. You could, yes. Multiple sales, two sales.
Q. Right, you can't do it on one sale?
A. No.
Q. Now, have you done, have you followed any of those steps with regard to the testimony that you offered this evening?
A. No, the scope was not to provide a detailed analysis of it. It was if I had done properties, if it

had ever impacted values the properties I have appraised in the past.

Q. And as far as impacting values of properties you appraised in the past, as part of your scope of work or analysis of problem analysis, did you review whether or not crematoriums had been placed around or near those properties prior to conducting, or performing your appraisal?

A. No, I haven't, because they were never proven to be an environmental detriment to properties surrounding it, so it was not required.

Q. So, as far as it not being required, you are saying it wasn't required for the scope of the appraisals that you perform previously?

A. Correct.

Q. But do you know of any of those properties you appraised if any of them came before or after a crematorium, and if any of them sold before or after a crematorium?

A. I didn't perform that analysis.

Q. And don't you think that analysis would be necessary to accurately determine if there is going to be a detriment on property values by the addition of a crematorium?

A. No.
Q. Why wouldn't that be necessary to tell if an addition of crematorium would hurt that?
A. In my profession, in my experience crematoriums have never been proven to be an external problem on surrounding properties, therefore, we have never needed to look at it that closely.
Q. And if you knew that it was, that there was an external problem in crematoriums on surrounding properties, would that go ahead and change your analysis that you just did?
A. It would.
Q. Now, with respect to the homes on Sussex, do you know the difference in elevations between the street that the homes are situated on and Route 19?
A. I don't know the exact elevation, probably 50 to 60 feet above?
Q. And do you know if the proposed crematorium would have a smoke stack?
A. From what I understand it will.
Q. And do you know the height of those smoke stacks?
A. Not the exact height.
Q. Do you know if a crematorium smoke stack would go ahead and have emissions that would come out of it?

A. From what I understand it has heat but no emissions.

Q. Let's just assume that you are correct it has heat that is coming out of it. If there is a smoke stack of a heat source that is 10 feet below somebody's residential backyard, do you think that will have a negative impact on the value of the property?

A. Depending on the distance if it is going to protrude into the adjacent property.

Q. So, when you say it, you are talking about the emission?

A. Emissions or heat.

Q. Do you know if there is any plan by the applicant to go ahead and to control those emissions so that they do not protrude onto the adjacent residential properties?

A. I don't.

Q. Do you know if hot air generally rises or sinks.

A. It rises.

Q. So, would it be safe to assume that it would rise 10 feet up to the adjacent residential property?

A. Again, I'm not an environmental, I don't know how far it rises.

Q. In any of the appraisals that you looked at to

make this determination as to impact to value, did you look at any properties that were above the elevation of the facilities?

A. I see the one specific case ir was at the same level as the facility.

Q. So, no --

A. To answer your question, no.

Q. You previously appraised residential properties that are adjacent to commercial uses, correct?

A. Yes.

Q. Have you previously appraised residential properties that are adjacent to industrial uses?

A. Yes.

Q. And as far as a residential property adjacent to an industrial use, are there different factors that go into valuing that versus commercial use?

A. Appraising the residential versus the commercial?

Q. Appraising a residence situated next to commercial versus a residence situated next to industrial?

A. Yes, depending on the neighborhood you will try to find comparable houses in that neighborhood.

Q. And from a part of your analysis is doing what we call a residential characteristics analysis, you look at

surrounding land uses, correct?

A. You do.

Q. And would commercial be generally more or less desirable than industrial as surrounding land use?

A. I haven't done the specific analysis, but I would say that industrial depending on your proximity to the plant may be in what it is throwing off may have higher negative.

Q. Nothing further for this witness.

CHAIRMAN ATKISON: Thank you, sir.

MR. JOHNSON: Ms. Mitinger.

MS. MITINGER: My name is Alice Mitinger with the law firm of Cohen & Grigsby, 625 Liberty Avenue, Pittsburgh 15219. M-I-T-I-N-G-E-R.

And I have no additional cross-examination at this time but I would like to note that I'm entering my appearance on behalf of Thomas Homes, Inc., which owns property immediately above the proposed facility and that's the subject property as well as Mr. Jeff Thomas who owns a house on Sussex Way which is about 75 feet from the proposed property.

But I don't have any questions at this time and can provide the board with a formal notice of intervention.

MR. JOHNSON: Do you have any redirect of your witness?

MS. RIBAR: No.

MR. JOHNSON: Thank you. Mr. McDevitt, are you still here? Do you have anything that you want to present at this point?

MR. McDEVITT: You mean of Dr. Penkala?

MR. JOHNSON: No, on behalf of yourself as a party in this matter.

MR. KAMIN: Excuse me, Council, for interrupting, I have a number of questions for Dr. Penkala and also a number of questions for CEC, I don't know from an order standpoint.

MR. JOHNSON: You are absolutely correct.

BY MR. KAMIN:

Q. Good evening. Dr. Penkala, I had an opportunity to review the transcript of the prior testimony in both of your reports. I would like to ask you a number of questions about some of those items as well as your testimony this evening.

A. Okay.

Q. The first item which I would like to ask about is the scope of your engagement. You were engaged by Peters Township, is that correct?

A. Yes.

Q. And as part of being engaged by Peters Township, your specific scope was to review the information that was supplied to you by the Township including the CEC report, let's call it the CEC-1, correct?

A. Yes.

Q. And as part of reviewing that report, the Township relied on you in terms of your expertise and issues of air science and meteorology, is that correct?

A. Correct.

Q. Did you do any studies whatsoever on the language and definitional issues within the Township zoning ordinance?

A. No.

Q. So, you were not asked to opine on the appropriateness of the curative amendment proposal, is that correct?

A. That is correct.

Q. You were not asked to opine whether or not the ordinance of the Township was exclusionary?

A. That is correct.

Q. Your specific scope of work was to address sort of the science of the crematoria and information provided to you?

A. Yes.

Q. So, when Ms. Ribar asked you earlier this evening whether or not you thought that the application should be voted on favorably or should be approved, your response was limited to the question of the science based on the information that you had been provided, is that correct?

A. Yes.

Q. Do you have any land use background whatsoever?

A. No.

Q. You weren't, so you weren't testifying as a land use expert, you weren't testifying as a zoning expert?

A. Right.

Q. Now, with regard to the information that has been provided to you, I think you testified earlier that you did not go ahead and seek out any original source information because there is a lack of original source information?

A. I did not seek out any original source information because that wasn't part of my task as I saw it.

Q. So, is part of your task as you saw it was merely to review the information that had been supplied?

A. Correct.

Q. If the information that had been supplied to you was not complete information, then your opinion is only as good as what you got?

A. Where I saw a potential incompleteness of information, I indicated the potential need for such documentation.

Q. Did you attempt to go ahead and seek out the original reports of the information that CEC relied on in making its conclusions?

A. No.

Q. Did you attempt to go on the internet to see those individual sources of those reports?

A. No.

Q. And as part of your analysis, did you go ahead and interview any of the authors or drafters of those reports or any of the studies such as the Penn State study?

A. No.

Q. Now --

A. Correct my assumption, the Penn State study had nothing whatsoever to do with the air dispersion of that source.

Q. But you didn't?

A. Is that correct?

Q. I'm asking you the questions, I just want to understand what you looked into to understand. Now, as far as the analysis of the information that CEC provided to you, did you ask them to go ahead and get any manufacturer specific information?

A. I didn't ask them to do anything. I indicated that that might be useful to their case in the sense of not having completeness. I don't believe potentially it is a -- go ahead, ask the question again because I'm not sure I understood your question.

Q. Well, as part of your analysis, did you ask them for any backup information from the manufacturers to operations?

A. In my summary and conclusions part 2 I indicated in number 2 that CEC needs better documentation than per vendor. That wasn't asking them to provide it, it was an indication that I saw a potential need. I didn't tell them to do anything.

Q. Right, but you identified it as sort of a deficiency in the data that was supplied to you, correct?

A. I thought it would add credibility to their report. I thought that they had potential for a better source of information than simply quoting per vendor.

Q. As part of your review function you would want the best available information, correct?

A. Every scientist wants the best available information. Sometimes it isn't available.

Q. Now, I would like to read to you a statement, and I would like you to tell me if you think this describes what a crematorium does. Is there a process associated with cremating bodies?

A. Yes.

Q. And as far as that process, is smoke created?

A. Not necessarily.

Q. How about noise?

A. If you would define smoke, we would be able to have a better idea as to what whether smoke is created.

Q. How about noise, what about noise, is there any noise spill-off?

A. How quietly can you talk? Noises are another relative measure.

Q. How about soot?

A. Again, soot is a relative measure. In this air right now, we have soot, we have particulates, we have various chemicals.

The fact of the matter is that unless and until you measure them with sufficiently accurate and precise

instrument, you don't know what it is.

Q. How about dirt?

A. Same answer.

Q. Odor?

A. Same answer.

Q. Now --

A. I mean, walking in you can smell after shave, you can smell perfume, powder, so forth, so on. If you consider them to be objectionable, as some people have sensitivities to various materials, for them it could be a problem. For most people it would not.

Q. Now, but, the crematory, the information supplied by CEC and the information that you reviewed that was supplied by them stated that they were capable of operating their business controlling all these items, correct?

A. They indicated they could operate their business in compliance with the regulations of the Pennsylvania DEP, and to the extent that they would not create and air pollution problem.

Q. So, they were able to control these external effects, is that a fair statement?

A. What is external?

Q. It means outside of the business.

A. Outside the business itself, yes.
Q. Now, are you familiar with Pennsylvania Department of Protection's regulations on various what we would call hazardous pollutants, volatile organic compounds, all of the items that would be on what we would consider to be DEP's list?
A. Specific levels on specific things, I would have to refer to their reports, but they do exist.
Q. Did you look at any of those reports as part of your review analysis of the CEC supplied information?
A. The criteria for conditions for crematories which refers to SO2 and particulates.
Q. Did you, are you familiar with something called DEP's state-wide health standard?
A. Which particular chemicals are you referring to?
Q. Well, right now I'm just asking about the standard, I will get to the chemicals?
A. It is fairly extensive.
Q. And are you familiar that there are different standards within DEP standards for different classifications of uses so there is a state-wide residential standard and a state-wide commercial standard?
A. Okay, in this case we are talking about standards

for emissions as opposed to standards for ambient air, correct?

Q. The answer is yes, but I believe there is a difference. So, I want to focus on this state-wide health standard promulgated by the DEP. There are air quality standards and then there are also what we would consider to be volatile or organic compound standards and other specific pollutant standards, that is correct. Is that correct?

A. There are air pollutant standards, correct. There are standards for hazardous chemicals.

Q. Are you familiar with whether there are standards for soil concentrations of hazardous chemicals?

A. I'm not a soil chemist. There may be.

Q. Are you familiar whether there are soil vapor standards that is promulgated by the DEP?

A. Same answer.

Q. As far as, are you familiar with there are different standards for indoor air quality and outdoor air quality, correct?

A. I don't believe that the state regulates indoor air quality.

Q. So there aren't different standards or there are different standards?

A. I don't believe that the state regulates indoor air quality where they can go ahead and say your indoor air violates our standards.

Q. Now, as far as the materials that are emitted from what we will just call the smoke stack, do you know as part of your study and your experience, do you know where those materials go once they are emitted?

A. Everywhere.

Q. It is based on factors of wind direction, correct?

A. Yes.

Q. Based on weather?

A. Yes.

Q. Based on perhaps sunlight or ambient light have some effect on them?

A. Yes.

Q. And once the materials get blown, do they have certain characteristics of dispersion based on how far they are away from the given pollutant source off point discharge?

A. There are various measures of dispersion, it is not necessarily a matter of how far away they are.

Q. Some of the different measures that you are talking about would depend on the weight of the

chemical, correct?

A. Very few air contaminants have a problem with weight. Most -- well -- if you are talking about an atom that has a particular molecular weight and you want to talk about whether that is an effect on its rate of which it falls, that is usually not a material factor.

Q. Let me ask the question this way. If I'm putting out 199 pounds of mercury a year out of that smoke stack?

A. Yes.

Q. Where does it go?

A. Potentially everywhere.

Q. Does part of your engagement with the Township, did they ask you to go ahead and review the original source material or to go ahead and collect any of your own data?

A. They asked me to review the original source material supplied by CEC. At some point I discussed the idea of providing some background information on the specific case of mercury.

Q. Do you have, do you know whether the specific oven that the applicant has proposed, whether that specific oven associated emission control devices if that contains scrubbers or any other sort of pollution

prevention device?

A. To my knowledge it does not contain a scrubber. It operates by complete combustion of materials charged to the crematory.

Q. Can you just explain a little bit for the record what complete combustion means?

A. Complete combustion would be providing sufficient oxygen at a temperature and pressure such that the materials that can oxidize will oxidize, or the materials that can vaporize will vaporize.

Q. So, it burns really hot?

A. Yes.

Q. The basic of it?

A. Basic.

Q. Now, do you know if any studies or tests that you reviewed, if any of those studies or tests went ahead and were used on the same type of materials, or same time of equipment that Matthews put in?

A. Certain of the reports that I saw did reference exactly the same types of equipment that Matthews provides.

Q. Do you know if any of those equipment had scrubbers on them?

A. I do not.

Q. Would you feel that your report would be enhanced if you had had an opportunity or if you had reviewed the original source material?

A. What do you mean by enhanced?

Q. Well, if I'm basing my opinion on the fruit that comes out of the tree, would I want to know what happened at the trunk?

A. The truck that took it to market, the truck that took it from the tree to the processing facility that cleaned it, which truck?

Q. I'm saying trunk.

A. Trunk?

Q. So, in other words, if I'm going ahead and making conclusions and analysis based on interpretations that others have made of reports, wouldn't the best practice be to go look at the original source material?

A. If I were tasked with doing an entirely independent evaluation of the crematory, your assumption would be correct. If I was tasked with evaluating the materials provided and supplied by CEC, and their submissions, I did what I was asked to do. That did not require going to the original source materials. It did not require reading those materials and potentially having to critique those reports as well.

Q. So, your testimony is that that was beyond the scope what is asked of you?

A. That was well beyond the scope of what I was asked to do.

Q. Thank you.

MR. JOHNSON: Do you have questions for other witnesses?

Q. I think Jerry has questions for him.

EXAMINATION

BY MR. McDEVITT:

Q. Hello, Dr. Penkala.

A. Hello.

Q. Just thought it might be useful to sort of back up and make sure everybody understands, I think the limited nature of your engagement. Tell me if I have this wrong. CEC originally came out with a report where they characterized the estimated emissions based on data that was supplied to them by Matthews, correct?

A. Yes.

Q. All the information, all the tests, everything that they base their estimated, estimates of emissions was based on information given to them by Matthews, correct?

A. No, I don't believe so.

Q. Did you read their report?
A. I did read their reports. But I'm sure that Mr. Macoskey has background information that he drew upon in forming the analysis he performed, and verified the information that Matthews provided and established the EPA risk analysis information on an independent basis.
Q. In Section 2.21 of the first report, do you have that handy, sir?
A. Okay. Yes.
Q. And am I correct that is the emissions literature review section of their original report, correct?
A. It reads vendor literature.
Q. It says the literature reviewed for this evaluation consisted of obtaining information from the equipment vendors, the US EPA and other regulatory authorities about the atmospheric emissions produced by operation of cremation systems for humans or animal remains, correct?
A. Correct.
Q. Then below that it lists the vendor literature obtained, correct?
A. Yes.
Q. And it says contacted Matthews by phone to obtain

performance data and were provided five reports, correct?

A. Yes.

Q. And I think you mentioned in your direct testimony that you regarded the EPA test set forth in there as the most credible test?

A. I don't know -- of those five, I don't believe so.

Q. Do you regard the US EPA test of 1999 as a credible test characterizing emissions in this particular instance?

A. The EPA test of 1999 was deficient in a number of ways which I pointed out in my original evaluation.

Q. All right. What do you know about the history of that 1999 EPA test, sir?

A. Effectively what was in the CEC report. I did not go to the original EPA 1999 report.

Q. So you haven't read the actual report?

A. That is correct.

Q. Do you know where that test was done?

A. No.

Q. Have you ever researched the history of that test?

A. No.

Q. Do you know Matthews involvement in the test?
A. No.
Q. Did you remember the period when CEC came back with a supplement to its original report on the mercury matter and cited one additional source, specifically this Rendell report? Do you recall that, sir?
A. I'm looking for that report.
Q. It is dated February 24th, 2001.
A. Do you have a copy of that?
Q. I do. I will show you exactly what the reference is, sir.
MR. ARCURI: You can have my copy.
Q. I appreciate that.
MR. ARCURI: I don't know it is mine, it is in here what you are referring to.
Q. Do you recall reading this document when you received it?
A. Yes. I can't come up with it.
Q. That's all right, we have it here. Do you recall in general terms what they did to supplement their report about mercury?
A. Yes.
Q. And they did so on the basis of an additional study that they had obtained, correct?

A. Yes.
Q. And, in fact, it was only one study that they had obtained, correct? They cited in footnote three of that document?
A. Can I have the whole document, please?
Q. Sure, absolutely.
MR. JOHNSON: Given the nature, do you want to make you're point then perhaps ask Dr. Penkala to respond to it, it may expedite matters.
Q. I would love to but he wanted to read the whole report and I wanted --
MR. JOHNSON: We are giving you the latitude.
A. Let me read it, refresh my memory.
Q. Did you actually read the Rendell report that they cited?
A. No, I didn't.
Q. Never?
A. If I would read every reference that was made in every report, it would, this report referred to 15 references across the United States, United Kingdom, Norway, Sweden, Switzerland and Germany. We are talking about referencing a tremendous amount of information that was not readily available to me. What is your

specific question relative to the soil deposition of mercury?

Q. It is not a question about that, sir, it is a question did you bother to read the report they cited?

A. I read their reference and the use of that report.

Q. Do you know what that report discloses about this 1999 EPA study, sir?

A. The Rendell report of 2008?

Q. Yes, the one --

A. No, I don't. What does the Rendell report of 2008 talk about on the EPA 1999 report?

Q. Do you know where the tests were done, sir?

A. No, I don't.

Q. Do you know what cremation units were present at that cemetery?

A. What cemetery?

Q. The one that they studied in the 1999 report?

A. No, I don't.

Q. Do you know how many tests they did there?

A. I have no idea.

Q. Do you have any idea what Matthews' involvement was in selecting that site for the test?

A. How did Matthews get involved in doing that

report?

Q. Do you know, sir?

A. No, I don't.

Q. Do you know why that test was even done in 1999?

A. Apparently, they were trying to evaluate not only emissions from crematories of mercury releases, but also soil levels of mercury in the vicinity of crematories.

Q. Do you know if that test was done for the purpose of determining whether the EPA was going to regulate emissions from crematories?

A. No, I don't.

Q. Do you know, sir, how many crematoriums in America have scrubbers?

A. No, I don't.

Q. Would it surprise you to learn that the test that was done in 1999 was done in a situation where there was four crematories a common flue and a scrubber?

A. I didn't know that.

Q. You didn't know that. That would matter, wouldn't it?

A. Depends on what the scrubber was designed to do.

Q. Well, scrubbers are all designed to remove emissions, aren't they?

A. They are designed to remove specific types of

emissions, yes.

Q. And according to what Mr. Rendell says, and I can supply a copy of this, actual document if Council doesn't have it. Page nine of the actual report says however the actual study US EPA 1999 shows somewhat different data. It is talking about nine cremations. For background the crematorium has four cremation units that feed into a common chimney which includes a wet scrubber. According to Rahill, the man sitting right there, this is the only crematorium in the US that is known to have a wet scrubber and was specifically selected for this test to determine the effectiveness of the scrubber to remove materials from the exhaust gas. Did you know that?

A. Very interesting. What did it show?

Q. Well, if you read the report you would know that. You also know, sir, whether there were any -- let me back up a minute. When you read the original report of CEC, am I correct that what they said they were going to do was characterize the emissions, that is what they said they would do, right, they were going to characterize them?

A. Yes.

Q. They are going to take these tests from other

sources and they are going to characterize them for us, right?

A. Yes.

Q. Do you know that in the Woodlawn study, the actual document, do you know there is a disclaimer in there about doing that?

A. I haven't read the report. How could I possibly know if there was a disclaimer?

Q. Would it surprise you to learn that according to the Rendell report that they cite in their own documents and rely on in their own documents the Rendell report says the authors of the Woodlawn study, however, caution against use of their data. All three volumes of the EPA study contain a disclaimer that, quote, this report presents the results of a single test program at a single cremation facility. It should not be assumed that these results would characterize emissions at other cremation facilities without further study. Did you know that, sir?

A. I didn't know that as I have not read the report. However, I would point out that the Rendell study is not solely limited to the 1999 EPA report. And the emissions of mercury which you appear to be focusing on --

Q. I'm not focusing on anything?
A. You are not?
Q. I'm focusing on what you have read and what you have done in emissions.
A. Okay.
Q. Do you understand, can you tell me why, sir, Matthews who was involved this study and presumably knows this disclaimer is in this document would ever supply it to an expert to use in characterizing emissions when it has a disclaimer right in the document not to do so? Do you think that is kind of misleading?
A. Gee, then why did they provide the other data?
Q. Do you think that is misleading?
A. I think it is misleading to characterize any one study which is why they provided four, apparently.
Q. And one other criticism that you also made in your recent report, correct me if I have this wrong, sir, is that of all the studies they produced only one, only one purports they even gauge hazardous air pollutants. Did you not criticize of the test that they provided in your most recent report, did you not point out, sir, that only one of the tests that they provided on page four of your report you say to produce meaningful estimates of ambient concentrations the

modeling must start with credible estimates of emission rates of the process under evaluation. In both reports the stack emission rates come from five reports provided to CEC by Matthews International and EPA web fire HAP, that stands for hazardous air pollutants, right?

A. Correct.

Q. Emission fact report performed in 1992. The test varied widely on operating conditions. Secondary chamber temperatures are only known for one case. Charge weights are missing in two of the cases. Fuel heat input rates are unknown in one test. And are assumed to be 3 million BTU for the most recent four cases. And only one criteria pollutant particulate matter was reported for all cases. Most of the HAPs are only available from a single test.

Is that what you said?

A. Not the same single test.

Q. Which test is that, sir?

A. The situation is that some of the tests provided valuations of some of the HAPs. And other tests provided valuations of other HAPs such that there were a number that only had one represented value. However, it could have been any one of the four tests that were provided by Matthews.

As Mr. -- I'm sorry, I forget your name -- pointed out, HAPs were not considered by either the EPA or by Matthews to be a considerable pollution problem which is the reason why we do not have significant emission measurements of those particular HAPs --

Q. Do you know --

A. -- processed.

Q. Do you know whether that is because the 1999 test done by EPA on a system that had a scrubber convinced them it wasn't worth regulating the business?

A. I don't know that. However, I doubt that that would be the sole reason why EPA would make such a determination.

Q. Can you tell me any time that the EPA has ever come in and done systematic testing to determine the emissions from the crematory since 1999?

A. No.

Q. Can you name me one time?

A. No.

Q. By the way, sir, I think you indicated in fairness to you, you are not a toxicologist, correct?

A. That is correct.

Q. Correct me if I have this part wrong, in terms of the health risk that they were supposedly screening,

they only screened for inhalation exposure, didn't they?

A. That's correct.

Q. And there are other ways that these toxins can affect people other than inhalation, correct?

A. There are multiple ways by any toxin can affect people, yes.

Q. Did you by any chance consult with the Center for Disease Control or data that they put on their website in determining the risk to human health from what is going to come out of the chimney at this crematorium?

A. In general.

Q. I didn't ask in general, did you do that or not?

A. Did I consult? No, I did not consult.

Q. Are you aware that the Center for Disease Control has an agency that lists on a toxic portal all the hazardous chemicals and what the effects of them are?

A. Yes.

Q. Did you consult with that at all?

A. I did to verify that the risk standards that the CEC report had were credible for atmospheric inhalation standards.

Q. Which substances did you check on the toxic portal?

A. The ones that were in the list.

Q. Name them for me.
A. Excuse me, but can we get to the point here?
Q. Yes, I'm asking you which ones you checked.
A. Well, a laundry list of chemicals is not something that is necessarily important to this discussion.
Q. A laundry list of chemicals is not important to the discussion?
A. Right. Mainly because --
Q. Do you know what bis (chloromethyl)ether, do you know what that is, sir?
A. Organic chemical.
Q. Do you know if that can form during the cremation process?
A. Can it be, can it be formed during the cremation process?
Q. Yes, sir.
A. Probably because it is an organic chemical it has a combustion process you can get all sorts of things being formed, yes.
Q. Do you know how it formed during the cremation process?
A. And if the temperature in the oxidation process is sufficiently operated, it should oxidize to mostly

carbon dioxide, water and nitrogen oxides.

Q. Did you do any specific analysis of bis (chloromethyl) ether?

A. Of course not.

Q. Do you, when you say in your report here, sir, after you summarize all this data, this is very sketchy information on which to evaluate any source. Is it fair to say, sir, that it would be much better to have actual test data on this particular oven in order to make meaningful determinations about the hazards associated with it?

A. I would say that it is not necessary.

Q. Not necessary?

A. Because of the levels, extremely low levels of the concentrations we are talking about to the point where it would be a research project that potentially EPA would want to perform except that they have already decided that it is apparently not necessary to perform because they haven't done it since 1999 despite their continuing evaluation of all sorts of emission sources over the years.

If they were that concerned about hazardous air pollutants from well controlled, well designed crematory processes, they would have done such a study.

Q. Do you know if Matthews does any testing?
A. I assume that they test their operations to make sure the airflows, the temperatures --
Q. I'm not asking you to assume, sir, I'm asking you what you know.
A. I don't know.
Q. One minute. Did you by any chance, sir, have an opportunity to review the Matthews' sales literature that they submitted here?
A. Yes.
Q. Did you happen to come across anything that talked about claims that they do all kinds of actual testing?
A. The sales literature I saw didn't have, it had operational data.
Q. Did you --
A. I did not see claims of actual testing.
Q. You didn't?
MR. JOHNSON: Mr. McDevitt, perhaps to expedite the proceeding if there are particular points you want to make, why don't you go ahead and make those and Council will review any materials you want to submit without necessarily asking Dr. Penkala those questions.
Q. Fair enough, let me just add, did you ever see

this document, Dr. Penkala, called Cremation Systems Testing by Matthews?

A. No.

Q. Then were you aware that was submitted in connection with this proceeding?

A. No.

Q. Have you ever seen this document, sir?

A. This was part of the CEC presentation.

Q. Am I correct this is a CEC, sorry, a Matthews drawing for stack details, clearances and installation instructions for its stack?

A. Yes.

Q. Submitted in this proceeding?

A. Yes.

Q. What does it show as part of the design of the stack right where I'm pointing, sir? Test port?

A. Test ports to be accessible above roof line if equipped.

Q. So Matthews designs into the stack test ports?

A. I believe that is for opacity measurement.

Q. You believe or do you know?

A. I don't know. But that --

Q. If you don't know, sir, it would be helpful for you to say I don't know, all right?

A. Thank you very much.
Q. You are welcome. I think I concluded this, I will make the other points in my presentation if I could. But I think you were asked about Professor Agee's report?
A. Refresh my memory.
Q. The Penn State professor that wrote a study about the diminution in value. I think you indicated it didn't have any emissions information in it, in your prior testimony?
A. I indicated I didn't evaluate that in response to anything I did for Peters Township.
Q. Do you remember, sir, what the Agee report found in terms of the history when testing began on that crematory?
A. No.
Q. Is that a report you read?
A. No.
Q. So, insofar as the Agee report might provide information of value to you on what the emissions are from these things, dangers, that is not something that is part of your task to consider that?
A. Correct.
Q. And so you don't know then that the history of

that one was that state didn't come in, all in the Agee report, you can read it yourself, didn't come in until nine months after the crematory started operating and they actually did actual testing, do you know what they found at the boundary crematory property boundary as far as hazardous substances were concerned?

A. Since I didn't read the report, how would I know that?

Q. Well, would it surprise you I guess then to learn that the state, National State Air Quality Standards where dioxins and cadmium exceeded permissible limits by 205 and 2200 percent at the boundary?

A. In the Penn State research has proved this was due to the crematory exactly how?

Q. Did you ever call and ask?

A. That was my question to you.

Q. Well, it is part of the science, sir, we are talking about what the science is here.

A. Right.

MR. JOHNSON: Anything else?

Q. No, that's all. Thank you, Dr. Penkala.

MR. JOHNSON: Anything? Any follow-up?

MS. RIBAR: No.

MR. JOHNSON: Thank you. Mr. Kamin, do you

want to put anything in the nature of a case in chief?

MR. KAMIN: I have a couple more questions for the CEC.

(Recess held)

CHAIRMAN ATKISON: I'm told we have a couple presentations that will be quite lengthy tonight. Which means we will not be able to complete this tonight by any measure.

So we will just set a deadline right now, we will go until 10:30 then we will stop and continue another date. We cannot continue because we have people that say they want to talk for an hour or three. Sam, I only know what I'm told.

The fact of the matter is we will not be able to proceed to be able to continue with that kind of a schedule. We will go as far as we can we and will knock it off at 10:30. All right? Next.

MR. KAMIN: I have a couple questions for the CEC witness, please.

EXAMINATION

BY MR. KAMIN:

Q. Will you just state your name for the stenographer?

A. Kris Macoskey.

Q. Kris, I took a look at your CV, and I see you just briefly describe the designations that you have?
A. I'm a qualified environmental professional.
Q. To be qualified environmental professional, you take a course at Duquesne University, is that correct?
A. That is not correct.
Q. Where did you take your qualified environmental professional course?
A. There is an exam given through the Institute for Professional Environmental Practice, I took it in Pittsburgh.
Q. And as part of that exam do you have to take any special studies or any special courses of study?
A. Yes. There are qualifying criteria to be eligible to test for QEP.
Q. And how many courses did you have to take?
A. It is not based on specific course work.
Q. What is it based on?
A. Experience.
Q. So, as far as experience, how many years of experience do you have to have to be QEP?
A. I think the requirement is when they started testing for QEPs, you could take an oral exam if you had I think ten years of experience. Right now the

requirement is that you can test I believe after five years of experience.

Q. You pay a fee and to the Institute or whoever runs this, correct?

A. That is right, I'm a regional coordinator for the Institute for Professional Environmental Practice. I proctor exams for other students who wish to become QEPs, and a member of the Institute and had multiple years of experience that would qualify me for an oral exam but I chose to take the written exam.

Q. Now, I have had an opportunity to review your testimony from March 21st and to review the two reports which we call CEC-1 and CEC-2, you were the principal author of the reports?

A. That's correct.

Q. You were also the same person who previously testified, correct?

A. That's correct.

Q. Now, is it, I'm going to summarize your testimony because we don't have all night. But would it be a fair statement to say that your testimony was that this particular crematorium could cooperate in such a manner as to control the external effects of smoke, noise, soot, dirt, vibration, etc.?

A. None of those criteria really were specific elements of my evaluation. It was based solely on human health risk associated with exposure to specific environmental contaminants.

Q. You are familiar with the crematoria, correct?

A. Of course.

Q. You wrote a couple reports?

A. Is that a question?

Q. It is.

A. I authored a report in September of 2010 on the topic, CEC-1. I authored an amendment on the topic of mercury. I responded to Dr. Penkala's comments which I believe refer to CEC-2.

Q. And as part of your response and as part of your study, you believe this crematoria could operate in such a way as to control those effects, is that correct?

A. I believe that this crematoria could operate in a manner that would not cause excess health risks to the surrounding population.

Q. So there would be no odors to the surrounding population, correct?

A. Well, again odors were not specific elements of our evaluation. We did a field visit to an operating crematorium, I observed no odor given the very high

temperature of the secondary combustion chamber, the after burner which is essentially the control device, I would not expect there to be odors associated with the device.

Q. This observation, I'm curious, were you at the ground level or were you above the smoke stack?

A. We were at every angle possible, from the ground, 360 degrees around and from a window that gave us a vantage point of the roof and the roof stack.

Q. So, how much higher was the stack than that particular window that you were sitting at?

A. We were at a vantage point above the elevation of the stack. The stack was about, I believe, three to four feet above the roof.

Q. And did you go ahead and make an analysis above that so you would be --

A. Yes, well, sure. The plume from an operating crematorium is very hot. The plume was visible as a rising heat plume, so it was visible from any particular angle.

Q. But, so visible you observed it but you weren't standing above it?

A. Visible as a sheen, as a shimmer as you might see --

Q. Through the light?
A. -- heat rising. So, depending on your angle, it was more visible depending on the angle of the sun, that kind of thing.
Q. So but from your testimony and your observations, what you are saying is that this particular operation wouldn't go ahead and endanger or disturb the neighboring --
A. That is what we concluded, that is correct.
Q. When you observed that crematorium, was it operating?
A. Yes.
Q. Do you know when the most recent body had been put in it?
A. I don't recall how far apart through the cycle they were. I think we have that information, and the planning Council staff were there submitted a report on the topic if you have seen that.
Q. Yes, I read it. Now, do you know the body that was put through, that was in a coffin, box or bag?
A. No, I don't. It was in, they had a number of different types of receptacles, cardboard units there. I believe that is what their standard practice was. I didn't see it go in, I wouldn't know for sure.

Q. As part of your investigation of the operation, this is the D'alessandro property, is that the one you visited?

A. That is not correct, it's the Gilbert facility.

Q. That's the Boston, PA one you previously testified to?

A. Correct.

Q. Did you, as part of your process, did you interview any of the surrounding neighbors?

A. Personally, no, I did not speak to any neighbors.

Q. Do you know if any of those neighbors had kids?

A. I would suspect so, but I don't know for sure.

Q. As part of being a qualified environmental professional, did you study items other than air pollution, did you look to say soil samples, soil vapor samples, water quality issues?

A. In general?

Q. No --

A. This evaluation.

Q. As part of this evaluation?

A. No.

Q. Are you familiar with DEP state-wide health standards for various compounds found in soils?

A. I'm familiar that there are such things, and that

is about the extent of my knowledge.

Q. Do you know if there is a different standard between commercial and residential?

A. Well, I can speak to a procedure that is used to evaluate the appropriateness of land uses when hazardous sites have been remediated, for instance. There is a program called the Act 2 program which provides for a risk based evaluation, cleanups. So, once a property is remediated and our company does quite a bit of this work, not me personally, but then the site would be cleaned up to a level that is acceptable from a risk perspective for whatever the land use happens to be, whether it is industrial, commercial, residential, that sort of thing.

Q. So, I don't want to talk specifically about the Act 2 program. But, you do understand as part of the Act 2 program there are specific standards, there are specific residential standards for compounds and there are specific commercial standards for compounds, correct? If you don't know, it is okay to say you don't know.

A. Well, what I can tell you is that at a facility or site that has been cleaned up and remediated, if the future land use is intended to be residential, then the

cleanup criteria would be more strict than if the future land use is intended to be industrial.

Q. All right, I understand what you are talking about in terms of site specific standard which is the Act 2 process, what I'm trying to focus on is your knowledge as to whether or not there is a specific residential standard for chemicals and a specific commercial standard for chemicals on a state-wide basis, I'm not talking about the site specific area.

A. The only such criteria I'm familiar with is the Act 2 cleanup criteria.

Q. In performing your analysis did you not review the state-wide standard for commercial, for commercial compounds or for residential compounds, right?

A. Well, our analysis didn't evaluate any other potential risk pathways other than the inhalation pathway. So, we wouldn't be trying to characterize the deposition of constituents onto the soil and then the future ingestion or dermal contact of a resident or child with that kind of material.

Q. Right, but the state-wide standard doesn't require you to go ahead and to review pathways. It is a standard for parts per million, parts per billion within the soil, is that correct?

A. Again, I'm not familiar with that.
Q. Okay. That is all I have.
CHAIRMAN ATKISON: Thank you.

EXAMINATION

BY MR. McDEVITT:

Q. Mr. Macoskey, I just have a few questions for you at this time. I think you indicated at the end of your testimony there that in terms of doing your analysis, you only analyzed one exposure route of these toxins, correct?
A. That's correct.
Q. That is breathing?
A. Inhalation pathway, right.
Q. Not dermal?
A. Correct.
Q. Not whether it irritates your eyes?
A. Right, an inhalation pathway, not any kind of exterior irritants.
Q. And your report estimated I believe if I'm correct that 196 pounds of hydrochloric acid is going to be emitted from this crematory when operating at 13 percent of its production capacity, is that correct?
A. I would have to check. 196 pounds, you say, over

the course of a year. That would have been most likely. If that was, I don't recall if that was stated in the text. I have the numbers, in the record, so, regardless, 200 pounds or maybe to clarify what your concern is about hydrochloric acid we could go on from there.

Q. I just want the first make sure I'm not misreading what you say here.

A. Okay.

Q. And --

A. We are looking at the September 2nd report.

Q. The original report, yes.

A. I have emission rates in terms of tons per hour.

Q. On page five of your report where you have your crematory emissions if I could let me back up. You are projecting these on the assumption this crematory is going to operate at 13 percent of its production capacity and sit idly 87 percent of the time, correct?

A. That's correct, yes.

Q. All right, so --

A. 196 pounds per year hydrogen chloride, yes.

Q. That is your prediction for what will come out of this crematory at 13 percent capacity?

A. That was our estimate, yes, what we reported in

CEC-1.

Q. And sir, are you familiar with agency for Toxic Substances and Disease Registry maintained by the CDC?

A. Sure.

Q. Did you consult that reference for determination of whether there were any exposure routes that could cause harm by that hydrogen chloride coming out of that stack?

A. Our risk evaluation is based on EPA screening level criteria for all the different constituents. I didn't cross-reference to see if EPA was consulting with the agency.

Q. Is that a no, did you read --

A. The point is --

Q. My point is, sir, did you read the CDC statements about the impact of hydrogen chloride exposure?

A. I believe I have, I believe I have read those at some point.

Q. What did they say about hydrochloric acid?

A. Well --

Q. The toxic substance CDC, what did it tell you about hydrochloric acid?

A. I'm speaking just from recollection and professional judgment on hydrochloric acid.

Q. I'm not asking that, sir, what did the Toxic Center of CDC tell you?

A. I couldn't quote that for you.

Q. Would you like me to read it to you?

A. If you choose to.

Q. Hydrochloric acid is corrosive to the eyes, skin and mucous membranes. Acute short-term inhalation exposure may cause eye, nose and respiratory tract irritation and inflammation and pulmonary edema in humans. Chronic long-term occupational exposure to hydrochloric acid has been reported to cause gastritis. Acute oral exposure may cause corrosion of the mucous membranes, esophagus, stomach. And dermal contact may produce severe burns, ulceration and scarring in humans?

A. Sure. Hydrochloric acid, hydrogen chloride hydrochloric acid, everybody used that in chemistry lab. And it is also constituent, can be contributing to acid rain. And the health risk evaluation that we did would have considered hydrogen chloride as a non-carcinogen and its associated health risks using EPA's criteria.

Q. You didn't even consider dermal exposure, did you? You said that here in your report?

A. Right, we didn't look at it from a dermal perspective.

Q. Are you aware that Center for Disease Control places on its official website various questions in the form of fact sheets and toxic frequently asked questions.

A. Yes.

Q. Do you know what the answer is to the question that they give is how can hydrogen chloride affect my health? Would you like me to read that?

A. No. I'm familiar with hydrogen chloride, sir.

Q. It is very corrosive?

A. Unless you want to read it for the audience.

Q. It is very corrosive?

A. That's what I said, it is an acid.

Q. It is not just corrosive to people, it is corrosive to property, too, isn't it?

A. I think that is what Mr. Penkala's point about welfare.

Q. Is my statement correct, sir, hydrochloric acid is corrosive to property, paint all that kind of stuff?

A. In sufficient concentrations.

Q. Sure. Just for the record, what the CDC says I would urge Council if you really want reliable information it is a great site to ask any questions you need about all these substances coming out of here, how

can hydrogen chloride affect health? Answer, by the Center for Disease Control.

Hydrogen chloride is irritating and corrosive to any tissue it contacts. Brief exposure to long, brief exposure to low levels causes throat irritation. Exposure to higher levels can result in rapid breathing, narrowing of the bronchi, blue coloring of the skin, accumulation of fluid in lungs, and even death. Exposure to even higher levels can cause swelling and spasm of the throat and suffocation.

Some people may develop an inflammatory reaction to hydrogen chloride. This condition is called reactive airway dysfunction syndrome, RAD, a type of asthma caused by some irritating or corrosive substances. If that happened to you, would you consider that a substantial health impact, sir?

A. I think the pertinent point is relative to this particular analysis --

Q. My question, if that happened to you, would you consider that a significant impact?

A. I think that is an irrelevant question. I will not answer it. The point is the concentration we are predicting would not cause such dire impacts.

Q. You are predicting?

A. Absolutely, that is part of this very conservative worst-case evaluation, concentrations we are predicting through our modeling and the very conservative worst-case concentration emission rates and continuous emission blowing in a single wind direction over 8,760 hours per year would not cause those effects.

Q. Cause them to you, would you consider those significant?

A. If I spilled hydrochloric acid on myself I would feel that I would certainly want to go to the emergency room, yes.

Q. And if you were exposed constantly to hydrogen chloride coming out of that stack, breathing it every day of your life --

A. Again, it gets to Dr. Penkala point about concentration.

Q. You didn't hear my question, sir, or does that not matter?

MR. LEWIS: Can we proceed here?

Q. I'm trying to ask a question, he is interrupting before I can get it out.

A. No you are not.

MR. LEWIS: You are consuming this Council's time as well as the public. I don't know that you are

doing yourself service or your client a service.

MR. McDEVITT: Well, I am my client and I'm trying to do a service to you because I think these are important facts.

MR. LEWIS: You are losing your target here.

MR. McDEVITT: So be it. I certainly don't mean to offend, I'm trying to put forward to you fact that I think are important to your analysis. I will reserve any further questions.

MR. LEWIS: Thank you.

MR. JOHNSON: Ms. Ribar, any redirect for Mr. Macoskey?

MS. RIBAR: Sorry, I didn't hear you.

MR. JOHNSON: Any redirect?

MS. RIBAR: Of Mr. Macoskey, no. We want to know, Mr. Rahill is here from out of town. If this is going to be continued, if anybody has any questions of him we can do that before the 10:30 cutoff. That would be most appreciated.

MR. KAMIN: I'm happy to defer my questions to Mr. McDevitt.

MR. JOHNSON: All right. Do you have a position on that? Mr. McDevitt, any questions.

MR. McDEVITT: Just a few.

EXAMINATION

BY MR. McDEVITT:

Q. Mr. Rahill, just as a general proposition, I think you indicated you have been working in this business for quite some time?

A. I have.

Q. And by way of background so Council can understand the regulatory scheme of the federal level, in 1990 Congress passed the Clean Air Act, right?

A. Yes.

Q. Am I correct that for a period of time after that Congress was trying to determine, I should say the EPA was trying to determine what sources would be regulated?

A. That's correct.

Q. Eventually it got around to the question of whether or not they were going to regulate emissions from crematoriums?

A. That's correct.

Q. Am I also correct you, sir, were personally involved on behalf of Matthews in working with the EPA to devise the test that would determine that?

A. I was asked by EPA to participate with other industrial groups --

Q. All right.

A. -- in determining not just crematories but other sources as well. Eventually we got around to crematoriums.

Q. In that crematorium test that was determinative of what EPA's future position would be was the Woodlawn test, right?

A. That was one of many they considered.

Q. The '99 test?

A. That's correct.

Q. Woodlawn?

A. Woodlawn Bronx.

Q. Am I correct, sir, that that test on which EPA based all future decisions was done on a unit that was fed through a scrubber?

A. They considered many stack sources. That was one of the ones they chose.

Q. The four units at Woodlawn fed to a common flue, didn't they?

A. Feed through a common flue, correct.

Q. The common flew there was a scrubber then to remove stuff before it came out of the stack?

A. Incorrect.

Q. Incorrect. What did the scrubber do?

A. Each of the four units had an individual water

scrubber on them then they fit into a common flue.

Q. And the unit we are talking about here has no scrubber, right?

A. No.

Q. Am I also correct, sir, just for reference, you have massive sales literature, you have sales literature here that describes actual testing done by Matthews?

A. We do not conduct any testing.

Q. Is that what your sales literature claim?

A. I'm happy to listen.

Q. Are you familiar with the document that has been submitted called Cremation Testing by Matthews?

A. I'm sure I probably read it.

Q. More specifically, I think I mentioned this to Council, this document Cremation System Testing?

A. I have to read it.

Q. I would give you a copy but it is the only one I have.

A. Yes, I'm familiar with that.

Q. And doesn't this document claim extensive testing done by Matthews?

A. Matthews does not conduct any environmental testing. We engage contractors, professionals, to do it, we don't do it ourselves.

Q. It describes various levels of testing done by Matthews, or its independent contractors?

A. Matthews does not do any environmental testing, we do other types of testing. We do combustion analysis, no environmental testing.

Q. It says here in the sales document, environmental testing is accomplished using independent test laboratories?

A. Correct.

Q. Right? Then it says there are different types of environmental testing?

A. Correct.

Q. It talks about the lowest form being somebody sits there looks to see if there is smoke or whatnot coming out of the stack?

A. Actually, that is called visible emissions test and it is prescribed, probably the most common type of testing done.

Q. Just for the record, some of the substances that come out of this stack are odorless and colorless, correct?

A. Yes.

Q. What is methyl mercury?

A. I would have to defer to the experts on that.

Q. Do you know if methyl mercury is odorless and colorless?
A. I have to defer to the experts on that.
Q. If it is, you can't see or smell that danger, can you?
A. I would have to defer to experts on that.
Q. If it is odorless and is colorless, then you couldn't see it or smell any danger associated with the substance, could you?
A. I would have to defer to experts on that.
Q. Do you have experts within your company on this subject?
A. We do.
Q. Who would know the answer to that question whether the methyl mercury that comes out of that stack is odorless and colorless?
A. There are two experts right here who will be happy to answer the question for you.
Q. And then am I correct that in describing the testing in this Matthews' sales literature, it says the next level up of stack testing is called instack emissions testing. With this type of test the mobile laboratory and usually three technicians travel to the site with testing equipment and portable laboratory.

Each test will last 60 minutes and will be performed at three different cremations. That is what Matthews claims, correct?

A. Again, we don't do environmental testing, this is a paper describing the testing process cremation equipment. It was just a white paper, not a sales, piece of sales literature.

Q. Is that testing done on Matthews equipment or not?

A. There is all types of testing done on Matthews and other types of cremation equipment.

Q. Are those test reports in Matthews' possession?

A. We get copies of them often from clients, but not always.

Q. Then it goes on to describe the rest of the testing and it says during this testing lab technicians monitor temperature flow rates as well as the oxygen levels, carbon dioxide levels, carbon dioxide levels, carbon monoxide, particulate emissions and nitrogen oxide emissions. It goes on to talk about how it is detailed report and even goes on to describe the next level of more advanced testing as requiring that more emissions are treated, tested, I'm sorry, during this process.

Usually there are a variety of metals such as mercury, lead, cadmium that are measured during the cremation process to determine their levels and to allow the local environmental authorities to determine what, if any, impact it has on the surrounding community. That is what Matthews claims in this document?

A. We are describing different testing procedures here, and yes, that is a level of testing.

Q. Well, are any of these tests, the actual tests of your equipment in Matthews' possession?

A. Yes.

Q. And have any of those actual tests that you have in your possession been produced here?

A. Yes.

Q. How many of them?

A. I don't know. How many copies of tests, four or five, I think.

MR. MACOSKEY: Five.

Q. Five tests, that is it. Is that the totality of what is your possession?

A. No.

Q. There are more?

A. Many more.

Q. And you do have test ports in the system, right?

A. When they are required by state authorities we put them in.

Q. So you can do testing of your equipment?

A. We cannot do the testing, it has to be done by a licensed contractor.

Q. Well, you say that, sir, let me ask as a company you are capable of testing your equipment?

A. No, we are not.

Q. You are not capable of doing that?

A. We do not do environmental testing.

Q. It is not a question of whether you do environmental testing, I'm asking a simple question. Sir, as a manufacturer of the equipment you are capable of testing your own equipment for what it emits from the stack?

A. No, we are not.

Q. You are not?

A. No.

Q. Why is that, sir?

A. We are not a licensed contractor to do that, don't own the sampling equipment. It is done by an independent laboratory. We engage private contractors to do that.

Q. You don't have anybody on the payroll of Matthews

that is, can design tests to show what comes out of those stacks?

A. The test protocols are designed by US EPA and everyone follows the same protocol. So we would not spend our time designing a test when US EPA has already designed one.

Q. Well, the test protocols you are talking about for the EPA, does the EPA regulate testing of crematory?

A. They set up test protocols that everyone uses to test crematories.

Q. But they don't have any regulations per se on testing of crematories, do they?

A. They have specific, for different constituents particulate matter, carbon monoxide, CO2, oxygen, for all these elements they have specific procedures you have to follow.

Q. And who keeps the records of these tests that are in Matthews' possession in your company?

A. I'm not sure I understand.

Q. Well, who is custodian of the test records in your possession?

A. Well, most of the tests belong to the clients the that they were engaged for.

Q. I understand. I think you indicated some of the

test reports you get copies of?

A. We have filing cabinets.

Q. Who keeps custody of the actual test reports that Matthews has in its possession?

A. Probably in our Engineering Department.

Q. Do you know the name of man?

A. I could provide that.

Q. Nothing further.

CHAIRMAN ATKISON: Okay, then it is close enough to 10:30. Anything else you need to say right now.

MR. JOHNSON: No.

CHAIRMAN ATKISON: Prediction on a continuation date?

MS. RIBAR: Two minutes, Mr. Rahill is here, he has to leave.

CHAIRMAN ATKISON: You got it.

MS. RIBAR: Thank you so much.

EXAMINATION

BY MS. RIBAR:

Q. There were some suggestion maybe not so, maybe more than suggestion, there was some I think testimony that Mr. McDevitt offered regarding the Woodlawn study in 1999. I think it is important to understand what

Matthews' role was in the study. And Mr. Rahill, if you could address that, please.

A. When US EPA was trying to determine whether or not they would federally regulate human and animal crematories, they contacted the Cremation Association of North America which is the largest association of cremation operators in the world to determine what data existed in the industry to determine whether or not they wanted to regulate.

Once they reviewed all the data, they then asked about the inventory cremation equipment across the country. Who owned them, what type of equipment, how old were they and so that was done. The association came together. I am the environmental liaison to the committee.

And so, I was, I participated the process. Once we gave the spectrum of different types of cremation equipment out there, some are one year old, some are 40 years old. EPA, US EPA selected the one they wanted to test.

They considered it a worst-case representative sample. It was a poor design, it was about 20 years old at the time. It was the only one in the country that had wet scrubbers on them. So, they chose that site to

test. They asked us to be involved.

If you read the 1300 page test report you see I was on site. But they asked our company to be involved because that was our client at the time, still is. And we acted as a contractor on site as far as helping to install test ports other things.

But they then used their own contractors, Midwest Research to do all the tests. But they tested the emissions before the scrubber and after the scrubber to see what effect the scrubber had, if anything, on emissions.

They determined after the data was collected that they would not take a role in federally regulating human or animal crematories, they would leave that to the states.

However, the data they collected at that site is used today still on the National Emission Inventory Database as the standard so when states go to look at emission standards for crematories, if they don't have real data, that is the data they use. US EPA uses it to this day.

Our role was simply as a contractor on site. We did not do testing the extent of involvement. That is why they selected that site, it was not something we

selected.

CHAIRMAN ATKISON: Thank you.

MS. RIBAR: It is also important to note the CEC report did not rely on that study on what we are calling the Woodlawn study. That is listed for reference only, if I'm correct.

MR. MACOSKEY: Right, if you take a careful look at the summary of emissions you will see that while that was recognized as a potential source, the other sources of emission factors most notably web fire, EPA web fire had higher emission rates for most all constituents so we used that instead of the old, the other 1999 report.

And I do believe also that we had information through that actual report, 1990 report that indicated the preemissions, the emission rates prior to the scrubber and after. We would have used the prescriber ones because we recognize there isn't a scrubber associated with the Power-Pak II.

MS. RIBAR: Thank you very much.

CHAIRMAN ATKISON: This hearing is recessed until a date to be announced.

(Hearing adjourned at 10:30 p.m.)

* * * * * *

I hereby certify that the foregoing is a correct transcript from the record of proceedings in the above entitled matter.

_____
William E. Weber, RDR
Court Reporter