BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

MATTESON WHP PARTNERSHIP, an Illinois general partnership,	)	
Complainant,	)	
vs.	)	PCB 97-121
JAMES W. MARTIN AND EVA D. MARTIN, individually and d/b/a Martin's of Matteson,	)	
Respondents.	)	VOLUME III

The following is the transcript of a hearing held in the above-entitled matter, taken stenographically by LORI ANN ASAUSKAS, CSR, RPR, a notary public within and for the County of Cook and State of Illinois, before JOHN KNITTLE, Hearing Officer, at 100 West Randolph Street, Room 11-512, Chicago, Illinois, on the 21st day of October, A.D., 1999, at 9:30 a.m.

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A P P E A R A N C E S :

ROSEHTHAL AND SCHANFIELD,
55 East Monroe Street
Suite 4600
Chicago, Illinois 60603
(312) 236-5622
BY: MR. JOSEPH R. PODLEWSKI, JR.,

Appeared on behalf of the Complainant,

ROSS & HARDIES,
150 North Michigan Avenue
Suite 2500
Chicago, Illinois 60601
(312) 558-1000
BY: MR. DAVID L. RIESER,

Appeared on behalf of the Respondents.

ALSO PRESENT:

Ms. Marili McFawn
Mr. Anad Rao
Mr. James D. Persino
Mr. C. Michael Perkins
Mr. James Harrington
Ms. Eva D. Martin

I N D E X

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E X H I B I T S

(Respondents' Exhibits I and J marked for idenficatation before the commencement of the proceedings, 10/21/99.)

HEARING OFFICER KNITTLE: Let's go back on the record.

My name is, as you know by now, John Knittle. I'm a hearing officer with the Illinois Pollution Control Board. Today is the third day of hearings in Matteson WHP Partnership versus James W. Martin and Eva D. Martin individually and doing business as Martin's of Matteson. It's PCB No. 97 121. We are still in the middle of the respondents' case-in-chief.

Mr. Rieser, it's your witness.

MR. RIESER: Thank you very much. I would like to call Mr. Fred Krikau, please.

HEARING OFFICER KNITTLE: Would you swear him in for me, please?

(Witness sworn.)

WHEREUPON:

F R E D E R I C K G. K R I K A U, P. E., called as a witness herein, having been first duly sworn, deposeth and saith as follows:

D I R E C T E X A M I N A T I O N

by Mr. Rieser

Q. Would you state your name and address for the record, please?

A. My name is Fred -- well, it's actually Frederick G. Krikau, K-r-i-k-a-u. I reside at 1056 Killarney, K-i-l-l-a-r-n-e-y, Drive in Dyer, D-y-e-r, Indiana 46311.

Q. Mr. Krikau, where are you currently employed?

A. I'm currently employed by a company called Krikau, Pyles, Rysiewicz and Associates and I'm the president of the company.

Q. What is the business of Krikau, Pyles, Rysiewicz?

A. We are an environmental consulting remediation firm.

Q. What types of things do you do?

A. Well, we design remediation strategy. We actually project manage the work in the field doing remediation work. We do air pollution permitting work, water pollution permitting work, redesign water pollution treatment systems, and we consult with clients.

Q. Is the Pyles of Krikau, Pyles, Rysiewicz, David Pyles?

A. That is David Pyles.

Q. Prior to KPR -- what I'm going to call KPR -- how were you employed?

A. I was employed by a company that changed its name repeatedly. At one time, it was Acme Steel Company. Then, it became a company generally known as Interlake. Then Interlake split into two companies; one becoming Acme Steel again and one remaining Interlake.

Q. And what was your position with these companies?

A. When I left the company, my title was corporate director of environmental affairs.

Q. How long were you with those group of companies?

A. Thirty-two years.

Q. And for how long did you hold the title that you just described?

A. For about 15 years.

Q. What were your duties as director of environmental affairs?

A. Interlake had 35 plants working in iron and steel, aerospace, furniture, powdered metal, storage racks, strapping, material handling. We had 35 plant locations scattered throughout the world. I had environmental responsibility for every one of them.

Q. Did the responsibility have anything to do with remediating contaminated sites?

A. Yes.
Q. In what way?
A. The company, throughout the years, had developed a number of landfills, which in the late 1970s and early 1980s, we -- they began to close and remediate where required.
Q. Anything else?
A. I designed a lot of remediation strategies for the company, yes.
Q. The company had several integrated steel -- operated several integrated steel facilities, is that correct?
A. That's correct.
Q. That included coke plants, glass furnaces, things of that nature?
A. Right.
Q. And you were called upon to look at remediating strategies for issues related to the steel-making process?
A. Yes.
Q. What was your education?
A. I have a bachelor's of science degree in chemical engineering from Purdue University.
Q. Any other training?
A. Oh, I attended a number of courses years ago

before the formation of what we finally refer to as the U.S. EPA and Illinois EPA with the U.S. Public Health Service and the Department of Interior.

Q. Do you have any certifications and registrations?

A. I'm a registered professional engineer by examination in Illinois. At one time, I held licenses in Ohio, Kentucky, South Carolina.

Q. Any other registrations or certifications?

A. Lots of awards and stuff like that, but they don't really count.

Q. Okay. Do you hold any patents?

A. Yes. I hold three patents.

Q. What are those patents in?

A. The first patent was a new method of treating a liquid waste called pickle liquor, which is actually a spent acid. It is a process that the iron and steel industry uses where you clean steel by immersing it in acid and, of course, you generate what is now a hazardous waste.

The other two are air pollution abatement patents. Both of them specifically are directed towards air pollution issues with coke plants.

Q. Have you testified previously before the

Pollution Control Board?

A. Yes.

Q. Can you estimate about how many times you have done that?

A. Probably -- oh, boy. Just a guess, probably 200 times.

Q. Have you served on the boards of any business or industry trade associations?

A. A number of them.

Q. What ones?

A. I was a member of the U.S. Chamber of Commerce's environmental committee. At one time, I was a member of the Illinois State Chamber of Commerce environmental committee, Illinois Manufacturers environmental committee. I'm one of the founding father's of what we finally refer to as the Illinois Environmental Regulatory Group or ERG. I was chairman of the Manufacturing Chemist Association's environmental committee.

Q. Thank you. Is it correct to say that you are currently involved in working on projects that involve remediation of contaminated sites?

A. I'm working on a number of them.

Q. In what capacity?

A. Project management, design of remediation,

writing and developing work plans of what needs to be done on the various sites, and actually hiring the workers who -- and supervising them as they do the actual remediation.

Q. Do those sites involve both soil contamination and groundwater contamination?

A. Yes, they do.

Q. For how long have you been developing programs for remediation of contaminated sites?

A. Middle to late 1970s.

Q. Have you ever worked on any CERCLA sites, C-E-R-C-L-A?

A. Yes.

Q. How many would you say?

A. Counting them, probably seven or eight of them and some of those, we are currently working on.

Q. Have you worked on remediating contaminated sites in Illinois?

A. Yes.

Q. How many would you say?

A. Non-CERCLA sites, maybe 15 or 16.

Q. How many of these would you say obtained no further remediation letters or some type of final resolution from either the Illinois EPA or the U.S. EPA?

A. I'm sorry. I have to ask a question. Under what programs?

Q. Under any of the programs.

A. I will say around ten or so.

Q. Have you worked on any sites located -- contaminated sites located in the south suburbs of Chicago?

A. Yes.

Q. Have you worked -- how many would you say?

A. Four or five maybe.

Q. Have you worked on sites involving the release of perchlorethylene or perc?

A. Yes.

Q. How many?

A. Three or four of them.

Q. Okay. How many of these involved dry cleaners?

A. So far, one.

Q. Okay. How many remedial action plans have you developed for Illinois sites and submitted to the Illinois EPA for review and approval?

A. Eighteen or 20 of them. Not all of them have been approved yet, but they are pending.

Q. How many -- that was my next question.

A. I'm sorry.

Q. That's okay. How many have been approved?
A. Sorry. Eight or nine, roughly.
Q. And the rest are still pending?
A. The rest are still pending.
Q. Are you familiar with the Board's Tiered Approach to Corrective Action Objectives or TACO objectives?
A. I'm very familiar with them.
Q. How did you become familiar with those?
A. Well, I actually belonged to another trade organization currently called the Illinois Steel Group. Through that organization, they had retained a group of people to work on TACO and I kind of acted like a technical advisor to one of them. Of course, I read TACO and work with it almost every day.
Q. How many sites have you worked on in Illinois where you have used these regulations to develop remedial objectives?
A. Five or six. Somewhere in that neighborhood.
Q. And how many of these have been approved by the Illinois EPA?
A. I would say most of them have been approved by the Illinois EPA.
Q. The ones that are not approved are still

pending?

A. They are still pending.

Q. Have you prepared a professional profile listing your professional qualifications?

A. Yes, I have.

Q. I'm going to show you what has been marked as Respondents' Exhibit I and ask you if that is your professional profile.

A. Yes, it is.

Q. That's current and up-to-date?

A. I don't think the cases that I testified about are exactly up-to-date.

Q. Okay.

A. But everything else in here is up-to-date.

Q. You list on here on Page 3, major remediation projects, correct?

A. Yes.

Q. Okay. So these aren't all of the remediation projects that you have worked on, just the ones that you feel are of particular note?

A. These are the large ones, and I mean very large ones.

Q. When you say very large, what do you mean?

A. Each one of these remediations ran well over

$1 million. Some of them are as much as $85 million.

Q. Now, you have become familiar with a site in Matteson, Illinois located at 5603 Vollmer, which we have been calling the Martin's of Matteson site, correct?

A. Correct.

Q. Have you reviewed any engineering or technical reports with regard to that site?

A. I reviewed a report that was prepared by an environmental firm called Pioneer.

Q. And I'm going to show you what was previously marked as Exhibit E --

HEARING OFFICER KNITTLE: Actually, it's on the bottom.

MR. RIESER: Thank you.

HEARING OFFICER KNITTLE: You're welcome.

BY MR. RIESER:

Q. -- and ask you if -- and this is the Pioneer report of September 10, 1996, and ask you if this is the report you were just referring to?

A. Yes, it is.

Q. You have also, I understand, reviewed the deposition testimony of Mr. James Persino regarding his desired remedy in this case, is that correct?

A. That is correct.

Q. What do you understand that remedy -- desired remedy to be?

A. I understand the desired remedy is that the contamination that is on-site be cleaned up to what is referred to as background.

Q. Are you otherwise familiar with the site other than your review of the Pioneer documents?

A. Yes. I drive past the site because I live -- basically, Dyer, Indiana is basically a southern suburb of Chicago. I was born and raised in Dolton. There is a nice man's fashion shop called Raymond Levine where I purchase my clothes.

Q. Is that on the -- on the --

A. It's near it, let's put it that way. It's on Vollmer Road.

Q. Have you developed an opinion as to whether Mr. Persino's proposed remedy is technically feasible and economically feasible?

A. Yes, I have.

Q. Now, in developing that opinion, is it accurate that you relied on the Pioneer report that's included as Exhibit B?

A. Yes. The assumptions that I made is that the Pioneer report is correct as far as it went.

Q. As far as it went?

A. Yes.

Q. And you were not asked to give an opinion as to whether the study was adequate for the purposes of designing a remediation strategy at the site?

A. I was not asked that question, no.

Q. All right. Now, going back to your opinion as to whether the remedy is technically feasible and economically reasonable, what is that opinion?

A. In terms of economical reasonableness, the requirement or the request that it be cleaned up to background, in my opinion, is unreasonable and not in accordance with Illinois environmental regulations.

I also have trouble based on the limited information we have from the plan or report whether or not it would be technically feasible to achieve background.

Q. Taking the economic reasonableness issue first, what's the basis for that statement?

A. Well, under Illinois regulations, a site can be cleaned up to a point where it can continue to operate and you don't have to clean up to basically a background level if the background level is what I call the infinite zero. Zero means no matter how many decimal points you go, it remains zero.

Q. When you say how many decimal points you go, do you mean in terms of the samples that you take?

A. Yes.

Q. So that no matter how sensitive the sampling is, you would not find perchlorethylene in the ground?

A. Correct.

Q. Okay.

A. It would always be zero.

Q. Go on and state the economic reasonableness.

A. Right. Because the costs would continue to go up, up, up as you try to reach that infinite zero.

Q. Did you identify any remedial strategies that, in your mind, would attempt to achieve that particular remediation objective of zero?

A. I came up with two strategies that would, I think, reach say Illinois TACO cleanup objectives, two of them, yes.

Q. Is it your opinion that they would not achieve the background levels that's the desired remedy?

A. I don't believe these two strategies would, no.

Q. What are the strategies that you had developed?

A. Well, the first one was to basically excavate the contaminated soil, backfill the excavation as such, and then install a technology called pump and treat, pump

up and treat groundwater.

Q. All right. What would that process -- what would excavating the soil involve?

A. Well, first of all, in order to excavate the soil, you would have to tear down the building because the Pioneer report says the contamination is underneath the building. It's kind of hard to excavate under a building without removing the building. Consequently, the building would have to be removed or demolished, if you will, and then the soil excavated.

In my opinion, that would have to be done first because the -- if you tried to pump and treat without removing contaminated soil, the contaminated soil would continue to contaminate the groundwater. After that excavation is completed, you would have to backfill the excavation obviously because you cannot leave an open hole. It's not safe.

Then you would have to install a pump and treat system to pump up groundwater and run it through basically a wastewater treatment plant to remove -- I'm going to use the word perc rather than perchlorethylene for the sake of the discussion.

Q. And all of these strategies would address not only the perc, but the degradation products as well that

the report identifies?

A. Yes.

Q. How does the wastewater treatment system for the pump and treat process you have indentified work?

A. Well, you put an extraction well down into the groundwater and you pump that water up and you run it through wastewater where you have a pump and piping and things of that nature.

You run that through a -- generally, for a chlorinated solvent, you run it through a carbon filter, if you will. The carbon itself then absorbs the perc stripping it away from the water. So now you have a way stream which is the carbon that has the perc on it which you have to dispose of.

Then you have a wastewater stream that you have to determine what you want to do with it. There are two ways to handle that wastewater stream. That would be to put it into a sanitary sewer, which would require trying to get a permit from the Metropolitan Water Reclamation District, or you can reinject it into the ground.

Q. During the time that the excavation is going on, the premises obviously cannot be occupied because the building is demolished, is that correct?

A. Yes. There is going to be a big hole there.

Q. Fair enough. While the pump and treat system is going on, can the premises -- assuming the building is rebuilt -- be occupied?

A. The building is already gone. You would have to rebuild it.

Q. Okay. Assuming it was rebuilt.

A. That probably could be done.

Q. Okay.

A. I don't think there is enough information in the Pioneer report that I could make that judgment.

Q. Okay.

A. You have to understand when you put the extraction well into the ground, you have to create what is called a cone of depression in order to -- perc is heavier than water.

Consequently, if it's not floating on top of the groundwater, it's sitting on the bottom of the groundwater. So you have to get lower than the lowest spot of a clay layer, as we call it, in order to extract the water for treatment.

Without spending some time going through the report, I don't know where that deep spot is. If it's underneath the building, you may not be able to rebuild the building.

Q. Are there any other -- let's call it aesthetic

impacts with having a pump and treat system next to a commercial building?

A. Well, obviously people around are going to get upset about a great big hole being dug. Number two, you have to install somewhere a wastewater treatment plant. They tend to be a little bit noisy at times.

If they are not perfectly maintained, they sometimes create odors. Odors will become a problem also for the surrounding people during the excavation of the contaminated soil. Obviously, the perc will volatilize and there will be an odor problem during the excavation.

Q. Did you provide an estimate -- have you estimated the cost of this -- let me ask one more question before we get to the cost.

How long would you have to run the pump and treat to achieve background levels with the groundwater assuming there is groundwater?

A. I would venture to guess it could be anywhere from 15 to 25 years.

Q. Have you prepared a cost estimate of the cost of doing this work?

A. I prepared a rough cost estimate to do this work to excavate the soil, dispose of it, and install the pump and treat system. I did not include in that estimate the

cost of demolishing the building because I'm not qualified to do that or to rebuild the building.

Q. What was the cost estimate?

A. That was right around, I think, $700,000.

Q. Okay. I think you said that there was another remediation strategy that you could use at the site to try and achieve background conditions?

A. Yes.

Q. Okay. What is that other remediation strategy?

A. I want to emphasize the word try.

Q. Okay. What is that other remediation strategy?

A. Well, that would be to install a soil vapor extraction system to attempt to remove the perc from the contaminated soil without removing the soil. This is called in situ treatment and then follow that with the pump and treat system that I described in my last answer.

Q. What would be involved in installing an in situ treatment system?

A. Well, to install a soil vapor extraction system, which we'll call it an SVE system for now on to make it easier, you basically have to sink tubes into the ground and blow air down there and have the air try to strip the perc off of the contaminated soil. Then you bring it back up through another series of tubes. That ends up going

through an air pollution vapor device.

Depending on -- and again assuming that the Pioneer report is correct, it's most likely you would have to put some of those tubes down through the building floor or remove the building and then put the tubes down and bury them and then rebuild the building, one or the two. That would mean the building is unusable.

Q. Do you believe that an SVE strategy could be used to remediate the soils to background levels?

A. I have run a number of SVE systems and I've never come to my infinite zero. Could you reach some of the TACO number's cleanup objectives? Probably.

What we are missing in the Pioneer report is what the soil conditions are underneath the building. If it's a fine grandular sand material where you can get the area pushing down there to mingle with the fine particles of the contaminated dirt, then you could strip it.

On the other hand, if it's a very dense clay with permeabilities of ten to the minus five or ten to the minus six, it's very difficult to get the air and that to the individual clay particles to have the stripping actually occur.

Q. Do you recall a finding by Pioneer as to the permeabilities of soil that was concluded in this report?

A. I might have read it. I don't remember.

Q. I'm going to direct your attention to Section 5.5, "Results of Pump/Slug Test," on Page 15 of Exhibit E, and point you to the sentence that says, and I quote, "Based on the results of the slug test performed on-site and the physical characteristics of the soil, the hydraulic conductivity at the site is estimated to be approximately ten to the minus nine to ten to the minus seven centimeters per second." Do you see that?

A. Yes.

Q. Okay. Based on that, does that make any difference in what you just described in terms of the ability for SVE to remediate the soil to either background or tier I levels?

A. It would be tough. It would be very difficult to do on that type of soil.

Q. Why is that?

A. Because you probably would have to do some -- attempt to do some of what we call shattering of the soil, subsurface of soils.

Q. In order to break up the soil's pathway for the air to move through the soils, is that correct?

A. Yes.

Q. Okay.

A. That gets to be tricky because sometimes to do that, you are using many different types of devices to shock.

Q. Even if you were able to remediate the soils to some level, you would still have to operate a pump and treat system with respect to groundwater, is that correct?

A. Yes. The contaminated groundwater is still going to be there.

Q. Okay. Would the property be usable during the time you were implementing an SVE pump and treat strategy?

A. As I said, I think the property might be usable. I'm not sure the building would be usable, the structure.

Q. Why not?

A. Well, as I said --

MR. PODLEWSKI: I'm going to object to this because I think this is beyond his expertise as to whether or not something is usuable. He is an environmental consultant. Whether or not property or buildings are usable is something that I think goes beyond his expertise. I think that --

MR. RIESER: All we are talking about is whether the placement of this system would make it difficult to be in

the building, not in a property sense of what's usable, but whether -- through excavation, things torn down so you can't use it, whether you have to run equipment or other issues with respect to the construction or operation of the system, that would make it very difficult to use the system. I think that's what -- he has addressed that in other aspects and he is just addressing that again.

HEARING OFFICER KNITTLE: Mr. Podlewski, do you still have an objection based on that limited definition of what usability is in this situation?

MR. PODLEWSKI: I would prefer that Mr. Rieser ask the questions other than using the term usable. If he wants to have Mr. Krikau describe what an SVE system and pump and treat system would entail in terms of where it would be located and would it -- possibly could it interfere with the use of the -- with the occupancy of the property, that may be proper for him to testify as to that.

HEARING OFFICER KNITTLE: I'll sustain it. You could ask more specific questions, I think, and avoid this problem, Mr. Rieser.

MR. RIESER: That's fine. Thank you.

BY MR. RIESER:

Q. For the implementation of the SVE system that

you described, what equipment would be necessary to install and where would it be located?

A. Well, as I said, you would have to sink somewhere into the ground or into the soil a set of tubes; one to put air down there and one to bring the air back up or sometimes you use them both ways. That would require drilling holes all over the place to put holes in there.

Q. Would you have to set only two or would you have to set a number of them?

A. On an SVE system, I would set a number of them.

Q. How many -- for this type of property, how many would you have to set?

A. I would have to look at the site map. I don't remember the details.

Q. But more than two?

A. More than two.

Q. Okay.

A. You would have to sink them.

Q. Okay.

A. Now, you could either sink them through, for example, the floor of the building or you can install those subgrade. But in order to install them subgrade, you have to get beneath the floor. That would be -- and then from those tubes you vertically put into the ground,

you then have to continue running them through that air pollution abatement device for the air movement that I described to you before.

Q. So then you would have to have pipes in the ground and then pipes coming from those pipes for the air movements?

A. Yes.

Q. How large would those pipes be?

A. Some of them I've installed are as small as three inches in diameter and others are as large as nine inches in diameter. It depends on lots of things.

Q. And if you had to install these wells and these pipes within the stores of the shopping center on Vollmer Road, would that have any potential impact on people walking in and out or walking through those stores?

MR. PODLEWSKI: I'm going to object to that unless Mr. Krikau can testify he's actually prepared a proposal for the installation of an SVE system and a pump and treat system at the property.

HEARING OFFICER KNITTLE: Mr. Rieser?

MR. RIESER: Mr. Krikau has presented an opinion involving the installation of the SVE system at that site. He obviously has not presented a formalized proposal. I think what he is talking about are some of the issues that

could come up with the use of this type of system to achieve the goals Mr. Persino has said. We are talking about potential problems that have come -- that might come up, potential limitations on the use of the property as a result of the installation of this type of equipment.

HEARING OFFICER KNITTLE: Okay. I'm going to overrule the objection.

MR. RIESER: Do you remember the question?

THE WITNESS: No.

MR. RIESER: Would you read it back, please?

(Whereupon, the requested portion of the record was read accordingly.)

BY THE WITNESS:

A. Well, if the design calls for the installation of one inside of the building that was the dry cleaners and you didn't tear up the floor to bury the pipe, obviously somebody would trip over a pipe laying on the floor. So you wouldn't want to do that.

Whether you would have to sink these tubes, as I call them, in other buildings or tenants in that shopping center, I would need to have some time to design it. Most likely, you would. I can't say for sure you would. I don't know without spending a lot of time actually working out a total design.

BY MR. RIESER:

Q. Does -- do the TACO regulations require that perc contamination be remediated to background levels?

A. No, they do not.

Q. What's the basis for that statement?

A. Well, the TACO regulations were originally adopted -- and this is my opinion -- to establish in Illinois levels of contamination that could be left on the ground to protect public health and the environment and that sort of thing. The TACO regulations don't require cleanup to background. They don't.

Q. TACO provides different levels of tiers of cleanup standards and methods for determining cleanup standards, is that correct?

A. Yes. TACO has -- classifies property into two classifications; one being residential and then the other being referred to as industrial/commercial. Within each of those classifications, there are actually three tiers; Tier I, Tier II and Tier III.

Q. It is correct also that the different values are established for different potential pathways for contaminants to move from the soil groundwater and cause exposure?

A. Yes. They establish cleanup objectives for

soils. Then they establish the pathways. Often, there are pathways to groundwater, the type of soil used, things of that nature.

Q. And they also provide for methodologies to exclude certain pathways based on conditions and use of the particular property where the contamination might be located, correct?

A. Yes, they do.

Q. What are some of those methods?

A. Well, we finally refer to those as institutional controls.

Q. Those are?

A. Restricting a deed restriction, installation of engineering barriers, that sort of stuff.

Q. How could an institutional control be used to address a groundwater contamination issue?

A. Well, obviously, if nobody is using the groundwater as a drinking water source, that could become an institutional control. If it was prohibited from being used as a drinking water source...

Q. Then you could also establish that the groundwater was not impacting other properties. Would you have to make any other findings with respect to the groundwater with respect to using institutional controls

on individual properties?

MR. PODLEWSKI: To do what? Objection.

MR. RIESER: To exclude the groundwater pathway.

HEARING OFFICER KNITTLE: Is that okay?

MR. PODLEWSKI: Yes.

BY THE WITNESS:

A. To make sure that this doesn't impact, you know, adjacent uses as such.

BY MR. RIESER:

Q. And are there other vehicles besides institutional controls that TACO allows to exclude certain exposure pathways such as engineering barriers?

MR. PODLEWSKI: Objection, leading.

HEARING OFFICER KNITTLE: Sustained.

BY THE WITNESS:

A. I said engineering barriers already.

BY MR. RIESER:

Q. Well, describe how engineering barriers would work.

A. Well, an engineering barrier is basically, as I refer to it, tapping over the contamination so that you can't get to it and then making sure somehow that anybody who is using the property or anything like that never goes through that barrier. We usually refer to that as a deed

restriction or some form of deed restriction.

Q. You testified earlier that TACO provided standards for properties being used as residential, is that correct?

A. Correct.

Q. Are those the most stringent standards?

A. Generally, they are more stringent, but if I remember correctly, the cleanup objective, particularly the migration of the groundwater, is the same -- on perc, is the same whether it's residential or it's industrial. It's the same number.

Q. The cost estimates you developed with respect to -- the cost estimates you developed with respect to achieving the background levels from two different remediation strategies, do they vary at all if your remediation objective was Tier I values involving groundwater?

A. Say that again.

Q. Do the cost estimates that you developed to achieve the remediation objective of background conditions that you have testified here today, do they change at all if you changed the remediation objective to the Tier I residential standards?

A. Yes.

Q. In what way?

A. The cost would be less.

Q. How much?

A. Well, I only testified on a cost estimate for the excavation and that. The other one that I estimated was for the SVE system which is pump and treat. That one, I think in my letter report, I estimated at $400,000, which would be the one that I would recommend if you went to Tier I and not excavating. It probably would be $100,000 or $150,000 less. Remember, I said even the SVE pump and treat remedy that I put in my letter report, I really don't believe that it would achieve background. I don't.

Q. Would the pump and treat system ever achieve Tier I residential standards for the protection of groundwater?

A. Given enough time, yes.

Q. How long would it take?

A. As I testified before, I don't care whether you put in a pump and treat system or the excavation scenario. If you put in the SVE scenario, it's going to take a long time. Probably 20 years.

Q. At a cost of how much per year?

A. In order to install that, you would have to

submit a corrective action plan to the Illinois EPA and that's one of the nice negotiating points that go through with them. It's got to do with how many times a year when you install the pump and treat system, you have to install monitoring wells around the extraction well. Periodically, you have to go out and sample those monitoring wells to see whether you are accomplishing anything and if so, how much. We like to draw beautiful curves showing how the cleanup is going. How often you sample those wells is not really definitely spelled out in regulations. That's an issue you negotiate with the Illinois EPA based on the site and things of that nature.

Q. All right. Would the cost of the excavation remedy change at all if your remediation objective was Tier I residential standards rather than background?

MR. PODLEWSKI: Could you read that question back? I may have an objection.

(Whereupon, the requested portion of the record was read accordingly.)

MR. PODLEWSKI: I don't have any objection.

BY THE WITNESS:

A. I wouldn't recommend that strategy.

BY MR. RIESER:

Q. Why not?

A. I hate to tear down the usable building and I think you could possibly design an SVE system if you had to to meet a Tier I cleanup objective without having to remove the building.

Q. In your experience with the U.S. EPA, have they ever required that a building be demolished in order to remediate a site?

A. I have never had them order or ask us to demolish a building for remediation.

Q. Have you ever required a building be rendered unusable to remediate a site?

(Whereupon, Mr. Perkins entered the proceedings.)

HEARING OFFICER KNITTLE: I'm sorry. You can go ahead, Mr. Rieser.

MR. RIESER: Could you read the question back?

(Whereupon, the requested portion of the record was read accordingly.)

BY THE WITNESS:

A. No.

BY MR. RIESER:

Q. In your experience with the Illinois EPA, have

they ever required that buildings be demolished in order to remediate a site?

A. Not in my experience, no.

Q. Has the IEPA required a building be rendered unusable to remediate a site?

A. No.

Q. Does the IEPA have what it calls the common sense approach with regard to contamination of buildings?

A. That's a policy they have, yes.

Q. What is that?

A. Well, you just asked the question on the buildings. They don't require you to tear down a building to remediate under a site. The major reason they don't is that the building itself, having a concrete floor or something of that nature, is an engineering barrier. They use that as an example of a common sense approach.

Q. As a consultant, would you recommend to a property owner that they try to achieve -- that they use a strategy to try to achieve background levels for contaminants?

A. No.

Q. Why not?

A. Regulations don't require it.

Q. If you built an SVE system at the site, would it

achieve either background levels or Tier I residential standards within a two-year time frame?

A. No, not in my experience.

Q. I have nothing further. Oh, excuse me. I do have something further. Sorry.

Did you prepare a letter embodying your opinions that you presented today previous to this?

A. Yes.

Q. I'm going to show you what was previously marked as Respondents' Exhibit J and ask you if this is a true and accurate copy of that letter.

A. Yes.

Q. This letter embodies the basic opinions presented today, is that correct?

A. Yes.

MR. PODLEWSKI: I object to that. I think the letter speaks for itself.

HEARING OFFICER KNITTLE: Sustained.

MR. RIESER: I have no further questions. I ask for the admission of Exhibits I and J at this time.

HEARING OFFICER KNITTLE: Let's take them one at a time. First of all, the profile of Mr. Krikau?

MR. PODLEWSKI: I have no objection to that.

HEARING OFFICER KNITTLE: That will be admitted.

Respondents' J is the letter of Mr. Krikau concerning remediation.

MR. PODLEWSKI: I have no objection to that one either.

HEARING OFFICER KNITTLE: That will be admitted as well.

Do you have anything further, Mr. Rieser?

MR. RIESER: No.

THE WITNESS: Can I get a drink of water?

HEARING OFFICER KNITTLE: Let's take five. Let's go off the record for a moment.

(Whereupon, after a short break was had, the following proceedings were held accordingly.)

HEARING OFFICER KNITTLE: All right. Let's go back on the record. We will now begin the complainant's cross-examination of this witness.

MR. PODLEWSKI: Thank you, Mr. Hearing Officer.

C R O S S - E X A M I N A T I O N

by Mr. Podlewski

Q. Mr. Krikau, you testified that you were involved in remediation of landfills and designed remediation plans for Interlake and Acme Steel, is that correct?

A. That's correct.

Q. And the landfills -- the landfills that you designed remediation plans for, were these landfills that were owned by either Interlake or Acme Steel?

A. While I was employed at Acme/Interlake, yes, they were owned by Acme/Interlake.

Q. And what about -- you said you designed remediation plans. Does that also relate to those landfills?

A. Yes.

Q. It didn't relate to any other kind of facilities or situations? It specifically related to landfills that were owned and operated by either Acme Steel or Interlake?

A. No. I might have misstated. Yes, it was that, but I also did remediation plans for spills and things of that nature for various plants.

Q. But those were at the Acme Steel or Interlake facilities?

A. The reason I'm pausing is at one time, Interlake allowed my environmental department to sell services outside the company. Give me a minute. I don't remember quite what I did at that time.

Okay. I believe at that time I did not design any remediation plans for landfills. I might have done one for a spill -- a cleanup remediation plan to cleanup a

spill of an acid.

Q. And this was at a site other than one owned by either Interlake or Acme Steel?

A. Yes.

Q. Okay. And did you design that cleanup plan for the property owner as best as you can recall?

A. Yes. Because it was a spill that occurred at a plant and the property was owned by the property owner and I designed it for him.

Q. That's fine. Now, you also testified that you have given testimony before the Pollution Control Board approximately 200 times?

A. Yes.

Q. How many of those -- how many of those instances involved testimony as to the technical feasibility or economic reasonableness of a remedy sought from the Pollution Control Board in a citizen's enforcement case?

A. None.

Q. This is the first time?

A. Yes. As you defined it, yes.

Q. You also testified you were involved in CERCLA sites?

A. Yes.

Q. Do you remember your testimony?

A. Yes.

Q. Were those -- are those sites -- well, are those sites that are on the national priorities list or are those sites that are being investigated under CERCLA or what -- when you say CERCLA sites, what do you mean?

A. That gets to be complicated. That's a good question. One of them is a listed NPL site.

Q. Okay. And what are the other sites that you said were CERCLA sites?

A. Some of those are cleanups going on under Section 106, which I interpreted to be a CERCLA site because I think Section 106 is CERCLA.

Q. Right.

A. And others are -- they were cited under CERCLA statutes, but they ended up with administrative consent orders.

Q. And what is the extent of your involvement in those sites?

A. In one of them, I actually designed the remedy and got it approved by the government agencies involved.

Q. And for whom did you design that remedy at that site?

A. On this one, I designed the remedy for Interlake.

Q. Were they the owner of the property?
A. No, they were not.
Q. What was their relationship with the property?
A. They had owned the property and they had sold the property years ago and then contamination was discovered at that property. I'll tell you, it's the St. Louis River site up in Duluth, Minnesota.
Q. My point is that you designed a remedy and got approval for a remedy at a site that was previously owned by Interlake --
A. Correct.
Q. -- and operated by Interlake?
A. Correct.
Q. And that was for Interlake?
A. That was for Interlake. I'm currently --
Q. No, no question is pending.
Now, you also testified that you have been involved in three or four perc sites?
A. Yes.
Q. And you also testified that one involved dry cleaners?
A. Yes.
Q. Is that this case?
A. No.

Q. Okay. What case is that?
A. This and --
Q. Let me rephrase that. What is your involvement in that perc site?
A. It is a site in Indiana owned by a dry cleaner in which there is perc in the groundwater and in the soil and we are currently developing a remediation plan for that property.
Q. Are you developing the remediation plan for the owner of the property?
A. Yes.
Q. And you are not involved in any perc sites in Illinois?
A. I was involved in one in Illinois.
Q. Wait, wait. I'll withdraw that question.
A. Okay.
Q. And that site in Indiana was a site that was owned by the dry cleaners, correct?
A. Yes.
Q. Now, you also testified, I believe, that you prepared 18 to 20 remedial action plans --
A. Correct.
Q. -- for various types of sites?
A. For various types of sites, yes.

Q. All right. Does that include some of the work that you testified you did for Interlake when you say 18 to 20 remedial action plans --

A. One of them was for Interlake and the rest of them were not.

Q. Okay. Did -- in the course of preparing -- strike that.

For whom were those remedial action plans, as best you can recall, developed? Were they in those instances where they were developed for the property owner?

A. In most cases, yes.

Q. Were there cases in which you developed a remedial action plan for someone other than the property owner?

A. That gets complicated. I prepared remedial action plans for a company on property they didn't own, but they had previously owned.

Q. Okay.

A. Okay.

Q. That was the only --

A. Yes.

Q. -- instance in which you prepared a remedial action plan for an entity other than the owner of the property?

A. Based on what I said, yes.
Q. Okay.
A. I mean, they didn't own the property at the time.
Q. But they were a prior owner?
A. They were prior owners, yes.
Q. In those instances in which you developed remedial action plans for the owners of contaminated properties, let's disregard for the moment the one that you developed for the prior property owner, but in those instances in which you developed remedial action plans for the owners of contaminated properties, were you dealing with contamination that had been caused by the operation -- by the owner's operation of that property?
A. That was always alleged, but in some cases, probably it was not true.
Q. So you developed remedial action plans for contamination that might have -- that may not have been caused by the owner of that property?
A. No. On a couple of them, the accusation against the previous owner was that they caused the contamination although they had sold the plant where the contamination occurred and the new owners continued to operate the facility and so who put it there, how much?

Rather than for these people to argue it out, they just came up with an agreement on sharing costs and the remediation plan was developed by myself and then implemented.

Q. Okay. Now, in your CV that's been identified as exhibit -- Respondents' Exhibit I --

A. Yes.

Q. -- on Page 5, you have -- going from Page 5 on to Page 6, you list various cases in which you have provided testimony either at trial or at a -- in a deposition, is that correct?

A. Well, either one, yes.

Q. Okay. Where you say, quote, "Mr. Krikau has testified in court and/or had his deposition taken in the following legal proceedings" --

A. Correct.

Q. Quote, end quote.

Okay. In any of those proceedings that you have identified here, did your testimony involve the technical feasibility or the economic reasonableness of the remedies sought?

A. Yes.

Q. Which ones?

A. Clarification?

Q. Of these seven cases that you have listed here in which you either testified or had your deposition taken, out of these seven cases, could you identify for me which ones -- in which cases did your testimony involve either the economic reasonableness or the technical feasibility of the remedy that was at issue?

A. For wastewater?

Q. Okay. Well, let's just leave it as --

A. General?

Q. Can you just answer my question?

A. Okay. All right. Number one, the Atlantic States Legal Foundation, yes.

Q. That it did?

A. Yes, it did.

Q. Okay. Why don't we just go through them one through seven and then we can go back.

A. Okay.

Q. Okay?

A. Number one, it did.

Q. Okay.

A. Number two, it did not. Number three, it did. Number four, it did. Number five, it did not. Number six -- wait a minute. Number four, it did not. Number six, it did. Number seven, it did not.

Q. Okay. So your testimony that you gave related to or concerned issues relating to technical feasibility and economic reasonableness in cases that you have identified in your CV as one, three, and six?

A. Yes.

Q. Is that correct?

A. Correct.

Q. Okay. None of these cases are Pollution Control Board cases, is that correct?

A. No. These were all cases that were in either federal court or state court. I can never say that correctly.

Q. What was the substance of your testimony in case number one, Atlantic States Legal Foundation versus Universal Tool and Stamping?

A. Atlantic States Legal Foundation is an environmental group that is very, very interested in water pollution issues. Universal Tool and Stamping had installed a wastewater treatment system and Atlantic States didn't think it was adequate. Within there, the testimony was in the Superior Court in Fort Wayne.

Q. And you -- did you get -- did you testify on behalf of Universal Tool and Stamping?

A. Yes.

Q. And your testimony involved what?

What was the subject matter of your testimony?

A. Whether or not the remedy that the Atlantic States Legal Foundation wanted to achieve from this wastewater treatment plant was reasonable or not and then the economics of what they wanted versus what the plant had installed.

Q. All right. What about the next one, number three, Jackson Hurt versus Chrysler Corporation?

A. Mr. Hurt had contracted with the Chrysler Corporation down in Indianapolis to allow them to put -- to fill his property with foundary sand.

As soon as the depression he had on his property was filled with foundary sand, he turned around and sued Chrysler Corporation wanting a lot of money because he felt they had contaminated his property.

The issue there was, number one, was foundary sand a contaminant in Indiana and number two, whether the methods that Chrysler used for depositing the material into this landfill was proper.

What he was asking for was a substantial cap on the property of so many feet thick because he wanted to build a housing development on it after he had filled it in and whether that cap was technically feasible or economically

reasonable for that type of operation.

Q. But this was a case in which he actually allowed Chrysler Corporation to deposit foundary sand on his property?

A. Yes, he did. But then he was asking for more in the court case.

Q. And what about PMC versus The Sherwin Williams Company?

MR. RIESER: You know, I'm going to interpose an objection. It's a brief objection. As much as I enjoy hearing about Mr. Krikau's experience and cases, I am really beginning to question the relevance in continuing in this line of questions. Mr. Krikau was available for a deposition earlier. His expertise was not -- the offering of his opinions was not objected to.

I understand and I think we can all raise questions about how much he has actually been involved in these types of issues, but, you know, I think his expertise pretty much speaks for itself in his CV. To spend a huge amount of time on this doesn't seem to make a lot of sense to me.

MR. PODLEWSKI: I don't believe I'm spending a huge amount of time on it and I think I'm entitled to inqure on cross-examination.

HEARING OFFICER KNITTLE: For what purpose?

MR. PODLEWSKI: To find out to what extent he has previously testified or given testimony on issues of technical feasibility and economic reasonableness of a remedy.

HEARING OFFICER KNITTLE: And are you attempting to impeach his credibility? I don't understand.

MR. PODLEWSKI: I want to find out what the basis -- what the basis of his experience is in giving testimony as to the economic reasonableness and technical feasibility of remedies at sites that have contamination.

HEARING OFFICER KNITTLE: I'm inclined to sustain the objection. You've got just one more case to go through here?

MR. PODLEWSKI: Right.

HEARING OFFICER KNITTLE: Okay. Let's go through that. If this line of questioning continues to an unnecessary degree, I will sustain the objection.

MR. RIESER: Thank you.

BY MR. PODLEWSKI:

Q. Go ahead. What about the PMC versus The Sherwin Williams Company case?

A. Okay. Sherwin Williams had sold a section of a plant on the south side of Chicago to PMC Corporation.

PMC, shortly after purchasing the property, sued Sherwin Williams, as I understand it -- now, I'm not a lawyer. Keep this in mind. This is my interpretation of what happened.

Anyway, shortly after purchasing the property, PMC sued Sherwin Williams for selling them a contaminated piece of property. They had hired a consultant who came up with a remedy to remediate the contamination that was on the then PMC property.

I testified on behalf of Sherwin Williams as to the technical feasibility and economic reasonableness of the remedy that PMC was trying to get Sherwin Williams to implement and pay for.

Q. Now, Mr. Krikau, directing your attention to what's been marked as Respondents' Exhibit J, I believe, and correct me if I'm wrong, but did you not testify today that the Martin's of Matteson site cannot be remediated to barkground levels? Was that your testimony?

A. No.

Q. It can be remediated to background levels?

A. Given enough time, given enough money, you can probably do anything.

Q. And that would be consistent with the first sentence that appears on -- in the first full -- excuse

me -- the second paragraph of the first page of Respondents' Exhibit J in which you state, quote, "The site can be remediated to background levels assuming that time is not an issue and there is an unlimited amount of money available to do remediation," closed quote?

A. That's true.

Q. So really, the remedy that Mr. Persino is seeking in this case, which is remediation of property to background levels, is technically feasible, is it not?

A. Given enough time, given enough money, you could probably reach it, yes.

Q. Okay. Now, let's shift for a minute to the TACO rules -- our discussion about TACO. You testified that you are intimately familiar with TACO, is that correct?

A. If you are in this business, you've got to be -- and work in Illinois, you've got to be familiar with TACO.

Q. And the TACO rules are often referred to as sort of a shorthand as the Part 742 rules?

A. I believe so. I don't remember the numbers that way.

Q. Okay. Now, you testified that you have used TACO to develop remedial objectives at five or six sites, is that correct?

A. Yes.

Q. Okay. And did any of those sites involve development of remediation objectives under TACO -- strike that.

Did you develop remediation objectives under TACO at sites on behalf of someone other than the property owner of that contaminated site?

A. In all cases, it was for the property owner or, as I defined before, a previous owner of the property.

Q. But in either case, it was for the party that caused the contamination, is that correct?

A. I can't go that far because I don't know in a lot of cases who caused the contamination.

Q. Have you ever been involved in the development of remediation objectives under TACO in a citizens enforcement case like this one where the property owner is seeking to have cleanup -- is seeking to have -- the property owner who is a landlord is seeking to have the tenant cleanup the property?

A. As I said before, I've never had a case like this before the Illinois Pollution Control Board.

Q. All right. Now, referring your attention or directing your attention to Respondents' Exhibit J, I don't see anywhere in that document in which you state expressly that it is economically unreasonable to

implement the remedy that Mr. Persino is seeking in this case, is that correct?

A. I don't believe I put it in there, no.

Q. But you are saying that now?

A. Yes.

Q. So has your view of this changed since July of this year to the date of this hearing --

A. No.

Q. -- as to the economic reasonableness of the remedy that Mr. Persino is seeking?

A. No.

Q. But you didn't put it in your letter, did you?

A. I did not put it in that letter, but I used that in developing the remedies that I have in the letter.

Q. Now, in your July 8th letter, you state that tenant spaces would have to be unoccupied in order to do a remediation that would not involve demolition of the buildings. That would be your SVE and pump and treat system, is that correct?

A. That's correct.

Q. Now, you haven't developed a remedial action plan for this site, have you?

A. No. In reviewing the Pioneer report, I would like to have a lot more information that is not in the

Pioneer report in order to write a proper remediation plan.

Q. Right. And you haven't been asked to do that by Mr. Rieser or Ms. Martin, have you?

A. No.

Q. Okay. So the extent of your -- the basis for your testimony is reviewing what's been marked as Complainant's Exhibit E and reviewing Mr. Persino's deposition transcript?

A. Correct.

Q. All right. Now, isn't it possible that with respect to an SVE system that wells could be installed in such a fashion that they wouldn't interfere with the occupancy of the building that's there?

A. Oh, I said they could in my direct testimony. I said it could.

Q. And that would -- through what mechanism?

A. Well, as I said, to put in the tubes, as I refer to them, for an SVE system, you could, you know, bury them, tear up the floor, put them in, put the floor back. It wouldn't involve demolition of the building, but you could bury them if you had to sink any of those extraction tubes down underneath the building and I don't know that.

Q. Now, you also, in your letter, state and you

have testified consistently today that the Illinois EPA and U.S. EPA would never require demolition of the building in order to do a cleanup?

A. No, I did not.

Q. Oh, you didn't testify to that?

A. No.

Q. Okay.

A. What I said is in my experience, I have never been involved in the case where the U.S. EPA or the Illinois EPA required demolition of a building.

Q. All right. But this case isn't about what the government would require, is it?

MR. RIESER: I'm going to object to that as -- I'm not -- I'll withdraw it. Go ahead.

HEARING OFFICER KNITTLE: You can answer the question, sir.

BY THE WITNESS:

A. Ask me again.

BY MR. PODLEWSKI:

Q. Is this -- well, let me withdraw that question and rephrase it a little differently.

This case isn't about what the Illinois EPA or the U.S. EPA would require with respect to remediation of that property, isn't that correct?

A. I don't think I'm qualified to answer that. I really don't.

Q. Now, isn't it true -- let me back up for a minute. Strike that question.

Are you familiar at all with the state of Illinois' underground storage tank regulations?

A. Yes.

Q. You have some familiarity with them?

A. Some familiarity with them, yes.

Q. Okay. You have worked with them before?

A. Yes.

Q. Okay. And you are familiar with what costs are eligible for reimbursement from the underground storage tank fund and what costs are ineligible for reimbursement from the underground storgage tank fund under that program?

A. Yes.

Q. Okay. Isn't it true that under the state of Illinois' underground storage tank regulations that the cost to -- the cost of dismantling and reassembling of above-grade structures in response to the release of petroleum are eligible for reimbursement from the underground storage tank fund if a licensed professional engineer certifies that such action is necessary to

perform corrective action?

A. Yes.

Q. Doesn't that then acknowledge under some circumstances, the Illinois EPA would acknowledge the fact that demolition of a structure is necessary in order to provide corrective action at a site?

A. For petroleum products.

Q. What's the difference between petroleum products and perc in terms of contamination?

A. Nothing, but it's the way you read it. It was specific to petroleum. Perchlorethylene is not a petroleum product.

Q. Well, your testimony -- well, the fact of the matter is is that the Illinois EPA would, in fact, permit demolition of a -- in the context of underground storage tank cleanup -- demolition of a building in order to conduct corrective action, correct?

A. I don't know that. I have never experienced it.

Q. Okay.

A. As I said, in my direct testimony, I have never been involved or requested on any of the work that I have done by either the U.S. EPA or Illinois EPA to demolish a building.

Q. Well, isn't it true that the government

acknowledges that sometimes it's necessary to demolish structures in order to perform corrective action?

A. It says what it says. If that's the rule, it says they can.

Q. So they do, in fact, acknowledge that, the Illinois EPA?

A. I don't think I ever said they didn't acknowledge it.

Q. Okay. If an owner submitted a remedial action plan to the IEPA under the voluntary site remediation program that included the demolition of buildings to address contamination, would the IEPA disapprove that plan?

A. I don't know. I have never submitted one that included that.

Q. So you have no experience one way or the other?

A. No.

Q. Now --

A. Now --

Q. There is no question pending.

You also testified consistent with your letter, which is Respondents' Exhibit J, that you would not recommend that a client demolish existing structures to remediate property, is that correct?

A. That's correct.
Q. What if your client said I don't care?
A. That's his decision.
Q. Okay.
A. If he wants to demolish the building, that's his decision.
Q. Let's go back to TACO for a second. Are you aware of situations in which the use of TACO to derive remediation objectives is inappropriate -- let me add one thing -- under the TACO rules?
MR. RIESER: Could you read that question back for me?
(Whereupon, the requested portion of the record was read accordingly.)
BY THE WITNESS:
A. I think I understand your question. I have never run into that. I don't know how to respond to that.
BY MR. PODLEWSKI:
Q. Well, you testified that you are familiar with TACO, correct?
A. Yes.
Q. And don't the TACO rules provide that the use of TACO is to be used in underground storage tank situations, correct?
A. Yes.

Q. And involving RCRA Part B applications?
A. Yes.
Q. And corrective action under RCRA?
A. Yes.
Q. And also the site remediation -- the voluntary site remediation program?
A. Yes.
Q. And that it's -- it's not to be used if you are dealing with an imminent and substantial endangerment to the environment?
A. Well, that's the overriding thing that's always there in the regulations.
Q. But don't the regulations provide that?
A. Yes. I believe they do.
HEARING OFFICER KNITTLE: Is there an objection, Mr. Rieser?
MR. RIESER: No, no.
BY MR. PODLEWSKI:
Q. So the use of TACO is not appropriate in all circumstances to derive cleanup objectives?
A. I have never run into that. Since TACO has been adopted, you are asking me to interpret a regulation and I'm --
MR. PODLEWSKI: I ask that that answer be striken as

being nonresponsive.

MR. RIESER: I don't think it was unresponsive at all.

MR. PODLEWSKI: Well, I think it was. I asked him whether -- what was my question? Excuse me. What was my question. Can you read my question back?

(Whereupon, the requested portion of the record was read accordingly.)

MR. RIESER: And his answer was --

MR. PODLEWSKI: Yes or no. That required a yes or no answer.

HEARING OFFICER KNITTLE: I don't think his answer was unresponsive. I'm going to deny the motion to strike, but if you want -- I can direct you to answer the question again. If you can answer it with a yes or no, you have to do so.

MR. PODLEWSKI: Let me rephrase the question.

BY MR. PODLEWSKI:

Q. Under the Part 724 -- strike that.

Is the use of TACO to derive remediation objectives appropriate under all circumstances?

MR. RIESER: Asked and answered. I object to that.

BY MR. PODLEWSKI:

Q. Yes or no.

HEARING OFFICER KNITTLE: I think he has asked and answered that, but I'm going to allow him to ask it again because I think there's some -- it's a little bit unclear as to where we are on this issue.

Sir, if you can answer that question, please do. Do you recall the question?

BY THE WITNESS:

A. The way I can answer is in my experience, the answer is no.

BY MR. PODLEWSKI:

Q. Thank you.

HEARING OFFICER KNITTLE: Mr. Rieser?

MR. RIESER: No.

BY MR. PODLEWSKI:

Q. Mr. Krikau, these cost estimates that you testified to this morning and that you have in your Respondents' Exhibit J, in your letter, of $700,000 and $400,000, I believe is the other figure, the $700,000 is for excavation with the pump and treat and the $400,000 is an SVE system with the pump and treat, is that correct?

A. That's correct.

Q. Okay. Those are not based upon the development of any detailed remediation -- remedial action plan for

the property, is that correct?

A. No. I think what I said before was in order to do an actual remedial action plan, I would require or need additional information than that which is provided in the Pioneer report.

Q. If the property were to be remediated to residential cleanup objectives under TACO, it wouldn't be necessary to implement institutional controls or engineered barriers, would it?

A. If you went to the Tier I levels and you cleaned up, probably, yes, you would not need institutional controls.

Q. If you cleaned up to Tier I residential levels under TACO?

A. Correct.

Q. Sorry about the pause. I just have one other question assuming I can formulate it properly. It's been a long three days.

Mr. Krikau, have you ever, in developing remedial action plans, done work for an owner of a property that was not responsible for the contamination at that property?

A. No.

MR. PODLEWSKI: I have no further questions.

HEARING OFFICER KNITTLE: Do we have a redirect, Mr. Rieser?

MR. RIESER: Yes.

HEARING OFFICER KNITTLE: Is it going to be long?

MR. RIESER: Well...

HEARING OFFICER KNITTLE: Let's take a break.

(Whereupon, after a short break was had, the following proceedings were held accordingly.)

HEARING OFFICER KNITTLE: We're back on the record after a short recess and we are commencing with the redirect examination of Mr. Krikau.

Mr. Krikau, I'm sure you remember from the 200 times you have testified before the Illinois Pollution Control Board that even though you have had a break, you are still under oath.

R E D I R E C T E X A M I N A T I O N

by Mr. Rieser

Q. Mr. Krikau, Mr. Podlewski asked you some questions regarding the Illinois Environmental Protection Agency's handling of reimbursement for costs of the underground storage tank programs. Do you recall that?

A. Yes.

Q. You are aware, aren't you -- are you aware of

whether or not the Pollution Control Board has adopted regulations with respect to underground storage tanks which include sections on eligible costs?

A. Yes.

Q. Those rules are called Part 732 regulations?

A. I believe so, yes.

Q. Okay. Directing your attention to Section 732.605.18, I will point you to what I think Mr. Podlewski was referring to in that it says, quote, "The destruction or dismantling and reassembly of above-grade structures in response to a release of petroleum if such activity has been certified as necessary to the performance of corrective action by a licensed professional engineer." Do you see that?

A. Yes.

Q. And do you see that it's identified as being in Section 732.605, which is entitled, "Eligible Costs"?

A. Yes.

Q. Would you -- you are a licensed professional engineer, correct?

A. Yes.

Q. Would you, as a licensed professional engineer, certify that the destruction or dismantling and reassembly of above-grade structures in response to release, in this

case perc, is necessary to the performance of corrective action at this site?

A. I don't believe it's necessary, no.

Q. So you would not certify that?

A. I would not certify that.

Q. Are you aware whether the IEPA and the administration of its underground storage tanks has any limitations in how they implement that reimbursement allowance?

A. I have never run into it, so I don't know.

Q. Mr. Podlewski also asked about the limits of applicability of the TACO regulations. Do you recall those questions?

A. Yes.

Q. As you said, the TACO regulations are contained in Part 742 of the Pollution Control Board's regulations, correct?

A. Yes.

Q. Part 742.105 is the section entitled, "Applicability," correct?

A. Yes.

(Whereupon, Mr. James Harrington entered the proceedings.)

BY MR. RIESER:

Q. Directing your attention to 742.105(b), it states, "This part is to be used in conjunction with the procedures and the requirements applicable to the following programs: One, leaking underground storage tanks; two, site remediation program; and three, RCRA Part B permits and closure plans." Do you see that?

A. Yes.

Q. Is there anything about what you know about this site that under that subsection would preclude the application of TACO to the Martin site?

A. No. I believe TACO is applicable to the Martin site.

Q. Okay. Section 742.105(c) says, and I quote, "The procedures in this part may not be used if their use would delay the response action to address imminent and substantial threats to human health and the environment. This part may only be used after actions to address such threats have been completed." Do you see that, sir?

A. Yes.

Q. Is there anything that you know about the Martin site that would preclude the application of TACO based on that language in the regulations?

MR. PODLEWSKI: I'm going to object to that because I don't think he's qualified to state whether or not there

is an imminent or substantial endangerment to the property.

MR. RIESER: He was asked on cross-examination whether -- especially because of this, the TACO rules may be inapplicable under certain situations. He testified regarding his knowledge of the site based on the Pioneer report, and I think he is certainly qualified to respond to Mr. Podlewski's cross-examination question as to the applicability or inapplicability of TACO here, and he is entitled on redirect to clarify and expand upon that answer and direct it based on his knowledge of the site.

MR. PODLEWSKI: Based -- if I may?

HEARING OFFICER KNITTLE: You may.

MR. PODLEWSKI: I never asked Mr. Krikau if the conditions of the property constituted imminent and substantial danger to human health or safety to the environment. I simply asked him about those conditions in which TACO would be appropriate or inappropriate. I didn't ask him specifically with respect to this site because he is not qualified to give that opinion.

HEARING OFFICER KNITTLE: I'm going to overrule the objection, but his answer is, of course, limited to his knowledge of the site, which was based as far as I know strictly on the Pioneer report.

MR. RIESER: Go ahead.

BY THE WITNESS:

A. I don't see anything there that would preclude the use of TACO on the property.

BY MR. RIESER:

Q. In anything else you know about TACO or the property, is there anything that you are aware of that would preclude the application of TACO to this property?

A. Nothing that I'm aware of.

Q. You were asked by Mr. Podlewski a series of questions as to whether you performed certain work for a site owner or for another part. Do you recall those questions?

A. Yes.

Q. Do you believe that an opinion as to technical feasibility changes depending on whether you are providing that opinion on behalf of the site owner or on behalf of someone else?

A. From a technical standpoint, no. It doesn't make any difference. We deal with the contamination of the property. That's what we look at.

Q. You are developing technical remedial strategies in response to that contamination?

A. Yes.

Q. You were also asked about a statement in your letter, which is Exhibit J, and you were questioned about whether that constituted an opinion as to whether remediating to background levels is technically feasible. I think the sentence was the first sentence of your second paragraph saying the site can be remediated to background levels assuming time is not an issue and there is an unlimited amount of money available to do the remediation. Do you recall that?

A. Yes.

Q. Is a task which requires an unlimited amount of money and an unlimited amount of time to be completed technically feasible?

MR. PODLEWSKI: Objection. There is no testimony that this -- that this mediation that Mr. Krikau has discussed thus far either takes an unlimited amount of money or an unlimited amount of time. As a matter of fact, his testimony on Exhibit J says quite the contrary.

HEARING OFFICER KNITTLE: Mr. Rieser?

MR. RIESER: I think that was exactly the point of Mr. Podlewski's question. I think the board is entitled to know how Mr. Krikau defines feasibility.

HEARING OFFICER KNITTLE: Anything further?

MR. PODLEWSKI: He has already testified -- he has

already testified that it's not technically feasible to conduct the remediation of the property to background concentrations. I don't see what --

HEARING OFFICER KNITTLE: I'm going to overrule. I think he has testified to that effect, but I would like to know his definition of technical feasibiltiy. Do you remember the question, sir?

THE WITNESS: Yes.

HEARING OFFICER KNITTLE: You can answer.

BY THE WITNESS:

A. In my opinion, to institute a remediation given enough time and enough money that may go into infinity is technically not feasible.

HEARING OFFICER KNITTLE: Thank you.

MR. RIESER: I have nothing further.

HEARING OFFICER KNITTLE: Recross?

MR. PODLEWSKI: Sure.

R E C R O S S - E X A M I N A T I O N

by Mr. Podlewski

Q. Now, Mr. Krikau, you testified on redirect that nothing precludes the use of TACO to develop remediation objectives at the property, is that correct?

A. That's correct.

Q. Okay. Now, Mr. Krikau, directing your attention

to Section 742.105(b) of the TACO regulations, it describes situations under which TACO is to be used, is that correct?

A. Yes.

Q. To derive cleanup objectives?

A. Yes.

Q. Okay. The first situation is if you are dealing with an underground storage tank release, is that correct?

A. Yes.

Q. Are we dealing with an underground storage tank release here?

A. I don't believe so.

Q. All right. The third situation is when you are dealing with a RCRA Part B application and a closure plan under RCRA, is that correct?

A. That's correct.

Q. And are we dealing with either of those situations, here?

A. Not under a Part B RCRA permit, no.

Q. And are we dealing with a RCRA closure plan?

A. We're not dealing with a RCRA closure plan.

Q. All right. And the third situation is if you are dealing with remediation under the site remediation

program, is that correct?

A. That's correct.

Q. That's called a voluntary site remediation program, is that correct?

A. Yes.

Q. And that's a voluntary program, is that correct?

A. It says it's voluntary. That's the word.

Q. So would it be appropriate to use that to derive cleanup objectives in a situation where cleanup was compelled by a board order and not voluntary? If you don't know, you can answer you don't know.

A. I don't know that.

Q. Now, Mr. Krikau, you testified that you reviewed the September 10, 1996, Pioneer report in developing your opinions in this case?

A. Yes.

Q. Okay. And you are familiar with the condition of soil and groundwater of the property as reported in that report?

A. Yes.

Q. Okay. And isn't it correct to state that concentrations as high as 300,000 parts per billion of perchlorethylene have been found in the groundwater of the

property?

A. I believe that's what the report says.

Q. And that's -- and it's your opinion that that condition does not present an imminent and substantial danger to the environment?

A. I need some time to think about that and develop that answer.

Q. So your answer is you don't know?

A. I don't know at this point.

Q. But if it did, the use of TACO would not be appropriate to develop cleanup objectives under the TACO rules, is that correct?

A. Until I do the work required, I don't know the answer to that.

Q. Now, Mr. Krikau, directing your attention to Exhibit J, Respondents' Exhibit J, this, in your opinion -- strike that.

In this exhibit, you do not opine that in order to remediate the property to background concentrations, it would take forever and would cost an unlimited amount of money, is that correct?

A. Ask me that again, please.

MR. PODLEWSKI: Would you read that question back?

(Whereupon, the requested portion of

the record was read accordingly.)

BY THE WITNESS:

A. I don't believe that's correct. My sentence says that the site can be remediated to background levels assuming that time is not an issue and there is an unlimited amount of money available to do the remediation.

BY MR. PODLEWSKI:

Q. But you also -- you also estimate that the cost to do remediation, if you are talking about excavation and pump and treat, is $700,000, and the cost to do a remediation if it's an installation of an SVE system and a pump and treatment would cost $400,000, correct?

A. Yes.

MR. PODLEWSKI: I don't have any further questions.

HEARING OFFICER KNITTLE: All right. Do you have any re-redirect, Mr. Rieser?

MR. RIESER: Yes.

R E - R E D I R E C T E X A M I N A T I O N

by Mr. Rieser

Q. If you did the remediation -- implemented the remediation strategies that you described both in your letter and as you have testified here today, could you be assured that you would achieve background levels in soil and groundwater?

A. Given enough time and money, maybe.
Q. What do you mean by that?
A. Well, number one, I need a lot more information than what was in the Pioneer report to come up with something better than that.
Q. What else?
A. I would have to sit down and write a corrective action plan, which would take considerable effort to do. I would have to know the status of the buildings and things of that nature.
MR. RIESER: Thank you. I have nothing further.
MR. PODLEWSKI: I have nothing more.
HEARING OFFICER KNITTLE: No re-recross?
MR. PODLEWSKI: No.
HEARING OFFICER KNITTLE: Thank you. You can step down.
(Whereupon, after a lunch break was had, the following proceedings were held accordingly.)
HEARING OFFICER KNITTLE: We are back on the record after a lunch break.
Mr. Rieser, have you concluded your case-in-chief?
MR. RIESER: Yes, I have.
HEARING OFFICER KNITTLE: We don't have any exhibits

or anything that you have to offer, I don't think?

MR. RIESER: I think everything has been offered and has been --

THE COURT: I just have Respondents' I and J that were offered today.

MR. RIESER: And I thought we -- at the end of the -- if I didn't move for their admission, I will do so now. I believe they are both --

HEARING OFFICER KNITTLE: No. They have both been admitted. That is correct.

MR. RIESER: That's what I thought.

HEARING OFFICER KNITTLE: There is nothing else?

MR. RIESER: No.

HEARING OFFICER KNITTLE: Let's then move to -- you have a case in rebuttal, I take it?

MR. PODLEWSKI: I do, Mr. Hearing Officer.

HEARING OFFICER KNITTLE: Your witness.

MR. PODLEWSKI: In rebuttal, we will call Michael Perkins.

HEARING OFFICER KNITTLE: Will you swear him in? You've already been sworn, but I'm going to have you sworn in again.

(Witness sworn.)

WHEREUPON:

M I C H A E L P E R K I N S ,

called as a witness herein, having been first duly sworn, deposeth and saith as follows:

R E B U T T A L E X A M I N A T I O N

by Mr. Podlewski

Q. Mr. Perkins, were you present at this hearing yesterday to hear Mr. Pyles' testimony regarding Pioneer's use of hand augers to construct boreholes for the installation of groundwater monitoring wells?

A. Yes, I was.

(Whereupon, Marilee McFawn entered the proceedings.)

BY MR. PODLEWSKI:

Q. All right. Do you agree with his testimony that the use of hand augers is not an appropriate methodology for the construction of boreholes for the installation of groundwater monitoring wells for the property?

A. No, I don't.

Q. And why do you disagree?

A. Well, because in some -- in many instances, the use of hand augers is an acceptable methodology. The U.S. EPA has designated that it's an acceptable methodology. Sometimes it's the only method that you can use.

Q. When you say U.S. EPA methodology, what are you referring to?

A. I'm referring to the document "Handbook of Suggested Practices for the Design and Installation of Groundwater Monitoring Wells."

Q. Is that the document marked as Complainant's Exhibit T?

A. Yes.

Q. Now, in that document, I'm directing your attention to Section 4, Page 5. Actually, it's Page 35 and not Page 5. It's Section 4, Page 35.

A. Yes. Okay.

Q. And do you see in the left-hand column the paragraph that begins with generally?

A. Yes, I do.

Q. And that paragraph begins with the sentence, quote, "Generally, the borehole cannot be advanced below the water table because the borehole collapses," close quote?

A. Yes, I do.

Q. And does that relate to the use of hand augers?

A. Yes, it does.

Q. Now, do you agree with that statement that's found -- that I just read to you out of Exhibit T?

A. I generally agree with it because it -- in many cases when you are dealing with certain types of sediments, the borehole will collapse especially in soil such as sands or gravel. They generally collapse within the well bore when they are in wet conditions. However, at this site, which is a silty clay, which is a cohesive soil, it will generally hold its shape within the saturated zone.

Q. So that statement that generally the borehole cannot be advanced below the water table because the borehole collapses is correct, but the use of a hand auger is appropriate for soils with a clay-type matrix, is that correct?

A. Yes, it is.

Q. Am I using the right type of terminology?

A. Clay matrix, yes.

Q. Mr. Perkins, if a hand auger with a diameter of three and a quarter to three and a half inches is used to install a groundwater monitoring well with a casing diameter of two inches or less, what would be the annular space?

A. Probably five-eighths of an inch or somewhere in that range.

Q. If the U.S. EPA acknowledges in Exhibit T that a

hand auger may be used to install a groundwater monitoring well with a casing diameter of two inches, what does that say about the U.S. EPA's position regarding such a small annular space?

A. Well, I can't really speak for them, but in my opinion, the way I read it is that it is acceptable for the installation of a monitoring well. Otherwise, they would not, you know, make this an acceptable methodology.

Q. The use of hand augers?

A. The use of hand augers, yes.

Q. Now, Mr. Perkins, you will note on the face page of Complaint's Exhibit T, if I could refer your attention to that.

A. Yes.

Q. This is a March 19, 1991, document?

A. That's correct.

Q. Is this document -- has this document been revised since March 1991?

A. Yes, it has. When we received this document, handwritten up in the corner near the date was REV and that indicated that it had been revised.

Q. Okay. This document -- you keep this document in your office?

A. Yes, I do.

Q. And you rely upon this document in the course of your work as a hydrogeologist?

A. Yes, I do.

Q. And is this an authoritative document relating to suggested practices for design and installation of groundwater monitoring wells?

A. In my opinion, it is.

Q. Has the U.S. EPA's position regarding the use of hand augers to drill boreholes for groundwater monitoring wells changed since 1991?

A. Not to my knowledge.

Q. Did you hear Mr. Pyles' testimony yesterday that the use of a hand auger is acceptable to construct a borehole only if a well casing is used?

A. Yes, I did.

Q. Do you agree with that statement?

A. Not necessarily, no. I don't see how it is possible. I'm not aware of any situation where you use your hand auger to create a hole. That hole is of a certain size. If you run a casing down behind it, then it has to be either the same size or smaller than the auger itself. If that's the case, how would you pull it out or how would you put in the next, you know, to go deeper once that casing is in?

Q. It would be difficult if not impossible to do so?

A. Based on my knowledge, yes.

Q. Now, Mr. Perkins, when you say pull it out, are you talking about the auger?

A. The auger itself. Can I make one statement here? There is -- I am aware of one method that you can use. However, I'm not sure how you could do it and install a monitoring well and that would be to put your casing in there and bring in a smaller auger. You would go down through that and put in a smaller casing. Then go down through that. By the time you get down, you couldn't put in a two-inch monitoring well.

Q. Mr. Perkins, is it true that some soil is going to be pushed down a borehole during well construction no matter what kind of drilling technique is used?

A. I would say so, yes.

Q. All right. Mr. Perkins, I'm going to direct your attention -- you have it in front of you -- to what has been marked as Complainant's Exhibit E.

A. Yes.

Q. I would like for you to take a look at first is Figure 2 of that exhibit.

A. Okay.

Q. All right. I would like you to note on Figure 2 the location of boring B-12/Monitoring Well 5?

A. Okay.

Q. Do you find that?

A. Yes, I have.

Q. What does the designation B-12/MW-5 mean?

A. B-12 stands for the boring -- the number of the soil boring and MW-5 is the monitoring well designation that was installed within that boring.

Q. Okay. Do you know whether -- strike that. MW-5 was constructed with a hand auger, is that correct?

A. That's correct.

Q. And the well diameter was two inches?

A. That's correct.

Q. Now, I would like you to direct your attention to the soil sampling results from boring B-12, which is found at Table No. 1 of three of this Exhibit E.

A. Table 1 of three, yes.

Q. Three of three.

A. Oh, three of three. Okay.

Q. The soil sampling results from boring B-12, do you see that?

A. Yes, I do.

Q. And the sampling date was?

A. 4/23/96 and 4/24/96.

Q. All right. And at what sample -- at what soil interval was the sample from B-12 taken?

A. From 2.5 feet to five feet in-depth.

Q. What were the results for perchlorethylene at that interval?

A. No perchlorethylene was detected.

Q. So it was non-detect?

A. Non-detect.

Q. Now, I direct your attention on the same exhibit to Table No. 2, two of four.

A. Okay.

Q. And does that table contain results from monitoring well five?

A. Yes, it does.

Q. Okay. Monitoring well five was the monitoring well that was installed in boring B-12?

A. That's correct.

Q. And what were the groundwater sampling results?

A. Tetrachlorethylene or perchlorethylene had 16,000 parts per billion.

Q. Okay. Is that result consistent with the theory that contamination detected in the groundwater at the property is attributable to contaminated soil being pushed

down boreholes during well construction?

A. It would indicate that the -- since there was no contamination shollow, it would indicate that the groundwater was impacted or that the source was not from shollow or up the borehole.

Q. What does that say about the well construction, if anything?

A. It implies that it was constructed properly.

Q. Mr. Perkins, did you hear Mr. Pyles use the term representative groundwater yesterday?

A. Yes, I did.

Q. And what does that mean to you?

A. Representative groundwater is -- I'm not sure I really understood his term because groundwater, by definition, is greater than one atmosphere -- exhibits an internal pressure greater than one atmosphere. Whether it's part of the year or the whole year, if it exhibits that characteristic, it's groundwater.

Q. When -- you said over the whole year?

A. Yes. If it's there for part of the year or the whole year.

Q. Is that called the intermittent nature of the groundwater?

A. If it's there only part of the year, it's

intermittent.

Q. If groundwater at the site is intermittent, is it any less groundwater?

A. In my opinion, no.

Q. Does the absence in the Pioneer reports of any discussion of meteorological conditions during a sampling event have any significance?

A. Very little at this site. The reason for that is because the site is covered by a parking lot and by the concrete floor of the building. There would be very little potential for any storm water to enter the soil itself. It would run off first.

Q. Now, Mr. Perkins, on the exhibits that you have there, if you could pull out Complainant's Exhibit J, it should be a chain of custody form.

A. I'll get to it eventually here. I think this is it. No. That's K. J, here we go.

Q. All right. Mr. Perkins, did you hear Mr. Pyles' testimony yesterday about the use of field blanks?

A. Yes, I did.

Q. Directing your attention to Complainant's Exhibit J, which is -- well, what is Complainant's Exhibit J?

A. It appears to be a chain of custody for

groundwater samples that were taken on 4/24/96.

Q. And this is a group exhibit, correct?

A. Define group.

Q. Group exhibit means there is more than one page to this exhibit.

A. That is correct.

Q. And the first two pages relate to groundwater samples that were taken on 4/24/96?

A. Yes.

Q. Okay. Doesn't -- does this exhibit indicate that a field blank was used during April 24, 1996, groundwater sampling event?

A. Yes, it does.

Q. Now, again, directing your attention back to Exhibit E, if I can have this for a moment.

A. Sure.

Q. Mr. Perkins, I'm directing your attention to a page in Complainant's Exhibit E, one of the laboratory report sheets. Can you identify on the record what sheet I'm directing your attention to?

A. Yes. This is the field blank that was taken on 4/25/96 -- well, the receive date was 4/25/96. This is the analytical report from Synergic Analytics.

Q. And does it indicate on that form that the

sampling date was 4/24/96?

A. Yes, it does.

Q. Does that appear to be the analytical report relating to the field blank that was -- that is also referenced on Complainant's Exhibit J?

A. It appears to be, yes.

Q. Okay. And what did that field blank show?

A. That nothing was -- none of the chemicals analyzed there were detected.

Q. Okay. Now, directing your attention back to Complainant's Exhibit J, which is the chain of custody form, that form indicates that a sample was sent to the lab from monitoring well one, correct?

A. Yes, it does.

Q. A groundwater sample?

A. Yes.

Q. Okay. Now, going back to Complainant's Exhibit E, if you go to the next page following the analytical report on the field blank, which is the page you just testified about?

A. Yes.

Q. Can you identify what that is?

A. That's a sample analysis for the groundwater sample from MW-1 collected on 4/24/96.

Q. And what were the sampling results?

A. The results on that indicated 310,000 parts per billion of techtrachlorethylene or perchlor.

Q. What do these sample results indicate to you?

A. It indicates that the decontamination procedures followed by Jeff McClelland of Pioneer were effective.

Q. Does that suggest anything with respect to the construction of monitoring well one?

A. It also suggests -- actually, no, it doesn't. It just makes the suggestion that the decon materials between -- after this sample was collected and the field blank, that it was followed properly, that your decontamination procedures were followed.

Q. Mr. Perkins, does the fact that better procedures could possibly have been used to construct, develop and sample the groundwater wells at the property alter in any way your opinion that you have given in this case that the groundwater samples obtained from Pioneer from the property in April, May, and June of 1996 were representative samples of the groundwater?

A. Actually, it provides a little more definition in the fact that we did have some quality control, but as to alter my opinion as to whether they were representative, no, it does not.

MR. PODLEWSKI: I have no further questions.

HEARING OFFICER KNITTLE: Cross-examination?

MR. RIESER: Sure.

MR. PODLEWSKI: Although at this time, I would move that Complainant's Exhibit T be admitted into evidence. It was identified before, but it was never moved.

HEARING OFFICER KNITTLE: Correct. Is there any objection to that?

MR. RIESER: No.

HEARING OFFICER KNITTLE: That will be admitted.

C R O S S - E X A M I N A T I O N

by Mr. Rieser

Q. Mr. Perkins, looking at Exhibit J, I think you testified that the -- I'm sorry.

Looking at Exhibit J and Exhibit E, i.e., the chain of custody, showing what samples were delivered to the lab and the field blank, correct, you testified about that?

A. Yes, I did.

Q. Okay. And it was your testimony that the fact that the field blank had non-detect and the fact that the sample from MW-1 showed a high level of contamination gave you a feeling of confidence that the decontamination procedures used by Pioneer, or whatever they were, were followed, is that correct?

A. That's correct.

Q. Do you know whether the field blank was taken before or after the sample -- I'm sorry -- the sample from MW-1?

A. To be honest with you, no, I do not.

Q. And no sampling from MW-4 -- the sample from MW-4 that was taken was held and then analyzed, correct?

A. That's correct.

Q. So no field blanks were taken for any of the other sampling events that occurred, correct?

A. That's correct.

Q. So on April 26, 1996, there was no field blank, correct?

A. It appears to be that way, yes.

Q. Okay. And on the sampling results on Exhibit K for May 17th, there was no field blank, correct?

A. May 17th?

Q. That's on Exhibit K. It should be somewhere on that pile.

A. That's correct.

Q. And on June 25, 1996, there was no field blank, correct?

A. That's correct.

Q. So whatever level of confidence you derived

from seeing field blank results for April 24th, you can't derive that same level of confidence for the other sampling events, correct?

A. That's correct.

Q. All right. And since we don't know whether the field blank was taken before or after the sample from MW-1, it really doesn't tell us very much about whether your decontamination policies were followed or not?

A. The field blank is generally taken after the first sampling event as a standard procedure, but I do not know whether they performed it before or after.

Q. So going back to the question I asked you, the answer is we don't know whether the decontamination procedures were followed or not?

A. The fact that they came back with a field blank, whatever procedures that they did, if they followed the standard procedures, the field blank indicates that their procedures were followed.

Q. Okay. The fact that they -- if they took the field blank before they took contaminated samples, we don't know what it says in terms of decontaminating that bailer after they took the contaminated sample, correct?

A. Correct. I would say if they didn't follow standard procedures, which I'm not aware of, that would be

correct.

Q. You also talked about the absence of meteorology and not having an impact on the site because it's covered by a parking lot and a building, is that correct?

A. That's correct.

Q. Have you been to the site?

A. I've only -- no.

Q. Okay. But you have looked at the site diagrams that are contained in the Pioneer reports, correct?

A. Correct.

Q. And you will agree with me that that site has several storm sewers on it?

A. Yes.

Q. Storm sewers can carry water from precipitation events under the parking lots?

A. Yes, that's correct.

Q. And into the ground from the storm sewers themselves?

A. If they leak.

Q. If they leak?

A. Yes.

Q. Are you aware that storm sewers leak from time to time?

A. From time to time.

Q. All right. Now, you talked about the results of boring B-12 and comparing that to the results from the monitoring well that was developed from the boring. Do you recall that?

A. That's correct, yes.

Q. And it was your opinion, I believe, that that showed that the potential for carrying down in that boring was not likely because the soil boring had shown non-detect, but the groundwater showed contamination, correct?

A. Correct.

Q. Now, the sample from MW-5 was taken on April 26th, correct?

A. MW-5, yes. One sample was collected on 4/26.

Q. On that same date, samples were taken if you turn to Table 2 on Exhibit E?

A. Table 2. What appendix is that?

MR. PODLEWSKI: It's not an appendix. It's a table.

BY THE WITNESS:

A. Oh, right. I've got you. Table 2 of three?

BY MR. RIESER:

Q. Table 2 of 4.

A. Okay.

Q. On the date that sample was taken, there was contamination detected at several other wells as well as well number five?

A. Correct.

Q. Since no field blank was performed, we don't have any confirmation in the data records as to whether decontamination procedures were followed as the bailer was brought between those wells, correct?

A. Correct.

Q. And we don't have any record of which these were sampled first and which was not sampled -- which was sampled among these four wells?

A. No. There does not appear to be any order stated. However, on the --

Q. I'm sorry?

A. Never mind.

Q. So the absence of a soil boring detecting -- showing detected contamination above the monitoring well doesn't rule out the possibility of cross-contamination from another source?

A. I believe that's probably unlikely if they followed the proper procedures.

Q. But again, we don't have the documentation that they stated in the protocol that they would provide

documents that they followed their procedures?

A. I have no reason to believe that they didn't follow their procedures.

Q. Okay. You began your testimony today talking about the document that is Exhibit T, which is the handbook of suggestive practices for design and installation of groundwater monitoring wells. I believe you said this was an authoritative text with respect to that subject?

A. Yes, I did.

Q. And it is your opinion that the U.S. EPA believes it's acceptable to use a hand auger in some situations because of the fact that the hand auger is identified as a methodology in this document, correct?

A. Yes, and in other documents I have read, which are not here.

Q. Okay. And the discussion on whether the hand auger provides an annular space that Mr. Pyles testified to and you testified to, you believe that this document also supports your position regarding whether the annular space created by a three and a half-inch hand auger in using a two-inch well is adequate?

A. Yes.

Q. Now, that's true of this document taken as a

whole, correct?

A. Correct.

Q. Okay. Well, this document, would you agree, is intended to provide an extensive discussion about all the different methodologies you could use for creating a groundwater monitoring well in allowing a professional to decide among those technologies based on the site characteristics and conditions he is working in, correct?

A. It should, yes.

Q. And this document includes an Appendix B, which has matrices, m-a-t-r-i-c-e-s, for selecting appropriate drilling equipment, correct?

A. Yes, it does.

Q. Okay.

A. What page are you looking at?

Q. Well, I'm going to look at Page 166. Well, the beginning of the matrix is Page 165.

A. Okay.

Q. So you will agree with me the purpose of this matrix is to identify the different characteristics of the different equipment and talk about different site conditions that can be employed in and talk about which method is preferable given those types of site characteristics, correct?

A. Okay.

Q. And if you look at matrix number one on Page 167, it appears that they use a scoring methodology for each of the different technologies. Do you see that?

A. Yes.

Q. And that the scoring methodology is a one to ten scale with one being the lowest preference and ten being the highest preference, correct?

A. Correct.

Q. Now, if you look on Matrix 1, it has both hand auger and hollow-stem auger in additional to several other technologies, correct? Matrix 1 on Page 167.

A. Yes.

Q. Okay. If you look at the criteria for evaluation of drilling methods, you will see category labeled sample reliability?

A. Correct.

Q. So in this category, the U.S. EPA is identifying its relative preferences of the two of these methodologies as to sample reliability, correct?

A. Correct.

Q. And you'll note that for hollow-stem auger, the value selected by U.S. EPA is a ten, correct?

A. Correct.

Q. And the value selected for hand auger is a five?
A. Correct.
Q. Does this mean that the U.S. EPA believes that the hollow-stem auger is twice as likely to produce reliable results than a hand auger?
A. What it means is that the hollow-stem auger and the hand auger, while they are both acceptable methods according to the U.S. EPA, one is preferable over the other, but it does not mean that either one of these things is not an acceptable method.
Q. But you will agree with me that if you are concerned about sample reliability, the U.S. EPA demonstrates a marked preference for hollow-stemmed augers as opposed to hand augers?
A. There are better ways to do it than hand augers, yes, and they state that here.
Q. Okay. Now, this document also contains in Appendix A, which starts on Page 141. Would you turn to that, please?
A. Yes.
Q. Okay. What this is is a drilling and construction -- is a report dedicated to drilling and constructing monitoring wells with hollow-stem augers, correct?

A. Correct.

Q. And in the first paragraph of that report, the U.S. EPA states, and I quote, "To date, hollow-stem augers represent the most widely used drilling method among groundwater professionals involved in constructing monitoring wells." Do you see that?

A. No, I don't.

Q. It's in the middle of the first introductory paragraph.

A. Oh, in the middle. Okay.

Q. To date.

A. To date. Okay. Yes.

Q. Okay. So you agree with U.S. EPA that that's true, don't you?

A. I agree that the hollow-stem auger is a better method of installing monitoring wells, but I disagree with the fact that it's the only method that is approved and acceptable by the U.S. EPA.

Q. In fact, as this report goes on to say, several reports that they identify from 1986 and 1988 estimate that more than 90 percent of all monitoring wells installed on consolidated materials in North America are constructed with hollow-stem augers.

MR. PODLEWSKI: Your Honor, I'm going to object to

this. We've gone over the same testimony 15 different ways. The testimony is hand augers are appropriate. There may be better ways to do it. A hollow-stem auger may be a better way to do it. That testimony is given. It's of record. We don't have to go over it 15 times.

MR. RIESER: Well, this document was used to attempt to impeach Mr. Pyles' credibility in terms of his testimony regarding hand augers and why they were a better technology and it was being presented for the -- certainly the implication, if not the point, that hand augers are an acceptable measure of -- an acceptable way of providing results.

I think to the extent that there was information in this document that clearly supports Mr. Pyles' point, which is most people use hollow-stem augers, it ought to come out. I mean, this document was dropped in front of Mr. Pyles yesterday and he was asked to acknowledge that it meant U.S. EPA supported the use of hand augers.

The point is that this document identifies numerous limitations on the use of hand augers, which we have not yet finished discussing. I don't see why Mr. Podlewski wants to prevent me from having his expert go through the document that he himself presented.

MR. PODLEWSKI: Because the point is is that

Mr. Rieser is -- through his ad nauseam testimony is attempting to show that hollow-stem augers are better than hand augers in drilling boreholes for installation of groundwater monitoring wells. I don't think there is any dispute about that. Mr. Pyles has so testified. So let's move on.

HEARING OFFICER KNITTLE: How much more do we have?

MR. RIESER: Well, we have another issue with relation to annular space that we need to discuss. I believe we can break this off here. We've dealt with some other issues in this document.

HEARING OFFICER KNITTLE: Yes. This is your exhibit, Mr. Podlewski, and it was used by your witness to a significant degree and used in the cross-examination yesterday of Mr. Pyles. I would like to give him the opportunity to go through it, but I do understand your point. We don't want to cover things over and over again if we have made our point.

MR. RIESER: Understood.

HEARING OFFICRE KNITTLE: I will allow you to go on with this a little bit longer.

MR. RIESER: All right.

HEARING OFFICER KNITTLE: But I certainly don't want to get to the ad nauseam level.

MR. RIESER: Well, hopefully, I won't get to the ad nauseam level.

HEARING OFFICER KNITTLE: I don't know that we have reached that yet, but...

MR. RIESER: I don't think that we have either, but I understand. I will move on.

HEARING OFFICER KNITTLE: I guess I'm not sustaining or denying the objection.

MR. RIESER: You are giving me an advisory as to how I should proceed.

HEARING OFFICER KNITTLE: Oh, that sounds good. I like that.

MR. PODLEWSKI: Thank you.

BY MR. RIESER:

Q. You testified today, and also you testified the other day, that the annular space provided when you use a three and a half-inch hand auger to drill a monitoring well with a two-inch diameter pipe is adequate for placement of a sand pack and the seal on top of the sand pack, is that correct?

A. That's correct.

MR. PODLEWSKI: I'm going to object to that because that's beyond the scope of his rebuttal testimony.

MR. RIESER: Not at all because he testified

directly -- directly on this very point, that because the monitoring well -- that because the hand augers were identified as an available technology that meant -- because of that identification that the U.S. EPA was satisfied with the annular space that he identified as being appropriate.

MR. PODLEWSKI: Can you read back the initial question?

(Whereupon, the requested portion of the record was read accordingly.)

MR. PODLEWSKI: If I may, Mr. Hearing Officer, my examination of Mr. Perkins on rebuttal was nowhere close to addressing that particular question the way Mr. Rieser asked it.

To the extent that he wants to bring up stuff that was testified to during his direct examination, he had his opportunity two days ago to do that.

MR. RIESER: The specific question was asked, and obviously I don't have it transcribed verbatim, but I see in my notes that a question was asked regarding the annular space. Testimony was given that it was approximately -- what I have written down is five-eighths of an inch, but I'm not going to talk about whether that's the correct number or not, and that --

HEARING OFFICER KNITTLE: I recall that question.

MR. RIESER: The next question asked, well, since the document on Page 35 talked about the availability and use of hand augers, that means that the U.S. EPA approves an annular space being there. Those questions were asked today and I'm entitled to cross-examine him about the other parts of the documents that talk about that.

HEARING OFFICER KNITTLE: I have to agree with Mr. Rieser. The objection is overruled. We will take a short break.

(Whereupon, after a short break was had, the following proceedings were held accordingly.)

HEARING OFFICE KNITTLE: Now, do you need a prompt as to where we were?

MR. RIESER: Where were we?

(Whereupon, the requested portion of the record was read accordingly.)

BY MR. RIESER:

Q. I believe you testified today that -- I think you said the annular space was five-eighths of an inch, is that correct?

A. My guestimate would be five-eighths of an inch.

Q. It's your testimony that because the U.S. EPA

identifies the hand auger as an appropriate methodology in Exhibit T and that that annular space is therefore acceptable according to the U.S. EPA, correct?

A. Correct.

Q. If you will, turn to page -- you agree with me that this document has extensive discussions an all of the issues we've talked about in this hearing including annular space, filter packs, sealants, and things like that, correct?

A. Correct.

Q. And it's also your position that what the U.S. EPA says in this document about those issues is the authoritative text on that issue, is that correct?

A. It is authoritative, but there are other documents out there. Part of it is in my affidavit.

Q. Okay. On Page 92, this is in the section on filter pack dimensions and a chapter on Section 5, design components and monitoring wells, correct?

A. It appears that way, yes.

Q. Okay. Now, on the bottom of Page 92, in the right-hand column, it states, quote, "Conversely, it's difficult to reliably construct a well with a filter pack that is less than two inches thick. Monitoring well filter pack thicknesses are commonly suggested to be at

least two to four inches." Do you see that?

A. That's what it says, yes.

Q. And you agree with that?

A. Not entirely. It says to reliably construct. Therefore, I mean, I don't disagree with the information here, but what I do state is based on this and other articles that I have read, that the construction is relative to what you are able to get. If a hand auger is possible, you can also do what they call a natural filter pack. That is with no filter pack at all. That is also an acceptable method under certain conditions.

Q. Is that identified as an acceptable method in this document?

A. Yes, it is.

Q. And where is that?

A. Section 7.

Q. What page?

A. There are several pages. It's on Pages 115 and 116, down at the type of geological material on 115.

Q. Yes.

A. Okay. Nearly the last sentence, it says, "Uniformly distribute and maintain the proper height of filter pack if one is installed above the the well intake." Also, on the right side on Page 116, it says,

"The natural filter back installations where the natural formation is allowed to collapse around the well intake, the function of development is twofold." Then, it goes into that.

Q. Okay. So in soils where the natural tendency of the materials is to collapse around the well intake, that being in the steam, correct?

A. Correct.

Q. Then you could use a natural filter pack, right?

A. Under certain conditions.

Q. Right. Of course, you earlier testified that you were working in clay soils, correct, which you said is cohesive and did not have a tendency to collapse, correct?

A. The way I stated it was that it held its shape longer, if I remember.

Q. Held its shape longer?

A. It will collapse, but over a period of time, which may be several days to several weeks.

Q. In fact, one of the boreholes in there constructed did collapse, isn't that correct?

A. I don't remember.

Q. Okay. So when the statement appears monitoring well filter pack thickness, they are commonly suggested to be at least two to four inches, that's an incorrect

statement by U.S. EPA?

A. No, it's a standard that they would like to achieve, but it does not mean that it has to be achieved. I mean, that's the way I read there.

Q. So if a hydrogeologist using a judgment based on the soil conditions makes a decision that natural filter pack is an inappropriate methodology at a given site, then that natural filter pack is okay?

A. Based on the conditions and I think one of the things, it could be questioned, but he needs to document what he is doing and when he is doing it.

Q. Okay. But that wasn't done here, wouldn't you agree with me?

A. I agree.

Q. Page 92 also references Appendix A. Do you see that right at the bottom?

A. Which page?

Q. I'm at the bottom of Page 92 below where we read, "Methods to calculate volume of filter pack necessary are contained in Appendix A in the section entitled installation of the filter pack." Do you see that?

A. Oh, yes. I do, yes.

Q. So if we turn to 152 in Appendix A, we see

the sentence in the middle of the right-hand column that says, "Table 3 shows, however, that the maximum working space available between a two-inch nominal diameter casing and three and one-quarter-inch diameter hollow-stem auger is less than one inch, i.e., 0.875-inch." Do you see that?

A. Yes.

Q. It goes on to say, "This small working space can make the proper emplacement of the filter pack and annular seal very difficult, if not impossible." Do you see that?

A. Yes. It could make it difficult.

Q. If not impossible?

A. In some conditions, maybe.

Q. Do you know whether the condition -- strike that.

What's the bridging problem when you talk about annular placement of the seal?

MR. PODLEWSKI: Objection. That term -- that's the first time I've heard that term used in the three days of hearings. He certainly didn't testify about that during his rebuttal testimony or his direct examination and this goes beyond the scope of both.

MR. RIESER: I can read through this some more. I was trying to short circuit the reading of this document

which is what is suggested. It goes directly to the issue of adequacy of the filter back and annular seal.

HEARING OFFICER KNITTLE: Anything else?

MR. PODLEWSKI: I would like the record -- on the record to make a continuing objection to Mr. Rieser's -- this whole line of Mr. Rieser's cross-examination on rebuttal relating to areas to which Mr. Perkins did not testify to. Again, what was the term, bridging?

MR. RIESER: Yes.

MR. PODLEWSKI: Whatever it was, I don't even remember what it was, but that term -- I certainly did not use that term in Mr. Perkins' direct examination or in his rebuttal testimony. It goes beyond the scope of each.

THE COURT: I'll sustained that objection. This question does appear to go beyond the scope of the direct examination.

BY MR. RIESER:

Q. All right. Further down in that same paragraph, you will see the sentence, quote, "A small working space can also increase the possibility of bridging problems when attempting to convey the filter pack and annular sealant between the hollow-stem auger and well casing." Do you see that?

A. No. I'm not sure exactly where you are at.

Oh, way down here? Okay.

Q. Yes.

A. Okay.

Q. Do you agree that that's true?

A. Bridging can happen in just about any type of soil boring. So, yes, I agree.

Q. And the bridging problem is -- what is the bridging problem?

A. A bridging problem is when it sluffs off into the side basically trying to close up the hole.

Q. Isn't bridging also the -- doesn't it also occur when the filter pack or annular sealant material spans or arches across the space between the inner diameter of the auger and outer diameter of the casing?

A. Yes, based on this description here.

Q. As a result, gaps or large unfilled voids may occur around the well intake or well casing due to the non-uniform filter pack or annular sealant?

A. Yes.

Q. And that the bridging problems are more likely to occur with a small or annular space such as five-eighths-inch annular space rather than a larger annular space?

A. I've had it happen in both.

Q. They are more likely to occur with a smaller space?

A. Not necessarily. They are just as likely to occur. It's just there is more space for -- you know, in the larger boring, there is more space for it to move. Therefore, it doesn't seem to be as much of a problem. However --

Q. Excuse me. Let's stop there. But it's the U.S EPA's position it is more likely to occur in the smaller boring?

A. Based on this.

Q. Based on the handbook?

A. Yes.

MR. RIESER: I have nothing further thank you.

THE COURT: Do you have any redirect?

MR. PODLEWSKI: Yes.

R E D I R E C T E X A M I N A T I O N

by Mr. Podlewski

Q. Mr. Perkins, Mr. Rieser, on cross-examination, asked you a wide ranging -- a variety of wide ranging questions concerning the construction of groundwater monitoring wells and specifically with respect to a reference to Complainant's Exhibit T?

A. That's correct.

Q. Okay. Is it still your opinion that the groundwater samples that -- in light of Mr. Rieser's cross-examination, is it still your opinion that the groundwater samples that were obtained by Pioneer from the Martin's of Matteson site in April, May and June of 1996, were representative samples of groundwater?

A. That's correct.

Q. That still is your opinion?

A. Yes, it is.

Q. Mr. Rieser asked you -- directing your attention to Complainant's Exhibit J, Mr. Rieser asked you about the timing of the use of the field blank, is that correct?

A. Yes, he did.

Q. Okay. And how is that relevant?

A. The relevancy of it is if it's -- I don't understand why anybody would do it, but if somebody ran the field blank first, then what does it tell you? You decontaminated -- you check into decontamination water of a non-used piece of equipment.

Field blank is generally performed after you have taken your sample. You have cleaned up and you take your deionized water and the appropriate soap and clean it off. Then, you rinse water -- clean water over it and put that into a jar and send it to the laboratory for analysis.

That's to determine if any contamination remains on that piece of equipment.

Q. Between the taking of the groundwater samples?

A. After the taking of at least the first or one of the groundwater samples. It's usually taken -- either taken after the first one or at random. It's just a way of checking to see if decon procedures are being followed. Therefore, it doesn't make sense to run it before.

Q. Do you have any reason to believe that wasn't done in this case?

A. No reason to believe.

Q. If you have water from a storm sewer that is leaking into the ground, under certain circumstances, would that still be groundwater?

A. Once it reaches the appropriate pressure point, yes.

MR. PODLEWSKI: I have no further questions.

HEARING OFFICER KNITTLE: Do you have any recross, Mr. Rieser?

MR. RIESER: I have nothing.

HEARING OFFICER KNITTLE: Thank you, sir. Do you have another rebuttal witness?

MR. PODLEWSKI: One more. Mr. Persino?

HEARING OFFICER KNITTLE: Mr. Persino, please have a

seat.

MR. PODLEWSKI: Do you want to swear him in again? You did that with Mr. Perkins.

HEARING OFFICER KNITTLE: That's probably a good idea.

(Witness sworn.)

WHEREUPON:

J A M E S P E R S I N O ,

called as a witness herein, having been first duly sworn, deposeth and saith as follows:

R E B U T T A L E X A M I N A T I O N

by Mr. Podlewski

Q. Mr. Persino, you testified, did you not, that at one time you had the property for sale for $850,000?

A. Yes.

Q. Was it listed at that point?

A. We sell our own property. So it was us marketing our own property.

Q. Okay. And when was that?

A. Prior to the contamination being discovered.

Q. So that would have been prior to 1995?

A. I believe so. I don't remember the exact date, but I know it was prior to the contamination being discovered.

Q. And have you taken it off the market since?

A. It was taken off shortly after the contamination was discovered.

Q. And why did you do that?

A. Because in my business as a real estate developer and also a licensed real estate broker, it's very difficult to sell contaminated property. There is no sense in putting it out in the marketplace if you have that taint against title.

Q. Do you think $850,000 is the value of the property today?

MR. RIESER: I'm going to object to that question partly because he is not an expert as to valuation. When I asked questions regarding valuation in interrogatories, it was objected to as irrelevant. Previous questions regarding valuation have been objected to as he is a developer. So I would object to that being -- anything further on that subject being brought forward as to what the current value of the property is.

MR. PODLEWSKI: Mr. Rieser opened the door on cross-examination of this witness. I didn't ask him any questions about value. Mr. Rieser did on cross-examiantion. I think I'm entitled to examine him on it.

HEARING OFFICER KNITTLE: I know we've had questions about value and the objections were not upheld.

MR. RIESER: He did and he had an opportunity, obviously, to have redirect. To bring it up on rebuttal seems entirely inappropriate.

HEARING OFFICER KNITTLE: Anything else? I'm going to overrule the objection.

BY MR. PODLEWSKI:

Q. Do you think $850,000 is the value of the property today?

A. If the property were clean or as it exists?

Q. As it exists.

A. As it exists, no.

Q. Okay.

A. If it were clean, I believe it would be worth substantially more than that in today's hot real estate market.

Q. Now, were you in this hearing room yesterday when Eva Martin testified?

A. Yes.

Q. And she testified, did she not, that she received Phase 1 proposal from another environmental consultant to do the Phase 1 work in 1995?

A. Yes.

Q. Do you recall ever receiving such a proposal from Ms. Martin?

A. Yes.

Q. And what did you do in response when you received that proposal?

A. I believe I faxed a copy to Pioneer Environmental to have them prepare a proposal -- because I knew Pioneer -- to have them prepare a proposal to do a Phase 1. What was sent to me was a Phase 1 proposal with a price.

Q. And did they do that?

A. Yes.

Q. And do you recall how the prices of the Phase 1 proposal that Ms. Martin obtained and the price of the Phase 1 proposal that you obtained from the Pioneer compared in terms of price?

A. Well, I didn't necessarily obtain the proposal. I suggested to Pioneer that they make a proposal to Ms. Martin in response to the proposal that she had sent me because again, I was using Pioneer as my environmental firm at that time and their price, I thought, was going to be cheaper because I had found in comparing prices of environmental firms on work I was doing is that they had been cheaper in other instances. Indeed, the proposal

they came up with was cheaper for their Phase 1 report.

Q. You did see a proposal that Pioneer prepared to do Phase 1 work for Ms. Martin?

A. Yes.

Q. And it was cheaper?

A. Yes.

Q. Was that among the reasons you recommended Pioneer to Ms. Martin?

A. Yes.

Q. Did you ever tell Mrs. Martin that she could use no one but Pioneer to do any environmental work on the property?

A. No. What I suggested was that she could choose somebody, but I would have to approve anybody that would work on my property.

Q. Now, do you recall Ms. Martin's testimony yesterday concerning the letter of credit?

A. Yes.

Q. Why was that letter of credit established?

A. At the time that the contamination was discovered, I was in the process of refinancing the property and my lender requested, cased upon our receipt of the first -- I believe it was the first initial Pioneer boring report where they estimated that the cleanup was

going to be about $70,000. If you added up all the numbers in that report, that's where the figure came from. My lender requested that that amount of money be placed in escrow to cover that cost before they would proceed with the refinancing.

Q. And have there been any disbursements from that letter of credit?

A. Yes.

Q. Do you recall how much those disbursements -- what the total sum of those disbursements is?

A. My recollection is there is about, I think, $47,000 or $48,000 left from the letter of credit, which has now become a different instrument. I believe it's an escrow of some sort. So it's the difference between that and the $70,000 being what was disbursed.

Q. The original amount of letter of credit was $70,000?

A. Correct.

Q. Did you ever -- in the time that the business was operated as either one-hour Martinizing or Martin's of Matteson, did you ever have occasion to call the dry cleaners -- to call up that business and ask for Eva and be told she wasn't there?

A. Frequently.

Q. When you say frequently, what do you mean?

A. As a managing partner of the entity and being responsible for the day-to-day management of the property, I was the one contacted by all the ten tenants. On a number of occasions, I had called Eva and was told she was not there.

Q. Did you know about Ms. Martin's plan to have KREC monitor Pioneer's initial Phase 2 activities?

A. Yes.

Q. Did you speak with her about it?

A. Yes.

Q. And what did you tell her?

A. My response was that was fine provided that somebody from Pioneer who was performing the work was going to be on-site so that I would have some assurance that the borings that were being undertaken were not going to be in any way destroyed or contaminated or in any way disturbed so that there was some assurance that both firms were going to be getting fair samples of being done.

Q. Other than that, you had no objection to KREC remediation applicant C doing work alongside Pioneer?

A. None whatsoever.

Q. Do you know whether since June 1996 the Martins have performed any environmental work at the property?

A. Not to my knowledge.
Q. Not to your knowledge means you don't know?
A. I'm not sure if they have.
Q. Okay. Now, you were at the hearing today and you heard Mr. Krikau's testimony?
A. Yes.
Q. Now, was it -- correct me if I'm wrong. Did Mr. Krikau testify that the Pollution Control Board's TACO regulations permit contaminated soil to remain at a property?
A. That's what I heard him say.
Q. Is cleanup to a level that would allow contaminated soil and groundwater to remain at the property an acceptable remedy to you in this case?
A. No.
Q. Why not?
A. Because it's going to diminish, in my opinion, the value of my property and also the financability of the property.
Q. And what is your view on the use of institutional controls or engineered barriers?
A. I have had conversations with my respected environmental attorney, who happens to be sitting across from me, about this issue in the past and I have been

told --

MR. RIESER: I'm going to object to what he has been told.

MR. PODLEWSKI: That's fine.

HEARING OFFICER KNITTLE: I sustain that.

BY MR. PODLEWSKI:

Q. What is your view?

A. My view is that the property value would be diminished and the institutional controls, particularly something such as an engineered barrier creates an ongoing obligation for subsequent property owners to maintain. That barrier is in satisfactory condition in a person buying the property looking at that, I believe, is going to reduce the value and purchase price of the property if that has to be in place if he has to accept the property with that kind of deed restriction.

Q. Have you ever been involved with -- strike that.

Have you ever participated in the state's voluntary site mediation program?

A. At least three occasions.

Q. And have you received any further remediation letters?

A. In two instances.

Q. Okay.

A. One is pending.

Q. And there's no further remediation letters, under what program were they? Were they under the voluntary site remediation program?

A. Voluntary and then under -- they were petroleum sites that were under the LUS reimbursement program as well.

Q. Cleanup, were they at properties that you or an entity that you control own?

A. Yes.

Q. What cleanup levels or remediation objectives were attained in those cases?

A. In two of the cases, one of which is still pending, the issuance of the NFR letter, we cleaned up to background standards. In the second -- in the other case, upon which an NFR letter was issued, we cleaned it up also to background standards, but there was a -- it had one restriction on that particular property that we couldn't unfortunately get around which included a commercial/industrial use restriction.

Q. Why did -- was it your decision to obtain no further remediations based upon background concentration of cleanup objectives?

A. Yes.

Q. And why did you -- why didn't you accept some lesser cleanup standard at those properties?

A. Because we develop the properties primarily for our own account for long-term hold with an eye down the road at some point of selling or refinancing the property. We just felt that from our experience of 25 years in the development business that having less -- having any kind of an NFR letter with a restriction on it of any kind would diminish the value and financiability of the property.

Q. And that's why you are seeking cleanup to background levels here?

A. Yes.

Q. In those sites that you have talked about where you have obtained NFR letters, was it necessary to demolish any buildings or structures in order to do corrective action?

A. In all three sites.

Q. And your testimony is that some of those sites were conducted under the UST program?

A. All of them.

Q. All of them were under the UST program. Did you seek reimbursement for costs associated with demolition of the structures of the buildings?

A. Yes.
Q. Were they reimbursed by the agency?
A. Two reimbursements have been completed and they were reimbursed and the third one is pending, but the request for reimbursement of demolition is included in that request.
MR. PODLEWSKI: I have nothing further.
HEARING OFFICER KNITTLE: Cross-examination?
MR. RIESER: Yes.

C R O S S - E X A M I N A T I O N

by Mr. Rieser

Q. Now, the three sites that you just described, it's correct that they were -- all three of them were underground storage tank sites?
A. Yes.
Q. And you were working with the agency's underground storage tank program?
A. Yes.
Q. And on two of the sites, structures were demolished?
A. All three.
Q. All three of the sites, structures were demolished. And two of the sites, you received reimbursement for the structures?

A. So far. The third one is pending.
Q. What were the structures that were demolished?
A. Gas station facilities, gas station buildings.
Q. What was the --
A. And gas station islands.
Q. Were the buildings --
A. And canopies, everything associated with a gas station.
Q. It was the gas station structures for the entire -- all the structures on the property?
A. Correct.
Q. What was the -- what were the addresses of these sites?
A. One was the -- let me get the correct address or correct location. One was the northeast corner of Ardmore and North Avenue in Villa Park. The other one is the northwest corner of Chatham and North Avenue in Villa Park.
Q. I'm sorry. Chatham?
Q. Chatham, C-h-a-t-h-a-m.
A. Third one was 4950 Main Street in Downers Grove.
Q. You have retained Pioneer many times, is that correct?

A. Define many.
Q. More than ten, less than ten?
A. Less than ten.
Q. Are they the only environmental consultant you have retained?
A. To date.
Q. When you have retained them --
A. Actually, I take that back. Through several lenders of mine on refinancing, I have paid for other environmental consultants that were recommended by various lenders.
Q. Those were because the lenders had an approved list of environmental consultants that they wanted you to use, is that right?
A. Yes.
Q. But when you have hired your own environmental consultant, you have always hired Pioneer?
A. Yes.
Q. And when hiring Pioneer, did you typically seek bids from other consulting companies before making your decision to hire Pioneer?
A. On two of the recent occasions.
Q. Pioneer has always been the cheapest bid?
A. Yes.

Q. You hired them because they are the cheapest company --

A. Cheapest qualified bidder.

MR. RIESER: I have nothing further.

HEARING OFFICER KNITTLE: Any redirect?

MR. PODLEWSKI: No, your Honor -- Mr. Hearing Officer.

HEARING OFFICER KNITTLE: I wish I were a your Honor. Mr. Persino, please step down. Thank you very much.

MR. PERSINO: Thank you.

HEARING OFFICER KNITTLE: At this point in time, do you have any other rebuttal witnesses?

MR. PODLEWSKI: That concludes my case.

HEARING OFFICER KNITTLE: Okay. Before we get to closing arguments, we are supposed to entertain statements from interested citizens. I want to note for the record that there are no interested citizens here to provide any statements nor have there been any citizens at any point in this case.

MR. PODLEWSKI: Of course, we are all interested citizens, but not with this case.

HEARING OFFICER KNITTLE: Not affiliated with the parties in this case, correct, nor with the Illinois

Pollution Control Board for that matter. So there will be no statements from interested citizens.

We have talked previously and both parties indicated that you wanted to waive closing arguments. Is that still the case?

MR. PODLEWSKI: Yes, Mr. Hearing Officer.

MR. RIESER: Yes, sir.

HEARING OFFICER KNITTLE: Closing arguments will be waived.

We also talked off the record about briefs, but I want to make sure there are no motions prior to the closing of this record before we close the record and talk about briefs. Any motions on your end?

MR. PODLEWSKI: I don't believe I have any motions.

MR. RIESER: We have no motions.

HEARING OFFICER KNITTLE: Let's go off the record for just one second.

(Whereupon, a discussion was had off the record.)

HEARING OFFICER KNITTLE: Let's go back on the record.

Pursuant to an off-the-record discussion, the briefing schedule is as follows: Complainant's post-hearing brief will be due on December 13, 1999. The

respondents' brief will be due on January 24, 2000. The complainant's reply brief will be due on or before February 7, 2000. We didn't talk about this, but in light of the extended briefing schedule, the mailbox rule will apply. As long as you get it in the mail by that date, you will be okay.

Also, I'm required to make a statement about the credibility of the witnesses at the hearing. Based on my legal experience and judgment thereto, I find no credibility issue existed at this hearing.

That's all I have. Thank you all very much.

(Whereupon, no further proceedings were had in the above-entitled cause.)

STATE OF ILLINOIS)
) SS.
COUNTY OF C O O K)

I, LORI ANN ASAUSKAS, CSR, RPR, a notary public within and for the County of Cook and State of Illinois, do hereby certify that heretofore, to-wit, on the 21st day of October, A.D., 1999, personally appeared before me at Room 11-512, 100 West Randolph Street, in the City of Chicago, County of Cook and State of Illinois, in a certain cause now pending and undetermined before the Illinois Pollution Control Board, wherein MATTESON WHP PARTNERSHIP is the Complainent and JAMES W. MARTIN AND EVAN D. MARTIN, et al., are the Respondents.

I further certify that the said all witnesses were by me first duly sworn to testify the truth, the whole truth and nothing but the truth in the cause aforesaid; that the testimony then given by them was by me reduced to writing by means of shorthand in the presence of said witness and afterwards transcribed upon a computer, and the foregoing is a true and correct transcript of the testimony so given by them as aforesaid.

I further certify that the taking

of this hearing was pursuant to notice and that there were present at the taking of the deposition the aforementioned parties.

I further certify that I am not counsel for nor in any way related to any of the parties to this suit, nor am I in any way interested in the outcome thereof.

In testimony whereof I have hereunto set my hand and affixed my notarial seal this 2nd day of November, A.D., 1999.

_____
Lori Ann Asauskas, CSR, RPR.
Notary Public, Cook County, IL
Illinois License No. 084-002890

SUBSCRIBED AND SWORN TO
before me this_____day
of_____, A.D., 1999.

_____
Notary Public