BEFORE THE POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
Petition of Chemetco, Inc	)	
for an Adjusted Standard	)	
from 35 Ill. Adm. Code	)	No. AS 97-02
720.131(a) and (c)	)	
	)	
	)	

Hearing before the Pollution Control Board taken on March 11, 1997.

I N D E X

Reporter: Angela K. Sievers, CSR - #084-004102

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IN THE MATTER OF:
Petition of Chemetco, Inc.
for an Adjusted Standard
from 35 Ill Adm. Code
720.131(a) and (c). No. AS 97-02

APPEARANCES:

Hearing Officer:	Michael L. Wallace
For Petitioner:	Armstrong, Teasdale, Schlafly & Davis by George M. von Stamwitz, Esq.
	Armstrong, Teasdale, Schlafly & Davis

by Richard L. Waters, Esq.

For IEPA: Christopher P. Perzan, Esq.

From the Office of
Attorney General: James Lee Morgan, Esq.

IT IS STIPULATED AND AGREED by and between counsel for Petitioner and counsel for Respondent that the hearing of witnesses may be taken for purposes pursuant to and in accordance with the provisions of the Illinois Code of Civil Procedure and Supreme Court Rules pertaining to such hearings on March 11, 1997, at the State Regional Office Building, 1100 Eastport Plaza Drive, Collinsville, Illinois, before Angela K. Sievers, a Notary Public, that the issuance of notice is waived and that this hearing may be taken with the same force and effect as if all statutory requirements had been complied with.

Witnesses produced, sworn and examined on behalf of both sides testified and deposed as follows:

HEARING OFFICER: Pursuant to the direction of the Illinois Pollution Control Board, I now call docket AS97-2. This is the petition of Chemetco, Inc. seeking an adjusted standard under 35 Illinois Administrative Code 720.131 A and B. May I have appearances for the record. For the petitioner?

MR. VON STAMWITZ: George Von Stamwitz, law firm of Armstrong, Teasdale, Schlafly & Davis, St. Louis Missouri.

MR. WATERS: Richard Waters, Armstrong, Teasdale, St. Louis, Missouri.

MR. PERZAN: Christopher Perzan, Illinois EPA.

MR. MORGAN: James Morgan, Illinois Attorney General's Office.

HEARING OFFICER: All right, thank you. Let the record reflect there are no other appearances of today's hearing. Are there any members of the public that are here? At the conclusion of the hearing, we generally allow persons to make a statement for the record if they so desire. So if you wish to do that, remind me later and we'll give you an opportunity to make comments for the record. Everyone else is either with the petitioner or the agency. All right. Mr. Stamwitz, Mr. Perzan, this is an adjusted standard, it's kind of a hybrid type of proceeding. It's considered a contested case but also a rulemaking so I guess we'll take it from there. Mr. Stamwitz do you wish to make an opening statement.

MR. VON STAMWITZ: We'll waive opening statements.

HEARING OFFICER: Mr. Perzan?

MR. PERZAN: Very briefly a couple of things. First with regard to the January 27th amended response, I'd like to note a typographical error on that. In Condition 5 where it states 8000 tons, it should read 2000 tons. Likewise on page 16 in the last paragraph of section 4, it should read 2000 tons rather than 8000 and the petitioner is hereby orally amended to correct that error. I think also that there are some things that we need to see from the petitioner at this hearing and I think I'd like to state very quickly what we expect to see. First, I think the Illinois EPA believes that the petitioner must demonstrate that there is a market for this zinc oxide and that there is value to this material. It should explain specifically the characteristics of the zinc oxide which make it valuable. I think this is very important that the adjusted standard and it goes to the heart of what they request and basically it's the thing that shows there is a market, that this is a product rather a material rather than the adjusted standard being used as a way to get around RCRA regulations regarding waste. I think secondly the petitioner should demonstrate that it can remove the

material at a rate sufficient to justify the adjusted standard and which would ensure this material is removed expeditiously. And third, I think that it should be shown that the petitioner can manage this material in a way that it can be accounted for at all stages during the management as its removed and shipped off site and handled in a way to reduce or minimize the chance of the loss. That's about all I have to say.

HEARING OFFICER: Thank you. Do you care to respond, Mr. Von Stamwitz?

MR. VON STAMWITZ: Briefly. We are prepared with the witness we present today to address all of those conditions and we'll have testimony and documentary evidence on those points. As a matter of protocol to expedite the proceeding, counsel have conferred regarding exhibits and have submitted the Hearing Officer exhibits 1 through 16 which can be admitted in bulk and thus we can avoid having them admitted as we go through the proceeding if that's acceptable to the Hearing Officer?

HEARING OFFICER: That's certainly acceptable. There is no objections; is that correct?

MR. PERZAN: There is no objection. I don't think we'll do it that way to start with. I think we'll introduce our exhibits as we go along and then move in bulk at the end for admission.

HEARING OFFICER: Are you moving them at this time?

MR. VON STAMWITZ: Yes, I'm moving for petitioner exhibits, I'm not making a statement regarding any exhibits that the respondent may have.

HEARING OFFICER: Actually, one slight alteration although they are agreed, I see no problem with admitting them, but your witnesses are going to discuss them or use them in their testimony?

MR. VON STAMWITZ: Yes. We will be identifying them. We're just talking about going through the formal procedure of dealing with their admission. Each and every exhibit will be referenced and identified by a witness.

HEARING OFFICER: Okay. Then what we'll do is we'll admit them all at the conclusion of your case. All right. Are there any other preliminary matters that anyone wishes to bring up for the petitioner?

MR. VON STAMWITZ: None.

HEARING OFFICER: All right. The agency?

MR. PERZAN: No.

HEARING OFFICER: All right. Then you may call your first witness.

MR. VON STAMWITZ: Petitioners will call Mr. Dave Hoff.

HEARING OFFICER: Mr. Hoff will you please take our witness chair here.

(Witness sworn)

HEARING OFFICER: Thank you. Please speak clearly and loudly so that the court reporter and everyone can hear you. You may proceed.

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

by Mr. Von Stamwitz:

Q. Would you state your name again please for the record?

A. David Hoff.

Q. And by whom are you currently employed?

A. Chemetco.

Q. And how long have you been employed by Chemetco?

A. For ten years.

Q. And what position do you currently hold with Chemetco?

A. President.

Q. Before you became president of Chemetco, did you hold any other positions with the company?

A. No, I've always been president of Chemetco since I hired in.

Q. In general, what are your duties as president of Chemetco?

A. I oversee all the day-to-day operations.

Q. Where is Chemetco located?

A. In Hartford, Illinois.
Q. Is there a street address?
A. Route 3 and Oldenberg Road.
Q. Thank you. What is the nature of Chemetco's business?
A. Chemetco is a secondary copper smelter.
Q. What products are generated?
A. Anodes and solder.
Q. Who owns Chemetco?
A. John Suarez.
Q. And how long has Mr. Suarez owned the company?
A. Since 1993.
Q. And who were the prior owners of Chemetco if you know?
A. The prior owners that I know of were the Ferrones from Belgium.
Q. What by-products are generated from Chemetco's smelter process?
A. Zinc oxide and slag.
Q. What is zinc oxide?
A. Zinc oxide is the material that comes out of our wet scrubber system.
Q. Has the basic composition of zinc oxide changed since you've worked for the company?
A. No. Very, very little depending on your mix, but very little.
Q. How much zinc oxide is produced each month from the operations?
A. About 1000 tons a month.
Q. And what happens to the zinc oxide that is currently produced?
A. The current zinc oxide is shipped to Elmet.
Q. And who is Elmet?
A. Elmet is a company in Europe. Who the owners are, I don't know, but that's our customer in Europe.
Q. So 100 percent of zinc oxide produced from your current process is sold to Elmet?
A. Yes.
Q. Does Chemetco have a bunker at its facility containing zinc oxide?
A. Yes, it does.
Q. Could you describe this bunker for me?
A. It's a concrete floor and concrete walls bunker.
Q. Is any of the zinc oxide currently being produced deposited in the bunker?
A. No.
Q. Since you've worked for the company, has any of the zinc oxide produced been put in the bunker?
A. No.
Q. How much zinc oxide is in the bunker if you know?
A. About 30 to 35,000 tons.
Q. Is there anything else in the bunker other than zinc oxide?
A. There's slag in the bunker also.
Q. What was the purpose of adding slag to it, if you know, the purpose of adding slag to the bunker.
A. To the best of my knowledge, it was to cap it so that no dust would come out.
Q. Is the zinc oxide sold each month mixed with any other material before it is sold?
A. Yes, it is mixed with copper tin fines.
Q. How long does it take from the time the zinc oxide leaves the scrubber system before it is loaded and sold?

A. Between 30 and 45 days.
Q. Okay. Now in 1996, who were your customers for the current zinc oxide production?
A. Elmet.
Q. Have there been in the last twelve months negotiations with other potential customers?
A. Yes there's been--there's been negotiations with Sinko Resources. There's been negotiations with Laclede Steel. There's been negotiations with Metabel.
Q. Okay.
A. I think that's it.
Q. Is there an agreement between Elmet and Chemetco for Chemetco to sell Elmet a certain amount of zinc oxide?
A. Yes, there is.
Q. I'm going to hand you what's been marked as Petitioner's Exhibit No. 3 and ask you if you can identify this document.
A. Yes, this is the document with Elmet to sell them a barge of copper tin oxides.
Q. Is that the form of document that has been used to describe the transaction internally?
A. Yes.
Q. I'm going to hand you what's been marked as Petitioner's Exhibit No. 4, can you identify this document for me?
A. Yes. This is what Elmet sent to Chemetco. These are Elmet specifications for the material we ship.
Q. Okay. In laymen's terms when you say specifications, what do you mean?
A. This is what Elmet expects to get when we ship to them.
Q. Okay. Now I'm going to hand you what's been marked as Petitioner's Exhibit No. 5 and ask you if you've ever seen that document before?
A. Yes, I have.
Q. And what is it please?
A. This is an affidavit from Jose Boba-da (phonetically), who's the director of Elmet and this is something I requested for Jose to send to us to tell us why the copper tin oxides are a value to him. We do not do large purchase contracts and stuff like that so we just simply do it like this.
Q. I'm going to ask you to look back at Petitioner's Exhibit 3 again, is the form of paperwork utilized in Exhibit 3 similar to the type of paperwork Chemetco will use for the purchase and sales of other materials?
A. Yes.
Q. What is the duration of the contract with Elmet?
A. The duration of the contract with Elmet is one year.
Q. And is it renewable?
A. Renewable upon the end of each year.
Q. Has it been renewed for 1997?
A. Yes, it has.
Q. How does Elmet pay for the material?
A. Elmet pays for the material by returning a material to us.
Q. And what material is that?
A. That's a red brass.
Q. When this red brass is shipped to Chemetco, is it assigned a value?
A. Yes, it is.
Q. And how is that value come up with?
A. It is assigned a current market value of red brass in the states.
Q. Is Chemetco making money on this transaction with Elmet?

A. Yes, we do.
Q. Do you have an estimate of what the current margin for the transaction is for Chemetco as of let's say the last 30 days?
A. The current margin at Chemetco has right now from the material coming back is between 18 and 24 cents a pound.
Q. Does that factor in all the cost of doing business to Chemetco in shipping material to Elmet and freight, etc?
A. Yes, it does.
Q. In this transaction, does Chemetco ever send Elmet money?
A. Yes, they do.
Q. And how does that work?
A. What we do is we ship them a barge of copper tin oxides which goes over to them, okay, and they pay for that material in return with the red brass, okay. And in the accounting, they keep a credit/debit ledger and every so often, they balance that and then we equalize with Elmet and that's what that sum of money is for.
Q. Now the margin you talked about before, is that taking into consideration the moneys paid to Elmet?
A. Yes.
Q. So the net is--the margin you discussed before is net of all expenses to Elmet?
A. Yes.
Q. If the Board does not grant an adjusted standard in this case, how will the bunker be addressed?
A. The bunker would probably have to be closed as a landfill.
Q. And others will speak more specifically about that procedure but do you roughly know the cost of that closure?
A. It'd be somewhere excess of a million dollars.
Q. Will that be a permanent facility at Chemetco if that happens?
A. Yes.
Q. Based on your current customers and operations, what is your estimate of how long it will take for the bunker to be eliminated through sales?
A. It would be somewhere between five and six years.
Q. What changes if any in Chemetco's operations would be necessary to increase the volume of production of zinc oxides to customers taking into consideration the bunker volume?
A. Well, we would have to first of all make sure we have both presses in operation. We would have to go from one press to two presses, we'd have to have two presses in operation. We'd have to have two men on each crew around the clock. That's what we'd have to do and we'd also have to add a moils pump.
Q. Is Chemetco prepared to make these changes?
A. Yes, we are.
Q. Has Elmet or any other customer for the zinc oxide product ever rejected a shipment?
A. No.
Q. Has any zinc oxide sent overseas been returned for any reason?
A. No.
Q. Has Chemetco had an occasion to seek an adjusted standard for zinc oxide in the past to your knowledge?
A. Adjusted standard?
Q. I'll rephrase that. Has Chemetco ever had to go through a similar proceeding such as this to have zinc oxide that was classified as a hazardous waste unclassified so it could be sold?
A. Yes, we did.
Q. And where did that happen?
A. In Exmet in Kentucky.

Q. And was zinc oxide in fact sold to Elmet?
A. Yes, it was.
Q. Has there been an increased interest in zinc oxide in recent weeks?
A. Yes. We have just signed a new agreement with Metabel in Europe for 400 tons a month. We have an interest with Sinko Resources for the quantity of somewhere around 2000 tons a month which is now in the--David Sinclair has been negotiating with us, he's going to be our customer. He feels that there is an 80 percent probability that will happen.
Q. To what do you account this increased interest?
A. We feel that zinc is at about 50 cents a pound which is a five-year high for zinc so now there's interest in zinc.
Q. I'm going to hand you what's been marked as Petitioner's Exhibit 15 and ask if you can identify that document?
A. This is the new agreement with Metabel for 400 tons a month, metric tons, for one year starting in 1997 for the copper tin oxides.
Q. And I'm going to hand you what's been marked as Petitioner's Exhibit 16 and ask if you can identify that?
A. This is the agreement with Sinko Resources. This is the sale of zinc oxide and it is priced 2 and 2 and a half cents a pound FOB Chemetco's door for approximately 2000 tons per month and they expect to commence trials.
Q. Now this Exhibit 16 transaction, is that for the blended zinc oxides or is that for zinc oxide unblended?
A. That is for zinc oxide unblended.
Q. You used the term agreement a minute ago in relation to Exhibit 16, isn't it true that this transaction is still in negotiations?
A. That is true it is still in negotiations.
Q. And do you have--has Mr. Sinclair and you discussed what percent likelihood that he'll be able to consummate the transaction with his customer base?
A. Yes, we have discussed that and his opinion is that the likelihood is 80 percent plus that it will happen.
Q. Finally I'm going to hand you what's been marked as Petitioner's Exhibit 12 and I'll ask you if you can identify that document?
A. This is a sales register which is a summary of the year with shipments to Elmet.
Q. Is that a calendar year or more of a snapshot of portions of 1996?
A. It's a picture in time.
Q. And each ledger entry signifies what?
A. Signifies a shipment.
Q. And does that document show for that period of time how many pounds of zinc oxide fines the blended product was sold?
A. Yeah, the material weight is 35,641,980 pounds.
MR. VON STAMWITZ: No further questions at this time, Mr. Hoff.
HEARING OFFICER: Mr. Perzan?
MR. PERZAN: I have some questions, can I have a minute.
HEARING OFFICER: Sure. While you're looking, Mr. Hoff will you spell your last name?
THE WITNESS: H-O-F-F.
HEARING OFFICER: And Sinko, how do you spell that?
THE WITNESS: S-I-N-K-O.
HEARING OFFICER: And Metabel?
THE WITNESS: M-E-T-A-B-E-L.
HEARING OFFICER: And then there was another company you mentioned, Exmet?

THE WITNESS: E-X-M-E-T.

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

by Mr. Perzan:

Q. Mr. Hoff, how many suits are there now for environmental problems pending against Chemetco?

MR. VON STAMWITZ: Objection, relevancy for this proceeding.

MR. PERZAN: I think petitioner's compliance history is completely relevant as to whether they should have an adjusted standard.

HEARING OFFICER: All right. Objection's overruled. Mr. Hoff?

THE WITNESS: I don't know the answer.

Q. (by Mr. Perzan) Does the State now have two suits pending against Chemetco?

A. Are you asking me or telling me?

Q. I'm asking.

A. I don't know the number.

Q. Does U.S EPA have a suit pending against Chemetco?

A. They do.

Q. Is there at least one private suit pending against Chemetco?

A. There is.

Q. Thanks. Have you reviewed the petition for the adjusted standard recently?

A. I've looked at it, yes.

Q. Okay. Do you want to see it?

A. Please.

MR. PERZAN: Mr. Hearing Officer, would you like this marked as an exhibit?

HEARING OFFICER: Is it the petition?

MR. PERZAN: It's the petition.

HEARING OFFICER: No.

Q. (by Mr. Perzan) On the first page where it says pursuant to binding contracts, see what I mean, that's not really correct, is it? I mean there is nothing that forces Elmet to buy this, is there?

A. Forces Elmet to buy the material?

Q. Yes.

A. Nothing forces them, no.

Q. They can cancel this at any time?

A. Not for a year, no.

Q. Well, how is that embodied, how is that set down?

A. There's an agreement, in the agreement.

Q. Where is it?

A. It's an exhibit. For Metabel?

Q. You're referring to--no, I'm talking about Elmet.

A. Elmet, we have a year agreement.

Q. Well, where's the contract, where does it say that?

A. In the exhibit, the year 1997.

Q. Here it is, Exhibit 5, is that what you're talking about?

A. No. We have a brand new one for the year 1997.

Q. Where is it, please show me where it says.

MR. VON STAMWITZ: It's not an exhibit at the moment.

Q. (by Mr. Perzan) So you can't show me where it says there's a year agreement to buy 3000 tons of oxides a month?

A. I can, yes. I don't have it with me now.

Q. You don't have it with you now?

A. 1500 tons.

Q. You didn't think it was important to bring along?

A. No.

Q. Okay.

A. That's not the answer. Yes, I do think it's important.

HEARING OFFICER: Well, Mr. Hoff, if you're trying to be flippant, it would be appreciated if you wouldn't.

THE WITNESS: No, I'm not. I didn't mean that the answer was no, it was not important, it was no, I didn't bring it.

HEARING OFFICER: All right.

Q. (by Mr. Perzan) In page 2 of the petition, it says that Chemetco has sold approximately 900 tons per month in the last 12 months. You've stated that you generate about 1000, has this been about 1000 that's constant?

A. It fluctuates month to month.

Q. But it's over 900?

A. It fluctuates. It might be less than 900, it might be over 900.

Q. So what happens to the excess?

A. At this point, there is no excess, it's all shipped.

Q. There is no excess?

A. There is no excess.

Q. Okay. Now since 1990, do you know who else you've sold this zinc oxide to other than Elmet?

MR. VON STAMWITZ: Object as to the period of time. What's the relevance of 1990?

MR. PERZAN: '91? It's an arbitrary number but I think it's within the last seven years, he should know that, he's been the president for ten years.

MR. VON STAMWITZ: Well I think I'll also say that the market for zinc is changing and metals are changing all the time.

MR. PERZAN: Since 1994?

MR. VON STAMWITZ: Better.

Q. (by Mr. Perzan) Inclusive from 1994 until now, who else have you sold the zinc oxide to?

A. Elmet has been our main customer.

Q. Your main customer. But you've sold it to somebody else?

A. We've done trials, I don't believe we've sold any.

Q. Do you recall your variance with Kentucky?

A. I would have to look at it. I recall seeing it, yes.

Q. I'm going to show you what I'll mark as EPA or Respondent's Exhibit No. 1. Can you take a look at that?

HEARING OFFICER: Is that not Exhibit 7, is that different?

MR. PERZAN: I can do it however you want.

HEARING OFFICER: Well, if it's already marked as Petitioner's Exhibit 7.

MR. PERZAN: That's Kentucky's variance.

MR. VON STAMWITZ: This is not an exhibit, Mr. Wallace.

HEARING OFFICER: Okay.

Q. (by Mr. Perzan) Have you seen that document before?

A. Yes.

Q. I want to refer you to page 5 in that document. Now in the last sentence on that page--not the last sentence, excuse me, but the fourth sentence of the last paragraph beginning with Chemetco, can you read that for me please?

A. Chemetco has three customers for the copper tin oxides, Metallo Chimaque International, a Belgium company, Lunin, a German company, and Elmet S.L.

Q. Okay. And could you read the next sentence.

A. These customers have each contracted to purchase 1000 tons per month of the product over the next several months based on these existing contractual arrangements of approximately 530 tons of recycled zinc oxides will be easily disposed of in one year.

Q. So didn't you just tell me that you only sold to Elmet?

A. Yes.

Q. Can you explain.

A. Elmet may ship it to Metallo Chimaque. Elmet may ship it to Metabel. Elmet is our customer.
Q. Doesn't it say these customers have each contracted to purchase, doesn't that make it sound like the contract is between you and them?
MR. VON STAMWITZ: Well, objection, just because they can ship it doesn't mean they did. They may make a lot more money sending it to Elmet, it may be a better deal.
MR. PERZAN: But you will stipulate that it does say that there are contractual arrangements?
MR. VON STAMWITZ: The document speaks for itself as to other alternatives. It doesn't say they had to be used or they in fact were used.
MR. PERZAN: What's your objection.
MR. VON STAMWITZ: Well, I think you're mischaracterizing the fact that they had a relationship doesn't mean they in fact used them. I mean you started off saying where does this stuff go since '94 and what he's saying is primarily to Elmet.
HEARING OFFICER: All right. Sustained. Rephrase your question.
Q. (by Mr. Perzan) In your opinion, does it make it look in that sentence like Chemetco has contractual relationships with these three companies?
A. We do our contract or our agreement arrangements with Elmet, okay, and that's our principal customer. Now they could ship to Metallo Chimaque or they could ship to Germany but that's who we do our interplay with is Elmet.
Q. So why did you tell Kentucky that you sold or had contractual relationships with all three of these companies?
A. Because Metallo Chimaque is very interested in and wants copper tin oxides and so does Germany, okay, but we do ours with Elmet.
Q. Well, don't you think that this would have mislead the State of Kentucky in thinking that you had contractual relationships with these companies and you could have submitted this to any of those? I mean don't you think this is a little misleading?
A. From where I sit, no.
Q. Okay.
HEARING OFFICER: All right. Stop, just a minute, will you mark this as Respondent's Exhibit No. 1 please.
(Respondent's Exhibit No. 1 marked for identification.)
Q. (by Mr. Perzan) Was there a court action brought by Kentucky, was this part of a court action?
A. Yes.
Q. So you were ordered in court in Kentucky to remove the material and this variance was a part of that?
A. I believe that's correct.
Q. Okay. When did the accumulation in the bunker start if you know?
A. That's before my time.
Q. Okay. Do you have any general idea as to how long the material was stockpiled in that bunker?
A. I don't, I was not there.
Q. Okay. You said earlier in your testimony that your products are anodes and solder, do you consider zinc oxide to be a product?
A. Yes.
Q. Okay. You also said that in your testimony that you thought it was 30 to 35,000 tons of zinc oxide in the bunker, correct?
A. Correct.
Q. I believe the petition says it's 40,000, can you explain?
A. It's about, I don't know.
Q. Which figure would you say is probably more accurate?

A. Somewhere around 30, 35,000 tons.
Q. So it's not 40,000 tons, so the petition is not accurate?
A. I don't know, it could be 40,000.
Q. Okay. What valuable materials are in the zinc oxide?
A. Zinc, copper, tin, lead, gold, silver.
Q. Okay. What's different about Elmet's processing than Chemetco's that Elmet can recover this and you can't?
A. Ask me that question again please.
Q. Well you're shipping it to Elmet because Elmet can recover it and you can't apparently, correct?
A. That's not correct.
Q. Okay. Well can you--does Elmet have a use for the zinc oxide that is somehow different than Chemetco's use?
A. Elmet uses the zinc oxide, okay, number 1 to generate heat in their process which lowers their energy cost. Number 2, they make a high grade zinc which they have a customer for.
Q. Okay. They make a high grade zinc. How does it work in the making of the high grade zinc?
A. Don't know that process in detail, that's why we asked for Jose Boba-da (phonetically) to answer that question.
Q. Okay. Are you aware that if you burn a recyclable for heat that it remains a solid waste and that therefore this would remain a hazardous waste?
MR. VON STAMWITZ: Objection, asking for a legal regulatory opinion from the witness with no foundation.
MR. PERZAN: I just asked if he was aware.
HEARING OFFICER: Rephrase your question.
MR. PERZAN: I'll withdraw it.
Q. (by Mr. Perzan) If you know, does Elmet pay more for pure copper tin oxides than for the blend?
A. I don't know that.
Q. You ever sell pure copper tin oxides?
A. Have I? No.
Q. Okay. Only the blend?
A. Yes.
Q. Okay. Now I think you've said before that you have to purchase the copper tin oxides?
A. We do.
Q. You purchase the copper tin oxides, you mix them with the zinc oxide, and you sell them to Elmet, correct?
A. Correct.
Q. You ever use a toll arrangement?
A. No.
Q. All right. I'm going to show you, now this is a packet of materials, can you take a look at that and tell me what that is?
A. This is a Chemetco document shipping to Elmet in Berango, Spain copper tin oxides.
Q. Can you look through them just generally. So I'll refer you to the first page of that document under terms where it says toll.
A. Uh-huh.
Q. What does that mean?
A. That means we get material back.
Q. Do you pay Elmet for processing this?
A. I explained this earlier. We ship copper tin oxides over to Elmet. They return material which is red brass which is a much greater value than the copper tin oxides that we ship over. Copper tin oxides are very important to Elmet because they cannot buy oxides in Europe, it's a country problem. We want the red brass back because we can't buy red brass in the states. So it's a greater value to us. Now we

equalize that every so often on the books, debits and credits, and we make the deal fair to Elmet.

Q. But you don't pay for processing?

A. I just explained how we do it.

HEARING OFFICER: Well, answer the question. Do you pay for processing?

THE WITNESS: We pay to equalize the value of the two products.

HEARING OFFICER: Do you pay for processing?

THE WITNESS: If you call it processing I guess.

MR. PERZAN: Is that a yes?

THE WITNESS: Yes.

Q. (by Mr. Perzan) Okay. So this is a pretty common practice, I mean, this is the way you do your business all the time?

A. Some of it, yes.

Q. How do you keep track of how much zinc oxide is in each shipment and how much zinc oxides as opposed to copper tin oxides goes over each time?

A. It's a mixed 50/50.

Q. So it's always 50/50?

A. It's always 50/50 or as close as we can get.

Q. So you just pay based on a 50/50 ratio?

A. Yes.

Q. What value is the zinc oxide now today as close as you can come? I mean, what's the value of the zinc oxide? Say you were to ship a barge out today or yesterday, what would be the value per pound of zinc oxide in that shipment, do you know?

A. No, I would have to calculate that.

Q. Okay. How would you calculate that?

A. You would take zinc, you would take the copper, you would take the tin, you would take the lead, you would take the gold, and you would take the silver. Those all have values.

Q. Okay. What percentages would that be?

A. Zinc is 35 percent, copper is 9 percent, tin is 2 and a half percent, so many ounces of silver, and so many ounces of gold.

Q. Okay.

A. That can be determined.

Q. Okay. Now you said that you think that this arrangement will result in the zinc oxide being completely removed I think you said five to six years?

A. Yes, sir.

Q. Okay. And what were your assumptions going in in terms of how much you would be able to send and to whom? What were your assumptions behind those numbers?

A. We have 1500 tons a month with Elmet. We have 400 tons a month with Metabel, okay. We have an 80 percent likelihood of 2000 tons a month with Sinko Resources.

Q. So would you be able to make five to six years if it was just Elmet?

A. I'd have to do the math but it's very close.

Q. Well, we can do the math. You're still producing about 1000 tons a month, right?

A. Uh-huh.

HEARING OFFICER: Yes?

THE WITNESS: Yes, I'm sorry.

Q. (by Mr. Perzan) So that's 4 to 500 tons out of the bunker per month, correct, does that seem right?

A. I'm sorry, I didn't...

Q. Well, if you're producing 1000 tons, that means with regard to only Elmet's arrangement, you have room to take about 4 to 500 tons out of the bunker a month, right?

A. I'm with you.
Q. Okay. So 400 times 12.
A. 4800.
Q. 4800 per year. By my calculations if you divide 4800 into 40,000, you get about 8.3. So it'd be about 8.3 if it was just Elmet?
HEARING OFFICER: Do you agree with that statement?
THE WITNESS: I do not because we use 30 to 35 and you're using 40 so that's probably the difference.
Q. (by Mr. Perzan) Isn't it correct that you used 40 in the petition?
A. Yes.
Q. So now you're lowering it?
A. I don't know exactly what's in the bunker, it's somewhere around 30, 35,000.
Q. Numbers are changing though?
A. I'm sorry?
Q. The numbers are changing though. Have you done anything recently that would lead you to change the number from 40? Because it seems to me, and you can answer the question, it's been pretty consistently 40,000 up until today, correct?
MR. VON STAMWITZ: We'll stipulate that the petition says 40 and you're free to use 40 the rest of the day.
MR. PERZAN: Okay. Thank you.
Q. (by Mr. Perzan) Let's talk about the new ones. When did you find out about, let's talk about Metabel first. When did you find out about Metabel?
A. Last week Metabel was negotiated.
Q. Do you have the exhibit, I think it's 15. Where it says material.
A. Yes.
Q. Can you read what it says there.
A. Gun metal drosses.
Q. What are gun metal drosses?
A. That's the European term for copper tin oxides.
Q. Isn't a dross not something that comes out of a bunker or air pollution control system?
A. To Europeans, no, sir.
Q. To Europeans? This is a special European term?
A. This is what they say, this is their terminology.
Q. Does Elmet ever address it that way?
A. I don't believe.
Q. Does anybody else other than Metabel address it that way?
A. I don't know that.
Q. Wouldn't gun metal drosses usually refer to something that comes out of a kiln or furnaces?
A. I don't know that, this is their terminology. Gun metal is red brass I believe.
Q. Is there anything on this document that says oxides?
A. Is the word oxide on this piece of paper, is that the question?
Q. Yes.
A. I don't see it, no.
Q. Okay. Let's talk about the second one, I guess that's Exhibit 16. Sinko Resource, have you done business with them before?
A. We have been in communication with Sinko Resources for five years.
Q. You sold them anything before?
A. No, sir.
Q. How much does it cost to ship the material to I guess this is going to New York?

A. It's FOB Hartford, we're not paying the shipping.
Q. What does it mean when they say they expect to commence trials?
A. We will ship trial loads to customers.
Q. So they haven't had a load, is that correct to assume that?
A. These are new customers.
Q. So they actually haven't had any of these materials?
A. No.
Q. So you don't know whether this is going to be acceptable to them?
A. I've been told that it's 80 percent plus accepted by Mr. Sinclair.
Q. Based on?
A. His knowledge.
Q. On his knowledge. Mr. Sinclair works for whom?
A. Sinko Resources.
Q. Okay. And Mr. Sinclair was going on information that you provided to him?
A. Yes.
Q. Did you tell him you were sending gun metal drosses as well?
MR. VON STAMWITZ: Objection.
HEARING OFFICER: Sustained.
Q. (by Mr. Perzan) Do you know what the market for zinc oxide will be in a year?
A. I do not.
Q. What about six months?
A. I do not.
Q. One month?
A. Do not.
Q. Tomorrow?
A. Do not.
Q. So it's possible that the market could fall and stay low for a long period of time?
A. I don't know that.
Q. But it's possible?
A. I don't know that.
Q. You don't know that it's possible?
A. I don't know what the market is going to do.
Q. But it's possible that it could go low and stay low?
A. It's possible.
Q. Has any zinc oxide from Chemetco been released into a wet lands area on your property?
MR. VON STAMWITZ: Objection, relevancy. We're talking about recycling a bunker in one part of the facility and we're bringing up issues on other parts of the facility that are unrelated.
MR. PERZAN: In both of the standards for which they seek an adjusted standard under 720.131, I believe the manner in which the material is handled to minimize loss is a consideration and I think their past history in minimizing loss of material especially when it's zinc oxide is relevant.
HEARING OFFICER: Overruled. Mr. Hoff, you may answer the question.
THE WITNESS: Ask it again would you please.
Q. (by Mr. Perzan) Has any zinc oxide from Chemetco been released into a wet lands area on your property?
A. We have had a pipe that leaked on the south side of the Oldenberg Road, yes.
Q. Was it a lot of material?
A. I don't know the answer to that, I don't know the volume.

Q. So you haven't been too successful in managing this so as to minimize the loss up to now?

MR. VON STAMWITZ: Objection. One event from one pipe does not, cannot be characterized as overall unsuccess. The record already shows 35 million pounds sold to one customer in a period of time in '96.

HEARING OFFICER: I'll sustain the objection as to the form of the question.

MR. PERZAN: I'll withdraw the question. Can I have a moment. I have no further questions.

HEARING OFFICER: Off the record.

(An off-the-record discussion was held)

HEARING OFFICER: Back on the record.

MR. PERZAN: I have no further questions.

MR. MORGAN: Mr. Hearing Officer, I have a few questions.

HEARING OFFICER: All right. Go ahead.

MR. MORGAN: Thank you.

E X A M I N A T I O N

by Mr. Morgan:

Q. Mr. Hoff, the petition that we're here on concluded specifications from Elmet and I believe it's Exhibit No. 4 in the packet of materials Mr. Stamwitz prepared, does the zinc oxide in the bunker currently meet those specifications?

A. Very, very close, yes.

Q. Is there anything that needs to be done or added to that zinc oxide in order to meet those specifications?

A. As far as to what?

Q. Well as I understand it, Elmet has a contract of whatever duration for copper tin oxides. We've been referring to the material in the bunker as zinc oxide. The material data safety sheet for the zinc oxide concluded as I think an exhibit to the petition Exhibit A includes concentrations of materials that has copper oxide at 5 to 7 percent versus the specifications in the Elmet specification at something quite a bit higher 10, 25 percent. I'm asking do you need to add anything to the zinc oxide in the bunker in order to meet the specifications Elmet has set for in its contract?

A. The copper tin oxides that we would ship to Elmet would meet these specifications.

Q. Okay. Would the zinc oxide in the bunker alone meet those specifications?

A. I would have to look at the analysis of the bunker. It would be very, very close.

Q. Okay. Is the zinc oxide in the bunker comparable to the material safety data sheet included as an exhibit to the petition?

A. May I see that?

Q. Sure.

A. The zinc oxide in the bunker is very close to the zinc oxide that we currently generate, yes.

Q. Do you have to add copper oxides to the material you ship to Elmet in order for them to accept it?

MR. VON STAMWITZ: You're saying do we or do we have to?

MR. VON STAMWITZ: Do you.

THE WITNESS: We do, yes.

Q. (by Mr. Morgan) Why do you add copper oxide to the material you currently ship to Elmet?

A. We add copper to the zinc oxide for the value.

Q. You would get--well, how do you determine the value of the copper oxides you add to the zinc oxide you ship to Elmet?

A. How do we determine the value?

Q. Yes.

A. We determine the value by what we pay for it.

Q. Okay. And how is that price determined?
MR. VON STAMWITZ: I think he answered the question. He pays for it, he has receipt of some kind of ledger.
MR. MORGAN: That's what I'm asking.
MR. VON STAMWITZ: He's already said so it's repetitive, objection.
HEARING OFFICER: Sustained. Go ahead.
Q. (by Mr. Morgan) You mentioned earlier that there is a current market value for what you called red brass; is that correct?
A. Ask the question again, I'm sorry.
Q. You mentioned earlier that there is a current market value for red brass and that's what you used to determine equalization payments with Elmet?
A. Yes, sir.
Q. Where do you find that current market value?
A. It's put out by--how we buy copper, it's put out by--it's the pricing of the red brass determined by the Co-Max (phonetically).
Q. What's the Co-Max (phonetically)?
A. That's your copper board in the United States.
Q. Okay. Is there a similar pricing mechanism currently in existence for zinc oxide?
A. For zinc oxide?
Q. Yes.
A. No, not for zinc oxide.
Q. So is there any reference material, reference board, other agency I can call up and say what's today's price for zinc oxide?
A. I'm going to answer your question. For red brass, okay, there's a reference for the copper, okay. In zinc oxide, there's reference for zinc, lead, tin, gold, and silver. So yes you can call.
Q. Who do I call then?
A. You can call anybody who sells or buys that material in the United States or Europe.
Q. Okay. And how is that price determined?
A. Determined by the market.
Q. Okay. And where is the market?
A. It's the LME or Co-Max (phonetically).
HEARING OFFICER: It's what?
THE WITNESS: It's the LME or the Co-Max (phonetically).
Q. (by Mr. Morgan) What's the LME?
A. London Metal Exchange.
Q. And as I understand it, there is--zinc is assigned a certain price, say a penny a pound, and then you look at the amount of material you have and the zinc composition in that and you can make an estimate based upon that; is that correct?
A. Of what?
Q. Zinc.
A. Yes.
Q. All right. And so if you've got ten compounds in your material and there's a price established for each one of those compounds, then is the price for your material the sum of those prices multiplied by the percentage of the material in them?
A. It's very close, yes.
Q. Okay. I've heard several different numbers about what Chemetco is currently producing in terms of zinc oxide per month. Is it 1500 tons or 1000 tons?
A. It fluctuates with the mix we put in. The average is about 33 tons a day for the last 30 days, okay. It's going to vary every month with the mix we put in. Not a lot but some.
Q. What's the highest rate of production it's been in the past year?
A. Don't know the answer to that.

Q. Do you know the lowest?
A. Don't know.
Q. But the average is about 990 tons per year--or per month?
A. That's about as close to the average, yes.
Q. Okay. And you're currently shipping how much to Elmet per month?
A. We're shipping a barge load a month currently or two.
Q. And how much is a barge load?
A. Of what?
Q. Zinc oxide.
A. You mean a total barge?
Q. The total barge.
A. Total barge is 15 to 1800 tons.
Q. Does that barge consist entirely of zinc oxide produced at the Chemetco facility?
A. Yes.
Q. And how many barges are you shipping per month?
A. One to two to three.
Q. So if you're producing 1000 tons per month and you're shipping what could be as much as 5400 tons per month, where is the difference coming from?
A. What difference?
Q. Between your current production and what is actually shipped.
A. I don't understand the question.
Q. Well, let me make sure I've got my math straight. You say that you can ship up to three barges of zinc oxide per month?
A. Uh-huh.
HEARING OFFICER: Yes?
THE WITNESS: Yes, I'm sorry.
Q. (by Mr. Morgan) And that could contain as much as 1800 tons of zinc oxide per barge; is that correct?
A. No, it's a 50/50 mix.
Q. A 50/50 mix of what?
A. Copper tin oxides.
Q. Okay. So I cut that in half and of each barge you're shipping, approximately 900 tons of it would be zinc oxide; is that correct?
A. From 7 to 900 tons, yes, that's correct.
Q. So you could be shipping as much as 3600 tons per month; is that correct?
A. We could if we had that inventory, yes.
Q. Well, you've told me that you do.
A. No, I said we could.
Q. Okay. How many tons per month are you actually shipping to Elmet?
MR. VON STAMWITZ: Objection, I'm not sure it's clear from the witness that they ship every single month.
HEARING OFFICER: Well, your objection is overruled. I think Mr. Morgan is trying to determine how much is shipped every month to Elmet and Mr. Hoff is not answering the questions fairly clearly at least for the record. So the objection is overruled, let's try it again, Mr. Hoff.
Q. (by Mr. Morgan) How many tons of zinc oxide are you shipping to Elmet per month?
A. We are shipping approximately 900 to 1000 tons to Elmet every month.
Q. Now you said that you could ship up to three times that amount?

A. We have the ability to ship--you know, if we have two barges underground, we can ship two barges underground. If we have one barge underground, we can ship one barge underground.
Q. So the limiting factor is the availability of barges?
A. No, sir.
Q. Okay. What's the limiting factor?
A. What we have ready to ship.
Q. Okay. If you've got a bunker with 40,000 tons in it, why can't that be shipped immediately if you're authorized to ship that material?
A. Ship all 40,000 tons at once?
Q. Let's start with that.
A. We would have to find 40,000 tons of mix.
Q. Okay.
A. And we would have to clean out the bunker in one day. I think that's impossible.
Q. If you can ship an amount of zinc oxide that is three times what you're currently shipping as you've said you can do, can that excess come from the zinc oxide bunker?
A. Ask me that question again.
Q. Sure. You've mentioned that you can ship up to three barges per month and each barge could contain up to 900 tons of zinc oxide.
A. Okay. I've misled you. You think I can ship three barges every month?
Q. That's what you told me.
A. No, I said we could--if we have one underground, we ship one. If we have two underground, we ship two. We have 1500 tons a month and 400 tons a month, that's what we can ship to the customer at this point in time. So it's between 1800 to 2200 to 2400 if we ship every month. So it would be two barges a month.
Q. Again I'm confused. You've said that you ship 900 tons per month of zinc oxide to Elmet, the contract is for 1000 tons per month; is that correct?
A. The contract is for 1500 tons a month.
Q. Okay. Is that 1500 tons per month just zinc oxide?
A. Copper tin oxides.
Q. Okay. So in order to meet that quota, what percentage of that is zinc oxide you produce at your facility?
A. It's a 50/50 mix.
Q. Okay. So 750 tons of your 1500 tons that you ship to Elmet comes from the current production; is that correct?
A. 750 to 950.
Q. Okay.
A. Depending on what the barge will hold.
Q. What is done with the excess of your monthly production?
A. There is no excess. The storage facility is cleaned out.
Q. But you said you produce 1000 tons per month.
A. I said it varies. An estimate is 1000 tons a month depending on the raw material we put in the furnace.
Q. Okay. So I guess what I'm left with is you can't give me any certainty as to how much you could actually ship per month to Elmet?
MR. VON STAMWITZ: Objection, I believe he said how much he sends to Elmet on a contract basis.
HEARING OFFICER: Overruled, answer the question, Mr. Hoff.
THE WITNESS: Would you ask it again.
MR. MORGAN: Certainly.
Q. (by Mr. Morgan) You can't give me any certainty as to how much you can actually ship to Elmet of your current zinc oxide production; is that correct?
A. That's not correct.

Q. Okay. How much do you ship per month?
A. We ship average 950 tons a month to Elmet of zinc oxide. We ship between 1500 and 1800 tons per month of copper tin oxides to Elmet.
HEARING OFFICER: When you say copper tin oxides, is that the mix?
THE WITNESS: Yes, sir.
HEARING OFFICER: All right.
Q. (by Mr. Morgan) You also mentioned earlier that a Mr. Suarez owns Chemetco?
A. Yes, sir.
Q. Does he own all of the stock of Chemetco?
A. I don't know the answer to that.
Q. Do you know the--I believe you mentioned Metallo Chimaque?
A. Yes, sir.
Q. Does that company own any stock in Chemetco?
A. I don't know the answer to that.
Q. Who would?
A. Mr. Suarez would know.
Q. And have you ever been to a shareholder's meeting at Chemetco?
A. At Chemetco, yes.
Q. Who shows up?
A. Mr. Suarez shows up, Mr. Hoff shows up, Mr. Boba-da (phonetically) shows up, Mr. Hartman shows up, and Mr. Crip-pant (phonetically) shows up.
Q. Could you tell me who the last two gentleman are?
A. Mr. Crip-pant (phonetically) is on the board of Chemetco and right now is in tin purchases.
Q. And who is the other gentleman just before him?
A. Jor-Jan (phonetically) Hartman?
Q. Yes.
A. He is a gentleman from Germany who works for I believe it's Lunin, I'm not real sure on that.
Q. Is that also one of the companies Chemetco's previously sold zinc oxide to as mentioned in the Kentucky affidavit?
A. I don't believe we've ever sold to Lunin.
Q. Could I have my petition back?
A. This one?
Q. Yeah. Thank you. In the affidavit of Greg Cotter submitted in support of the petition, in paragraph 3 it says Chemetco sales all of the by-products from its operations. Chemetco has a one year renewable contract with Elmet S.L. Europe located in Spain to sell 3000 tons of oxides per month. Is that contract different from the one you're currently operating under?
A. May I read it?
Q. Certainly.
A. We just signed a new contract last week or we just signed--it's probably not right, we just negotiated the new agreement with Elmet last week.
Q. Has that agreement taken a written form yet?
A. I believe it has, yes.
Q. Has that agreement been provided to the Environmental Protection Agency?
A. No, I don't believe so.
Q. And what amount is Chemetco authorized to provide Elmet under that contract?
A. It was 1500 tons per month, metric tons, for one year.
Q. Okay.
A. And renewable upon the end of that year.
Q. And that is a reduction from 3000 tons per month under this prior agreement referenced in Mr. Cotter's affidavit; is that correct?

A. That's correct.
Q. What's the difference?
A. I don't know that.
Q. Were you involved in the negotiation of the contract?
A. I was not.
Q. Who was involved?
A. John Suarez.
MR. MORGAN: No further questions. Thank you.
HEARING OFFICER: Re-direct, Mr. Von Stamwitz?
MR. VON STAMWITZ: Yes.

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

by Mr. Von Stamwitz:

Q. Mr. Hoff, your agreement with Elmet is to take the zinc oxide you produce; is that right?
A. Yes.
Q. If you produced more zinc oxide, is it possible under that arrangement that you could sell Elmet more material?
A. It's very true.
Q. So if you were given an adjusted standard and your ability to move more zinc oxide went up, is it possible that Elmet would take more material?
A. Yes, sir.
Q. Is it possible that they would take up to 3000 tons of blended material each and every month?
A. Yes, they would.
Q. The 1500 number you referenced comes from the actual amount you produce; is that correct?
A. That's correct.
Q. It's not a number based on their capacity?
A. No, it is not.
Q. You mentioned before and I believe Mr. Morgan called it a shareholder's meeting and that you listed several people were there. Do you know the difference between a shareholder's meeting and a board of director's meeting?
A. That was a mistake. It was a board of director's meeting, not a shareholder's meeting.
Q. In responding to questions from Mr. Perzan, I believe he asked you whether you knew the value of the zinc oxide by itself, isn't it true that Sinko Resources is interested in purchasing the zinc oxide by itself?
A. Yes.
Q. And that there is in negotiations a price for the material by itself?
A. Yes, there is.
Q. How does the profit to Chemetco from the Sinko Resources transaction compare to the profit made in the Elmet transaction?
A. The Elmet transaction is more profitable to Chemetco than the Sinko Resources contract would be.
Q. Prior or--I'll say prior to the Elmet arrangement, was zinc oxide ever shipped by itself to a customer?
A. It was shipped to--we used to ship zinc oxide to Meeti-ya-roba (phonetically) in Europe.
Q. By itself?
A. By itself.
Q. Do you know whether Elmet would in fact take the material by itself?
A. Yes, they would.
Q. What's a tolling arrangement in your mind?
A. Tolling arrangement is where we send something to someone and they send back a different material.

Q. So under that definition, the Elmet transaction could be referred to in your organization as a tolling arrangement?
A. In our organization, yes, because we do send copper tin oxides over and we do get red brass back.
Q. Okay. What would you call a transaction where you ship zinc oxide to a facility, they process the material, and send you back a version of that material that has been changed, what would you call that?
A. That would be a treatment of that material.
MR. STAMWITZ: No further questions.
HEARING OFFICER: Re-cross, Mr. Perzan?
MR. PERZAN: Yeah.

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

by Mr. Perzan:

Q. I'm going to ask that this be marked. Can you take a look at that, that's a documents from Chemetco to Hydromet, correct?
A. Correct.
Q. Now you've said that there's a distinction in your mind between a treatment and a toll arrangement and that the treatment is when you send something, they process it, and send something back. But that's not a toll. Doesn't it appear to you from these documents that Hydromet or that your letters to Hydromet appear to show a relationship where something would be sent--zinc oxide would be sent, it would be treated, and something would be sent back to you from the original zinc oxide, and isn't that described in these as a toll arrangement?
A. What this arrangement was going to be, which it is not, we were going to send the zinc oxide to Hydromet, they were going to keep the zinc. They were going to sell the zinc, that's their product. We would get in return copper, lead, tin, gold, silver, minus the zinc because they can't treat those elements.
Q. Doesn't it say on page 2, the first one, that Hydromet shall return the accountable copper to Chemetco in the form of copper, skipping a few words there, doesn't it say that?
A. It does say that.
Q. Isn't that a toll, isn't that what you're referring to as a toll arrangement?
A. They're going to keep the zinc, they're going to sell the zinc.
Q. Okay. Where does it--look through these documents and take your time and show me --
MR. VON STAMWITZ: We'll stipulate for the record that people have used different terms at different times not entirely consistently. We would stipulate that this is called a toll but is the treatment that he talked about. We'll stipulate that that's what the document says.
MR. PERZAN: Well, that's fine.
Q. (by Mr. Perzan) Isn't your company referring to this arrangement as a toll in this document?
HEARING OFFICER: He already stipulated to that.
MR. PERZAN: All he stipulated to is that there are different terms but I want to know, I'd like to get --
HEARING OFFICER: Unless I misheard him, the last statement he said was we'll stipulate that that's what it said in this document. Maybe I misheard.
MR. VON STAMWITZ: Yes.
MR. PERZAN: Okay, fine, I misheard that. So you've stipulated that a toll as it's used in this document.
MR. VON STAMWITZ: Is the same thing as the treatment that David Hoff used in re-direct five minutes ago and it has not been entirely consistent in the paperwork provided the State. We'll stipulate to that.

MR. PERZAN: Okay.

Q. (by Mr. Perzan) You also compared the profitability of your arrangement with Elmet with the one that you pose to have with Sinko. On those lines, how much did you make from the Elmet last year, do you know?

A. I don't know the answer to that. I'll answer it this way. Today we are somewhere between 18 and 22 cents margin on the red brass material coming back. The Sinko is 2 to 2 and a half cents a pound.

Q. But you can't say how much you made from the sale of zinc oxide last year, correct, you don't know that?

A. I do not know the exact number, no.

Q. You know a range?

A. I've just said that, 18 to 22 cents a pound.

Q. You don't know the exact number?

A. No.

Q. I'm talking about over the course of the year, how much did you make from the sale of zinc oxide?

A. I don't know.

Q. Is it over $1,000?

A. I don't know that.

Q. You have no idea?

A. I have no idea.

Q. So how do you know whether it would be more profitable than the Sinko one?

A. We deal in margins.

MR. PERZAN: I have no further questions.

HEARING OFFICER: Mr. Morgan?

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

by Mr. Morgan:

Q. Have you been to a shareholder's meeting?

A. No.

MR. MORGAN: Thank you.

MR. VON STAMWITZ: I'd like to clear one more thing up, if I may.

HEARING OFFICER: Just one. We don't do re-re-direct but go ahead and ask one question.

Q. (by Mr. Von Stamwitz) What would you need to look at to calculate the amount of money one makes from Elmet in a given three-month period, what would be the various numbers you would have to have in front of you to calculate the number of profit?

A. We would have to have the cost numbers and the margin numbers.

Q. Well let me ask it this way. Let's say you sold Elmet a million pounds of blend in a period of time.

A. Yes.

Q. And you've testified what your margin is on that transaction.

A. Uh-huh.

Q. Are you able to tell me how much money Chemetco put in its pocket from that million pounds as an estimate?

A. I can approximate, I would not be exact.

Q. Well, give me a range.

A. If we do 18 to 22 cents gross margin, our cost at Chemetco is somewhere between 10 to 12 depending on the month. So we would have a 10 cent net margin on the Elmet deal and we have a 2 to 2 and a half cent net margin on the Sinko deal.

Q. So with the hypothetical I just gave you, if I heard you right, correct me if I'm wrong, that your profit based on today's market conditions would be a $100,000 on a million dollar deal?

A. Approximately, that's true.

MR. VON STAMWITZ: No further questions.

Q. (by Mr. Perzan) Is there anyone that keeps track of that real number in your company?
A. Yes, sir.
Q. Who is that?
A. Bill Fargner.
MR. PERZAN: Okay. No further questions.
HEARING OFFICER: All right. Before you step down, Mr. Hoff, just some preliminary questions. How many people are employed at Chemetco currently?
THE WITNESS: At Chemetco in the operating facility, there's about 150.
HEARING OFFICER: And there was some information on the petition that it's on 170-acre facility; is that correct?
THE WITNESS: That's correct.
HEARING OFFICER: And what is an anode?
THE WITNESS: An anode? It's a mold, it's a shape and it's 99.2 percent pure copper.
HEARING OFFICER: And solder, is that the normal standard definition of solder?
THE WITNESS: Yeah, crude solder. It's crude solder.
HEARING OFFICER: What's crude solder?
THE WITNESS: Lead and tin.
HEARING OFFICER: What sizes are these anodes and what size does the solder come or do you produce?
THE WITNESS: Anodes are 825 pounds a piece and the solder runs from about 10 to 15,000 pounds. We call them pigs, they're molds.
HEARING OFFICER: So it's not a--the solder's certainly not a retail form?
THE WITNESS: No, no, sir.
HEARING OFFICER: What are anodes and solder used for after your process is finished?
THE WITNESS: Solder goes into pure tin or pure lead or a combination of. We sell it to a refiner then he refines it further to pure tin, pure lead, or whatever. And the anode goes to Sarco Amarillo, Texas and they make a cathode which then goes into wire bar, copper wire, copper bar.
HEARING OFFICER: Okay. When you were describing Chemetco, what did you call it?
THE WITNESS: A secondary copper smelter.
HEARING OFFICER: So what type of raw materials do you receive to make your anodes and solder?
THE WITNESS: Sure. We receive number 2 copper, red brasses, the yellow brasses, radiators, industrial skimmings, then copper and tin fines. We're looking for the copper and tin and the precious metals.
HEARING OFFICER: So all the materials that come into your plant are already in a manufactured form?
THE WITNESS: Yeah, we recycle them again. They're all used, that's why it's a secondary. There's no raw materials from the ground, it's all secondary.
HEARING OFFICER: That's what I was trying to get at. And red brass and yellow brass, that's a type of copper and some of their alloys?
THE WITNESS: You're right, it's a copper content. Red brass is 78 copper 2 and a half tin and 1 lead, something like that. It's your faucets and stuff like that.
HEARING OFFICER: And from your smelting process comes the zinc oxide or you said that comes from your scrubber?
THE WITNESS: Yeah, it's a by-product. It's a product from our scrubber system.

HEARING OFFICER: Just briefly, how is it a by-product of your scrubber?

THE WITNESS: Well, it's through the scrubber system. It fumes off. When we fire the furnace, it's hit with water, cooled down, the particulates fall out, it goes out into the system, and the steams goes up and it's knocked out of the system.

HEARING OFFICER: So the zinc oxide is actually particulates that you knock down with your scrubber?

THE WITNESS: Right.

HEARING OFFICER: And then it has all these other chemicals in it?

THE WITNESS: Right.

HEARING OFFICER: By metals, it's picked up?

THE WITNESS: Right, it's picked up by that and it's knocked down with water.

HEARING OFFICER: All right. I'm sure there's other questions but that will do it. Thank you. We will mark this as Exhibit 3. Let's go off the record.

(An off-the-record discussion was held)

HEARING OFFICER: Back on the record. Your next witness then, Mr. Von Stamwitz.

MR. VON STAMWITZ: Petitioners call Greg Cotter.

(Witness sworn).

HEARING OFFICER: Thank you, be seated. You may proceed.

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

by Mr. Von Stamwitz:

Q. State your name for the record please.

A. Greg Cotter.

Q. What is your educational background?

A. Environmental engineer, bachelor of science from the University of Missouri at Rolla.

Q. Where are your currently employed?

A. Chemetco.

Q. And in what capacity are you employed at Chemetco?

A. Environmental coordinator.

Q. And how long have you worked at Chemetco?

A. Eight plus years.

Q. How long have you been an environmental coordinator?

A. Three years.

Q. What other positions have you held at Chemetco?

A. Production foreman, production general manager, and scrap yard superintendent.

Q. What role if any have you had in the various plans to close the bunker?

A. I oversee all the environmental activities at Chemetco.

Q. And part of those activities would be the bunker closure?

A. Yes, sir.

Q. Did you file an affidavit with Chemetco's petition in this matter?

A. Yes, sir.

Q. Hand you what's been marked as Petitioner's Exhibit 1, could you identify that for me please?

A. That is an affidavit that was filed.

Q. I'm going to hand you what's been marked as Petitioner's Exhibit 2 and ask you if you can identify that?

A. That is a material safety data sheet for zinc oxide.

Q. And that document would normally be kept under your custody and control at Chemetco?

A. Yes.

Q. I'm going to hand you two documents, Exhibits 9 and 10, and ask if you can identify these documents for me.

A. 9 is a sample analysis and some sampling or drilling that was done by Geo Technology Services and another bunker zinc oxide sample analysis. And Exhibit 10 is an analysis of zinc oxide current production.

Q. Is the zinc oxide current production sample in the ordinary course of business?

A. Yes.

Q. And how often would you sample the zinc oxide that we've heard described and sold?

A. The production zinc oxide is sampled on a regular basis when pressing, when it's being pressed.

Q. When you say when it's being pressed, what procedure are you referring to?

A. When the filter cake is being produced through the filter presses at Chemetco.

Q. And are you as part of your job to be responsible for that sampling?

A. That sampling is done on a production basis. That is done and input into the computer not by myself, it's done by someone else.

Q. Have you worked with environmental consultants on the bunker project?

A. Yes, I have.

Q. And who are these consultants?

A. Cindy Davis of CSD and David Sidell of Shell Engineering and Associates.

Q. And what responsibilities have you asked from CSD Environmental?

A. CSD Environmental was asked to prepare the plan for the removal of the zinc oxide including the closure, the plans for that.

Q. And Dave Sidell, what was his responsibilities?

A. Dave Sidell was asked to do an analysis of the proposed plan from Cindy Davis for the removal of the zinc oxide from the bunker, to analyze any potential air emissions from that plan.

Q. And you may have said this already but who is Dave Sidell with?

A. Shell Engineering and Associates.

Q. And where are they located?

A. Columbia, Missouri.

Q. Okay. I'm going to hand you what's been marked as Petitioner's Exhibit No. 11 and I'll ask if you can identify this document?

A. Yes. This is the flow diagram for the proposed zinc oxide recycling as prepared by CSD Environmental Services, Cindy Davis.

Q. And this diagram was prepared under your direction and control?

A. Yes.

Q. Could you in laymen's terms walk us through utilizing the diagram the flow of zinc oxide from the bunker to its point of shipment to customers under the proposed plan.

A. Okay. The proposed plan was to slurry through a pump the zinc oxide from the bunker to our existing ponds, the existing settling ponds. The material from the settling ponds would be taken into the settling cells that we currently appropriate for our daily production of zinc oxide. From the cells, the material would be taken through the filter presses and de-watered, the water returning to the ponds. The filter cake from the filter presses would be loaded into dump pans and taken to the fines storage building where the material's blended and then prepared for shipment to customers.

Q. The sale of the bunker material will result in an increase in the production of zinc oxide from the facility; is that correct?

A. Yes.
Q. What adjustments, if any, will be necessary in the existing process of managing zinc oxide to accommodate this additional volume?
A. That would be to increase the production capacity which is the double manning of the shifts to increase the production through the cells and filter press areas.
Q. And are there any other changes in the way material is handled at the facility other than at the filter press in order to accommodate this extra volume?
A. Basically once the material left the bunker and made it to the ponds, the processing would be the same as is currently being done.
Q. With the single exception that you'll have extra manning?
A. Extra manning in the cells and the press area.
Q. Okay. Handing you what's been marked as Petitioner's Exhibit 8, I'll ask you to identify that?
A. That is the resume of David Sidell from Shell Engineering and Associates.
Q. Is that document in your custody and control at your offices at Chemetco?
A. Yes.
Q. And I'm going to hand you what's been marked as Petitioner's Exhibit 6 and ask you to identify that?
A. This was the study that we had asked David Sidell to perform for the zinc oxide material removal from the bunker.
Q. What was the purpose of the study?
A. To determine during the processing of the removal of the material from the bunker whether or not there would be any increase or decrease in emissions from the processing of the taking the material to the ponds.
Q. What type of emissions specifically were you asking Mr. Sidell to analyze and report back to you on?
A. Fugitive emissions from the pile.
Q. In laymen's terms, is that air emissions?
A. Yes, air emissions.
Q. We've heard referenced earlier from Mr. Hoff on a facility in Kentucky known as Exmet, did you have any responsibilities on the management of zinc oxide from the Exmet facility?
A. I had the oversight of the project of Exmet in Kentucky.
Q. Did you have an occasion to go to Kentucky?
A. Yes.
Q. Did you have an occasion to review the handling and shipment of zinc oxide from Kentucky?
A. Yes.
Q. Was the State of Kentucky present during the handling and shipment of the zinc oxide from Kentucky to Elmet?
A. Yes.
Q. Were any violations or other problems cited by the State of Kentucky during the management of zinc oxide from the state of Kentucky?
A. No, sir.
Q. I'm handing you what's been marked as Petitioner's Exhibit 7 and I'll ask you to identify this document?
A. This was documentation relating to the request for variance from the State of Kentucky concerning the Exmet site.
Q. And prior to that document, the zinc oxide at Exmet was being classified as a hazardous waste?
A. Yes.
Q. And the reason it was so classified was speculative accumulation?
A. Yes.
MR. VON STAMWITZ: No further questions.

HEARING OFFICER: Mr. Perzan?

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

by Mr. Perzan:

Q. Okay. Let's go over Exhibit 11. So after the stuff, the zinc oxide, is removed from the bunker and it goes to the ponds, can you tell me why it's necessary to go to the ponds?

A. Why it would be necessary to go to the ponds?

Q. Uh-huh.

A. We need to go to the ponds to allow pumping into our tank house or into the cells. I say tank house, it is the area where the cells are at the facility.

Q. Okay. Can you explain it a little further, I'm not sure I'm clear on why it goes to the pond.

A. The system is already in place for the processing of the zinc oxide that we currently generate. The material in the zinc oxide bunker by analysis is similar to what we currently generate. That material could go to the pond, settle, and be run through the same pressing operation that we currently use for our production of zinc oxide.

Q. So it doesn't seem like there's any independent reason to go to the ponds other than it just goes in with the other stuff, right? It just goes into the system at that point?

A. It goes into the system at that point, yes.

Q. And that's the point that you've chosen but it's not necessarily for any technical reason for it to go into the ponds?

A. No.

Q. So it could just go straight from the bunker to the filter press?

A. It would have to go to the settling cells prior to.

Q. So it could go from the zinc oxide bunker to the settling cells. Well, why does it have to go to the settling cells, can you explain?

A. That was--it does not have to go to the settling cells, that was just, everything is already in place for that production. So we could pump the material from the zinc oxide bunker to the cells and just process the material as we normally process all of our zinc oxide materials.

Q. Could it go--is it possible in your opinion to set up a filter press right next to the bunker, have it go straight from the bunker to the filter press, is that possible?

A. A portable filter press could be set up there, yes.

Q. So there's nothing stopping you from that?

A. There may be some I guess size limitations as far as the ground available out there to set up a filter press immediately in that area.

Q. But if you could find the space and get the press, you could set it up and use that to press the stuff straight out of the bunker, correct?

A. Yes.

Q. Okay. After the zinc oxide the way you have it now I believe, and you haven't testified to this but you may know, I believe there's a way on the pump in the bunker that you can keep track of the stuff that's removed at the point of the pump?

A. If we were to do this per se and set up a pump, some sort of metering could be put on the pump that you could determine a run time versus the capacity of the pump and a calculation as far as the gallons going to flow through that pump could be made.

Q. So after it leaves the pump though once it goes into the ponds and settling cells and filter presses, you won't be able to tell the difference?

A. It would be in with the existing materials.

Q. And they're identical?
A. They're very similar constituents.
Q. Okay. Has Chemetco given any consideration to getting any new filter presses, more filter presses?
A. We do have a second press at the site now. In the past, we had operated with just one filter press. There are two filter presses at the site now.
Q. Okay. How many days a week do you plan on removing the stuff from the bunker?
A. The removal from the bunker would be possibly five days a week. It could be more, that's depending on our processing capabilities.
Q. So as of right now, you're assuming about five?
A. Uh-huh.
HEARING OFFICER: Yes?
THE WITNESS: Yes.
Q. (by Mr. Perzan) How many tons per day are you planning to remove from the bunker?
A. That would depend on processing capabilities.
Q. What would you say the maximum would be?
A. Well, if we would double our capacity, the current that we produce is 30, 33 tons as stated by Mr. Hoff earlier, potentially I think it could go to as much as 90 but without having actually performed the operations, I wouldn't know what the exact number would be.
Q. Okay. I'm referring now to Exhibit 8, did you prepare this?
A. No, sir.
Q. This was prepared by Mr. Sidell then?
A. Yes.
Q. So you don't know of your own personal knowledge whether anything in here is true or not?
A. I know of the professional experience of Shell Engineering and Associates.
Q. Okay. Now I'm going to look at Exhibit 6, Shell's report. Now this is a calculation of air emission from the bunker, right, just from the bunker?
A. Yes, sir.
Q. To your knowledge, did Mr. Sidell do any calculations with regard to any emissions which might take place at the presses?
A. No, he did not.
Q. What about at the fines building?
A. That, he did not.
Q. What about when it was blended during the blending?
A. That is done inside the building and there was nothing in his report, no.
Q. And when it was loaded and shipped to customers, did he do any analysis of that?
A. No.
Q. Now can you testify with regard to--do you feel comfortable testifying with regard to the calculations made there in the report?
A. I did not do the calculations.
Q. So you wouldn't feel comfortable testifying on that?
A. I would rely on my consultant's expertise in the area.
Q. Okay. As a practical matter, when this stuff--when I refer to stuff, I mean zinc oxide--when it's exposed to air, say you dig into it, will it tend to dry out toward the top?
A. If I dig into?
Q. Say you've got a bunker, you go in there and you remove some stuff from the bunker, will the stuff that's exposed, and I keep referring to the stuff, but the zinc oxides that's exposed that was

normally buried some depth beneath the surface, if that remains there, will that tend to dry?

A. The material has a crust. It's been treated annually with a coherent dust suppressant and also has a slag coating on it. The plan would call for the removal of the zinc oxide from the bunker by wetting it down so any materials that would be dry would be wet down and the material would be drawn from the bottom out of the bunker.

Q. Say you were doing this, you're manipulating the pile to get some zinc oxide and take it to the pump and you stopped on Friday, would you reapply the coherence to the areas that's been exposed during that week's activities?

A. At this time, no.

Q. Okay. So that would basically be exposed then?

A. Well, the areas as we're talking would be taken from the bottom. So the material underneath is wet. So we would be drying the material out of the bottom. We would hope to see just a settling of the pile itself.

Q. Can you explain to me how you do that, just physically how you draw material from the bottom?

A. The material underneath the pile is wet. The southeast corner of the bunker is always wet, it has been built so that on the southeast corner gathers water. From inspections of the bunker, the material underneath is softer and has a moisture content, I don't know exactly what that is, but the material underneath the top layer or crusted layer is wet. So similar to how we pump our ponds now at the facility, the material is drawn off the bottom of the pond.

Q. Just so I have a mental picture of this, is there--you have a pump here on the outside of the bunker, is there some sort of hose leading?

A. You would take a line over the bunker sides, drop it down into the corner of the bunker, and then the material would slurry out through that pump.

Q. Okay. So how would you get it down injected into the bunker?

A. You would take the line and just submerge it into the southeast corner of the bunker right now and then slurry the material up and begin pumping it out of the bunker.

Q. And then you would press the line further into the bunker as the material was drawn out?

A. For like I said, we were planning to continue to wet the material at all times. We would wash and slurry the material to that corner.

Q. Okay. What kind of machinery are you going to use to push the bunker towards the corner to use the latter method?

A. With the latter method if we could wash all the materials to the corner, that's what we would do.

Q. You would just use a hose to spray it off?

A. Yes.

Q. What would you do with the slag as you remove it?

A. The slag could be segregated in an area in the bunker as we went through the procedure of removing the zinc oxide.

Q. Okay. So you've taken an analysis of the zinc oxide every time it goes to the presses?

A. Not each individual press. There's a sample taken during production times of when the material's being pressed. On a daily basis, it will press the sample. One sample will be taken from that daily period.

Q. Will you continue this with regard to the bunker material?

A. Yes.

Q. What do you do with the analysis, what do you use it for?

A. We just monitor what we have in our zinc oxide. It gives us the ability to see how we are treating the materials in the furnaces.
Q. And excuse me, did you say you would do this with the material from the zinc oxide bunker?
A. Yes.
Q. Why would you do it with the zinc oxide bunker if you used it to monitor? Just out of curiosity.
A. Well, with the ongoing production, we would still be able to monitor what is in our zinc oxide.
Q. Okay. Now are you aware that Chemetco in the course of this adjusted standard has agreed to a 90-day limitation with regard to when an amount of zinc oxide is removed from the bunker, Chemetco has agreed that it would have 90 days to put it through the processing and ship it out?
A. Yes.
Q. How would you comply with that based on your plan so far?
A. Material would be removed from the bunker in quantities such that we would be able to ship all the materials that we generated through the processing of the filter presses.
Q. But if you use the pond method and you put it in the pond and it goes into the settling cells, it will be intermingled with whatever is generated currently. So I guess my question still is, how will you know that that portion that you removed is there for 90 days or less?
A. Those ponds are pumped down throughout the week on a schedule depending on their capacity. So the materials in those ponds are removed and taken to the filter presses. That's necessary for our scrubber systems to operate properly.
Q. So that will be removed once a week?
A. Might be three or four times a week depending on the amount of material in the ponds.
Q. Okay. So how long did you say you've been an environmental coordinator, was it three years?
A. Just right at three years, yes.
Q. Do you have any formal training in environmental compliance issues?
A. No, sir.
Q. What happened, who was the environmental coordinator prior to you?
A. Michelle Reznick.
Q. Did she leave Chemetco at that time?
A. Yes.
Q. Do you know the circumstances?
A. That, I do not.
Q. Okay. It's a big job, isn't it?
A. Yes.
MR. PERZAN: I think I have no further questions right now.
MR. MORGAN: I have a few questions, Your Honor.

E X A M I N A T I O N

by Mr. Morgan:

Q. Mr. Cotter, you mentioned that you supervised the work done for Chemetco at the Kentucky facility?
A. Yes, sir.
Q. How was the zinc oxide material shipped off site?
A. The material in Exmet Kentucky was in bulk bags at the site.
Q. And how is the material intended to be shipped off from the Chemetco plant itself?
A. It will be shipped in bulk in containers on a barge--I'm sorry, container trailers to a barge.
Q. Could you describe the container trailers to me?

A. Well, it would just be put into an open top trailer and loaded onto a barge.
Q. Would that trailer be tarped?
A. Yes.
Q. Would there be any potential of air emissions from the material on the truck as it's being transported?
A. The materials when they commingle, the material that comes out of the press, it's moisture content is 25 to 30. So the blend of materials still has moisture content to relatively no air emissions.
Q. How does that moisture content compare to the moisture content slurried out of the bunker as the company proposes to do?
A. We've proposed to slurry it out of the bunker generally from our ponds to the cells. Generally the water to material ratio is 50 to 70 percent moisture.
Q. And then at the presses, it's reduced to the?
A. 25 to 30.
Q. You mentioned that the ponds are pumped down during the week at some frequency, exactly what's entailed in pumping down the ponds?
A. The ponds themselves are--there's a pump in the center of the ponds that the particulates settle and then is slurried from the ponds to the settling cells in the tank house.
Q. I guess what I'm asking, is the pond completely drained at some point during the week?
A. The ponds are taken down completely and all the zinc oxides is flushed from the pond. We have a north and south pond and there's a levy in the center of the two. One pond or the other is taken down periodically to remove the zinc oxide from those ponds.
Q. So at some point during the week, the north lagoon is completely emptied?
A. The north pond would be emptied, yes.
Q. And then the south pond would be done sometime later?
A. Right.
Q. Okay. Is anything similar done with the settling cells?
A. The settling cells, the material slurried into the settling cells and then the material's decanted further there and the water goes back to the ponds.
Q. Then are the settling cells ever completely empty at any point during the week?
A. Once the cells are empty, then the next pond would be pumped in. So it's just the alternate of one to the other.
Q. So at some point during the time during a week, the settling cells would be completely emptied?
A. They would go completely empty to allow the capacity of the next pond to be pumped in in a normal course of production.
Q. I'm just trying to make sure or to keep track of the material as it goes through. Are the filter presses periodically cleaned of accumulated material on any frequency?
A. I don't know the frequency there but, yes, the conditions of the presses are inspected whatnot.
Q. Okay. In the fines building, the area where the current production of zinc oxide is stored, is that area ever completely emptied and cleaned out?
A. Based on shipments, that material is already alleviated from that building.
Q. So at some point in time, you can go into the building and the floor is clean is what I'm asking?
A. There may be some other materials in that building of a different nature but it would be free and clean of the zinc oxide or the zinc oxide blend.

Q. Okay. Is there a different area in the fines building that is used for storage of zinc oxide material versus blending of zinc oxide material?
A. The materials might be stored or brought over to the building in one half and the blend may be done in another half of the building.
Q. Okay. If the blending is done in the other half of the building, is the blending area ever periodically cleaned or totally emptied at any point during a week, month, or year?
A. After a barge shipment, that area would be clear of all material.
Q. Okay. Are the container trucks loaded inside the building?
A. Yes.
Q. And after they are loaded, are measures taken to clean up any spills that may have occurred due the loading process?
A. That material that may have spilled inside is pushed back onto the pile inside to be loaded.
Q. Exhibit No. 6 was the Shell Engineering air emissions study, do you happen to know when that study was performed?
A. I don't know the exact date.
Q. Do you know if it was within the past week?
A. No, it was not done within the past week.
Q. Within the past year?
A. It's been done within the past year I believe.
Q. Has the material safety data sheet for the zinc oxide been altered or updated or changed in any way since it was first included as an exhibit to the petition?
A. No, sir.
Q. I believe you mentioned that Chemetco intends to accommodate the additional zinc oxide from the bunker by double manning the shifts at the filter press and the settling cells; is that correct?
A. Yes.
Q. And is there any intention to add any additional filter presses?
A. No.
Q. What is the current period of operation for the filter press and settling cells, is it an 8-hour shift five days a week?
A. We run three shifts around the clock on the filter press operation five days a week.
Q. How would you double men those shifts for those units in order to increase production?
A. We would increase the manning by one person per shift.
Q. And what would that enable Chemetco to do?
A. As David explained earlier that we would be adding one man per shift which would allow us to operate both presses at the same time. That would allow us to have one man pressing all the time and one man moving the material.
Q. Okay. So the current practice is one man operates or processes the material and running the pumps in series or?
A. Yes, one man takes care of the whole operation right now per shift.
Q. Okay. There was a question during Mr. Hoff's testimony about a discharge of zinc oxide material on the plant property, did that come from the ponds or the settling cells that would be utilized to handle the zinc oxide bunker material?
A. I do not know exactly where that came from.
MR. MORGAN: I have no further questions.
HEARING OFFICER: Re-direct?

R E - D I R E C T E X A M I N A T I O N
by Mr. Von Stamwitz:

Q. Mr. Cotter, currently the zinc oxide at the facility is mobilized by water, is it not?
A. Yes.
Q. And under the plan before the Board, Chemetco proposes to mobilize the bunker with water as well?
A. Yes.
Q. If Chemetco had proposed to bypass its existing structures to manage the bunker material, would it need to construct additional basins or ponds to manage water that came from the bunker?
A. It would need to replicate the system similar to this to handle that type of operation to keep it completely separate.
Q. And is that a feasible alternative in your opinion?
A. No. Due to space or space limitations as far as to incorporate the size of some of the units.
Q. There was a question earlier about air emissions and specifically from the presses, are the presses indoors or outdoors?
A. The presses are indoors.
Q. And is the material going into the presses wet?
A. Yes.
Q. Is that the material that has 50 percent or more water in it?
A. The material that goes into the settling cells is decanted and then taken to the presses, yes.
HEARING OFFICER: Wait, that didn't answer his question.
THE WITNESS: Yes, it has approximately 50 to 70 percent moisture content.
Q. (by Mr. Von Stamwitz) And I believe you stated earlier that the stuff, the zinc oxide, after it's pressed also contains a percentage of water; is that correct?
A. Yes.
Q. And what percentage is that?
A. Approximately 25 to 30 percent moisture.
Q. In your experience, have you ever seen air emissions off that material?
A. No.
Q. Mr. Perzan also asked you about Exhibit 10 which deals with the sampling of zinc oxide. Under the proposal before the Board, these sample results would not be of the bunker by itself?
A. No, sir.
Q. And why is that?
A. They would--under the proposal, we have the material going from the bunker into the ponds, it would be mixed with the current generation. So the samples would be the combination of the two materials.
MR. VON STAMWITZ: No further questions.
HEARING OFFICER: Re-cross?

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

by Mr. Perzan:

Q. Mr. Von Stamwitz asked you whether you can see the air emissions, can you always see air emissions? I mean, is it always something you can see to a fine particular matter?
A. No, sir.
Q. And with regard to the ability to move a filter press or have a filter press right at the bunker, the only problem you see right now is one of space, I think that's what you said?
A. Space and handling.
Q. So if you could find a fairly large bunker, if you can find the place to put it, you could do it, move it straight, the zinc oxides material, from the bunker to the filter?
A. That's a possibility.
MR. PERZAN: Okay. No further questions.

HEARING OFFICER: Mr. Morgan?
MR. MORGAN: Nothing, thank you.
HEARING OFFICER: Mr. Cotter, do you have the diagram in front of you there?
THE WITNESS: Yes, sir.
HEARING OFFICER: All right. The ponds that are shown on this diagram, those were constructed for the scrubber system that was described earlier?
THE WITNESS: Yes, sir.
HEARING OFFICER: And as well as the settling cells?
THE WITNESS: The settling cells officially were constructed--Chemetco operates an electrolytic confining process at the facility. The cells were left over from that to utilize for pumping into the ponds leaving capacity there to pump in the ponds to go to the filter presses.
HEARING OFFICER: And so right now you're operating one press or two presses?
THE WITNESS: Right now we operate one press.
HEARING OFFICER: And one man releases the material from the cells into the press?
THE WITNESS: Yes, sir.
HEARING OFFICER: And the anticipated operation would be to have two men and two presses?
THE WITNESS: Yes, sir.
HEARING OFFICER: Then would each man release material from the cell to the press or would one man be releasing and the other man running the press? I was unclear on that.
THE WITNESS: At this time, it would be one man to run the presses and one man to move the material. Depending on time available, there's a possibility they could both operate in the cells or the press areas.
HEARING OFFICER: Can one man operate both presses then?
THE WITNESS: The presses, they are both used together. While one is pressing and drying, the other press could be filled and then that process started and then drop the material from it. They would be staggered such that both presses could be operating.
HEARING OFFICER: But the second press has not been placed into operation as of today?
THE WITNESS: It is not in full operation, no.
HEARING OFFICER: The zinc oxide that comes out of the filter press into the dump pan, what's the consistency--is it a cake?
THE WITNESS: It's a cake material, yes, of about 25 to 30 percent moisture.
HEARING OFFICER: And then when you say it's trucked, is the entire dump pan trucked over or is it dumped into another truck.
THE WITNESS: The dump pan is hauled to the storage and fines building.
HEARING OFFICER: And as Mr. Perzan asked earlier, if you were to process the zinc oxide straight from the bunker assuming you could put a filter press there, you would still have to have a dump pan?
THE WITNESS: There would still be some material handling.
HEARING OFFICER: It would be pressed and then handled and again taken over to your fines building?
THE WITNESS: Depending on where the material was to be stored and what the nature of the material was. It would be stored in some building, yes.
HEARING OFFICER: But under his scenario, it would not necessarily have to be the fines building then?
THE WITNESS: At this time, the buildings we have for the storage of that material is the fines building.
HEARING OFFICER: The zinc oxide in the bunker, what's the moisture content of it?

THE WITNESS: Numbers that I have seen are approximately 45 percent.
HEARING OFFICER: And you were saying that you would have to slurry the material so you would have to have additional water to pump that out?
THE WITNESS: Yes, sir.
HEARING OFFICER: And then your anticipation is that would all be in one corner?
THE WITNESS: Yes.
HEARING OFFICER: All right. Thank you, Mr. Cotter, you may step down.
HEARING OFFICER: Why don't we start your next witness, Mr. Von Stamwitz.
MR. VON STAMWITZ: This is our final witness.
(Witness sworn)
HEARING OFFICER: You may proceed.

D I R E C T E X A M I N A T I O N
by Mr. Von Stamwitz:

Q. State your name for the record please.
A. Cindy Davis.
Q. What is your educational background?
A. I have a bachelor's degree in geology from Eastern Illinois University.
Q. By whom are you currently employed?
A. CSD Environmental Services.
Q. Handing you Petitioner's Exhibit 13, I'll ask if you've ever seen that document before and can identify it?
A. Yes, it's my resume.
Q. Is that resume true and accurate as of the date of this hearing?
A. Yes, it is.
Q. What position do you hold with CSD Environmental?
A. President.
Q. Does CSD correspond in some way to your name?
A. Yes.
Q. And how long has CSD Environmental been in business?
A. Since June of 1992.
Q. And in general, what kind of business do you conduct with CSD Environmental?
A. We do environmental consulting, namely RCRA issues and underground storage tank.
Q. Before forming CSD Environmental, by whom were you employed?
A. The Illinois Environmental Protection Agency.
Q. In what positions did you hold with IEPA and for how long?
A. I was employed with the EPA from January 19, 1985 until June of 1992. '85 to '86 I worked in the RCRA compliance section tracking facility's compliance records. From '86 to '91, I worked in the RCRA permit section. And from '91 and '92, I was the manager in the underground tank section.
Q. In general, what have been the scope of the duties contracted by Chemetco for CSD Environmental?
A. Can you ask that again?
Q. What are you doing for Chemetco?
A. I do environmental consulting relating to their land issues. Preparation of the closure plan, any ground water monitoring.
Q. Did you in fact prepare a plan to close the bunker at the Chemetco facility?
A. Yes.
Q. I hand you what's been marked as Petitioner's Exhibit 14 and ask if you can identify this document?

A. This is the revised closure plan for the bunker that we submitted February 26th of '97.
Q. And was there a previous version of the bunker plan?
A. Yes, it was submitted in June of I believe '94 as part of the facility-wide closure plan.
Q. Okay. We've heard references to slag being in the bunker, what was the purpose, if you know, of slag being added to the bunker?
A. I was told it was put there as a wind dispersal agent. They put it on top the zinc oxide to keep the zinc oxide from blowing around.
Q. Okay. I'm going to hand you what's been marked as Petitioner's 11 previously identified, have you ever seen that document before?
A. Yes, I have.
Q. Is that in fact part of the plan that's Exhibit 14?
A. Yes, it's in the plan. It's referenced as a diagram in here.
Q. Okay. At what point in the process set forth on Petitioner's Exhibit 11 would the adjusted standard being requested take effect?
A. We're requesting the adjusted standard take place as the zinc oxide is removed from the bunker.
Q. At what point--strike that. What type of closure does your plan contemplate for the bunker?
A. Clean closure.
Q. And what is clean closure?
A. Basically means all residue will be removed from the bunker so there is no remaining zinc oxide left.
Q. Will the bunker at that point be out of the regulatory program if it's clean closed?
A. Yes.
Q. To take you forward in time to when the zinc oxide has been slurried to the extent possible out of the bunker, what does your plan call for to manage the remaining materials?
A. Well, there probably will be some slag intermixed with some zinc oxide. We planned on power washing the slag. You can visually tell the difference between slag and zinc oxide. So we use the power wash to ensure that there's no zinc oxide attached or adhered to the slag. The slag would then be removed and then placed in with the current slag production. At that point then there would be a visual inspection of the bunker conducted with photographs and any zinc oxide that's found to be remaining on the bunker would be scraped. The bunker would be power washed and then the bunker would undergo a structural integrity test in accordance with the latest ASTM standards.
Q. If the efforts to recycle the bunker are unsuccessful, does your plan have a contingency to deal with that scenario?
A. Yes, it does.
Q. And what is that?
A. The entire bunker would be closed as a landfill and capped in place.
Q. And does your plan set forth the cost associated with that effort?
A. Yes, it does.
Q. And does your plan propose that Chemetco would financially assure those costs as a contingency?
A. Yes, it does.
MR. VON STAMWITZ: No further questions.
HEARING OFFICER: Mr. Perzan?

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

by Mr. Perzan:

Q. Okay. When you were with the agency, did you ever work on anything related to Chemetco?
A. Yes, I did.

Q. What was that?
A. I worked in the RCRA hazard waste units. I worked on--I think I had 22 RCRA facilities, one of which was Chemetco.
Q. Was enforcement any part of that?
A. Yes.
Q. Okay. Do you have any other clients that have this type of waste pile on-site?
A. No.
Q. When did you develop your first plan, when did you develop the first plan?
A. It was submitted to the agency as a discussion document in June of '94.
Q. Okay. And when did you develop the current one that's an exhibit here?
A. This basically is the '94 one with some minor revisions and we did this in February of '97.
Q. When you developed this one, did you talk to Dave Sidell at any point?
A. No, I did not.
Q. As the bunker sits now, is there anything to stop infiltration of water into the zinc oxide in the bunker?
A. As the bunker sits right now?
Q. Yeah.
A. Stop infiltration?
Q. Yeah.
A. No.
Q. Okay. Now you've stated that Chemetco intends to put up financial assurance for the contingency plan, does, as far as you know, Chemetco have any financial assurance plan in place now?
MR. VON STAMWITZ: Objection, there's no foundation that that's an area that she's involved in.
MR. PERZAN: Do you know --
HEARING OFFICER: Overruled. You can back up.
THE WITNESS: All I know is hearsay. I hear there is some funding in a closure trust fund.
Q. (by Mr. Perzan) Are you aware that the State of Illinois has filed a complaint before the Pollution Control Board alleging that there is no financial assurance for the zinc oxide bunker?
A. Yes.
Q. What machinery do you plan to use to dig the zinc oxide out and push it towards?
A. The plan as it sits right now is we do not want to dig any of the zinc oxide out. We are going to lower the zinc oxide out of the bunker by slurring it.
Q. How do you plan to introduce the water that will make up the slurry?
A. Similar to the way that they introduced the water, I believe in the current ponds. I mean if nothing else, we'll fire hose it into the bunker.
Q. Spray it into the bunker?
A. We could or we could just float it in. It would, you know, just be added so that the materials begin to float in the bunker.
Q. Now you're not an expert in air emission matters, are you?
A. No.
Q. Do you think that if it was fire hosed into the bunker you might get, just based on your every day experience, you might get some flying up into the air?
A. Okay. What I meant with the fire hosing, when we're down to the bottom of it and we need to kind of push it towards the southeast corner. We're going to have--you know, you're going to have material

laying all over the bottom of the bunker and we're going to need to start working that towards.

Q. But how in the ordinary course of things I mean before the point where you get to the bottom of the bunker, how will you be introducing water to make this slurry at that point? Is that hoses?

A. I don't really know, we haven't discussed that. I would leave that up to the plant personnel to tell me how best they think it would be done.

Q. Well I think your plan states that the slurry will be about 70 percent water; is that correct?

A. That's what they tell me that they need for it to be in the pond, to be about 70 percent.

Q. How do you plan on controlling that?

A. Basically, I believe 70 percent means it won't slurry until then. It's not going to flow until it's about 70 percent. So it won't ever get to the pond unless it's 70 percent.

Q. But it can go beyond 70 percent?

A. Oh, I think so. Probably.

Q. All right. Capacity of the pump is I think from your plan is 2250 gallons per minute; is that correct?

A. That was--can I look in the plan?

Q. Yeah, sure. It's on page 7.

A. Correct. We're not saying that it's going to be exactly that pump but something similar to that pump.

Q. Okay. You think that figure was based on water or on the slurry?

A. That figure was provided to me--this pump was provided to me by Chemetco. This is the pump they currently use in the ponds so they know that pump can handle slurry.

Q. Okay. So there isn't any part of the plan that addresses how the ratio or percentage of the water to zinc oxide will be controlled?

A. No, because I guess we didn't see a need.

Q. Okay. So how much do you think can be removed in a day, how much of the zinc oxide from the bunker?

A. I don't know to be honest with you.

Q. Now I believe that the plan states that there's a meter, a flow meter, on the pump?

A. Correct.

Q. Is there anything in the plan which would keep track or envision a method to keep track of the zinc oxide after it leaves the bunker?

A. No. We're requesting that the material as it leaves the bunker be classified as not hazardous therefore we did not include that in the plan.

Q. Well, you're aware there's a commitment of Chemetco to make sure the stuff leaves in 90 days?

A. Correct, yes.

Q. But there's nothing in the plan that addresses how that would be done?

A. No.

Q. And once again, once the zinc oxide from the bunker and the zinc oxide from the current production are intermingled, there really isn't any way of telling them apart?

A. No. They have told me the products are similar.

Q. Okay. Now the closure plan as you've stated it in your plan envisions that closure will take place on a range of one to five years, correct?

A. Correct.

Q. It's a large range, isn't it?

A. Yes.

Q. Can you maybe narrow it down any?
A. No.
Q. Did you hear Mr. Hoff's testimony previously that it could be five to six years?
A. Yes.
Q. Would you need to change your plan at all in light of that?
A. Yeah. If we got out to five years in time and we found--well obviously, we're going to be showing every year how much we recycle out of the bunker. If we got towards five years and we still showed we had 25 percent to go, we would be submitting a revision to the closure plan and request additional time for closure.
Q. When did you first hear about new customers, customers other than Elmet?
A. They mentioned something to me a couple weeks ago but I'm not involved in that type of the operations.
Q. You think it would be unreasonable to get about say 2000 tons in a 3-month period, is that an unreasonable number?
MR. VON STAMWITZ: Objection, I'm not sure there's any foundation for this witness's expertise on the market for zinc oxide.
HEARING OFFICER: Is that what you're asking for?
MR. PERZAN: Not physically how much can be removed. I mean, that's what she has done and her plan is focused on.
MR. VON STAMWITZ: If we're talking about the ability to move it, I'll withdraw my objection. I misunderstood the question.
HEARING OFFICER: All right. Ms. Davis.
THE WITNESS: So can you ask me again.
Q. (by Mr. Perzan) Could you physically remove say 2000 tons in a 3-month period?
A. Yes, I believe we could.
Q. Have you done any analysis in the course of doing your plan with regard to expansion of the capacity of the facility to process zinc oxide?
A. No, I haven't.
Q. Have you taken into account the current generation of zinc oxide and how that would have to be integrated with the facility?
A. Yes.
Q. Can you tell me how.
A. Well we discussed that with the plant personnel. My question was can the existing facility as it is right now handle the extra capacity that we'd be feeding on the bunkers. They responded they would need to add the second press that they have there now into operation in order to press it.
Q. And that was the extent of it?
A. Uh-huh.
HEARING OFFICER: Yes?
THE WITNESS: Yes, I'm sorry.
Q. (by Mr. Perzan) What's your estimate of the amount of zinc oxide in the bunker now?
A. I have never surveyed a bunker and got a depth. In order to come up with an accurate number, I guess you'd have to take in the height, the length, you know, the width, have cores down through the bunker to determine exactly how much is zinc and how much is slag. I have not done that, I have to rely upon what Chemetco tells me.
Q. So Chemetco told you when you were doing this plan that it was 40,000?
A. No, that came from the ENSR document, the former closure plan that was prepared by another consultant.
Q. Did Chemetco tell you anything about how much?
A. No, I don't think we discussed it. I just assumed that the number in the ENSR document was correct.

Q. Are you aware of how ENSR--ENSR is E-N-S-R I believe?
A. Yes.
Q. And they are a former consultant?
A. Yes.
Q. Are you aware of how they arrived at the figure?
A. No, I'm not.
Q. So do you think 40,000 is a reliable number?
A. Well, I think that you have to realize the bunker is not--it's not like measuring something, like you have a cube sitting right in front of you and you can say it's exactly so many feet high, so many feet wide, and so many feet long and can calculate the area. The bunker is uneven on the top. You have slag, you know, anywhere. More slag might have filled in an area. So like they say, it's an estimate, you know. I would say anywhere from 30 to 40, you know.
Q. Okay. Is it possible to nail that down?
A. Not without getting up there with a drill rig and drilling through it and I wouldn't want to put a drill rig up there and walking up there.
Q. You mean drilling?
A. You have to drill through it because you'd have to find out--when you drill through it, let's say you gridded the area, you drilled through it and found out you got 3 feet of sod and 10 feet of zinc oxide and then in the next grid, maybe you've got 2 and 8. I mean, it's not a flat surface.
Q. So if it could be from 30 to 40, could it be from 40 to 50?
A. I'd have to calculate what the actual total volume of the bunker would be. You could not exceed the total volume of the bunker walls.
Q. You could go pretty high?
A. Well, you could go as high as the bunker walls are I guess, if you want to assume that it was flat, that the zinc oxide was all the way to the top of the bunker walls which we know it is not.
Q. Could it be from 30 to 50, is it possible?
A. I don't know.
Q. But it is possible?
A. I don't know. I would have to calculate what the capacity of the bunker is right now in order to answer that. I don't know if the capacity of the bunker is 50,000, okay?
Q. Okay. Can I have a moment. Are you aware of anytime in the last year where water with zinc oxide or maybe just water itself had been observed coming out of the bunker?
A. I myself did not observe any but I heard from Chris in the field office that in his last inspection, he had found some leaks.
HEARING OFFICER: Chris?
THE WITNESS: Chris Charnovsky with the Illinois EPA.
HEARING OFFICER: Could you spell his last name?
THE WITNESS: No.
MR. PERZAN: I think it's C-H-A-R-N-O-V-S-K-Y.
Q. (by Mr. Perzan) Have you done any consideration as to whether this operation will affect the integrity of the bunker?
A. Well, the leak from what Greg Cotter told me, it was leaking out of the wall but going into secondary containment into the curbing for the zinc oxide bunker. That is just what Greg told me. The bunker itself already has water in it so we haven't done any calculation as to an additional load because it already has water in it.
Q. Has moisture?
A. Yes.
Q. Wound up in the zinc oxide, correct?
A. Uh-huh, because of the rainfall.

Q. So it's not really loose moisture? I mean I know that's not a very technical term.
A. In the southeast corner, yes, there's a pond on the top, yes.
Q. So have you done any analysis of the integrity of the bunker and how that will be affected by the removal?
A. No.
Q. Okay. With regard to the matter that was mentioned by Mr. Hoff and Mr. Cotter earlier with regard to the zinc oxide going into a swamp area, are you involved in that in any extent?
A. Yes.
Q. Do you have any estimate as to the amount of material?
A. There was an estimate done and off the top of my head, I can't recall, it's in my files.
Q. You may want to look in the plan towards the back, I refer you to Appendix 4, the last page of Appendix 4.
A. Okay.
Q. Does that refresh your recollection?
A. Yes. That was the number that we calculated roughly, 3000 and 5000.
Q. What?
A. Cubic yards.
Q. 3000 and 5000 cubic yards. Do you have any idea how much that is in tons?
A. That calculation was also done but off the top of my head.
Q. Do you know where that came from, did it come from the ponds?
A. I do not know.
Q. Is it possible that it could have come from the ponds?
A. I do not know.
MR. PERZAN: That's all I have.
HEARING OFFICER: Mr. Morgan?

E X A M I N A T I O N

by Mr. Morgan:

Q. A couple points of clarification. First, in your closure plan you mention that there is secondary containment, is that outside the walls of the zinc oxide bunker?
A. I believe it is. I think it's a curving out on the southeast corner.
Q. And that also includes a sump?
A. There's a sump in there, correct.
Q. Can you tell me what the sump consist of?
A. I don't know, I know it's a concrete but that's about all I know.
HEARING OFFICER: A concrete what?
THE WITNESS: It's a concrete--well, I don't really know. I stood there and looked at it and I know it's kind of a whole that's formed by concrete but I didn't construct it or have anything to do with the drawings of it.
Q. (by Mr. Morgan) The removal of the zinc oxide from the bunker wouldn't entail the material passing through the secondary containment or that sump, would it?
A. It could or it could not. We could bypass it or we could send it through. We haven't really worked out where exactly we would set the pump.
Q. Do you know if the sump is connected by piping currently to the settling ponds or would that piping have to be installed?
A. I don't know that answer.
Q. Referring to page 5 of your closure plan section 4.1, the last sentence on that page starts out if necessary to facilitate the removal of the zinc oxide, the slag layer may be peeled back from a portion of the zinc oxide. What does peeled back mean?

A. Well, I put that in there only as a precautionary measure in case when we started slurring the zinc, we had a portion that we were having trouble getting the zinc to move towards the sump. We would peel back part of that slag so that we could physically move the material over towards the pump. The reason I put it in so we didn't have to come in for a closure plan modification in case we found the smaller as we've gotten rid of the majority zinc, we had some trouble moving the rest of the zinc to the pump.

Q. How would the peeling back be physically accomplished?

A. Probably by clamshell I was thinking, that you could reach in with a piece of equipment that sat outside the wall and reached in over and peeled and then pushed.

Q. You mentioned earlier that you didn't want to take a drill rig up on top of the bunker?

A. No, I wouldn't.

Q. Why, because it's unstable?

A. Well, it's got a lot of water in it.

Q. The slag or the zinc oxide?

A. The zinc oxide, you know, is wet in there and then you have the slag on top of it. It'd be like setting a drill rig up on top of jello.

Q. What does the slag look like?

A. If you had a piece here and you had a piece of zinc oxide, I could tell. It's hard to describe. It's black.

Q. What I'm asking, is it large blocks, 6 feet wide 10 feet long or is it chunks of material?

A. It's chunks. I think it's more of the chunky slag up on top, it's not the fine slag. Most the pieces I saw were maybe 6 to 12 inches in diameter up on top.

Q. The closure plan also mentions that there were soil--that there was contaminated soil from other excavations included in this bunker, I guess what I'm asking is do you know how that's being accounted for in this closure plan, what will be done with that material?

A. That material will be--as we add the water, I mean that dirt is going to more or less become pumpable and mix with the zinc oxide and carry on through the way we process zinc oxide.

Q. Will it ever be separated from the zinc oxide?

A. No.

Q. So it will go out with the zinc oxide that's shipped off-site?

A. Correct.

Q. The water that's returned from the filter presses, do you know what it consist of? Is it just pure water or are there other constituents in it?

A. I've never sampled it. I assume it's just the water from the ponds goes to the settling tanks, the water is decanted off, and routed back to the ponds. So it would be similar to the water in the ponds.

Q. And is additional water generated at the filter presses?

A. No.

Q. What's the purpose of the filter press then?

A. You know, I don't know the answer to that one.

MR. MORGAN: No further questions, thank you.

HEARING OFFICER: Redirect.

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

by Mr. Von Stamwitz:

Q. Well, the purpose of the filter press is to press water out of the zinc oxide?

A. Right, but I don't know how wet the material is going into the press. That's what it does, it does press the water out.

Q. Then that water goes somewhere?
A. I would assume it goes back to the ponds.
Q. For references to the water in the bunker and secondary containment, in your judgment is the bunker secure today?
A. Yes.
MR. VON STAMWITZ: No further questions.
HEARING OFFICER: Mr. Perzan?
MR. PERZAN: I have nothing further.
HEARING OFFICER: Mr. Morgan?
MR. MORGAN: Nothing, thank you.
HEARING OFFICER: Ms. Davis, for what purpose was this report prepared, Petitioner's Exhibit Number 14? It was not prepared for this adjusted standard hearing today, was it?
THE WITNESS: It was prepared based upon their request. Mr. Perzan had a meeting a couple weeks ago that stated we needed to--he wanted this pulled out separate from the closure plan that we were looking at that was submitted in '94 that had all of the units at Chemetco. So Mr. Perzan requested it.
HEARING OFFICER: Okay. The original closure plan that you did in '94, that was for what?
THE WITNESS: There's five RCRA units on-site so it was closure of all five units.
HEARING OFFICER: And the zinc oxide bunker being one of those five?
THE WITNESS: Correct.
HEARING OFFICER: And then--okay, all right. Thank you, Ms. Davis, you may step down. Mr. Von Stamwitz?
MR. VON STAMWITZ: We would move for the admission of Exhibits 1 through 16. I believe the record will reflect each one was identified by a witness. I believe there are no objections.
HEARING OFFICER: That was my understanding, too.
MR. PERZAN: No, I don't object.
HEARING OFFICER: Petitioner's Exhibits 1 through 16 are admitted into evidence and that concludes the petitioner's case?
MR. VON STAMWITZ: It does indeed, thank you.
MR. PERZAN: At this point, I would request about five minutes so I can confer with my clients.
HEARING OFFICER: All right, let's go off the record.
(An off-the-record discussion was held)
HEARING OFFICER: Back on the record. Right now, does the agency have any testimony it wishes to present?
MR. PERZAN: No, we do not.
HEARING OFFICER: In an off the record discussion discussing exhibits, we have Respondent's Exhibits 1 through 5 and Exhibits 1, 2, and 3 have been identified. Exhibits 4 and 5 are Chemetco's answers to interrogatories. I guess Exhibit 4 is interrogatories responded to on roughly January the 6th, is that correct, do you think or how do you want to designate these interrogatories, original and amended, or how did you refer?
MR. PERZAN: There was a second set of interrogatories.
MR. VON STAMWITZ: Two sets at two different times.
HEARING OFFICER: Thank you. The Respondent's Exhibit No. 4 is the first set of interrogatories and Respondent's Exhibit No. 5 is the Chemetco's answers to the second set of interrogatories. There is no objection to these exhibits and Respondent's Exhibits 1 through 5 are admitted into evidence. The agency is not going to call any witnesses at this point. I was going to--is there a stipulation that the material, the zinc oxide in the bunker that has been stored there obviously from Mr. Hoff's testimony for several years, none of that has been removed, is that correct to say?

MR. VON STAMWITZ: That's a fair statement.

HEARING OFFICER: There has been no removal of zinc oxide from the bunker at this point in time?

MR. VON STAMWITZ: The plan would be to remove it once the adjusted standard is entered if it is or to landfill it in place.

HEARING OFFICER: All right. And is there any stipulation that we could get in response to some of Mr. Perzan's questions on a number of tons if assuming that the adjusted standard is granted, how much could be removed from the bunker per month? I think the record we left unclear on that and is there a number that we could stipulate to?

MR. VON STAMWITZ: That's hard to stipulate to because we are going to try to do everything we can to remove it as fast as possible. If we can get the contracts in place, we may move much more in the first year than otherwise. The current intent would be to remove the zinc oxide to the capacity of our current presses which would be 60 to 90 tons--I want to make sure I have my terminology right--per day. However, if the right business arrangement comes along, we may, you know, do other things. Right now we don't have customers for all that amount but in fact we may and could make other arrangements. It's really a function of press capacity as we understand it. So we would stipulate that our intent would be to go to the capacity of our presses today but hope to beat that down the road. I don't know if that's helpful.

HEARING OFFICER: Well, I guess I better let it go short of.

MR. PERZAN: I think from the agency's perspective, it's one of the things that may not be clear as a result of this hearing, one of the open questions.

HEARING OFFICER: Well, yeah, I am somewhat unclear. Mr. Hoff, would you take the stand again please. I don't want to belabor the obvious but I am somewhat confused and concerned about the numbers and I want the Board to have as clean of record as possible. Mr. Hoff, you've been present all during the day, right?

THE WITNESS: Yes, sir.

HEARING OFFICER: And so you've heard these discussions. What is Chemetco's estimated removal of the bunker assuming the adjusted standard is granted? And you can express that in tons per day or month or however you figure.

THE WITNESS: Okay. Let me answer it this way, okay. We currently have Elmet at 1500 tons per month. Elmet could go to 3000 tons per month. We currently have Metabel at 400 tons a month which could go to 1000 tons a month. We currently have Sinko Resources which is looking at 2000 tons per month, okay. The high potential, okay, is 3000, 2000, another thousand, that's five thousand, okay. At this moment in time, the capacity of our presses of our system, okay, let's say it's 90 tons a day.

HEARING OFFICER: No, no, I don't want you to say it is. What is the capacity of the presses per day, is it an actual 90 tons per day?

THE WITNESS: We have never done that so we really don't know. All we can do is theoretical.

HEARING OFFICER: What's the estimated capacity of two presses in operation?

THE WITNESS: Okay. If as we go along and zinc is at 50 cents and we get sales and the capacity of the presses will become irrelevant because if we have to add another press, we have to add another moil pump, we have to add four more people. We want the bunker gone.

HEARING OFFICER: All right. But let's try not to do too much speculation. The two presses that you have on your site right now, what is their pressing capacity per day if you run them I guess three shifts?

THE WITNESS: Okay. We're doing 33 tons per day at 60 percent efficiency on one press so it's about 100 tons per day.

HEARING OFFICER: Now that leaves another question, why is the one press at 66 percent effectiveness?
THE WITNESS: Because we have one man doing everything.
HEARING OFFICER: He's running back to the --
THE WITNESS: Yes, he's doing the cells, he's doing the pressing, he's doing the hauling, he's doing everything.
HEARING OFFICER: Okay. So we have an optimum amount if everything's working correctly of 100 tons per day?
THE WITNESS: Right.
HEARING OFFICER: Now you have firm or what appears to be firm contracts for 1,900 tons per month; is that correct?
THE WITNESS: At this point, yes.
HEARING OFFICER: And that's 1,900 tons of the mixed?
THE WITNESS: That's correct. Now that's based on current generation and what we know today. Both of those customers are willing to take more if we can generate more.
HEARING OFFICER: All right. Now then in that regard, you can generate approximately 40,000 more tons, right, from your bunker but is it your testimony or your knowledge that you can't move that from the bunker into this stream without this adjusted standard?
THE WITNESS: I'm not sure I understand that.
HEARING OFFICER: All right. The zinc oxide has been in this bunker for at least ten years, right?
THE WITNESS: Yes, sir.
HEARING OFFICER: And it has not been moved for ten years?
THE WITNESS: Yes, sir.
HEARING OFFICER: And you're not moving it to Elmet or Metabel at this point?
THE WITNESS: That's true.
HEARING OFFICER: I assume you're awaiting some response from the Pollution Control Board on this adjusted standard?
THE WITNESS: Exactly, yes, sir. Once that ruling is made then we'll go back with those customers and say now we have this available, you can have more, and they want more.
HEARING OFFICER: The loading aspect of it was also somewhat confusing in terms of what is the capacity of the barges you use?
THE WITNESS: The barge actually says on paper 1500-ton barge and then they adjust that when we get it into the port depending on where it sits in the water. So if we can load 18, we load 18. If we can only load 14, we load 14. That's dictated to us by the river people.
HEARING OFFICER: These are the regular river barges?
THE WITNESS: Yes.
HEARING OFFICER: These barges go to a point in New Orleans, is that what some filing I saw?
THE WITNESS: New Orleans, Chicago. They go to where they catch the ship and go about.
HEARING OFFICER: So currently as of today, Chemetco can only handle one barge per month?
THE WITNESS: That's all the material we have at this stage.
HEARING OFFICER: If things go well, you might be able to fill up an additional one or two barges?
THE WITNESS: Yes, sir.
HEARING OFFICER: All right. And is it additionally speculative whether or not Elmet or Metabel will take material--I'm sorry, strike that. Whether Elmet and Metabel will take straight zinc oxide?
THE WITNESS: It is not a speculation on Elmet, they will take straight zinc oxide.
HEARING OFFICER: But they are not taking straight zinc oxide as of today?
THE WITNESS: No, they are not.

HEARING OFFICER: And in none of the exhibits you've submitted is there any written commitment from Elmet to take straight zinc oxide, is there?

THE WITNESS: I would have to re-read Jose's affidavit. I believe he states that in there, that he would take straight zinc oxide.

MR. VON STAMWITZ: He does address that issue in his affidavit.

HEARING OFFICER: And so is it your testimony today that you do not have excess zinc oxide to ship to Elmet or Metabel absent using the bunker zinc oxide?

THE WITNESS: That's a true statement.

HEARING OFFICER: Okay, all right. I think that clears up several items for me. Mr. Perzan, did you have anything else you wished to ask?

MR. PERZAN: Probably not without getting into where I was before.

HEARING OFFICER: All right, okay. You may step down again, Mr. Hoff, thank you. Ma'am, would you like to step up here. You can do it one of two ways. I can swear you in and you can give testimony for the record or you can simply read a statement.

MS. BOETCHER: I just have some questions that I'd like addressed.

HEARING OFFICER: Do you have a statement that you wish to make or do you just have questions?

MS. BOETCHER: Well, right now I think I just have some questions. I don't think making a statement at this point is going to reflect one way or another on what happens here.

HEARING OFFICER: Why don't you begin by stating your name.

MR. BOETCHER: My name is Ann Boetcher. And I think I know most of the people here. I have a farm adjacent to the Chemetco property. And first of all, I'm concerned over the fact that they wanted to disturb the bunker because it's my understanding that the material is quite hazardous and being in such a close relation to the property where I'm located, I'm worried about what that might represent in the way of problems for myself because I already have more than enough problems with this facility. I'm involved in a private litigation at the present time with them.

HEARING OFFICER: If I might ask, where is your litigation currently at?

MR. BOETCHER: Madison County.

HEARING OFFICER: Circuit court I suppose. It's civil court, it's not federal.

HEARING OFFICER: Okay.

MS. BOETCHER: And also I'm concerned over the fact that it's my understanding that Chemetco and Elmet were both subsidiaries of Metallo Chimaque, the company in Belgium. So I don't see what they're putting on paper how it really is relevant or what it matters if they have ledgers that shows one thing or the other because it's basically the same holding company that has everything. So they can put anything they want on paper, I mean, they can do anything they want. And in regards to Exmet in Kentucky, what happened there is my understanding is that the first judge found the material to be hazardous and the State of Kentucky was supposed to figure out a way to remove it so they had another judge reclassify the material to get it unhazardous so that they could make Chemetco come in and clean it up. This is the same material we're talking about. I'm next door to this material every day and I'm very concerned over it and I don't believe anything that Chemetco says because they have a very bad--their history is not credible as far as I'm concerned. They have a total disregard for the environment and for my neighbors. I have a farm and they have done quite a lot of damage to it and it's fixable but I don't think they're going to fix it because it cost too much money and I can't sell it because it's contaminated. So I'm in a very tough situation. And I've looked to the EPA for help and I've had to do what I'm told by my attorneys and by what the EPA says

and I'm at the end of my rope right now because every time I turn around, I've got blue smoke rolling across my farm. I can't open a window. I have to breathe this horrendous stuff every day. I have grandchildren that can't come out and play in the yard because my daughter is so fearful of them breathing in what comes across. And I mean I have no idea which is worst, the air pollution or worrying about what's there that I don't know what it is. So that's why I'm concerned over the bunker. This is just one more thing that I have to be worried about and I'm very much against it being disturbed at this point. And that's pretty much it.

HEARING OFFICER: All right, thank you. Well if you're concerned about the bunker, are you opposed to this adjusted standard in which Chemetco has proposed to remove the material in the bunker?

MS. BOETCHER: I don't believe anything they say, you don't want to even ask me that. I'm not an engineer, I don't have that type of degree and I don't know that Ms. Davis can even tell you everything, it's apparent she has problems with things and she depends on what they tell her and, you know, when someone is not credible and they've proved themselves to be total uncredible in the past, it's difficult to understand why they're wanting to do it now. Apparently she says that bunker is secure, everyone agrees that it is secure, why not leave it there, why not just leave it that way. If Mr. Hoff thinks that they're only going to make $100,000 of a million pounds, that doesn't seem worthwhile to even fool with it. I mean just leave it, it's safe, it's secure, it's not damaging anything so just leave it.

HEARING OFFICER: And is this--did you have other questions or does this conclude your statement?

MS. BOETCHER: That's it.

HEARING OFFICER: Well, thank you, very much. Mr. Von Stamwitz, in regard to one question, do you care to comment on whether or not the three companies are related?

MR. VON STAMWITZ: Certainly. Since 1993, Chemetco has not been a subsidiary of anybody, it's been owned by an individual. Prior to 1993, I think the testimony today on this topic was that foreign entities did own Chemetco in which holding companies, the details of which is not in the record. I'm not prepared to comment with any great specificity. And whether or not prior to 1993 the Ferrones had an interest in Metallo Chimaque or not is something I do not know. It's possible, but I do not know. But certainly we can say for the record that since 1993, there's nothing accurate in that statement.

HEARING OFFICER: Well, it was a question.

MR. VON STAMWITZ: The statement made by Mrs. Boetcher, I think she said affirmatively that we are owned by and that's just not true as of 1993.

HEARING OFFICER: All right. Mrs. Boetcher has handed me pages from--the first page is from Chastains--I'm sorry from the Sorkins Directory Business and Government 1996, St. Louis Region Division. The information contained in this directory does state that Chemetco, Inc. is a subsidiary of Metallo Chimaque of Belgium, and another page which has no reference on it.

MR. BOETCHER: It's '95.

HEARING OFFICER: It does not have a reference on it, ma'am. List some information on Elmet S.L and states that Elmet S.L is a subsidiary of Metallo Chimaque International. All right. Thank you. I guess --

MR. VON STAMWITZ: I'd just like to say our understanding of the facts does not change based on that document provided to you.

HEARING OFFICER: All right, thank you. Let the record reflect that there are other members of the audience who I believe are all from the Environmental Protection Agency, well notwithstanding the three witnesses. And pursuant to the rules of the Pollution Control Board, I

do not find any credibility issues with the witnesses that were presented today. We will do a briefing schedule and let's go off the record.

(An off-the-record discussion was held)

HEARING OFFICER: The briefing schedule is set as follows: The petitioners initial brief is due April the 11th, 1997. The agency's response is due April 25th, 1997 and the petitioner's reply, if so desired, is due May the 2nd, 1997. I believe that is all for today. The hearing in this matter is concluded. Thank you.

STATE OF ILLINOIS)
COUNTY OF MACOUPIN) SS.

I, ANGELA K. SIEVERS, a Notary Public in and for the County of Macoupin, State of Illinois, DO HEREBY CERTIFY that pursuant to agreement between counsel there appeared before me on March 11, 1997 at the State Regional Office Building, 1100 Eastport Plaza Drive, Collinsville, Illinois, witnesses, who was first duly sworn by me to testify the whole truth of their knowledge touching upon the matter in controversy aforesaid so far as they should be examined and their examination was taken by me in shorthand and afterwards transcribed upon the typewriter and said hearing is herewith returned.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my Notarial Seal this 17th day of March, 1997.

_____
Notary Public--CSR
#084-004102.

My Commission expires September 6, 1999.
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