BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
REVISION OF THE WASTE DISPOSAL RULES; AMENDMENT TO 35 ILL. ADM. CODE 817.101	) R97-27) (Rulemaking))	

The following is the transcript of a rulemaking hearing held in the above-entitled matter, taken stenographically by Kim M. Howells, CSR, a notary public within and for the County of Cook and State of Illinois, before Richard McGill, Hearing Officer, at 100 West Randolph Street, Room 9-040 Chicago, Illinois, on the 2nd day of June 1997, A.D., commencing at the hour of 10 o'clock a.m.

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

HEARING TAKEN BEFORE:

ILLINOIS POLLUTION CONTROL BOARD,
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601
(312) 814-6983
BY: MR. RICHARD McGILL

ROSS & HARDIES,
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(312) 558-1000
BY: MR. CHARLES W. WESSELHOFT,

Appeared on behalf of Illinois Cast Metals Association.

ILLINOIS POLLUTION CONTROL BOARD MEMBERS PRESENT:

Ms. Kathleen M. Hennessey

Ms. Marili McFawn

Mr. Anand Rao

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MEMBERS PRESENT:

Ms. Kimberly A. Robinson

Mr. Kenneth E. Smith, P.E.

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MR. McGILL: Good morning. My name is Richard McGill, and I've been appointed by the Illinois Pollution Control Board to serve as a hearing officer in this regulatory proceeding entitled in the matter of Revision of the Waste Disposal Rules Amendment to 35 Illinois Administrative Code 817.101. The docket number for this mater is R97-27, and today is the first hearing.

Due to inclement weather, the representatives of the Illinois Environmental Protection Agency have been delayed this morning. Accordingly, we're going to recess this hearing until 11 o'clock.

Are there any questions?

Thank you.

MS. HENNESSEY: Before we go off the record, let me just introduce myself. For the record, I'm Kathy Hennessey, the board member assigned to this rulemaking and to my left is Anand Rao who's from the board's technical unit who will be assisting us as well.

We look forward to seeing you again in an hour. Thank you.

(Break taken.)

MR. McGILL: Good morning. Again, my name is Richard McGill, and I'll be the hearing officer in this regulatory proceeding entitled in the matter of Revision of the Waste Disposal Rules, Amendment to 35 Illinois Administrative Code 817.101.

On March 4, 1997, this proposed rulemaking was filed by its proponent, the Illinois Cast Metals Association or ICMA.

Again, also present today on behalf of the board is Kathleen Hennessey, the lead board member on this rulemaking, also Board Member Marili McFawn.

MS. McFAWN: Good morning.

MR. McGILL: And Anand Rao from the board's technical unit.

Please note that a service list and notice list sign-up sheets for this proceeding are located at the back of the room. The service list and notice list have been updated to reflect the addition of Kim Robinson, counsel for the Illinois Environmental Protection Agency.

Also at the back of the room are copies of the prefiled testimony, ICMA's petition for the rule change, and the updated notice and service lists.

Those on the notice list will receive only board opinions and orders and hearing officer orders. Those on the service list will receive these documents plus any prefiled testimony.

I just have a few comments about the procedure we will follow today. This hearing will be governed by the board's procedural rules for regulatory proceedings. All information which is relevant and not repetitious or privileged will be admitted. All witnesses will be sworn and subject to cross-questioning. Testimony was prefiled for four witnesses. Three for ICMA and one for the agency.

For today's hearing, we will begin with ICMA's presentation of its proposal. After ICMA's three witnesses testify, there will be an opportunity to ask them questions.

This will be followed by the testimony of the one witness for the agency and then an opportunity to ask questions of the agency's witness. After any questions of the agency's witness, any interested persons who did not prefile testimony may testify if time permits.

Anyone may ask a question of any witness.

I ask, however, that during the question period if you have a question, please raise your hand and wait for me to acknowledge you.

Also, please note that any questions asked by a board member or staff are not intended to express any preconceived notions or bias, but only to build a complete record for review by the other board members who are not present today.

We're going to break for lunch at approximately 11:50 today. Are there any questions on the procedure we will follow?

Okay. Seeing none, I want to note that there is currently one additional hearing scheduled in this matter for Friday, June 20th at 10:00 a.m. at the Illinois State Library, 300 South Second Street, Room 403 in Springfield, Illinois.

At the end of today's hearing, I will set a deadline for prefiling testimony for the second hearing.

Before ICMA begins its presentation, I note that ICMA's prefiled testimony was served late on several persons. Does anyone on the service list have any comment as to the timing of service of ICMA's prefiled testimony?

Seeing none, we will proceed ICMA's presentation of its proposal.

Mr. Wesselhoft, you may begin.

MR. WESSELHOFT: Good morning. My name is Chuck Wesselhoft. I'm the attorney for Illinois Cast Metals Association.

We will be presenting three witnesses this morning in support of our proposed rule.

Mr. Slattery will be giving an overview of the proposed rule and how it fits into the existing rulemaking, and Harold Horton and Geary Smith will be presenting testimony concerning their foundry processes and how their sands are generated.

At this point, I think we can swear the witnesses.

(Witnesses sworn.)

MR. WESSELHOFT: The first witness will be Michael Slattery.

WHEREUPON:

M I C H A E L P. S L A T T E R Y ,

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

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

by Mr. Wesselhoft

Q. Could you state your name for the record and your position for RMT?

A. Good morning. My name is Michael Slattery employed by RMT, which is Residuals Management Technology of Madison, Wisconsin. I'm currently a vice-president for the company and program manager for the metals industry.

Q. And what's your relationship to ICMA?

A. Currently, I'm serving on the board of directors for the Illinois Cast Metals Association. I have been the past executive director, past president and active since about 1984.

Q. Could you give a brief summary of your prefiled testimony?

A. I think so.

When we initiated the beneficial use rulemaking process with R90-26, we were attempting to focus on the greatest need in Illinois, which was

for the iron and steel industry large producers of foundry sand that had no escape, so to speak, from the system, and with the upcoming promulgation of new solid waste rules, we worked diligently with Ross & Hardies to prepare a rulemaking to create the beneficial use that we now have in place under 817.

At that time, the non-ferrous industry did not seem to be a priority to us because it's in Illinois a fairly small industry, and we neglected to incorporate that as part of the rulemaking process. It was focused strictly on SIC codes for iron and steel.

Our purpose in coming back now is to address their need, and they have demonstrated through analysis of their waste streams that they can meet the same criteria that was set forth in 817 for yard and steel industry. This will not apply to all the non-ferrous sectors, but a fairly large portion of it.

Q. Attached to your testimony were some SIC code pages. I think those address the SIC codes that were referenced in our proposal; is that true?

A. Yes.

MR. WESSELHOFT: Okay. The next witness is

Harold Horton.

WHEREUPON:

H A R O L D H O R T O N ,

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

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

by Mr. Wesselhoft

Q. Would you state your name for the record?

A. My name is Harold Horton. I'm with the Chicago Aluminum Castings Company, and I'm also currently the president of the Illinois Cast Metals Association.

Q. Would you give a brief summary of your testimony?

A. My testimony previously submitted outlined for the board the processes of the utilization of foundry sand in our operation. We are a jobbing aluminum sand foundry. We do jobbing and custom work.

Our procedure is utilized by floor molding, squeezer molding, and automatic machine molding. The sand medium that we use is derived from olivine sand to which we only add bentonite clay because the

olivine sand as it is mined has no clay content, and we require clay and moisture to turn it into a molding medium for the foundry.

We currently have not disposed of sand because it is a recyclable closed-sand system that we utilize. But sometime in the future, we do anticipate having to dispose of our sand to replenish it and formulate new sand using olivine sand in the future.

I think that pretty much covers what we submitted to you.

Q. Okay. Is the olivine sand process that you use typical of the aluminum business?

A. It's utilized in a fair number of non-ferrous and ferrous foundries. Olivine sand, because it has no clay content, is actually a rock that is crushed up and turned into a variety of screen-size, mesh-size sand for utilization in the industry in replace of silica sand or other types of sand that are used in molding medium.

Q. Do you add any binders to your sand?

A. The only thing we add to the sand is bentonite clay, four to five percent, and we add moisture.

In our own shop, we do add a wetting agent which simply breaks down the water to -- breaks down the surface tension of the water to enable to wet the sand more. It has no other function. It does not contaminate the sand or the atmosphere in any other way.

We run about four to five -- about four to five percent moisture, and bentonite mold mixed with the sand creates the molding median.

Q. Is it typical of aluminum foundries to recycle at the high rate that you do?

A. I'd say that it is pretty well, particularly where -- we were originally using a natural abundant sand, albany sand, which many non-ferrous foundries use, aluminum foundries in particular, because it has a natural clay content.

The olivine sand, that type of sand -- albany sand, excuse me, does not function in an automatic sand system. There's too much clay in the sand. So we have to control that clay and utilize the olivine sand.

Some foundries use silica sand that has no natural clay content, which we then use in bonding with bentonite to do the same thing that we are

doing with olivine sand.

MR. WESSELHOFT: Okay. Thank you.

And our final witness will be Geary Smith.

WHEREUPON:

G E A R Y S M I T H ,

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

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

by Mr. Wesselhoft

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

A. Good morning. Geary Smith. I'm the vice-president, general manager for Manufacturer's Brass & Aluminum Foundry. We're located in Blue Island, Illinois, and we make both aluminum as well as copper-base castings for the jobbing market.

Most of our product goes into the electrical industry. Some goes into -- more and more is going into the food handling business. We make a lot of castings for companies that make equipment which is used to make hamburger patties or chicken nuggets and those types of things.

In our process, we start with washed and dried silica sand, which we purchase from the Wedron

Silica Company located in the Ottawa area of Illinois.

We then coat -- we process the sand through mixers, which coat the sand with binders that hold the grains of sand together. There's two chemicals that go together in this mixing process. It's a very high-speed mixer.

The molds are then formed around the pattern equipment, opened. Cores are placed in position, if necessary, closed up, molded metal is, of course, poured into them. They're broken open, and then the sand gets reprocessed through a reclamation unit.

It breaks the sand back down into a grain size because upon breaking it apart it's in fairly large chunks of sand, so it breaks it back down to its grain size.

The vibratory action of that reclamation system does have a dust collection system attached to it to pull off all the fines because if the fines keep building up, it causes some quality problems for us.

The sand is -- this reclaimed sand is then sent back to a silo, which is located right next to

the new sand silo, and then we simply blend 80 percent reclaim sand and 20 percent new sand into -- they're blended together and sent back to the mixture to form another mold, and the process just repeats itself over and over.

The sand which -- that 20 percent which we just cannot continue to keep using goes to the landfill. You know, that sand has been tested, not only of the TCLP process -- because we, obviously, had to have that in order to be able to classify it as a special waste to be sent to the landfill, but, of course, had it tested to the new standards, the R90-26 -- well, the 817 standards.

The ability for us to be able to put this sand, which is past this criteria, into some type of beneficial reuse will obviously mean that the landfill space will not be filled up, and we will be able to save a considerable amount of money because at this time we're spending close to $16,000 a year to have the sand removed.

Actually, we're spending more money to have the sand removed than it costs us to purchase the sand to begin with. The raw sand I'm just talking about, not the binders that go with it.

Q. Okay. Based on your personal knowledge, are the binders that you use similar to the binders that are used in the ferrous foundries?

A. As far as I know, they are. I'm not an expert on binder chemistries and so forth, but they -- because we pour at such lower temperatures than iron or steel castings do, we don't use as much.

We only put in approximately one percent total binder, one percent by weight. So I don't know exactly how much a ferrous foundry would need, but I'm sure it's a larger percentage, maybe a half to twice as much as what we do.

I did bring with me and can give to you the MSDS sheets on that material. In all cases, we've never had any problems with it. Our employees work well with it. They have never had any problems, and it has passed all the tests that were required by our landfill to be able to put it there.

As a matter of fact, our understanding is that the landfill actually likes receiving these 15 cubic yard hoppers of sand because they love to be able to put it on and cover the material that they're already placing in the landfill.

So to sum it up, I don't think it's any

different than what a ferrous foundry would use. If anything, there's a smaller quantity of it being used.

MR. WESSELHOFT: All right. Mr. Slattery would like to present some additional testimony that has not been prefiled concerning some research that has been conducted by the University of Illinois on foundry sand uses.

BY THE WITNESS:

A. And certainly those documents could be made available for the board to review, but I would like to step back because we're sitting here reflecting on the last set of hearings when the rule was promulgated to allow us to go forward and conduct beneficial use.

We did so knowing that we had the board's support and the agency's support, and we aggressively presented that to the foundry industry.

Under Harold's guidance, we basically decided that we wanted to continue doing research work to further promote beneficial use of foundry sand in the state of Illinois, and we retained the University of Illinois to conduct research ferrous

using foundry sand that met the criteria of beneficial use to further enhance wet farm ground -- wet farmland, rather, basically ground that was too wet to plow or too wet to harvest, and the thought was that the foundry sand would improve drainage of tillable ground in the state of Illinois and further enhance the -- potentially enhance the yield and make that foundry sand of great value to the farmer.

That project was done in conjunction with the farm group near Geneseo, and a preliminary report was just received to the board here recently in the last two weeks, and Phase I gave very favorable results showing that the foundry sand improved the time frame in which the farmer can plant so he could get in sooner.

The crops -- as they monitored the crops through the summer, they grew healthy, and they produced at least the same yield that a regular farm yield would provide. Foundry sand didn't enhance the yield any more than what it was, but it didn't deter it.

They also studied the metal uptake into the roots of the plant and found no increase of any

metals due to foundry sand. Basically, it was as you would bind the natural soils.

We are, Harold and a few other board members, attempting to find some additional research money perhaps through the state of Illinois or one of the agencies, and we intend to go forward and do this for two more seasons to further enhance the validity of the research and make sure that we've done this very scientifically.

But we believe that this could be the greatest value ever created for the use of foundry sand and beneficial use promulgation.

MS. HENNESSEY: Can I ask you, did that foundry sand, was that non-ferrous foundry sand or ferrous foundry sand?

MR. SLATTERY: It was ferrous foundry sand.

MS. HENNESSEY: Do you have any idea whether the results would be any different with non-ferrous foundry sand?

MR. SLATTERY: If it met the criteria of beneficial use, I believe it would be the same.

MS. HENNESSEY: Thank you.

MR. RAO: Are there any changes in the physical characteristics of the sand from non-ferrous

foundries and ferrous foundries? The characteristics here are all based on chemical makeup of the sand.

MR. SLATTERY: Physical characteristics?

MR. RAO: Yeah. Are they pretty much the same?

MR. SLATTERY: I think they are, yes.

MR. WESSELHOFT: We will be presenting an additional witness in the next hearing, Professor Paul Trojan from the University of Michigan who will address chemical differences between the two types of sands as they may exist. We don't know at this point that they do exist, but he will discuss those.

I'd like to enter this prefiled testimony as exhibits.

MR. McGILL: Mr. Wesselhoft, you made a motion to have prefiled testimony of Michael Slattery, Harold Horton, and Geary Smith entered into the record as if read?

MR. WESSELHOFT: Correct.

MR. McGILL: Is there any objection to entering into the record as if read the prefiled testimony of Michael Slattery, Harold Horton or Geary Smith?

MS. HENNESSEY: I don't have an objection, but a

request. Could the witnesses, Mr. Horton and Mr. Smith, describe the attachments to each of their testimony? I don't think that you ran into that in their summary, the test results.

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

(cont'd)

by Mr. Wesselhoft

Q. Mr. Horton, could you describe for me samples that were tested and the test procedure that was used?

A. Yes. The samples that we submitted for testing for the LCT came from, I believe, if I recall, about three different locations within our closed-sand system. We don't take it off from one lump.

We submitted three or four separate clumps of quantities of sand from different locations within our system arbitrarily.

The testing that was done was at the American Foundrymen's Society Environmental Laboratory, and the results have been submitted, and as far as I know, they speak for themselves. I'm not a chemist, and they seem to be passing the tests of usable sand.

Q. Was the procedure used in 817?
A. It was under the 817 parameters, yes.
Q. Mr. Smith, if you could?
A. We also took samples of sand throughout the process. This sand is strictly the reclaim portion. There's no brand new sand mixed into this. It's strictly that 80 percent which is reprocessed.

So the silo that contains this reclaim sand, we took small samples out of there periodically throughout the day, and then put them into a large container, sent them to the same facility that Mr. Horton used, the Lester B. Knight Environmental Laboratory.

So it was a -- we probably sent to them a quantity of sand five or six times greater than what they actually needed, so then they put it through their splitters to get a nice homogenous blend and proceeded to do the neutral leach test per the 817 requirements.

(Ms. Robinson and Mr. Smith entered the proceeding.)

MS. HENNESSEY: Thank you.

MR. McGILL: Thank you. Is there any objection

to entering into the record as if read the prefiled testimony of Michael Slattery, Harold Horton or Geary Smith?

Seeing none, I am marking as Exhibit No. 1 and entering into the record as if read the prefiled testimony of Michael Slattery filed with the board on May 16, 1997, which includes as attachments excerpts from the Standard Industrial Classification Manual and also test results.

(Exhibit No. 1 marked for identification, 6/2/97.)

MR. McGILL: I am marking as Exhibit No. 2 and entering into the record as if read the prefiled testimony of Harold Horton filed with the board on May 16, 1997, which includes test results and an attachment.

(Exhibit No. 2 marked for identification, 6/2/97.)

MR. McGILL: And, finally I am marking as Exhibit No. 3 and entering into the record if read the prefiled testimony of Geary Smith filed with the board on May 16, 1997, which includes test results

as an attachment.

(Exhibit No. 3 marked
for identification,
6/2/97.)

MR. McGILL: We will now proceed with questions for ICMA's witnesses.

As I mentioned earlier, if you have a question, please raise your hand and wait for me to acknowledge you. If you would first state your name and the agency you're with.

MR. K. SMITH: My name is Kenneth Smith. I'm with the Illinois Environmental Protection Agency.

MR. McGILL: Go ahead.

MR. K. SMITH: I don't know if this was covered prior to my arrival, but in Part 817.106 delineates which parameters the foundry sands are to be tested for and delineates three categories of waste that the foundry sand could potentially be classified under.

With the introduction of these two additional SIC codes and to the scope and applicability portion of Part 817, are there any other parameters which would need to be added to the 817.106 parameter list?

MR. WESSELHOFT: Just briefly let me restate what I said before, we will have a witness at the June 20th hearing that will cover that. He's Professor Paul Trojan from the University of Michigan.

MR. K. SMITH: That's it. Thank you.

MR. McGILL: No further questions?

Before the board proceeds with its questions, does anyone else have any questions?

Do any of the board members present have any questions?

MS. HENNESSEY: I'd just like to ask Mr. Slattery to -- I missed him on -- could you just briefly describe the test results that are attached to your testimony?

It's already been admitted, but I think it would be helpful to have a brief overview.

MR. SLATTERY: What has been attached to my testimony is a copy of analytical results for Aurora Industries, which is a foundry located in Montgomery, Illinois.

A person who was working there at the time, Tom Skibinski, had forwarded copies of his analysis to me in November of 1994. I then provided this

information to Mr. Wesselhoft for inclusion in the exhibits.

As I recall in reviewing the results, it did meet the criteria of beneficially usable.

MS. HENNESSEY: What kind of a foundry is Aurora Industries?

MR. SLATTERY: I believe that they are a copper, brass foundry, but I don't think that they're pouring leaded brass.

MR. G. SMITH: If you'd like, I can --

MR. SLATTERY: Go ahead.

MR. G. SMITH: I'm somewhat familiar with their organization.

That's correct. They make a lot of castings for the pump and propeller industry in permanent molds, but then they do have this no-bake operation, which is similar to ours.

I think they use a slightly different binder system, but they use silica sand and make castings the same way.

But Mr. Slattery is correct. They don't pour any alloys of copper base which contain any significant amounts of lead. So it's the same kind of criteria that we have.

We do not pour any alloys that contain any lead, so we're able to pass the standards, and even our TCLP tests which were run again earlier this year confirm that we don't have any levels of lead in the sand. So it's a similar type operation that we have.

MS. HENNESSEY: Okay. Thank you.

I would also ask, Mr. Slattery, if you could provide us with the results of the Phase I study that U of I did. That would be helpful at the next hearing.

MR. SLATTERY: I will do that.

MS. HENNESSEY: And, Mr. Smith, you mentioned that you have the MSDS sheets for binders. Could we have those entered into the record?

MR. G. SMITH: If you want to.

MR. WESSELHOFT: We could do that today, or we can enter it when Professor Trojan discusses it.

MS. HENNESSEY: Whatever you prefer. If you would prefer to wait then on that, that's fine.

MR. WESSELHOFT: Yeah. I think we will be forwarding those to Professor Trojan for his analysis.

MS. HENNESSEY: That's fine.

Thank you.

MR. RAO: Mr. Smith, you just mentioned about pouring lead and brass.

Are you familiar with the foundries which are involved in pouring leaded alloys?

MR. G. SMITH: I've worked at foundries where we made bronze castings and valve castings.

MR. RAO: Is it a common practice in none-ferrous foundries to pour leaded brass and also do other types of non-ferrous castings because it involves leaded brass?

MR. G. SMITH: It can be done, yes. You can pour leaded copper-base alloys and other non-leaded copper-base alloys within the same foundry and the same sand, yes.

MR. RAO: And how do you envision this rule to work in a foundry where these kinds of activities are taking place? Would it be waste segregation?

MR. G. SMITH: If they have two distinctly separate sand systems, they could do that, but if it's all in the same system, they're going to have to adhere to the testing procedures.

First they've got to -- as I understand it, they have to pass the TCLP. And if they don't pass

that, you know, there's no sense of even going beyond that, so. . .

MR. RAO: If they do pass the TCLP with the proposed changes, will they be able to even use these rules? Because I was looking at the proposed language, and it cites we are including these two SIC codes with the exception of foundries which pour brass.

So are they pretty much excluded?

MR. WESSELHOFT: That was our intent, yes.

MR. RAO: Okay. Thank you.

MR. HORTON: I would think that -- it's my opinion that even though they may have the same SIC code that we're asking for, that doesn't mean that they're going to automatically pass the testing required under 817.

I think that's the fundamental basis for the ruling, but we don't know whether they have two separate sand systems or segregate their sand in a way to allow them to submit whatever sand they are using that passes the tests.

So the SIC code itself doesn't differentiate between one sand system and another.

MR. RAO: Yeah, I understand that. I was just

trying to get clarification as to how the rules apply because the way it's proposed, they're excluded from using these rules.

MR. G. SMITH: There will be -- there are a significant number of foundries today, and there's going to become more and more foundries in the future that elect to exclude the leaded alloys.

The National Sanitation Foundation is working with the foundry industry, and the foundry industry is working on developing copper-base alloys that do not contain lead, and yet can be used for plumbing-type applications.

So more foundries -- there are a number of them. We're just one, but there are more and more foundries that are electing to not pour the leaded alloys, and so that's going to become more and more prevalent in the future.

MR. RAO: Thank you.

MR. WESSELHOFT: Just to elaborate on ICMA's intent in its language, if a facility is pouring two alloys, one is leaded and one is not, and they cannot segregate the sands, then the segregated non-leaded brass sand would qualify under the rule. If the sands are mixed, it is our intent that they

would not qualify.

MR. RAO: Okay.

MR. McGILL: Could we go off the record for a moment?

(Discussion had off the record.)

MR. McGILL: Mr. Wesselhoft, your last statement was fairly significant in terms of foundries that pour leaded brass, and I guess we'd like to have that statement under oath.

I don't know if one of the witnesses will be comfortable providing that information, or if you would like to be sworn to testify in terms of the intent of the proposed rule regarding foundries that pour leaded brass.

MR. WESSELHOFT: Mike?

MR. SLATTERY: I will do that. I was whispering in his ear.

The intent of the rule as we moved ahead in helping the non-ferrous industry was to recognize that there are facilities that pour multiple metals. They have multiple SIC codes, and they have a mix of operating systems.

It is our belief and intent that with them

to help themselves, they have to be in a position of segregating the waste streams that come from the various metals.

So if they are pouring leaded brass, we've already told them that there's no way we can include them due to the lead content. They would never pass TCLP to begin with.

However, if they are doing non-leaded metals, they can easily qualify for the beneficial use. So there is some burden of responsibility on the industry to ensure that they have that segregation in place, and if they don't, they will not be able to take advantage of the rule.

Now, I would clarify that -- at least I would expound a little bit that we're not sure how many facilities are in that computation. There are many who are strictly aluminum. There are many who are strictly non-leaded alloys, and then there are those who do multiples.

MR. McGILL: So just to clarify, your understanding is the intent of the rule change regarding a facility that -- foundry that both pours leaded brass and other non-ferrous metals that if that foundry segregated the leaded brass pouring

from its pouring of other metals, none-ferrous metals, that it could qualify for Part 817 in terms of the metals which are not leaded brass?

I mean, let me try to restate that. If a given foundry pours leaded brass and that foundry also pours other non-ferrous metals, within these two SIC codes that have been proposed, can that foundry qualify for Part 817?

MR. SLATTERY: If it has separate systems.

MR. McGILL: Okay.

MR. SLATTERY: If the foundry is pouring a combination of alloys in the same sand system on a given day, no. They would not be able to segregate.

However, if they have multiple pouring lines, completely separate of each other, yes, they could. They could qualify.

MR. HENNESSEY: I just was wondering, as I understand the rule, correct me if I'm wrong, the testing for the sand that is being covered by Part 817 is an annual test, correct?

MR. SLATTERY: Yes.

MS. HENNESSEY: Did you consider whether the rule also needs to have in place some procedures for

ensuring the segregation of sand systems that may be used for the leaded brass and other systems?

MR. SLATTERY: No. In looking back to the earlier rulemaking, I recall discussions about the segregation of waste streams within a foundry, how we would ensure that proper testing procedures were being done, and I believe that we gave proper testimony to the board that ensured it is the responsibility of the generator to analyze each waste stream at the point of generation, not necessarily commingling all the wastes into a common waste piling at the back end of the plant.

I think that we still have that same philosophy in place, yes.

MR. McGILL: So just to follow up on that in the example we've been discussing, if you had leaded brass and then you had separate metals processed, those would be distinct waste streams?

In other words, I'm just looking at the Rule 817.104 regarding sampling frequency. It says all individual waste streams shall be tested annually.

So in our example, if leaded brass is completely segregated from another process, there

would need to be sampling of each waste stream?

MR. SLATTERY: Yes, yes.

MR. McGILL: And the leaded brass would simply not be -- do not come within that 817.

MR. SLATTERY: Yes.

And just as another example within a given foundry, you could have house dust that was related to a melting emission that would be segregated that would not be part of that initial use.

So we have gone to the industry and have been very adamant about it making sure that they follow that protocol of individual waste stream sampling and not commingling.

So those who have come forward to do beneficial use have been very cautious.

MR. McGILL: Thank you.

We're going to take a break for lunch now, and we'll reconvene in one hour. So at 12:50, we'll start up again and continue this question period.

Are there any questions?

Thank you. Let's go off the record.

(Whereupon, a lunch recess was taken reconvening at 12:50 p.m.)

MR. McGILL: Good afternoon. We're going to resume with the questioning period, questions of Michael Slattery, Harold Horton, and Geary Smith who are here on behalf of ICMA.

I'd like to give the agency an opportunity to ask any questions that they might have at this time.

MR. K. SMITH: Okay. Thank you. This is Kenneth Smith. I'd like to direct a question to Mr. Slattery.

On Page 2 of your testimony, the second paragraph, it's stated that the results for Manufacturer's Brass and Aurora Industries indicate complete compliance with the beneficially usable waste limits. I have reviewed Attachment C of your testimony, and I've noted that the manganese concentration for the Manufacturer's Brass Aluminum Foundry exceeds the beneficially usable waste limit, and, consequently, it would be classified as a potentially usable waste.

Is that also your understanding?

MR. SLATTERY: Let me find that correct page first.

MS. ROBINSON: It looks like it's the beginning

page of Attachment C, for the record, and it's Page 2 of Mr. Slattery's testimony.

MR. SLATTERY: I'm looking at Attachment C, and I would agree that the concentration of .189 is over the limit of beneficially usable.

MR. K. SMITH: All right. Thank you.

MR. McGILL: I'm sorry. Mr. Slattery, what was the concentration?

MR. SLATTERY: .189.

MR. McGILL: .189.

MR. SLATTERY: The acceptable standard is .15.

MR. McGILL: Thank you.

MR. SLATTERY: I can only offer that that was an oversight.

MR. K. SMITH: Secondly, on Page 2 of your testimony it's stated that the Chicago Aluminum Foundry shows an exceedance of beneficially usable waste limits for cadmium, lead, and selenium.

I'd also add that it appears from my review of the results on Attachment C of your testimony that this particular sand also exceeds the arsenic standard and the standard for 1,2 dichloroethane.

MR. SLATTERY: I am looking at Attachment C, and I would agree that those two compounds are over the

limit for beneficial usable waste. Again, that was an oversight on our part.

MR. K. SMITH: Thank you.

MR. McGILL: Mr. Slattery?

MR. SLATTERY: Yes.

MR. McGILL: Did you want to add anything more?

MR. SLATTERY: Just one moment.

(Brief pause.)

MR. SLATTERY: It does appear that -- I'm not sure, but it appears that part of the problem could be where they set the detection limit where they have set less than .006 rather than to set a lower detection limit on than the standard.

We have encountered that in some of the other laboratories in Illinois.

MR. McGILL: Your comment relates only to 1,2 dichloroethane?

MR. SLATTERY: Yes.

MR. McGILL: And just --

MR. SLATTERY: Probably also the arsenic, yeah.

MR. McGILL: Did you have anything else to add, Mr. Slattery?

MR. SLATTERY: No.

MR. McGILL: Just for clarification, an arsenic

level of .068 for Chicago Aluminum, that exceeds the low risk waste limit; is that correct?

MR. SLATTERY: I'm looking at the table in 817.106, waste classification limits. It appears that the results for Chicago Aluminum on their arsenic at .068 would exceed beneficially usable. However, it is less than the criteria of potentially usable, which is .1.

MR. McGILL: Thank you.

Did the agency have any further questions?

MS. ROBINSON: We have no further questions.

MR. McGILL: Thank you.

Anand Rao, do you have any questions?

MR. RAO: Yes, I have just one clarification question.

Mr. Slattery, in Attachment C where you have summarized testing results, for Chicago Aluminum, there are some numbers that appeared to be missing as far as trihalomethane, vinyl chloride, and xylenes.

Would you explain, you know, whether that was something that was tested for is, or is it just. . .

MR. SLATTERY: Let me look.

(Brief pause.)

MR. McGILL: Just for clarification of the record, this question relates to Attachment C of Michael Slattery's prefiled testimony.

MS. HENNESSEY: Which is now Exhibit 1.

MR. McGILL: Correct, which is now Exhibit 1.

MR. SLATTERY: Dr. Rao, to answer that, it appears that those parameters were not on the analytical sheet that we have here. Therefore, they weren't transferred onto the summary chart. I can't offer any further explanation.

MR. RAO: Okay.

MR. McGILL: Just to follow up, which analytical results were you referring to?

MR. SLATTERY: It's one for Chicago Aluminum Castings dated February of 1995.

MR. WESSELHOFT: It was the attachment of Harold Horton's testimony.

MR. McGILL: Okay. So those test results are in Exhibit 2, the prefiled testimony of Harold Horton?

MR. WESSELHOFT: Right.

MR. McGILL: Thank you.

MR. RAO: And I have one more question.

In the same sheet, that's Attachment C to

Exhibit 1, you have aspects that say represents total rather than leach results, and I can't find any aspects on the list that you summarize here.

So could you please explain if that's something that we need to worry about?

MR. SLATTERY: Just a moment. I'm not sure.

(Brief pause.)

MR. SLATTERY: It appears to be an error on our part. That was put on accidently and has no bearing to this exhibit. It should be stricken from the exhibit.

MR. RAO: So all the testing results are based on leach?

MR. SLATTERY: All are leach test results, yes.

MR. RAO: Thank you.

MR. McGILL: Any other questions from the board members present? I had a few questions relating to test results.

Will ICMA -- in addition to the test results that are included in the prefiled testimony, will ICMA have any additional test results to offer into the record?

MR. WESSELHOFT: At this point, we don't believe so.

MR. McGILL: Thank you.

I had a few questions regarding the test results on foundry sand from Aurora Industries and Manufacturer's Brass that were included in the prefiled testimony.

First of all, did each of these foundries make both aluminum castings and copper alloy castings?

MR. G. SMITH: I can address that in our foundry we make, yes, both aluminum and copper based.

It's by volume of -- because of the fact that aluminum weighs one-third of what copper base weighs, if I try to equalize that, it's approximately 65 to 70 percent aluminum in our particular situation.

We do pour the aluminum bronzes and silicon bronzes in that same sand. Speaking on behalf of Aurora, I've never worked there or anything, but I've been there, and I don't think they pour very much aluminum at all especially not in their sand foundry application. They pour aluminum probably in some permanent molds, but not in sand.

So it's exclusively copper. I think they pour a lot of pure copper and silicon bronzes and

aluminum bronzes.

MR. McGILL: Okay. So then at Manufacturer's Brass, you pour -- would you just recite those?

MR. G. SMITH: The major aluminum alloys in the 300 series and then alloys in the 500 series within the aluminum classifications, and within the copper base, it's the silicon bronzes, some manganese bronzes, copper, and aluminum bronzes.

But the volume of metal is heavily aluminum oriented, 65 to 70 percent of our work is actually aluminum castings.

MR. McGILL: What series were you referring to there?

MR. G. SMITH: Aluminum series. The 300 series is an aluminum silicon alloy, and the 500 series is an aluminum manganese chemistry.

MR. McGILL: What is that a reference, the series?

MR. G. SMITH: The aluminum association series of standard industrial classification for the alloys.

MR. McGILL: Okay. Let me just ask for your facility, which foundry sand waste stream was sampled to obtain the leach A test results that were

submitted with your prefiled testimony?

MR. G. SMITH: Our no-bake system. We pour all those different alloys in that system. It's a silica-base system that uses this chemical binder to actually bond the grains of sand together.

MR. McGILL: So the foundry sand sample that was used to extract the leach A, that foundry sand could have been waste from aluminum and bronze pouring. It's all mixed together?

MR. G. SMITH: Well, we would make molds with the same sand, and these jobs would get poured out of aluminum, and these jobs for these customers get poured out of one of the copper-base alloys, but the sand stays within the same system, yes. But it is segregated.

Ever since we have begun to, of course, follow all the various regulations, foundries are very familiar with keeping their waste stream segregated and testing them accordingly. So all of our waste streams are sand or dust from the back house or sand and dust from glass cleaning operation. Those are all segregated.

MR. McGILL: So this sand sample was taken from where?

MR. SMITH: It was taken at various times throughout the day right where the reclaim sand is fed onto a magnetic -- electromagnetic conveyer that blends it with the brand new sand. So we only take the reclaim sand. There's no brand new sand mixed in with this.

It's that 80 percent reclaim that goes back into the system. So it's strictly that sand which would have gone right to the mixers to be used to make another mold.

MR. RAO: So this is sand from the silo that you referred to?

MR. G. SMITH: Right. What we simply do is once that silo gets full, and we can't put any more into it -- because we're putting in 20 percent new sand all the time, eventually the reclaim sand silo gets full, and we can't put any more into it, then we've got a valve on there that we open up, put that sand into a hopper, and then take it out, and put it into one of these 15 cubic yard hoppers and take it away.

MR. McGILL: So the sand that was sampled resulted from aluminum pouring and copper pouring, et cetera?

MR. G. SMITH: Copper base, right.

MR. McGILL: Thank you.

Regarding Aurora Industries, perhaps Mr. Slattery could comment.

In your prefiled testimony, Mr. Slattery, that's reference to -- on Page 2, this is now Exhibit 1, there's a referenced to Aurora Industries being a copper alloy and aluminum foundry.

Would you happen to know which foundry sand waste stream was sampled to obtain the leach A test results from that facility?

MR. SLATTERY: I do not know. I think that we could determine that answer, but I honestly don't know.

MR. McGILL: So the case of Manufacturer's Brass, the leach A was extracted from a mixture of individual foundry sands, and then the foundry sands came from copper pouring, aluminum pouring, et cetera, but we don't know the case at Aurora Industries?

MR. SLATTERY: No.

MR. McGILL: Thank you.

I had a -- were there any other questions relating to test results?

MR. RAO: I have a follow up question to what

you were asking Mr. Smith earlier.

You mentioned how you store this sand in a silo, and then you reuse it. If you had a, you know, lead brass pouring operation, suppose if you had it, I don't know if you do, the waste sand from such an operation would not be mixed with this reclaim sand from other processes if you want to reuse it?

MR. G. SMITH: If we wanted to be able to make use of this, we would have to take any molds that had a leaded alloy poured into them and keep them segregated, which, in all honesty, would be difficult to do.

We'd almost have to have two separate systems. A foundry that wants to pour -- is forced to pour leaded alloys in the same system that they would pour non-leaded alloys isn't going to be able to -- probably will not be able to make use of this because it probably will not be able to pass the 817.

They could very well pass the TCLP for a special waste being put into a landfill, but they won't be able to pass this.

There are foundries that do have separate

sand systems. One for aluminum or one for non-leaded alloys, and then one -- you'd have to have a separate sand system. You couldn't break out molds that had been poured in leaded alloys in with that other material.

MR. RAO: But, basically, you're saying it has to be segregated if they want to --

MR. G. SMITH: I would think that they would have to have two distinctly separate systems in order to do that, and, you know, they would have to monitor it accordingly.

MR. RAO: Thank you.

MR. McGILL: I had a few other questions relating to economic matters.

My hearing officer order of April 30, 1997, required ICMA to include in its prefiled testimony more complete responses to certain questions proposed in a form entitled, quote, Agency Analysis of Economic and Budgetary Effects of Proposed Rulemaking, end quote.

I'm going to ask several questions relating to that form. Hopefully, they can be answered by ICMA's witnesses here today. To the extent they cannot be answered today, the questions will be on

the record and will need to be answered in ICMA's prefiled testimony for the hearing on June 20th.

My first question is, how many Illinois foundries are included within SIC codes 3365 or 3366?

MR. WESSELHOFT: I'm not sure that we have anyone who could make that statement today.

MR. McGILL: Okay. It would be helpful if we could get that information or at least find out how many within ICMA would come within those SIC codes.

My next question was, how many of those facilities pour leaded brass? That would be another question we'd be interested in getting an answer to.

MR. WESSELHOFT: I don't think we have that today either.

MR. McGILL: Okay. Thank you.

Do you know how much foundry sand is disposed -- in terms of non-ferrous foundries that might be able to avail themselves to this Part 817, if this rule change is made, how much foundry sand will be disposed of annually in Part 811 landfills?

MR. SLATTERY: I know that we can give you that answer at the next hearing. I won't have that

today.

MR. McGILL: Thank you. And then if you could also include the total annual costs for transportation and disposal of that material to Part 811 landfills.

My next question is, can you explain how the proposed amendment will reduce administrative expenses for foundries?

MR. WESSELHOFT: Do you want an economic number on that or just a general description?

MR. McGILL: General description.

MR. WESSELHOFT: We'll give you that next time.

MR. McGILL: Thank you.

There was also a mention in the petition of how the proposed amendment will reduce administrative expenses for the agency.

Do you have any sense of how the rule change would reduce the agency's administrative expenses?

MR. WESSELHOFT: I think we can give you an opinion on that next time.

MR. McGILL: Thank you.

And one other question relating specifically to form. Will the proposed rule change

have any other effect on state revenues or expenditures?

MR. WESSELHOFT: We'll try to address that.

MR. McGILL: Thank you.

My next question is, what are the opportunities available for recycling and reuse of these non-ferrous foundry wastes?

MR. SLATTERY: In today's current market?

MR. McGILL: Yes.

MR. SLATTERY: I would say they're very comparable to what we're experiencing with iron and steel foundries. The sand being equal and meeting the criteria of beneficially usable, the marketplace is calling for the use of this sand and the production of cement, where they need silica as a product in manufacturing cement.

We've seen applications where parties are making concrete using the sand as an exchange of other sand products that they would normally use. There's been some projects with the use of foundry sand in asphalt. I don't think that has been that strong in Illinois, but I know there have been some projects taken and developed along those guidelines, construction, backfill material.

The term flowable fill which was very hot in Ohio two years ago has not caught on that well in Illinois, but it is an option. Flowable fill being a low cost trench backfill material that goes in somewhat like a slurry, sets up in a ditch, allows the workers to lay the pipes without having to go in and compact all the sand, the natural sand material.

Those are several that come to mind. I can't think of any others right now. There has been some work done with concrete blocks and firebrick with sand.

MR. McGILL: All right. These uses that you're mentioning, are those specific to ferrous foundry sand?

MR. SLATTERY: Currently, yes, because they're the only ones that have the sand available, but either ferrous or non-ferrous sand would qualify for that use.

MR. McGILL: Are there any other -- there was reference in your prefiled testimony to markets for waste sand that predecessor rulemaking R90-26 enables steel and iron foundries to find.

Are these the markets you're referring to?

MR. SLATTERY: Yes.
MR. McGILL: Thank you.
Do you anticipate that this rule change would lead to the establishment of new foundry waste landfills?
MR. SLATTERY: New foundry waste landfills for non-ferrous?
MR. McGILL: Yes.
MR. SLATTERY: No, I don't think so. Based on what my knowledge of the non-ferrous industry is, I'm not aware of any non-ferrous foundry landfills at this time.
MR. McGILL: Right.
Do you anticipate with the rule change that non-ferrous foundry waste landfills might be established?
MR. SLATTERY: No, I don't think so.
MR. McGILL: This is a question specific to Chicago Aluminum. This is from the prefiled testimony of Mr. Horton.
Mr. Horton, could you exemplar the difference in the amount of sand Chicago Aluminum presently disposes, which is approximately two tons per year and the amount it potentially could dispose

which is approximately 37 tons per year?

MR. HORTON: In our closed-sand system with aluminum being a much lower pouring temperature than brass or iron metals, we do not burn up or dissipate the workability that the bentonite clay that is added to the olivine sand, which will give it the bonding properties that are required.

Therefore, we are -- we can continue to use the sand without completely throwing out a batch of sand like they do in the iron foundries or steel foundries. We can continue to recycle that sand, and we do add four general sands to the castings and is shaken off in shake out at the band saw, for example, and so on or droppings on the floor and losses within the conveyer system itself in spillage.

We do replace and only utilize perhaps 100 or 200 pounds in a week of new sand added. So that's why we don't find it necessary or a requirement of the molding process to maintain our viability of the sand.

However, we try and analyze and think about the results that we perceive from the testing that we've done with a buildup of certain things that

seems to be a little bit just outside the parameters of beneficial use possibly, and at certain times it's possible that it's an accumulation of buildup over ten or 15 years that we, in fact, have been utilizing the initial 37 tons of sand that we started our process back in 1981 with.

When we became automated in utilizing the system. We have never disposed of our sand lump in its entirety. It's always been -- our estimate is probably two tons a year, and this is from other sand that really is still usable.

So it's economically unfeasible for us to dispose of the whole system like they do and are required to do in the iron foundries or steel foundries. It's an advantage for aluminum because of the nature of the aluminum foundry business that we're in.

But there may be a point in time when product requirements or the advancement of the industry at some point in time in the future would require us to revamp our sand system, but at that time, we, obviously, would want to try and utilize that disposable sand instead -- in reusable situations instead of taking up landfill space, and

I'm sure that there are other foundries and similar situations in the aluminum field.

MR. McGILL: Thank you. Are there any other questions for these witnesses?

MR. K. SMITH: No.

MS. ROBINSON: No questions.

MR. McGILL: Thank you very much for your participation.

Mr. Wesselhoft, do you want to make a motion regarding the material safety data sheets?

MR. WESSELHOFT: Yeah. I'd like to move that we enter these -- two material safety data sheets were supplied to me by Mr. Smith from binders he uses to process this. I'd like to propose these as exhibits.

One is Techniset and Resin, T-e-c-h-n-i-s-e-t, and the other is Delta Set Coreactant.

MR. McGILL: And these are material safety data sheets from --

MR. WESSELHOFT: Binders that Mr. Smith uses in his process.

THE COURT: At Manufacturer's Brass?

MR. WESSELHOFT: Right.

MR. McGILL: Thank you.

MS. HENNESSEY: Mr. Smith, are these the material safety data sheets that you were referring to earlier?

MR. G. SMITH: Yes, these are the sheets that I gave to Mr. Wesselhoft.

MR. SLATTERY: Yeah. There's two chemicals that go together that complete the process. I don't think you have copies of those.

MS. ROBINSON: May we take a look at those?

MR. McGILL: Sure.

MS. McFAWN: So these are the two chemicals used in the no-bake molding process?

MR. G. SMITH: Yeah. They both go into the machine at the same time. They're pumped into the machine and coated. They literally get coated onto the grains of sand. One percent -- one-half percent of each of these is coated on the sand. It's a very small percentage of this material.

MS. ROBINSON: Thank you.

MR. McGILL: Sure.

Is there any objection to entering into the record material safety data sheets for a product referred to as 23-75 Delta Set Coreactant, Part II?

MS. ROBINSON: The agency has no objection.

MR. McGILL: Is there any objection to entering into the record material safety data sheets or a product referred to as 20-105 Techniset Resin NF?

MS. ROBINSON: No objection.

MR. McGILL: As there's no objection, I'm going to mark as Exhibit No. 4 the material safety data sheet with the product name 20-015 Techniset Resin NF. It's a material safety data sheet for Manufacturer's Brass.

(Exhibit No. 4 marked for identification, 6/2/97.)

MR. McGILL: And I'm going to mark as Exhibit No. 5 material safety data sheet for a product that's referred to as 23-75 Delta Set Coreactant Part II also material safety data sheet for Manufacturer's Brass.

(Exhibit No. 5 marked for identification, 6/2/97.)

MR. McGILL: At this point in time, I'd like to ask Miss Robinson on behalf of the agency if you would like to begin your presentation?

MS. ROBINSON: Yes, we would at this time.

MR. McGILL: Excuse me. Would you please swear in the witness?

(Witness sworn.)

WHEREUPON:

K E N N E T H E. S M I T H , P. E. ,

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

MR. K. SMITH: My name is Kenneth Smith. I'm an engineer in the solid waste unit of the UIC Unit, permit section, within the Division of Land Pollution Control, Bureau of Land of the Illinois EPA.

The Solid Waste UIC Unit is responsible for, in part, the permitting of nonhazardous waste landfills.

I have been employed at the Illinois EPA since January 1989. I received bachelor of science degree in civil engineering in March 1984 from Cleveland State University. I'm a licensed professional engineer in the state of Illinois.

In response to Item 1(d) of the form entitled Agency Analysis of Economic and Budgetary Effects of Proposed Rulemaking, the Illinois EPA

does not believe this rulemaking will result in any measurable increase or decrease in cost associated with rule implementation.

The Illinois EPA believes the inclusion of waste streams generated by non-ferrous industries into the Part 817 program has the potential to result in benefits to both the state of Illinois and the foundries covered through the elimination of disposal costs for the wastes involved and the conservation of landfill disposal space.

However, the Illinois EPA wishes to reserve support of this rulemaking until and contingent upon a review of the proponent's testimony.

Thank you.

As Mr. Wesselhoft replied in response to one of my questions earlier, we understand that there's going to be some testimony from the Illinois Cast Metals Association in regards to additional parameters that may or may not be added to 817.106, and we look forward to that testimony on June 20th.

MR. McGILL: Thank you.

Miss Robinson, did you want to make a motion to have this prefiled testimony of Mr. Smith entered into the record as if read?

MS. ROBINSON: Oh, yes, please. Would this then be Exhibit No. 6?

MR. McGILL: Yes.

MS. ROBINSON: Would you like me to have the court reporter mark that for --

MR. McGILL: I'll mark it up here, thanks.

There's a motion from the agency to have the prefiled testimony of Kenneth Smith entered into the record as if read.

Is there any objection to entering into the record as if read the prefiled testimony of Kenneth Smith?

Seeing none, I'm marking as Exhibit No. 6 and entering into the record as if read the prefiled testimony of Kenneth Smith filed with the board on May 16, 1997.

(Exhibit No. 6 marked for identification, 6/2/97.)

MR. McGILL: Are there any questions for the agency's witness?

MR. WESSELHOFT: I have one question.

MR. McGILL: Could you just state your name for the record?

MR. WESSELHOFT: Yeah. Chuck Wesselhoft for ICMA.

In the several years since the 90-26 rules have been in place, are you aware of any problems or concerns that the agency has had with the beneficial use of foundry sands from the ferrous foundries?

MR. K. SMITH: No problems, but there are certain parts of the 817 we feel needs some clarification, but we haven't encountered any problems.

MR. WESSELHOFT: Thank you.

MR. McGILL: Any further questions for the agency's witness?

MS. HENNESSEY: I just want to clarify that the IEPA is reserving support of this rulemaking until you hear Dr. Trojan's testimony; is that correct?

MR. K. SMITH: Yes, that's correct. You know, because they're non-ferrous foundries going to be possibly added to the rulemaking. We would like to hear some testimony as to whether the parameter list in 817.106 should be expanded.

MS. HENNESSEY: And based on what you've heard today and in reviewing the prefiled testimony, do you take issue with any of the statements that the

proponents have made today?

MR. K. SMITH: No, I don't.

MS. HENNESSEY: Okay. Thank you.

MR. McGILL: Any further questions for Mr. Smith?

Does anyone else wish to provide any testimony today?

Seeing no response, I'll move on to a few procedural matters to address before we adjourn.

I note again that there will be an additional hearing on Friday, June 20th at 10:00 a.m. at the Illinois State Library, 300 South Second Street, Room 403 in Springfield, Illinois.

Anyone who wishes to testify at the second hearing must prefile their testimony. Prefiled testimony must be received by the board no later than June 9, 1997. The mailbox rule does not apply to this filing.

You must file your prefiled testimony with the clerk of the board and simultaneously deliver it to all persons on the service list. You should contact me or the clerk's office to make sure that you have an updated service list.

Interested persons who wish to testify at

the second hearing and who do not prefile their testimony as required will be allowed to testify only as time permits.

Copies of the transcript of today's hearing should be available at the board by Wednesday or Thursday of next week. A few days after that, the transcript should be available through the board's own page on the Worldwide Web.

Are there any other matters that need to be addressed at this time?

MS. ROBINSON: Will you be requiring prefiled questions on the testimony?

MR. McGILL: No. Any other questions?

I'd like to thank everyone for their participation today. This hearing is adjourned.

(Whereupon, these proceedings were adjourned pursuant to agreement to be reconvened on June 20, 1997.)

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

I, KIM M. HOWELLS, CSR, do hereby state that I am a court reporter doing business in the City of Chicago, County of Cook, and State of Illinois; that I reported by means of machine shorthand the proceedings held in the foregoing cause, and that the foregoing is a true and correct transcript of my shorthand notes so taken as aforesaid.

_____
KIM M. HOWELLS, CSR
Notary Public, Cook County, IL.

SUBSCRIBED AND SWORN TO
before me this_____day
of_____, A.D., 1997.

_____
Notary Public