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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:

PETITION OF HORSEHEAD RESOURCE)
DEVELOPMENT COMPANY, INC., for) AS 00-2
an adjusted standard under 35) Adjusted Standard RCRA
Ill. Adm. Code 720.131(c))

The following is the transcript of a hearing held in the above-entitled matter taken stenographically by MICHELE J. LOSURDO, CSR, a notary public within and for the County of DuPage and State of Illinois, before JOHN KNITTLE, Hearing Officer, at 100 West Randolph Street, Room 11-512, Chicago, Illinois, on the 28th day of October, 1999, A.D., commencing at 1:30 p.m.

1 PRESENT:

2

3 AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P.
4 BY: MR. PAUL E. GUTERMANN
5 1333 New Hampshire Avenue, N.W.
6 Suite 400
7 Washington, D.C. 20036
8 (202) 887-4000

6

Appeared on behalf of Petitioner;

7

8 BY: MR. JOHN N. MOORE
9 200 North LaSalle Street
10 Suite 2200
11 Chicago, Illinois 60601-1095
12 (312) 782-9503

10

11

Appeared on behalf of Petitioner;

12

13 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
14 BY: MR. PETER E. ORLINSKY
15 ASSISTANT COUNSEL
16 1701 S. First Avenue
17 Maywood, Illinois 60153
18 (708) 338-7900

15

16

Appeared on behalf of Illinois EPA.

17

ALSO PRESENT:

18 Richard Krablin, Ali Alavi, Anand Rao,
19 Mark Schollenberger, Ellen Riley and
20 Claire Manning.

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I N D E X

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MARKED FOR IDENTIFICATION

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1 HEARING OFFICER KNITTLE: My name is John
2 Knittle. I'm a hearing officer with the Illinois
3 Pollution Control Board. I'm also the assigned hearing
4 officer for this matter in which we are having a hearing
5 today entitled In The Matter Of Petition of Horsehead
6 Resource Development Incorporated for an adjusted
7 standard under 35 Illinois Administrative Code
8 720.131(c), Pollution Control Board number AS00-2.
9 That's a RCRA adjusted standard.

10 This matter will be conducted in accordance
11 with the board's regulations in the Environmental
12 Protection Act. Specifically, the proceedings will be
13 in accordance with 35 Illinois Administrative Code 102
14 subpart J.

15 I note for the record there is one member of
16 the public not affiliated with either the parties or the
17 board. And, ma'am, you've stated earlier your name is
18 Ellen Riley.

19 MS. RILEY: Right.

20 HEARING OFFICER KNITTLE: And we asked you this
21 off the record, but do you want to provide any testimony
22 here today?

23 MS. RILEY: No.

24 HEARING OFFICER KNITTLE: Or any public comment?

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1 MS. RILEY: No.

2 HEARING OFFICER KNITTLE: Of course you're
3 welcome to sit and observe the proceedings as you see
4 fit. I also should note for the record that today's
5 date is October 28th. It is approximately 1:30 p.m.
6 We're getting started a little late. If I could, at
7 this point, have the parties introduce themselves
8 starting with petitioner.

9 MR. GUTERMANN: My name is Paul Gutermann from
10 the law firm of Akin, Gump, Strauss, Hauer & Feld
11 representing petitioner Horsehead Resource Development
12 Company Incorporated.

13 MR. MOORE: My name is John Moore. I'm a lawyer
14 representing HRD as well with the Moore law firm in
15 Chicago.

16 MR. ORLINSKY: Peter Orlinsky, Illinois EPA
17 Division of Legal Counsel.

18 HEARING OFFICER KNITTLE: Do we have any
19 preliminary matters? We talked about introducing the
20 exhibits at this point. Is there any other preliminary
21 matters?

22 MR. MOORE: No.

23 MR. GUTERMANN: No.

24 HEARING OFFICER KNITTLE: Okay. Why don't we

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1 handle the exhibits then.

2 MR. MOORE: Exhibit Number 1 is HRD's petition
3 for an adjusted standard, which I've marked. Exhibit 22
4 is the Illinois Environmental Protection Agency's
5 response to HRD's petition for an adjusted standard, and
6 Exhibit Number 3 is HRD's reply to Illinois EPA's
7 response.

8 HEARING OFFICER KNITTLE: Thank you.

9 Mr. Orlinsky, have you seen all these before?

10 MR. ORLINSKY: Yes, I have.

11 HEARING OFFICER KNITTLE: Do you have any
12 objection to the -- and I'm labeling them Petitioner's
13 Number 1, Petitioner's Number 2.

14 MR. ORLINSKY: That's fine.

15 HEARING OFFICER KNITTLE: Just in case the

16 agency changes their mind and wants to submit something
17 later on down the road.

18 First let's take Number 1. Do you have any
19 objection to that?

20 MR. ORLINSKY: No, I don't.

21 HEARING OFFICER KNITTLE: Okay. That will be
22 admitted. Number 2 is the IEPA response, any objection
23 to that?

24 MR. ORLINSKY: No, I don't.

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1 HEARING OFFICER KNITTLE: That will also be
2 admitted. I would hope you wouldn't have any objection
3 to that.

4 And Petitioner's Number 3 is the reply to the
5 response. Is there an objection to that?

6 MR. ORLINSKY: No objection.

7 HEARING OFFICER KNITTLE: All those three are
8 admitted. We can start off with opening statements if
9 you'd like.

10 MR. GUTERMANN: Thank you. We have a brief
11 opening statement. As indicated in your preliminary
12 remarks, we're here today pursuant to the Illinois
13 Environmental Protection Act which authorizes the board

14 to grant adjusted standards and specifically to a
15 regulation, section 720.131(c) which allows for the
16 board to enter an adjusted standard to exclude partially
17 reclaimed materials that are commodity-like.

18 Horsehead Resource Development Company, which
19 I'll refer to as HRD, seeks an adjusted standard for a
20 material that we refer to as crude zinc oxide or the
21 acronym CZO. HRD is the largest operator of high
22 temperature metal recovery facilities in the United
23 States and is the largest recycler of inorganic waste in
24 the United States.

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1 Our witness here today is Mr. James Hanrahan
2 who will discuss HRD's business, briefly explain the
3 feed stocks, material flows and products of HRD's
4 process and then briefly address each criterion in
5 section 720.131(c).

6 Exhibit 2 -- Petitioner's Exhibit 2 is the
7 response to the Illinois Environmental Protection Agency
8 which agreed that the petition generally satisfied the
9 criteria for adjusted standard subject to specific
10 questions and the presentation of testimony at the
11 hearing. HRD's reply, which is Petitioner's Exhibit 3,

12 responded to those questions and Mr. Hanrahan is here to
13 provide any additional reply or response that may be
14 necessary.

15 One final point in opening is that the board
16 granted a petition in April of 1979 (sic) to Big
17 River -- 1999, excuse me, to Big River Zinc for a crude
18 zinc oxide material that we believe is fundamentally
19 indistinguishable from HRD's crude zinc oxide. The
20 source is essentially the same. The composition is the
21 same, and the process suitability is the same. And on
22 the basis of our petition or reply and our testimony
23 here today, HRD respectfully requests the board to grant
24 its petition.

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1 HEARING OFFICER KNITTLE: Thank you, sir.

2 Do we have an opening from the Illinois
3 Environmental Protection Agency?

4 MR. ORLINSKY: Just briefly I'd like to say
5 that, in fact, the Illinois EPA did file its response on
6 August 27, 1999, which does contain a conditional
7 recommendation that the petition be approved by the
8 Pollution Control Board. Pending the outcome of the
9 testimony today, we will tell you what our actual

10 recommendation is.

11 HEARING OFFICER KNITTLE: Thank you, sir.

12 Why don't we call your first witness.

13 MR. GUTERMANN: I'll call Mr. James M. Hanrahan.

14 HEARING OFFICER KNITTLE: Could you swear him
15 in, please?

16 JAMES M. HANRAHAN,

17 having been first duly sworn, was examined and testified
18 as follows:

19 DIRECT EXAMINATION

20 by Mr. Gutermann

21 Q. Would you please state your name and title for
22 the record?

23 A. James M. Hanrahan, I'm a corporate vice
24 president with Horsehead Resource Development Company,

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1 otherwise known as HRD.

2 Q. What are your responsibilities as corporate vice
3 president?

4 A. My responsibilities are fairly wide-ranging.
5 They include business planning and financial management
6 as well as regulatory development and marketing and
7 strategic issues.

8 Q. Can you describe your background within HRD?

9 A. I joined HRD in 1990 as a manager of business
10 development. A couple of years later I became director
11 of finance and planning, and approximately three years
12 after that I became a corporate vice president.

13 The first approximately five years of my
14 career with HRD I spent working at one of our recycling
15 facilities and as such I obtained an intricate -- an
16 in-depth knowledge of the process. The last several
17 years I have been located and working out of our
18 corporate headquarters in New York, and in those several
19 years since that time, I have become more involved not
20 just in the business and final planning aspects, but
21 also in regulatory developments and also marketing and
22 strategic issues.

23 I might note that the regulatory development
24 aspects, which I think are somewhat related to the

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1 proceedings today, are an intricate part of business
2 planning and analysis as it involves an environmental
3 services company like HRD.

4 Q. What is HRD's business?

5 A. HRD is an environmental services business. We

6 accept from generators a material called electric arc
7 furnace dust or EAF dust. Primarily this material is
8 from the electric arc furnace or mini mill steel
9 industry. It results from the production of recycled
10 steel which is approximately 40 percent of the steel
11 produced by the United States or in the United States.

12 This material is fumed off in the electric
13 arc furnaces when they are remelting junk steel
14 essentially old cars is collected in bag houses. It is
15 designated K061 by both Illinois EPA as well as U.S.
16 EPA, a listed hazardous waste.

17 That material must be dealt with by the
18 generators typically either disposed of as a hazardous
19 waste or recycled, and Horsehead Resource Development or
20 HRD is the primary recycler of this material nationally.
21 We accept the material for a fee. We recycle it, and
22 we sell the recycled products.

23 Those products are crude zinc oxide or CZO,
24 which is part of what we're doing today, and also

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1 iron-rich material or IRM, which is an aggregate
2 material sold for numerous -- or sold for several
3 construction purposes or into cement for the cement

4 production industry and other uses.

5 Q. To clarify one point that was actually raised at
6 one time by the Illinois EPA, is electric arc furnace
7 dust the only feed stock for the HRD recycling
8 operations?

9 A. No. In Chicago we process -- EAF dust is about
10 90 percent of what we recycle. Approximately 10 percent
11 or somewhat less is our other feed stocks including
12 materials such as F006, which is electroplating sludge.
13 These would all be zinc-bearing materials as well as
14 certain other materials primarily D008, D006
15 characteristic hazardous wastes which would be zinc
16 bearing as well as zinc-bearing -- certain zinc-bearing
17 non-hazardous materials.

18 Q. What are the differences in either the handling
19 of these other feed stocks or in the CZO that was
20 produced from feed stock in addition to EAF dust?

21 A. These feed stocks of all the feed stocks I have
22 mentioned, EAF dust or the others, F006, et cetera, are
23 all handled the same way within HRD's operation.

24 Q. Are there any differences in the CZO that's

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1 produced?

2 A. No. The CZO produced is the same.

3 Q. Which are HRD's operating locations?

4 A. Of course, here in Chicago, Illinois, also in
5 Palmerton, Pennsylvania, Beaumont, Texas and Rockwood,
6 Tennessee.

7 Q. Can you summarize very briefly the materials
8 flow at HRD's Chicago facility?

9 A. The material arrives at the facility by truck or
10 rail car. Upon arrival at the facility, it is sampled
11 and tested. The material is unloaded into a building we
12 call the C & B or curing and blending building. This is
13 the beginning of our recycling process.

14 At that point it is conditioned with water
15 which starts the chemical reactions and it is blended
16 within that curing and blending building. The purpose
17 of the blending is to achieve a more consistent feed
18 stock composition at least so the process works as best
19 as possible.

20 From that point, the material is loaded onto
21 a conveyor belt and ultimately reaches a feed bin. From
22 the feed bin, it is discharged onto a conveyor belt.
23 Onto the same conveyor belt a reductant, a carbon source
24 reductant either coal or coke is metered on to the same

1 conveyor belt, a specific amount of it. The combination
2 of the feed stock and the reductant are charged to one
3 of two rotary kilns. The facility has two rotary kilns
4 called Waelz kilns, that's W-a-e-l-z.

5 These kilns are long tubes. One end is
6 higher than the other. As the material goes into the
7 high end and as the kiln rotates at high temperature,
8 the material flows down the length of the kiln. As it
9 flows kiln, the metal such as zinc, which are recovered,
10 are reduced in the bed and they volatilize, rise up out
11 of the bed and become part of a counter-current
12 airstream and are carried out of the upper end of the
13 kiln.

14 That material then is -- precipitates or
15 condenses into a particulate. It is collected in
16 product collectors and that collected material is, in
17 fact, the crude zinc oxide that we're talking about
18 today. From that point, the crude zinc oxide is loaded
19 directly into pressure differential or PD rail cars in a
20 fully enclosed system and then shipped off site within
21 hours of the point it is loaded.

22 Out of the other end or lower end of the kiln
23 is where it's discharged. The iron-rich material or
24 otherwise know as IRM, that is the material I referred

1 to earlier that is used in cement making industry
2 asphalt production as well as other uses.

3 Q. Are you familiar with Exhibit 1, which again for
4 the record is HRD's petition for adjusted standard,
5 which was filed with the board on August 5th, 1999?

6 A. Yes, I am.

7 Q. Are you familiar with Exhibit 3, which is HRD's
8 reply to Illinois EPA's response which was filed with
9 the board on September 10th, 1999?

10 A. Yes, I am.

11 Q. Are you familiar with the facts stated in the
12 petition and the reply?

13 A. Yes, I am.

14 Q. Can you state for the record whether the facts
15 in the petition and reply are true and correct and
16 remain true and correct to the best of your information
17 and belief?

18 A. Yes, they are true and correct and remain true
19 and correct to the best of my knowledge.

20 Q. Now, Mr. Hanrahan, I'd like to turn to the
21 criteria for an adjusted standard set forth in sections
22 720.131(c), and the first criterion is the extent of
23 whether the material undergoes substantial processing
24 and how much further processing is required.

1 Can you please describe the extent to which
2 HRD's -- the material is processed to produce CZO?

3 A. The degree of processing is substantial in HRD's
4 recycling process in Chicago. Specifically, and as
5 stated in our petition, for example, the average content
6 of zinc in the feed stock which is fed into the process
7 is approximately 15 percent.

8 Likewise, the average content of iron, which
9 is fed into the same process in the feed stock, is
10 approximately 26 percent iron. The 2 products which
11 result from the process, crude zinc oxide and iron-rich
12 material or IRM, the crude zinc oxide contains
13 approximately 60 percent zinc, which is a four-fold
14 increase over the feed stock amount.

15 The iron-rich material contains approximately
16 50 percent iron, which is approximately a doubling over
17 the amount of iron which is in the feed stock which goes
18 into the process, and on this basis, we feel there is
19 very substantial processing which occurs in the Waelz
20 kilns.

21 Q. Would you describe how much further processing
22 of CZO is required?

23 A. Very little additional processing is needed to
24 turn the material into final products. The primary

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1 additional processing is essentially a physical change
2 or preparation such that the material can be turned into
3 or converted into zinc metal. There is some additional
4 concentration of the zinc in the additional steps,
5 again, prior to conversion into a final metal product or
6 otherwise as used for a micronutrient product.

7 Q. What happens to HRD's CZO after it leaves the
8 Chicago facility?

9 A. HRD's CZO goes to three places. The company
10 sends material to HRD in Palmerton, Pennsylvania, where
11 we have our calcining process. We also send material to
12 Zinc Corporation of America in Western Pennsylvania in
13 the Pittsburgh area which is a direct feed stock into the
14 zinc refinery there.

15 HRD also sends material to a company called
16 Zinc Nationale, which is a company that produces
17 micronutrients for animal feed and that is located in
18 Monterrey, Mexico.

19 Q. Would you describe the further processing that
20 happens at HRD's facility in Palmerton, Pennsylvania?

21 A. In Palmerton, Pennsylvania, the CZO is charged
22 to the calcining process. The calcining process
23 produces two products, one is zinc calcine or sometimes
24 we just call it calcine. That is a purified form of

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1 crude zinc oxide.

2 The zinc content is increased approximately
3 from 60 to 65 percent. The calcine also has had the
4 salts and lead and other smaller amounts of materials
5 removed so it's a more purified product. The removal of
6 the salts in this process is actually quite analogous to
7 the removal of salts as referred to in the Big River
8 Zinc petition where they have actually a washing step
9 where they remove their salts.

10 The other product from the calcining process
11 is a lead concentrate and this contains lead that was in
12 the crude zinc oxide as well as salts.

13 Q. Illinois EPA's response to the petition, which
14 is Petitioner's Exhibit 2, raised an issue as to or a
15 question as to what happens to the salts during the
16 calcining process. Can you describe that further,
17 please?

18 A. Yes. As I mentioned, the salts exit the

19 calcining process in the lead concentrate material. The
20 lead concentrate material subsequently is sent to a
21 separate facility in Oklahoma. In that facility, the
22 lead concentrate is processed further for metals
23 recovery purposes. The chlorides or salts, which were
24 in that lead concentrate, end up in a water stream, a

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1 nonhazardous water stream which is deep well injected
2 into a permitted nonhazardous deep well in Oklahoma at
3 the site.

4 Q. Can you describe the further processing that CZO
5 undergoes at the ZCA zinc refinery?

6 A. Yes. At the zinc refinery for Zinc Corporation
7 of America, the material is charged along with other
8 materials into a process called a sinter machine. The
9 sinter machine largely prepares the crude zinc oxide as
10 well as the other materials into one uniform material
11 which is subsequently fed into the final process for
12 metal production which is called the electrothermic
13 furnace.

14 Q. What happens to the salts that were in the CZO
15 that are processed at the ZCA refinery?

16 A. In the sinter machines, the salts and the lead

17 and small amounts of other constituents are removed into
18 a sinter fume it's called. That product is then sent at
19 the site, at the same site, to a water leach facility.

20 From the water leach facility, the chlorides
21 ultimately end up in a water stream and that water
22 stream is finally sent to an N-P-D-E-S permitted outfall
23 at the facility.

24 Q. Is there any processing of CZO required beyond

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1 that which you described?

2 A. No. As I discussed, there is a very little
3 additional processing to make it in the final products
4 other than what I've described here.

5 Q. The next criterion in the regulations is whether
6 the CZO has substantial value. Would you please explain
7 how HRD supports the position that CZO has substantial
8 value?

9 A. Yes. There is several points I guess I'd like
10 to bring up along those lines. First of all, HRD has
11 utilized either internally or sold every ounce of crude
12 zinc oxide that we have produced at the facility in
13 Chicago.

14 Additionally, I'd like to point out that

15 there is a worldwide market for crude zinc oxide and
16 similar materials. For example, just from electric arc
17 furnace dust alone in this country or around the world
18 there are over a quarter of a million tons of crude zinc
19 oxide produced just from these materials worldwide and
20 those materials are, in fact, utilized by ours and other
21 companies either internally for zinc production purposes
22 and/or sold to other companies in the worldwide market.

23 Additionally, as we pointed out in our
24 petition, there are several transactional or economic

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1 value benchmarks that we laid out in an exhibit in our
2 petition. Specifically, the economic value stated by
3 Big River Zinc for its planned transaction with
4 AmeriSteel was approximately \$200 per ton for that crude
5 zinc oxide.

6 Likewise, another benchmark we used in our
7 petition was the economic value of zinc concentrate
8 produced from mined zinc ore, and that was approximately
9 \$266 per ton. Additionally, we have put into our
10 petition transactional dollar values for the transaction
11 between HRD and Zinc Corporation of America as well as
12 HRD and Zinc Nationale. Those numbers were confidential

13 or are confidential in our petition; however, those
14 numbers are very much in the same range I've just
15 described for the other materials.

16 I think the two key points to consider are,
17 number one, that there is, in an absolute sense,
18 substantial economic value. They're all up in the high
19 range of 200-plus dollars per ton. Additionally, the
20 numbers for our materials are also very much in the
21 range of what I described for the zinc concentrates or
22 the Big River Zinc/AmeriSteel transaction. And there's
23 a -- parity amongst those numbers is an additional
24 indicator of the fact the material has similar value in

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1 the marketplace today.

2 Q. How does the economic value of the CZO compare
3 to the economic value of the incoming feed stocks to the
4 HRD process?

5 A. The incoming feed stocks actually have negative
6 economic value because they are a listed hazardous
7 waste, and the generators of those materials have to
8 actually pay in order to either dispose them as a
9 hazardous waste and/or recycle them with someone such as
10 HRD. So HRD actually converts a material with negative

11 economic value into two products that both have positive
12 economic value.

13 Q. Turning now to the third criterion in the
14 regulations which is the extent to which the partially
15 reclaimed material is like an analogous raw material,
16 could you please describe the raw material that is
17 analogous to CZO and then explain how the two materials
18 are analogous?

19 A. Well, the analogous raw material is crude zinc
20 oxide as produced from mined zinc ore. We'll call that
21 zinc concentrates. CZO that HRD produces is a direct
22 substitute for mined zinc concentrate in the processes
23 for producing zinc metal or other zinc products.

24 Specifically, in our petition, we compared

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1 our material with -- or the composition of our material
2 with the composition of zinc concentrate as produced
3 from mined zinc ore. The primary constituent for
4 comparison obviously would be zinc and in the table that
5 we described, we have shown that the crude zinc oxide
6 produced by HRD at the Chicago facility has a zinc
7 ranging from 55 to 61 percent zinc.

8 A typical mined zinc concentrates that we

9 have portrayed range in zinc content from 48 to 61
10 percent zinc. Those numbers are obviously very similar.
11 I might also point out that the zinc concentrates do
12 have relatively high sulfur certainly relative to the
13 crude zinc oxide that we produce which is very low.

14 On the other hand, our crude zinc oxide does
15 have higher salts than are shown in the mined zinc
16 concentrates. In the same sense that the user of a
17 typical mined zinc concentrate would run that material
18 what is called a roasting process to remove the sulfur,
19 HRD and/or Zinc Corporation of America as I described
20 also have somewhat analogous steps to remove the salts
21 from the crude zinc oxide such that the material can be
22 most efficiently processed to make the end products.

23 I think of note, however, the crude zinc
24 oxide or CZO that HRD produces, because it does not have

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1 sulfur in it, gets to skip that processing step in any
2 zinc refiners process which is a plus for the crude zinc
3 oxide because it does not have that sulfur.

4 Q. Section 720.131(c) also contains a criterion
5 concerning the extent to which an end market is
6 guaranteed for the CZO. Please describe how HRD can

7 show that there is an end market guarantee for CZO.

8 A. Well, first I might note, as I said before, that
9 HRD has sold every ounce of crude zinc oxide that we
10 have produced at our Chicago facility and we have every
11 reason to believe that will certainly continue.

12 In addition to that, to a certain extent, as
13 I mentioned before, there is a worldwide market for
14 crude zinc oxides and analogous zinc materials,
15 zinc-bearing materials. Again, as I mentioned, there's
16 a quarter of a million tons of crude zinc oxide produced
17 just from electric arc furnace dust and similar
18 materials around the world today and around the country
19 today. And those materials are being used every day as
20 substitutes for mined zinc concentrates. Finally, HRD
21 also has contractual arrangements for the sale of its
22 crude zinc oxide.

23 Q. The next criterion in the regulations is the
24 extent to which the material is handled to minimize

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1 loss. Can you please describe how HRD handles its crude
2 zinc oxide both at its facility here in Chicago as well
3 as the HRD facility in Palmerton and at the ZCA -- how
4 the material is handled at the ZCA refinery?

5 A. I guess I start by saying that we have discussed
6 substantial economic value already in the range of we're
7 talking about 200, \$260 per ton. This material is quite
8 valuable. It is a zinc commodity. We have every reason
9 to want to conserve every bit of it that we can, so we
10 have invested millions of dollars in our Chicago
11 facility as well as others to make sure that we have the
12 most economically efficient as well as environmentally
13 protected facility.

14 Specifically, at our Chicago facility, the
15 material, as I mentioned, is directly loaded from the
16 product collectors -- it does not see the light of
17 day -- into fully enclosed PD rail cars and then shipped
18 to the sites that I've discussed. Upon receipt at the
19 Zinc Corporation of America facility, those same PD rail
20 cars are unloaded through an enclosed pneumatic
21 conveying line, and the material goes directly into a
22 fully enclosed feed bin.

23 Again, that material never sees the light of
24 day and then it is ultimately charged into the sinter

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1 machine as I discussed earlier. In an analogous or
2 identical fashion essentially at the Palmerton,

3 Pennsylvania, facility where the material is calcined,
4 it is again received in the PD rail cars. It is
5 pneumatically conveyed out of the rail cars through a
6 fully enclosed system and into a calcined feed bin.
7 Again, that bin is fully enclosed. It does not see the
8 light of day. From that point, of course, it gets
9 transferred into the calcine kiln process.

10 Q. The final criterion in section 720.131(c) is
11 whether there are any other relevant factors that
12 support the petition. Does HRD believe there are any
13 other relevant factors in support of this position?

14 A. We do. We believe there are several such
15 factors primarily, and I think it was mentioned earlier
16 in this proceeding, the Big River Zinc petition and the
17 granting of an adjusted standard to Big River Zinc we
18 think is very -- has a direct bearing upon this
19 proceeding.

20 The material, I think as was mentioned, is
21 virtually identical to our material and chemical
22 composition and in its usefulness to zinc refiners for
23 purposes of producing zinc metal and zinc products.

24 Additionally, the state of Tennessee has also

1 granted a variance to AmeriSteel for the very same
2 material that we just referred to. We think that also
3 has a direct bearing on this. It's been done in other
4 states. Finally, I guess I'd like to add that we
5 believe the recycling of electric arc furnace dust and a
6 result in production of zinc metal or zinc products
7 conserves natural resources. It minimizes the amount of
8 materials which are wastefully disposed in landfills and
9 overall meets governmental and state priorities for
10 recycling and resource recovery.

11 MR. GUTERMANN: I have no further questions.

12 HEARING OFFICER KNITTLE: Mr. Orlinsky, do you
13 have cross-examination?

14 MR. ORLINSKY: Yes, we have a few.

15 CROSS-EXAMINATION

16 by Mr. Orlinsky

17 Q. Mr. Hanrahan, what is the source of your EAF
18 dust? You said you get it in from steel mills. Are
19 there any particular steel mills, or I mean, do you have
20 a captive steel mill, or do you get it from all over the
21 country?

22 A. We get it from all over the country for all of
23 our facilities.

24 Q. Now, when you said that the EAF dust actually

1 has a negative value, are the steel companies paying you
2 to take the dust, or are you paying them for the dust?

3 A. No. Negative in the sense that they pay us to
4 take the dust.

5 Q. They pay you. Okay.

6 A. Yes.

7 Q. Once the EAF dust arrives at your facility, you
8 said it's put into a feed bin. How long does it stay in
9 the feed bin before it then goes into the conveyer?

10 A. It first goes into a building called the curing
11 and blending or we call the C & B building for curing
12 and blending. In that building -- it is in that
13 building for a matter of hours virtually before it's --
14 it starts being blended immediately as soon as it's put
15 in the building and be conditioned with water
16 immediately upon placement into that building.

17 So it's actually in the process physically
18 right away, and within a number of hours after that,
19 it's actually placed on a conveyor belt and it makes its
20 way to a feed bin. From there, it immediately goes into
21 the process.

22 Q. So there's no actual storage time from the time
23 it arrives at your facility until the time it's --

24 A. No. There's no storage time. It's immediately

1 into the process. The process actually starts in that
2 curing and blending building.

3 Q. On Exhibit 3, which is HRD's reply to the
4 agency's response, on page 4 where it says that HRD
5 implements a multi-prong prevention and response
6 strategy including employee training programs,
7 inspection and monitoring programs, preventative
8 maintenance, comprehensive housekeeping programs,
9 emergency equipment and arrangements with appropriate
10 authorities.

11 I'd like, if you could, just to expand upon
12 each one of these items and give us a little bit more
13 detail as to what these programs consist of.

14 A. Well, I think, going down the line, employee
15 training programs, I think employee training programs
16 constitute everything from both physical operational,
17 i.e., what the operators do every day at the facility as
18 well as OSHA health and safety type programs, both
19 operational as well as caretaking environmental and
20 health and safety programs.

21 I would really include in the same thing the
22 second bullet point in that explanation. Preventative
23 maintenance, I think typical preventative maintenance

24 programs that we perform, we have -- I'll give one

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1 example. On the rotary kilns that we have, we regularly
2 keep track of and monitor temperature profiles
3 throughout the kilns every day of every week, 24 hours a
4 day making sure that we don't see anything unusual about
5 the kilns that would make us want to repair or modify
6 something. If we do we can pick the appropriate time
7 and fax that particular item.

8 The housekeeping programs, I've been to the
9 facility many times here in Chicago. I was just out
10 again this week and I -- for instance, housekeeping
11 programs that we're referring to here to me is the
12 cleanliness of that facility and how we keep that, we
13 have sweeper trucks. We have other things that we do to
14 make sure that if there are any spills or anything
15 occurs at the facility that we immediately and quickly
16 pick up that material and keep it, put it back into the
17 process.

18 Emergency equipment goes along the same
19 lines. If we have any -- if we happen to have, which
20 I'm not sure if we have ever had one, but if we happen
21 to have a CZO spill, for example -- because, as I've

22 said, the material is transferred in fully enclosed
23 facilities, so it's very difficult to do that, but if we
24 did have one, we have vacuum facilities on the site that

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1 we use to pick up such material. We also have
2 arrangements with outside vacuum third-party companies
3 that we would bring into the facility if we needed to to
4 pick up those materials and transfer them back into the
5 process.

6 The arrangements with the appropriate
7 authorities, again, we have ongoing contact with all the
8 relevant regulatory agencies at the facility in case
9 anything comes up. We have regular visits from them
10 anyway, and we always keep up, as best we can,
11 relationships with those authorities so that if anything
12 happens, we can call on them to work with them as
13 necessary.

14 Q. Does that include also emergency authorities,
15 fire department, hospitals?

16 A. Yes. Yes.

17 Q. I'm just getting back to this briefly the
18 employee training program. Are these actual classroom
19 sessions, or are they on-the-job training or just

20 manuals that are passed out? Do you know how that
21 works?

22 A. I don't know the details of how that works. I
23 do know at other facilities we do have actual training
24 sessions I believe one per year of different sorts, 40

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1 hours haz. waste training, et cetera, standard training
2 that we have to give to our employee for proper conduct
3 amongst -- proper conduct as they are in the facility
4 utilizing or handling hazardous materials.

5 Q. Changing the subject now. You testified that
6 when the CZO leaves the facility in Chicago, it goes to
7 one of three places, your facility in Palmerton or ZCA
8 Zinc Nationale in -- that was in Mexico, was that?

9 A. Monterrey, correct.

10 Q. Now, is ZCA or Zinc Nationale, are those HRD
11 companies? Do they have some kind of a corporate
12 relationship to them, or are they subsidiaries or are
13 they just customers?

14 A. Zinc Nationale has no relationship whatsoever.
15 Zinc Corporation of America and Horsehead Resource
16 Development Company do have a common parent.

17 Q. And finally, do you know how many other

18 companies there are in this country that produce CZO?

19 A. Well, the AmeriSteel is producing crude zinc
20 oxide. Other than that, in this country, I don't
21 believe there are any others. Zinc Nationale produces
22 some crude zinc oxide also, but that's in Mexico as we
23 discussed.

24 MR. ORLINSKY: Okay. I have no further

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1 questions.

2 HEARING OFFICER KNITTLE: Do you have a
3 redirect, Mr. Gutermann?

4 MR. GUTERMANN: One moment please. No
5 questions.

6 HEARING OFFICER KNITTLE: Is there anybody here
7 who has any questions for this witness?

8 Okay, sir, you can step down or you're
9 stepping down figuratively.

10 THE WITNESS: Thank you.

11 HEARING OFFICER KNITTLE: Mr. Gutermann, do you
12 have any other witnesses you wish to call at this time?

13 MR. GUTERMANN: No, I do not.

14 HEARING OFFICER KNITTLE: Okay. Mr. Orlinsky,
15 do you have any witnesses?

16 MR. ORLINSKY: No, I do not.

17 HEARING OFFICER KNITTLE: I take it then you are
18 both resting your cases?

19 MR. GUTERMANN: Yes.

20 HEARING OFFICER KNITTLE: Nobody else has come
21 into this room since you started the hearing, so I
22 assume we have no public comment still going to be
23 issued at the hearing.

24 Ma'am, Ms. Riley, you're still the only

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1 person not affiliated with one of the parties. Have you
2 changed your mind?

3 MS. RILEY: No.

4 HEARING OFFICER KNITTLE: Okay. There are no
5 members of the public present who wish to give public
6 comment, so we will move on and actually go off the
7 record for a second.

8 (Discussion had off the record.)

9 HEARING OFFICER KNITTLE: We are back on the
10 record after a short recess. Mr. Orlinsky brought up
11 the fact that he wanted to state for the record the
12 EPA's response after hearing the testimony; is that
13 correct, Mr. Orlinsky.

14 MR. ORLINSKY: That's correct.

15 HEARING OFFICER KNITTLE: The floor is yours.

16 MR. ORLINSKY: After having read Exhibit 3,
17 which is the reply from HRD, and listening to the
18 testimony that was given today, the Agency is satisfied
19 that our questions which were raised in our response
20 have been satisfactorily answered, and, therefore, we
21 recommend that the Pollution Control Board grant the
22 petition that's being sought by HRD.

23 HEARING OFFICER KNITTLE: Okay. Thank you, sir.
24 Also off the record we had a discussion about public

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1 comments and post hearing briefs. Public comment period
2 in this case runs until November 26th, 1999. That is 14
3 days after we anticipate the transcript to arrive in the
4 board's offices.

5 If there are no public comment periods, it's
6 my understanding, based on my off-the-record discussion
7 with the parties, that the parties will file a notice
8 stating that they will not be filing posthearing briefs;
9 is that correct.

10 MR. GUTERMANN: That's correct.

11 MR. ORLINSKY: That's correct.

12 HEARING OFFICER KNITTLE: If, however, there are
13 public comments, and I will outline this more fully in
14 my hearing report, but if there are public comments, we
15 will have a posthearing briefing scheduled to address
16 those public comments.

17 The schedule will be as follows, the
18 petitioner's posthearing brief will be due on
19 December 10th, 1999. The Agency's response will be due
20 on -- well, actually, this is where I stopped. That
21 takes us to December 24th, and I imagine, Mr. Orlinsky,
22 you don't want to have a brief filed on December 24th.

23 MR. ORLINSKY: I'll get it done earlier.

24 HEARING OFFICER KNITTLE: Is there any objection

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1 to me giving him until December 31st?

2 MR. GUTERMANN: No, none whatsoever.

3 HEARING OFFICER KNITTLE: Okay. We'll give them
4 until December 31st, and then you'll have seven days,
5 petitioners, for your response which will take you to
6 January 7th --

7 MR. GUTERMANN: Okay.

8 HEARING OFFICER KNITTLE: -- of 2000. That, of
9 course, is only going to occur if, in fact, there is a

10 public comment filed in this case. And let me just also
11 state that even if there is public comment, if after
12 looking at that public comment, feel free to file your
13 notice that you do not want to file posthearing briefs.

14 The only other issue remaining is I am going
15 to issue a credibility statement. Based on my
16 experience and legal judgment, I don't find any
17 credibility issues with our one witness. I found him to
18 be exceptionally credible, and that's all I have.

19 Is there anything else?

20 MR. GUTERMANN: One final statement which is
21 becoming something of a precedent in these proceedings
22 is that we would like to express our appreciation to the
23 Agency for its allocation of resources and
24 responsiveness in working through this proceeding.

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1 HEARING OFFICER KNITTLE: Thank you. I also
2 note I never asked -- it is understood that you both
3 wanted to waive closing arguments; is that correct?

4 MR. GUTERMANN: That's correct.

5 MR. ORLINSKY: Yeah.

6 HEARING OFFICER KNITTLE: I wanted to make sure
7 we're all on the same page I should say. Thank you very

8 much.

9 (End of proceeding.)

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1 STATE OF ILLINOIS)
2 COUNTY OF DUPAGE) SS:

3

4 I, Michele J. Losurdo, Certified Shorthand
5 Reporter of the State of Illinois, do hereby certify

6 that I reported in shorthand the proceedings had at the
7 taking of said hearing, and that the foregoing is a
8 true, complete, and accurate transcript of the
9 proceedings at said hearing as appears from my
10 stenographic notes so taken and transcribed under my
11 personal direction and signed this _____ day of
12 _____, 1999.

13

14

15

16 Notary Public, DuPage County, Illinois
17 CSR No. 084-004285
Expiration Date: May 31, 2001.

18

19

20 SUBSCRIBED AND SWORN TO
before me this _____ day
21 of _____, A.D., 1999.

22 _____
Notary Public

23

24