UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 W. JACKSON BOULEVARD
CHICAGO, IL 60604

COMPLIANCE EVALUATION INSPECTION REPORT

INSTALLATION NAME:	Big River Zinc Corporation
U.S. EPA ID No.:	ILD 062 444 435
LOCATION ADDRESS:	2401 Mississippi Avenue Sauget, IL 62201
NAIC CODE:	331419 – Primary Smelting and Refining of Nonferrous Metal (except Copper and Aluminum)
DATES OF INSPECTION:	September 6 - 7, 2005
U.S. EPA INSPECTOR:	Todd C. Brown

PREPAPARED BY: Todd C. Brown — 10/5/05
Todd Brown
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Date

REVIEWED BY: Lorna M. Jereza — 10/21/05
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Compliance Section 1
Enforcement and Compliance Assurance Branch
Date

I. Purpose of Inspection

The purpose of this inspection was to conduct a Compliance Evaluation Inspection (CEI) at Big River Zinc Corporation (Big River Zinc) to determine its compliance with the Resource Conservation and Recovery Act (RCRA), with respect to Big River Zinc's management of hazardous waste. The purpose of this report is to document the CEI.

II. Plant Description/Back Ground

Big River Zinc is located at 2401 Mississippi Avenue in Sauget, IL. However, according to the site plan, a portion of the northern half of the plant is actually located in East St. Louis, IL. The plant occupies approximately 35 acres of land. Big River Zinc is primarily a producer of zinc ingots and commercial and electrolytic grade sulfuric acid. However, Big River Zinc also produces zinc sulfate solution and zinc sulfate monohydrate, which is used in agriculture as a fertilizer and animal feed. In addition, Big River Zinc's manufacturing processes produce by-products that contain silver, cadmium, copper, nickel, and/or cobalt, which at times can be sold to manufacturers in other industries for use as a feed stock. However, some of these materials have been disposed of as hazardous wastes in the past, when market conditions were not favorable. Big River Zinc employs approximately 300 people. Approximately 80 tons per year of zinc sulfide is processed at the plant.

III. Opening Conference - Day 1

I arrived at Big River Zinc on September 6, 2005, at approximately 10:05 am. Upon my arrival, I held an opening conference with George M. Obeldobel, CEO, and Michael Altepeter, Environmental Manager/Senior Processing Manager. At this time, I presented my credentials and provided Messrs. Obeldobel and Altepeter with the EPA Small Businesses Resources Handout. During the opening conference, I explained my purpose at Big River Zinc, and questioned Messrs. Obeldobel and Altepeter on Big River Zinc's hazardous waste generation and management. I also asked them to explain Big River Zinc's manufacturing processes, and the various products, by-products, and wastes that are generated throughout the process.

Messrs. Obeldobel and Altepeter provided me with three flow diagrams that outlined Big River Zinc's manufacturing processes including the feedstock, wastes, products, and by-products. Messrs. Obeldobel and Altepeter then proceeded to explain those manufacturing processes. Further explanations were also given during the site walkthrough and at the beginning of the second day of the inspection. The following is a summary of the manufacturing processes at Big River Zinc as described during my visit.

The majority of the feedstock utilized by Big River Zinc consists of zinc sulfide concentrates obtained from various mining operations in Missouri, Tennessee, Peru, Australia, Canada, and Mexico. The primary zinc bearing mineral commodity contained in the concentrates or ore is sphalerite (ZnS). The zinc sulfide concentrates can be classified into two categories; low and

high magnesium concentrates. To a lesser extent, Big River Zinc uses secondary zinc oxides as a feed stock. These are classified as either high or low halide secondary oxides. The high halide secondary oxides are high in chloride content and are derived from electric arc furnace dust (K061 listed waste) that was processed off-site by other companies to a crude zinc oxide. The low halide secondary oxides are derived from melting processes associated with production by galvanizers and dicasters.

The low magnesium concentrates can be directly fed into the roasting process (described below). The high magnesium concentrates may require processing in the pre-leach plant to remove the magnesium. In the pre-leach process, the high magnesium concentrates are slurried with city water or water termed "acid plant blow down" from the sulfuric acid plant (described below). The slurry is then placed in a reactor tank where sulfuric acid is added to leach the magnesium from the concentrates. The filtrate is treated in Big River Zinc's pre-treatment plant. The treated concentrates are then ready to be fed into the roasting process. The pre-treatment process is not always necessary when using high magnesium concentrates as a feed stock. Big River Zinc can utilize magnesium sulfate derived in the later processing stages, as a result of not pre-leaching the concentrates, in its production of zinc sulfate monohydrate.

The low halide secondary oxides can be directly fed into the roasters. The high halide secondary oxides must first be treated in the oxide wash plant. The oxide wash process involves the use of a caustic solution to remove the halides. Soda ash is used to achieve a pH in the solution of around 8.5. After the solution is filtered to remove the solids, the filtrate is treated in the pre-treatment plant. This process generates spent filter cloths that are managed along with other spent filter cloths produced throughout the production process as a hazardous waste. The treated zinc oxides are now ready for the roasting plant.

The roasting process utilizes two roasters referred to as fluidized bed oxidizing chambers. After blending with front end loaders, mixed feed stocks (zinc concentrates and/or secondary zinc oxides) are fed into the roasters. The roasters achieve temperatures of approximately 900°C. In the roasters, the zinc sulfides react with air to form zinc oxide (calcine) and an off-gas that contains 7% sulfur dioxide. The zinc oxides will be further processed in the leach plant. The sulfur dioxide gas is cleaned of impurities and processed in the sulfuric acid plant.

The leach process uses four leach tanks in series to convert the calcine formed in the roasters into zinc sulfate in solution. Sulfuric acid is used as the leaching agent to form the zinc sulfate solution. The pH of the solution in the leach tanks is between 3.5 and 4.5. The leachate formed from this process (impure zinc sulfate) is then sent to a series of thickener tanks. In the thickener tanks, the insoluble zinc oxides settle out, and are leached again using more concentrated sulfuric acid. The final insoluble solids are filtered and sold for their silver content (see Section VIII). The filtrate is routed back to the leaching process. Filter cloth derived from this process is managed as a hazardous waste.

The leachate solution then undergoes a series of purification steps. The first step is termed copper precipitation. In this process, zinc dust is added to the leachate causing copper to be

precipitated in pure metallic form. The copper is then filtered, and sold as a by-product. Filter cloth derived from this process is managed as a hazardous waste.

The next purification stage is used to remove nickel, cobalt, and remaining copper (this stage is referred to as "first stage purification" on the process diagrams). In this process, arsenic trioxide, zinc dust and weak sulfuric acid derived from the cell room, are added to the leachate to precipitate copper, nickel, and cobalt arsenides. These precipitated solids are filtered, and sold as "copper cement." The copper cement contains roughly 4% cobalt, 40% copper, 2% nickel, and 18-20% arsenic. Filter paper derived from this process is managed as a hazardous waste.

The next purification stage is used to remove cadmium from the leachate (termed "second stage purification" on the process diagrams). In this process, copper sulfate, zinc dust, and lead sulfate are added to the leachate to precipitate cadmium. The precipitated cadmium is filtered, and further purified. In the cadmium purification stage, the precipitated cadmium is dissolved in sulfuric acid, and zinc dust and a flocculant are added to the solution. The zinc dust causes the precipitation of "cadmium sponge," which appears as little white pellets or bee-bees of cadmium. The purified precipitate is filtered and sold as a by-product. Filter cloth from these processes are managed as a hazardous waste. The filtrate and zinc sulfate formed during the purification are recycled back to the production process.

At this stage in the production process, the purified zinc sulfate solution consists mainly of zinc sulfate and sulfuric acid. Impurities that may be left include magnesium sulfate, sodium sulfate, potassium sulfate, and manganese sulfate. Some amount of the zinc sulfate solution is sold directly as is. However, the majority is further processed in the electrowinning cell house to form zinc metal or processed to form zinc sulfate monohydrate.

Two forms of zinc sulfate monohydrate are produced by Big River Zinc: fines, which are less than 2mm in diameter; and maxis, which are 2-6 mm in diameter. Fines are sold as animal feed, and maxis are sold as fertilizer. In the process, the zinc sulfate solution is sprayed into a dryer tank in the presence of natural gas. Evaporation of the zinc sulfate solution in the presence of the natural gas forms the zinc sulfate monohydrate.

In the cell house, 15,000 pairs of aluminum cathodes and lead/silver anodes, 2-3 feet high, are used to electrolytically reduce the zinc cations in the sulfate solution to metallic zinc, which will plate onto the aluminum cathodes. During this process, the zinc sulfate solution becomes more concentrated with sulfuric acid as it is cycled through the cell house. The sulfuric acid derived from this process is used as the reagent in the leaching process. The zinc is stripped manually from the cathodes and further processed in the casting department. Anodes and cathodes are reused until spent, at which time they are sent to the original manufacturer or sold to other manufacturers that can use the material.

In the casting department, the zinc cathodes that are formed in the electrowinning process are melted into liquid form, and cast into various shapes and sizes for sale as pure zinc ingots. After the zinc is melted, a flux is added to the top of the zinc to prevent oxidation of the molten metal.

A solid dross forms on the surface of the molten metal that needs to be removed. The dross will consist primarily of zinc metal and zinc oxide. The dross is removed and ground in a ball mill. An air classification fan at the outlet of the ball mill separates the lighter oxides from the zinc metal. The separated oxides are collected in a baghouse, and reintroduced into the production process (leach or roast). The zinc metal is sent for re-melt.

Some of the melted zinc is diverted into the zinc powder plant. Messrs. Obeldobel and Altepeter did not want to discuss this process any further at the time of the inspection, due to its proprietary nature, other than to say that it is an atomization process. The zinc powder formed here is used in the leachate purification stages or sold for the production of batteries. Waste generated from this process includes empty bags from the bag house (which are used to collect the dust when formed) and ripped super-sacks that were used to store zinc dust. These are treated as hazardous wastes.

As previously stated, sulfur dioxide generated in the roasting plant is processed in the acid plant to make sulfuric acid. The gas stream generated from the roasting process is approximately 7% sulfur dioxide. The evolved gas stream is first transferred to a boiler for recovery of its heat energy in the production of steam. The gas stream is then passed through a dry electrostatic precipitator where residual calcine dust is recovered and returned to the production process. The gas stream is then passed through a wet scrubber and venturi packed wet electrostatic precipitator, where it is further purified and cooled to achieve a clean stream of sulfur dioxide. Waste waters derived from the scrubber and wet electrostatic precipitator are termed "acid plant blow-down" and are either utilized in the pre-leach process described earlier, or treated in the pretreatment plant. The sulfur dioxide is then cycled through a series of heat exchangers and converter passes, where it is converted into a stream of approximately 98% sulfur trioxide. The sulfur trioxide is then processed with water in the absorbing tower to form 93% sulfuric acid which is sold as a product.

Big River Zinc's pretreatment plant is used for treating waste waters derived from the acid plant (acid plant blow-down), the pre-leach process, the oxide wash process, and runoff from the plant that collects in several sumps. The wastewaters are first processed in two reactor vessels in series that are used to adjust the pH to around 9.3. A clarifier tank is then utilized to settle the suspended solids. The suspended solids are filtered in a drum filter and disposed of as a non-hazardous waste (land filled). The overflow of clear effluent from the clarifier tank is further filtered trough sand filters, and sewered to the American Bottoms Plant, a wastewater treatment plant that receives wastewaters from various industrial plants and operations in the local area.

Messrs. Obeldobel and Altepeter summarized that the wastes associated with production at Big River Zinc are the wastewater treatment solids, cloth filters, empty bag-house bags, and ripped super-sacks. The filter cloths possess the lead and cadmium toxicity characteristics. Big River Zinc stores its hazardous waste in roll-off containers. Typically, Big River Zinc generates one roll-off container per month. Periodically, excavations and construction activities at the plant can also generate hazardous waste (e.g. debris and soil contaminated with lead and cadmium). The

cadmium sponge by-product has also been disposed of in the recent past as a hazardous waste due to unfavorable market conditions.

The opening conference ended at approximately 12:00 P.M. At this time I went to lunch. I returned from lunch at approximately 1:00 P.M.

IV. Record Review - Day 1

The file review portion of the inspection began at approximately 1:00 P.M. I began by reviewing Big River Zinc's Annual Hazardous Waste Reports to the Illinois Environmental Protection Agency (IEPA) for the years 2002-2004. Table 1 summarizes the hazardous wastes generated by Big River Zinc during those years, the transporters used, and the designated facilities for shipments of hazardous waste as reported on the Annual Reports.

Table 1. Annual Hazardous Waste Reports, 2002-2004

Year Covered in Report	Waste Description	Amount Generated (lbs)	Designated Facilities (EPA ID Number)	Transporters Used (EPA ID Number)
2004	Cadmium Oxide (D006)[1]	3,537	Petro Chem – Detroit, MI (MID 980 615 298)	AR Pacquette and Company (FLD 982 105 884) Midwest Sanitary Service, Inc. (ILD 053 980 272) Peoria Disposal Company (ILD 009 848 193) OH0 068 913 409[2]
	Cadmium Metal in Sponge Form (D006)[1]	281,920	Petro Chem – Detroit, MI (MID 980 615 298) Peoria Disposal Company, Inc. – Peoria, IL (ILD 000 805 812)	
	Bricks and Wood (D008)	138,100	Michigan Disposal Waste Treatment Plant – Belleville, MI (MID 000 724 831)	
	Lead Dust (D008, D006)	10,772	Petro Chem – Detroit, MI (MID 980 615 298)	
	Filter Paper from Purification Process (D006, D004 and D008)	322,800	Michigan Disposal Waste Treatment Plant – Belleville, MI (MID 000 724 831)	
2003	Filter Paper from Purification Process (D006, D004, D008)	448,000	Michigan Disposal Waste Treatment Plant – Belleville, MI (MID 000 724 831) Perma Fix of Michigan, Inc. – Brownstown, MI (MID 096 963 194)	Perma Fix of Orlando, Inc. (FLD 980 559, 728) Robbie D. Wood, Inc. (ALD 067 138 891) U.S. Bulk Transport, Inc. (PAD 987 347 515) Midwest Sanitary Service, Inc.
	Cadmium Metal in Sponge Form (D006)	1,589,580	Perma Fix of Michigan, Inc. – Brownstown, MI (MID 096 963 194)	
	Caustic Skimmings from Cadmium Melt Furnace (D006, D002)	109,720	Perma Fix of Michigan, Inc. – Brownstown, MI (MID 096 963 194)	

Year Covered in Report	Waste Description	Amount Generated (lbs)	Designated Facilities (EPA ID Number)	Transporters Used (EPA ID Number)
	Debris from Preparation to Build ZSM Plant (D006, D008)	839,640	Perma Fix of Michigan, Inc. – Brownstown, MI (MID 096 963 194)	
2002	Filter Paper from Purification Process (D006, D004, D008)	270,260	Michigan Disposal Waste Treatment Plant – Belleville, MI (MID 000 724 831) Heritage Environmental Services, LLC – Indianapolis, IN (IND 093 219 012)	Peoria Disposal Company (ILD 009 848 193) Autumn Industries, Inc. (OHD 983 974 780) Wills Trucking, Inc. (OHD 068 913 409) Robbie D. Wood, Inc. (ALD 067 138 891) Midwest Sanitary Service, Inc. (ILD 053 980 272) Beelman Truck Company (ILD 007 814 825) PAD 067 138 891[3]
	Cadmium Metal in Sponge Form (D006)	1,451,400	Peoria Disposal Company, Inc. – Peoria, IL (ILD 000 805 812) Perma Fix of Michigan, Inc. – Brownstown, MI (MID 096 963 194)	
	Debris from Dismantling of Roasters (D006, D008)	2,241,200	Heritage Environmental Services, LLC – Indianapolis, IN (IND 093 219 012)	
	Dirt from Ball Mill Excavation (D006, D008)	1,534,620	Perma Fix of Michigan, Inc. – Brownstown, MI (MID 096 963 194)	
	Clean Out of Cadmium Furnace (D006)	25,200	Perma Fix of Michigan, Inc. – Brownstown, MI (MID 096 963 194)	

[1]An additional 3,065 lbs of "Cadmium Oxide" waste was reported as being shipped to Petro Chem in Detroit, MI, though this amount was not included in the amount of Cadmium Oxide waste generated. In addition, 3,065 lbs of "Cadmium Metal in Sponge Form" waste was reported as being sent to Peoria Disposal Company, in Peoria, IL, though this amount is again not included in the amount of waste generated.

[2]The EPA ID numbers OH0 068 913 409 and OHD 687 913 409 were reported on the 2004 and 2003 Annual Reports, respectively, as the EPA ID numbers of hazardous waste transporters used to ship waste from Big River Zinc in those year. However, a search in RCRA Info indicates that neither of these EPA ID numbers is assigned to a transporter. However, both numbers are similar to that of Wills Trucking, Inc., reported as a hazardous waste transporter for Big River Zinc in the 2002 Annual Report.

[3]The EPA ID number PAD 067 138 891 was reported on the 2002 Annual Report as the EPA ID number of a hazardous waste transporter used to ship waste from Big River Zinc in that year. However, a search in RCRA Info indicates that this EPA ID numbers is not assigned to transporter.

Hazardous waste manifests were on file for shipments of hazardous waste going back at last three years. The manifests were organized in folders by waste type and year. I selected various folders and reviewed the content.

Manifests for "Residue Press Cloths" were on file for shipments in the years 1996 – 1998, and 2002-2005. Land Disposal Restriction Notifications for this waste stream were also present. According to Mr. Altepeter, these manifests are for the filter paper from the purification processes. A waste analysis performed by Summit Environmental Technologies in 1996 was also on file for this waste stream. The TCLP analysis indicated a cadmium concentration in the extract of 15.4 mg/L. The manifests records indicate that in 2002, 11 shipments of approximately 20 – 30 thousand pounds were made. The 2003 and 2004manifest records of this waste stream were of a similar frequency and amount. The 2005 manifest records for this waste stream totaled five shipments thus far of approximately 20-30 thousand pounds each.

Manifest records for cadmium sponge waste were on file for 2003 and 2004. At the time of this review, I was unable to locate hazardous waste manifests for this waste stream for shipments in the year 2002, despite the waste stream being reported on the 2002 Annual Hazardous Waste Report (see Table 1). However, Mr. Altepeter was able to locate these records during the closing conference on the second day of the inspection upon my brining them to his attention.

I also reviewed hazardous waste manifests for shipments of waste in 2002 derived from the "Clean out of Cadmium Oxide Building;" shipments of hazardous waste in 2003 for debris derived from the construction of the zinc sulfate monohydrate building; shipments of hazardous waste consisting of "dirt from ball mill excavation;" and for shipments of hazardous waste for the disposal of a treatment pond liner in 2005. I was unable to locate Land Disposal Restriction Notifications for the manifests that accompanied the treatment pond liner and the dirt from the ball mill excavation. The manifest number for the shipment of treatment pond liner was MI9656176, and listed 30,000 lbs of D005, D006, D007 and D008 hazardous waste. The receiving facility on this manifest was Michigan Disposal Waste Treatment Plant in Belleville, MI (MID 000 724 831). The manifests for the "dirt from ball mill excavation" were eleven in total, and are further discussed in Section VII of this report.

I reviewed the hazardous waste contingency plan. I also obtained a copy of the plan on the second day of the inspection for further review back at the office. The contingency plan is entitled, "RCRA Contingency Plan and Emergency Response Procedures." The plan is dated as being revised on July 22, 2005. The contingency plan does not include the home addresses of the primary and alternate emergency coordinators. Though the contingency plan contains an evacuation plan, and makes reference to primary and secondary evacuation routes as being included in "Attachment A" of the plan, the evacuation routes are not actually present in the contingency plan.

Only weekly inspection records of the hazardous waste storage area for the month of June, 2005, were present. According to Mr. Altepeter, these were the only records regarding the inspections.

However, Mr. Altepeter stated that he does in fact visit the hazardous waste storage area at least once a week.

I also reviewed an analytical report for a sample of "oil and oil dry" collected in July of 2005. The report indicated that the sample possessed the lead and cadmium toxicity characteristics. See Section VIII for further discussion on this waste stream.

This concluded Day 1 of the inspection. I left Big River Zinc at approximately 3:30 P.M.

V. Opening Conference – Day 2

I returned to Big River Zinc on September 7, 2005, at approximately 9:00 A.M. I met with Mr. Altepeter and asked for further explanation on the workings of Big River Zinc's pre-treatment plant, sulfuric acid plant and ball mill. I also asked Mr. Altepeter for clarification on a number of other aspects related to its production process and the flow charts reviewed on Day 1 of the inspection. After our discussion, we prepared for the visual site inspection of the plant.

VI. Visual Site Inspection – Day 2

At approximately 9:45 A.M., I began the visual site inspection of Big River Zinc. Mr. Altepeter accompanied me throughout the inspection. We began at the concrete slab on the northeastern portion of the plant, where the zinc concentrates are stored prior to being fed into the production process. Large piles of zinc concentrates were being stored here at the time of the inspection (photograph 1). Some of the piles consisted of materials that were being recycled back into the production process. According to Mr. Altepeter, run-off from this area collects in a sump and is treated in the pre-treatment plant. Immediately to the south of the concrete pad was a concentrate storage building where zinc concentrates are also stored.

We then proceeded toward the oxide treatment plant. Just outside this building, on its east side, is a concrete pad where wastewater treatment solids (gypsum) were being stored in an open pile (photograph 2). Pure gypsum generated from the cell house (see Section VIII) was also piled onto the concrete pad. We then entered the pre-leach building where the high magnesium concentrates are treated prior to roasting. This building is connected to the zinc oxide plant. Inside these buildings, I viewed the reactor tanks/vessels and drum filters used in the processes.

I then visited the pre-treatment plant. While at the pre-treatment plant, I viewed an empty pond that had been previously used by Big River Zinc to store effluent form the pre-leach plant. According to Mr. Altepeter, the effluent from the pre-leach plant is acidic and contains cadmium, zinc sulfate, and magnesium sulfate. The pre-leach plant had not been used since the first of June.

We then toured the roaster plant, sulfuric acid plant, and silos where calcine formed during the roasting process is stored prior to its introduction into the leach plant. I also viewed conveyer

belts suspended overhead that are used to transfer calcine from the silos to nine storage bins prior to being processed in the leach plant.

We then proceeded toward the leach plant. Outside of the leach plant, I observed a pile of solid, earthen material that is derived from periodic cleaning of the leach tanks, and from leach tank overflow (photograph 3). According to Mr. Altepeter, this material will be re introduced into the roasting process.

We then toured the inside of the leach plant. While standing inside the leach-plant, and looking through an opening in the wall to the outside, I was able to observe silver concentrate derived from the leach procedure, being stored under a roofed, elongate structure, that is located just outside of and adjacent to the leach plant (photographs 4 and 5). The structure is open to the outside on two of its ends. We then toured the inside of the leach plant, which is also the building where the various purification stages take place.

We left the leach plant and went to the building where the cadmium sponge formed during the leachate purification stages is stored. This building is a small (approximately 40'X 20') structure located just north of the leach plant. Photograph 6 features a pile of cadmium sponge being stored in this building at the time of the inspection. Outside and near the leach plant, I viewed pallets of 55-gallon containers of "copper cement" (photograph 7).

In this same general area, I observed a roll off container of the hazardous waste filter cloths stored out doors. The container was labeled hazardous waste, and marked with an accumulation start date of September 1, 2005. One filter cloth was lying on the ground just outside of the container (photographs 8 and 9). A white powdery substance coated the ground near the location of the discarded filter cloth. Photographs 10 and 11 are of the roll-off container of hazardous waste.

We then toured the zinc sulfate monohydrate plant, and the cell room where the electrowinning process occurs. While in the cell room, I observed the cathodes and anode pairs, as well as employees stripping the plated zinc from the aluminum cathodes. Here, Mr. Altepeter explained that the aluminum cathodes are reused once they are cleaned of the plated zinc. Rinse waters used to clean the aluminum cathodes are recycled to the leach tanks. Mr. Altepeter explained that when the lead/silver anodes reach their life span, they are sent back to the manufacturer. Mr. Altepeter also explained that when the aluminum cathodes are no longer usable, they are either sent to the manufacturer or sold as scrap aluminum.

We then proceeded to the casting department. In a roofed area just outside of the casting plant, I observed bags of zinc metal and zinc oxide recovered from the ball mill (photograph 12). I then toured the casting plant and zinc dust plant.

The walkthrough inspection ended at approximately 12:10 P.M.

VII. Record Review – Day 2

After the walk through inspection, I returned to the administration building and continued the record review and reviewed my inspection notes. I began by reviewing the waste analysis records for the wastewater treatment solids. The earliest analysis I reviewed was conducted in 1996 by Enviro Monitoring Technologies in Morton Grove, IL. It included a TCLP analysis for all TCLP constituents. The next earliest analysis on record was for testing done in June of 1998. The analyses included tests for F-listed solvents, PCBs, TCLP metals, TCLP volatiles, TCLP semi-volatiles, pesticides, reactivity, cyanides, pH, phenols, reactive sulfides, ignitability, and the paint filter test. The 1998 TCLP analysis yielded cadmium and chromium concentrations of 0.198 and 0.048 mg/L respectively. The pH from the 1998 analysis was recorded as 11.11. A waste analyses record on file from 1999 reported cadmium, chromium and lead concentrations in a TCLP extract of 0.05, 0.21 and 1.5 mg/L respectively. I reviewed a record for a waste analysis done by Envirometrics (St. Louis, MO) in 2001. The analyses included TCLP, petroleum hydrocarbons, reactive cyanide, reactive sulfide, pH, ignitability, and the paint filter test. The pH was recorded as 12.08. I also reviewed a TCLP analysis done for metals by Envirometrics in 2003.

The most recent waste analysis record on file for the wastewater treatment solids was performed in 2004 by Envirometrics. I obtained a photocopy of this record. The following methods were included in that analysis: SW-846, PCBs in Solid Waste; SW-846-1311, TCLP; SW-846 9023, Extractable Organic Halides; SW-846 9010, Total Cyanide; SW-846 9045C, pH; SW-846 9065, Phenols; SW-846 9030, Reactive Sulfide; ASTM D92, Ignitability; and SW-846 9095, Paint Filter Test.

I then questioned Mr. Altepeter on the communication devices and emergency equipment on hand at Big River Zinc. Mr. Altepeter stated that telephones, walkie-talkies, and cell phones are available on-site for summoning emergency authorities. He also stated that a P.A. system is located in the roasting plant, and that a siren is present in the acid plant. Fire hydrants and spill control kits are located at various areas throughout the plant. According to Mr. Altepeter, the Safety Office at Big River Zinc is in charge of inspecting the fire extinguishers at Big River Zinc. I explained to Mr. Altepeter that I could not locate the evacuation route diagram in the contingency plan. He explained that the Safety Office is in possession of the evacuation diagrams.

Mr. Altepeter and I went through the hazardous waste training documents on file. Mr. Altepeter explained that he trained the supervisors, who in turn provided training for their subordinates. Mr. Altepeter was able to provide me with training certifications he received for courses he had attended given by the Environmental Resource Center, Cary, NC. I obtained photocopies of these certificates. The course was entitled "Hazardous Waste Management: The Complete Course, in accordance with 40 CFR 265.16." Mr. Altepeter also provided me with a copy of an e-mail sent to him from the Environmental Resources Center that listed the employees at Big River Zinc who had attended this course since 2000. The e-mail states that Anthony Thomas took the training from 2001-2005; Floyd Thomas took the training in 2000; Michael Riley took the training in 2003; Mike Altepeter took the training in 2004 and 2005; Robert Palisch took the

training in 2003; Stephen Ash took the training in 2001 and 2002; Stephen French took the training from 2000-2003; and Steven McComber took the training in 2004.

Documentation that employees were receiving the in-house hazardous waste training in 2005 was present. I obtained a copy of a list of employees along with job titles, whom according to Big River Zinc require hazardous waste training in the year 2005. The records for hazardous waste training prior to 2005 consisted of the following.

- A printout entitled "Course History with Students" that listed the names of employees that had taken a course entitled "Universal Waste Management." The name of the instructor and the students' status in the course (i.e. pass or fail) are also indicated on the document. This record indicates that 17 people attended this course in 1998; 27 people attended it in 1999; and that 30 people attended it in 2000. Michael Riley is listed as the course instructor.

- A roster for a class entitled "Hazardous Waste" that lists the names, job titles and departments of employees who attended the course, along with their status. The date of the training is listed as November 6, 1997. Seventeen people are listed as having attended. Michael Riley is listed as the instructor.

- A printout entitled "Course History with Students" that listed the names of employees that had taken a course entitled "Hazardous Waste." The name of the instructor and the students' status in the course (i.e. pass or fail) are also indicated on the document. This record indicates that 27 people had attended the course in 1997 and 51 people had attended in 1999.

- A printout entitled "Course History with Students" that listed Steven Ash, Stephen French, and Anthony Thomas as having attended a course entitled, "Hazardous Waste Management" in May of 2001.

- A printout entitled "Course History with Students" that listed Stephen French and Michael Riley as having attended Hazardous Waste Operations and Emergency Response (HAZWOPER) training in 2001 and 2002.

- A printout entitled "Course History with Students that listed Hans Trefny as having attended HAZWOPER retraining in 2000 and 2002.

I obtained photocopies of the above-listed documents.

After my review of the training records I reviewed the manifests that were in the folder marked, "Dirt from Ball Mill Excavation" for which I could not locate a Land Disposal Restriction Notification record (see section IV). There were 17 manifests in total for this waste stream that were signed by the generator in July and August of 2002. All of the manifests identified the waste as "RQ Hazardous Waste Solid (lead and cadmium)," and listed the hazardous waste

numbers D006 and D008. The designated facility on each manifest was Perma Fix, in Brownstown, MI (MID096963194). The manifest numbers, the quantity of waste on each manifest and the date the manifest was signed by the generator are listed below in Table 2.

Table 2. Manifest information for shipments of "Dirt from Ball Mill."

Manifest Number	Quantity of Waste Listed on Manifest (lbs)	Date Manifest was Signed by the Generator
MI 8617693	46,820	July 16, 2002
MI 8617692	44,280	July 16, 2002
MI 8617691	43,620	July 16, 2002
MI 8617690	47,300	July 16, 2002
MI 8617689	43,800	July 16, 2002
MI 8617670	46,300	July 11, 2002
MI 8617688	50,300	July 15, 2002
MI 8617687	46,940	July 15, 2002
MI 8617672	43,860	July 15, 2002[1]
MI 8617671	47,940	July 12, 2002
MI 8617500	46,480	July 16, 2002
MI 8617666	47,880	July 9, 2002
MI 8617665	46,020	July 9, 2002
MI 8617669	50,380	July 11, 2002
MI 8617667	48,540	July 10, 2002
MI 8617668	47,100	July 10, 2002
MI 8617504	46,320	August 26, 2002

[1]This date corresponds to the date the designated facility signed the manifest. The date the generator signed was illegible on the manifest copies reviewed during the inspection.

VIII. Closing Conference – Day 2

I held a closing conference wit Messrs. Obeldobel and Altepeter at approximately 3:50 P.M. During the conference, I enquired as to what is done with the filtrate from the various purification stages. Mr. Obeldobel explained that it was all recycled back to the manufacturing process (e.g. leach tanks, thickeners, acid plant). I explained that I was unable to locate any of the manifests for the 2002 shipments of "Cadmium Sponge" waste that was identified on the Annual Hazardous Waste report as a waste stream in 2002. Mr. Altepeter went back to his office and located these manifest records, which I briefly reviewed. I inquired about the analytical report for the sample of the "Oil and Oil Dry" that I had reviewed on the first day of the inspection (see section IV). Mr. Altepeter explained that during an IEPA inspection earlier this year, an IEPA inspector had taken notice of some oil dry that was present on the ground around used oil containers. The inspector asked for an assay on the oil dry, and Big River Zinc cooperated with that request. Mr. Altepeter explained that the spill probably did not come from the containers, but from a vehicle. The sample of the oil dry tested positive for the toxicity characteristic. Mr. Altepeter explained that this is probably the result of the metals present in the ground surface,

rather than from the oil prior to it being spilled. Mr. Altepeter explained that in the future, all used oil dry will be placed into the roasters for recovery of its zinc content.

I asked Mr. Altepeter to explain again the source of the "pure" gypsum pile I had observed outside of the oxide treatment plant and next to the pile of wastewater treatment solids. Mr. Altepeter explained that the leachate being processed in the electrolytic cell rooms contains gypsum. The gypsum will eventually precipitate as the leachate is continuously cycled through the cell room.

During the closing conference, I also pointed out certain observations I had made during the inspection that potentially represented non-compliance. I explained that I was unable to locate Land Disposal Restriction Notifications for the shipments of the "Dirt from Ball Mill Excavation" and for disposal of the treatment pond liner. Messrs. Obeldobel and Altepeter explained that the waste described as, "Dirt from Ball Mill Excavation" consisted of contaminated soil that was excavated when a new ball mill was installed. I also explained that I had observed a press cloth lying on the ground next to the hazardous waste container; that there appeared to be some deficiencies in the hazardous waste contingency plan (no addresses for emergency coordinators and no evacuation routes); and that there appeared to be gaps in the training records.

At the end of the closing conference, I asked Messrs. Altepeter and Obeldobel if they could demonstrate to me that the various by-products formed in the production processes do indeed have markets, and are sold to other companies. They explained that they could show me the contracts between Big River Zinc and the companies that receive the by-products. At this time, Mr. Hee Sagong, Financial Analyst for Big River Zinc, came into the conference room and presented me with copies of the contracts, and the most recent invoice for the sale of each by-product.

For the silver residue formed during the leaching process, I viewed two contracts. The companies named in the contract to purchase the silver residue were Korea Zinc (Big River Zinc's parent company) and Doe Run in Missouri. I was also presented with two invoices for shipments to Korea Zinc in May and June. I viewed a contract between Big River Zinc and Phelps Dodge in Miami Arizona for the sale of the copper precipitate, as well the two most recent invoices. I was presented with a contract between Big River Zinc and Compangnie de Tifnout, in Morocco for the sale of the copper cement. I was presented with two contracts for the sale of the cadmium sponge. The companies named in the contracts to purchase the material were Xinxiang Ming Yu Chemical Company in China, and Korea Zinc. I also reviewed the two most recent invoices for the sale of the cadmium sponge.

I left Big River Zinc at approximately 4:30 P.M.

Attachments

A. Photographs taken during CEI
B. IEPA inspection checklist

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 W. JACKSON BOULEVARD
CHICAGO, IL 60604

COMPLIANCE EVALUATION INSPECTION REPORT

INSTALLATION NAME:	Big River Zinc Corporation
U.S. EPA ID No.:	ILD062444435
LOCATION ADDRESS:	2401 Mississippi Avenue Sauget, IL 62201
NAICS CODE:	331419 – Primary Smelting and Refining of Nonferrous Metal (except Copper and Aluminum)
DATE OF INSPECTION:	September 19, 2007
U.S. EPA INSPECTOR:	Todd Brown

PREPARED BY: Todd Brown — 10/25/07
Todd C. Brown — Date
Environmental Scientist

REVIEWED BY: Apiros Bourgikos for — 10/26/07
Lorna M. Jereza, Chief — Date
Compliance Section 1
RCRA Branch

I. Purpose of Inspection

The purpose of this inspection was to conduct a Compliance Evaluation Inspection (CEI) at Big River Zinc, Corporation (BRZ) to determine its compliance with the Resource Conservation and Recovery Act (RCRA), with respect to BRZ's management of hazardous waste.

II. Plant Description/Back Ground

BRZ is located at 2401 Mississippi Avenue in Sauget, IL. The plant occupies approximately 35 acres of land. In its past, BRZ had primarily manufactured zinc ingots and sulfuric acid. Other products manufactured at BRZ included zinc sulfate solution and zinc sulfate monohydrate (fertilizer and animal feed). In addition, BRZ's manufacturing processes produced by-products that contained silver, cadmium, copper, nickel, and/or cobalt, which at times were sold to manufacturers in other industries for use as a feed stock. However, some of these materials were disposed of as hazardous wastes when market conditions were not favorable. Zinc sulfide bearing ore was the primary feedstock at BRZ.

BRZ ceased operations in 2006, and was acquired by Zinc Ox. Currently, BRZ is in the process of restructuring its plant to use "pelletized fume" as its primary feedstock. The pelletized fume will be derived from K061 waste processed off-site in a kiln. Currently, demolition and construction activities are occurring on-site in support of these efforts.

The demolition activities have generated three hazardous waste streams. These are as follows.

- Old wooden tanks dating from the 1950's that had been used in BRZ's leaching processes (a process that used sulfuric acid to leach zinc from zinc oxide to produce a zinc sulfate solution). The wood from the tanks possesses the toxicity characteristic as a result of its cadmium and lead concentrations.

- Brick that had lined steel tanks at BRZ. The brick possesses the toxicity characteristic as a result of its cadmium and lead concentrations.

- Concrete derived from the floor from the Leach Plant. Core samples from the floor revealed that the concrete possessed the toxicity characteristic as a result of its cadmium concentration.

The wood and concrete hazardous waste streams are stored in piles outside, on a concrete pad located on the northeast corner of the plant. This area was formerly used to store zinc ore feedstock.

III. Opening Conference

I arrived at BRZ on September 19, 2007, at approximately 9:30 A.M. Upon arrival, I held an opening conference with Mike Altepeter, Environmental Manager/Senior Processing Manager. I

provided Mr. Altepeter with a list of Pollution Prevention Contacts in Region 5; the U.S. EPA Small Business Handout; and the Illinois Waste Management and Research Center (WMRC) pamphlet entitled, "Sustainable Solutions." I provided a brief explanation of WMRC and its services.

During the opening conference, I questioned Mr. Altepeter on BRZ's current operations and hazardous waste management. Mr. Altepeter explained that BRZ was currently in the process of modifying its plant to use pelletized fume as its feedstock, as opposed to zinc ore. The pelletized fume is generated off-site from the processing of K061 waste in a kiln.

BRZ is currently demolishing its Leach Building. Three hazardous waste streams have been generated from these operations, and are described in Section III of this report. At the time of the inspection, two hazardous waste piles were being stored on-site. The piles contained concrete from the floor of the Leach Plant, and wood generated from the demolition of wooden tanks, respectively. These waste streams both possess the characteristic of toxicity due to their cadmium and/or lead concentrations. According to Mr. Altepeter, the two piles that were currently on-site had been present for approximately three weeks.

The waste piles are both located on a concrete pad located at the northeast corner of the plant. This pad was formerly used for the storage of zinc ore. Run-off from this portion of the plant reportedly drains to a holding pond associated with BRZ's waste water treatment system.

Mr. Altepeter confirmed that BRZ was currently generating waste at the level of a large quantity generator.

The opening conference ended at approximately 9:00 A.M. At this time, Mr. Altepeter accompanied me on a tour of the facility.

IV. Visual Site Inspection

Mr. Altepeter and I toured the plant, stopping to enter various buildings or areas at my request. We began at the south end of the plant, and worked our way north and back.

The first building we entered was the Cadmium Oxide Plant. Operations in this area ceased in 2000. The building is currently being used to house miscellaneous parts and equipment.

We then proceeded north to the Maintenance Shop. Here, I observed one 55-gallon container labeled with the words, "Hazardous Waste" (photograph 1). The label indicated that the waste in the container contained chromium (photograph 2). No accumulation date was present on the container. Mr. Altepeter stated that the waste stream in the container was generated from a parts-cleaner. The parts cleaner was located in close proximity to the container.

We next visited a small shed located next to a fueling station east of the Maintenance Shop. The shed was being used to store universal waste lamps and batteries (photographs 3-5). Many of the

lamps and batteries were not stored in containers. At least one box of lamps was too small to completely contain the lamps, as one end of each lamp was protruding from the top of the box. The batteries and lamps were not labeled with any of the required labeling for universal waste. However, the outside of the shed was labeled, "Universal Waste Storage Area" (photograph 6).

We then continued north on our tour, in the direction of the concrete storage pad where the two hazardous waste piles are located. Along the way, I observed the demolition activities occurring at the Leach Plant. We also entered the Old Skimmings Building and Pre-Leach Plant.

We arrived at the concrete pad located on the northeast end of the facility. Here, I observed the two hazardous waste piles of concrete and wood. The pile of concrete was located directly in front of the north wall of the Concentrate Storage Building (photographs 7 and 8). Caution-tape surrounded the perimeter of the pile. The wall of the Concentrate Storage Building was provided with a label corresponding to the contents of the waste pile (photographs 9 and 10), which was located in the immediate vicinity of the pile. The label included the words, "Hazardous Waste" and "Contaminated Concrete." The date the pile began accumulating was provided on the label as August 23, 2007.

The hazardous waste pile of wood was located just to the west of the Concentrate Storage Building (photograph 11). Concrete walls surrounded it on three sides. Caution-tape bordered the remaining side. A sign in front of the pile was present to identify the pile as hazardous waste (photograph 12). According to the sign, the pile had been present since September 10, 2007.

Mr. Altepeter and I then continued south along the eastern boundary of the plant. We visited the Sulfuric Acid Plant, Roaster Building and Leach Plant along the way.

We reached the south end of the plant, continued west, and entered the Casting Building. Numerous bags of vanadium oxide catalyst were present here (photograph 13). According to Mr. Altepeter, the catalyst was removed from an acid converter after BRZ ceased its manufacturing operations. The bags had been stored here for around one year. BRZ plans to use the material in its manufacturing operations again. The catalyst needed to be removed from the converter and stored in this manner to prevent moisture from being absorbed.

We then entered a small storage building located just north of the Leach Plant. In the past, this building had been used to house a cadmium by-product. At the time of the inspection, numerous 55-gallon containers (at least 50) of arsenic trioxide were present (photographs 14-17). According to Mr. Altepeter, the arsenic trioxide had not been previously used.

The walkthrough ended at approximately 10:45 A.M. At this time, Mr. Altepeter and I briefly met with George M. Obeldobel, CEO, in Mr. Obeldobel's office.

V. Record Review

After our brief meeting with Mr. Obeldobel, Mr. Altepeter and I returned to his office area where I reviewed various records made available by BRZ. The record review began at approximately 11:00 A.M.

I began by reviewing waste determination and hazardous waste manifest records. I reviewed an analytical report for a sample of "Contaminated Brick" collected on August 1, 2007. The samples were subjected to the Toxicity Characteristic Leaching Procedure (TCLP). The results yielded cadmium and lead concentrations in the TCLP extract of 260 mg/l and 36 mg/l, respectively. PDC Laboratories, Inc. (PDC), Florissant, MO, conducted the analyses. The manifest records revealed that there were seven shipments of approximately 25,000 to 45,000 lbs. of this waste stream in August, 2007.

I reviewed an analytical report for a sample of "contaminated wood" collected on August 1, 2007. The sample was subjected to the TCLP. The results yielded a cadmium concentration in the TCLP extract of 14 mg/l. PDC performed the analyses.

I reviewed analytical reports for samples of wood derived from the "3rd Stage Tank", "Process Water Tank", "#4 Check Tank", and "5 Check Tank". All of the samples were collected on August 7, 2007, with the exception of the # Check Tank – sample, which was collected on August 8, 2007. All of the samples were subjected to the TCLP. PDC performed the analyses.

The results for the 3rd Check Tank – sample yielded cadmium and lead concentrations in the TCLP extract of 1,300 mg/l and 7.4 mg/l, respectively. The results for the sample of the Process Water Tank yielded a cadmium concentration in the TCLP extract of 4.1 mg/l. The results for the #4 Check Tank – sample yielded cadmium and lead concentrations in the TCLP extract of 460 mg/l and 7.3 mg/l, respectively. The results for the #5 Check Tank – sample yielded a cadmium concentration in the TCLP extract of 1.6 mg/l.

The manifest records indicated that there were 14 shipments of hazardous waste "wood and debris" in August and September of 2007. The shipments ranged from approximately 8,000 to 23,000 lbs of waste.

Analytical reports for several samples of waste concrete were on-file. The samples were all subjected to the TCLP. PDC performed the analyses. I made note of samples whose TCLP extracts yielded concentrations of metals above the regulatory limits. These samples were named "1st Stage Purification" (collected August 9, 2007), "Eiemco Basement Wall" (collected August 21, 2007), and "2nd Stage Process Floor" (collected August 21, 2007). The samples yielded cadmium concentrations in the TCLP extract of 4.8 mg/l, 5.2 mg/l, and 2 mg/l, respectively.

I reviewed hazardous waste manifests for the years 2005 through 2007. All of the hazardous waste manifests for the year 2007 were destined to Michigan Disposal Waste Treatment Plant (EPA ID No.: MID000724831) in Bellville, MI.

I reviewed BRZ's Hazardous Waste Contingency Plan. I noted that the plan did not describe arrangements made with local authorities and emergency responders; did not provide the home addresses of the emergency coordinator; and did not provide a brief description of the capabilities of the emergency equipment contained in BRZ's spill kits.

I reviewed BRZ's documents pertaining to hazardous waste training. According to the documents, ten employees with duties involving hazardous waste management are provided with training. Training records for the contractor performing the demolition work, Spiritis, were also on file. I noted that a record describing the training provided to personnel was not present.

VI. Closing Conference

After the record review, I held a closing conference with Mr. Altepeter. During that conference, I explained that my main concern regarding BRZ's compliance with RCRA was the presence of the two hazardous waste piles located on the north side of the facility. I explained that generators of hazardous waste were not permitted to store hazardous waste in open piles without a RCRA Permit. In response, Mr. Altepeter explained that the waste in the piles needed to be broken down before it could be shipped to a land fill.

I left BRZ at approximately 12:30 P.M.

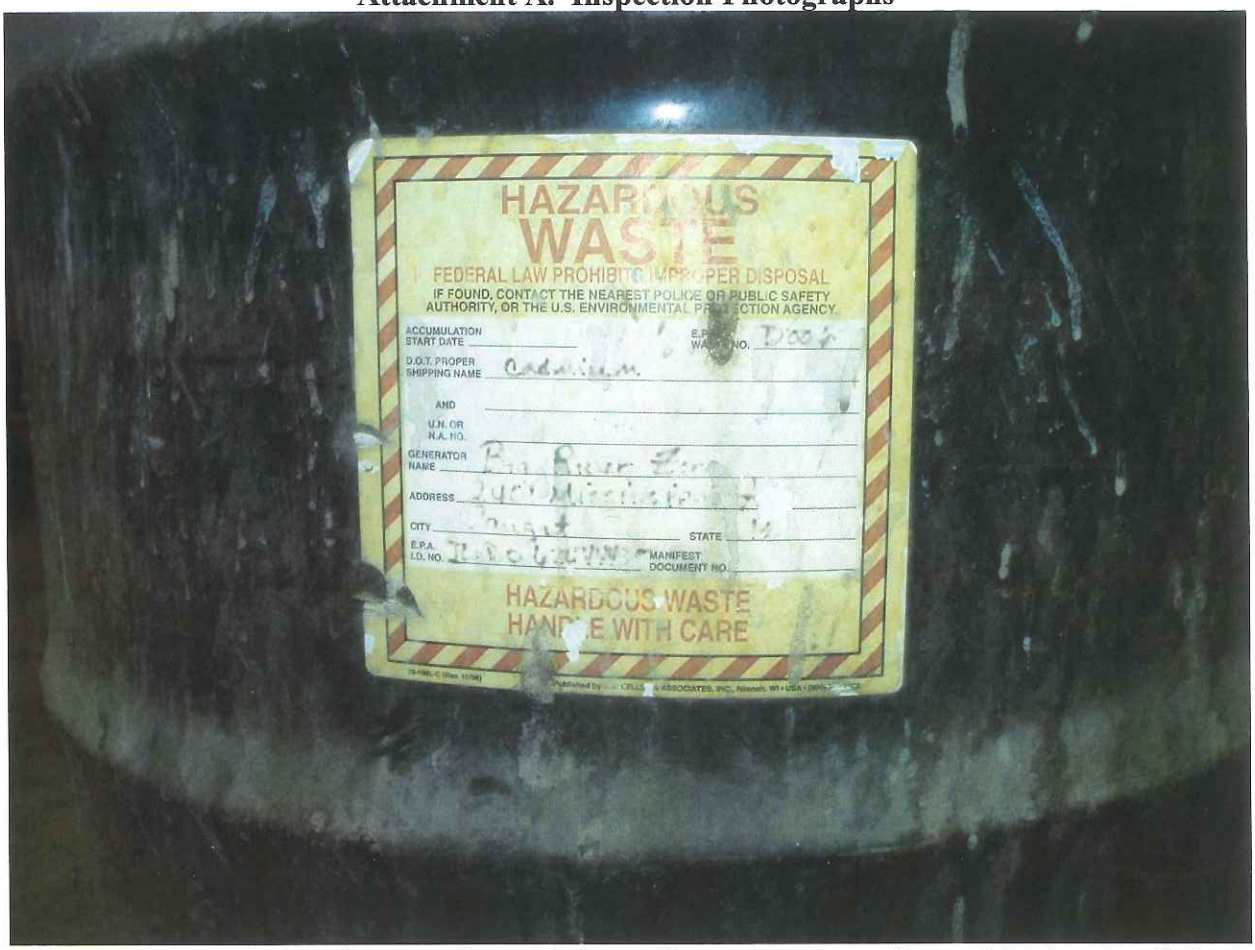
Attachments

A. Inspection Photographs
B. Inspection Checklist

Attachment A. Inspection Photographs

Photograph 1: 55-gallon container of hazardous waste located in the Maintenance Shop at Big River Zinc Corporation, Sauget, IL. The label indicated that the waste stream contained cadmium (see photograph 2). The waste stream is reportedly generated from a nearby parts-cleaner. The digital photograph was taken on September 19, 2007, at approximately 9:27 A.M. The photographer was Todd Brown, U.S. EPA. The file name is P9190001.

Attachment A. Inspection Photographs

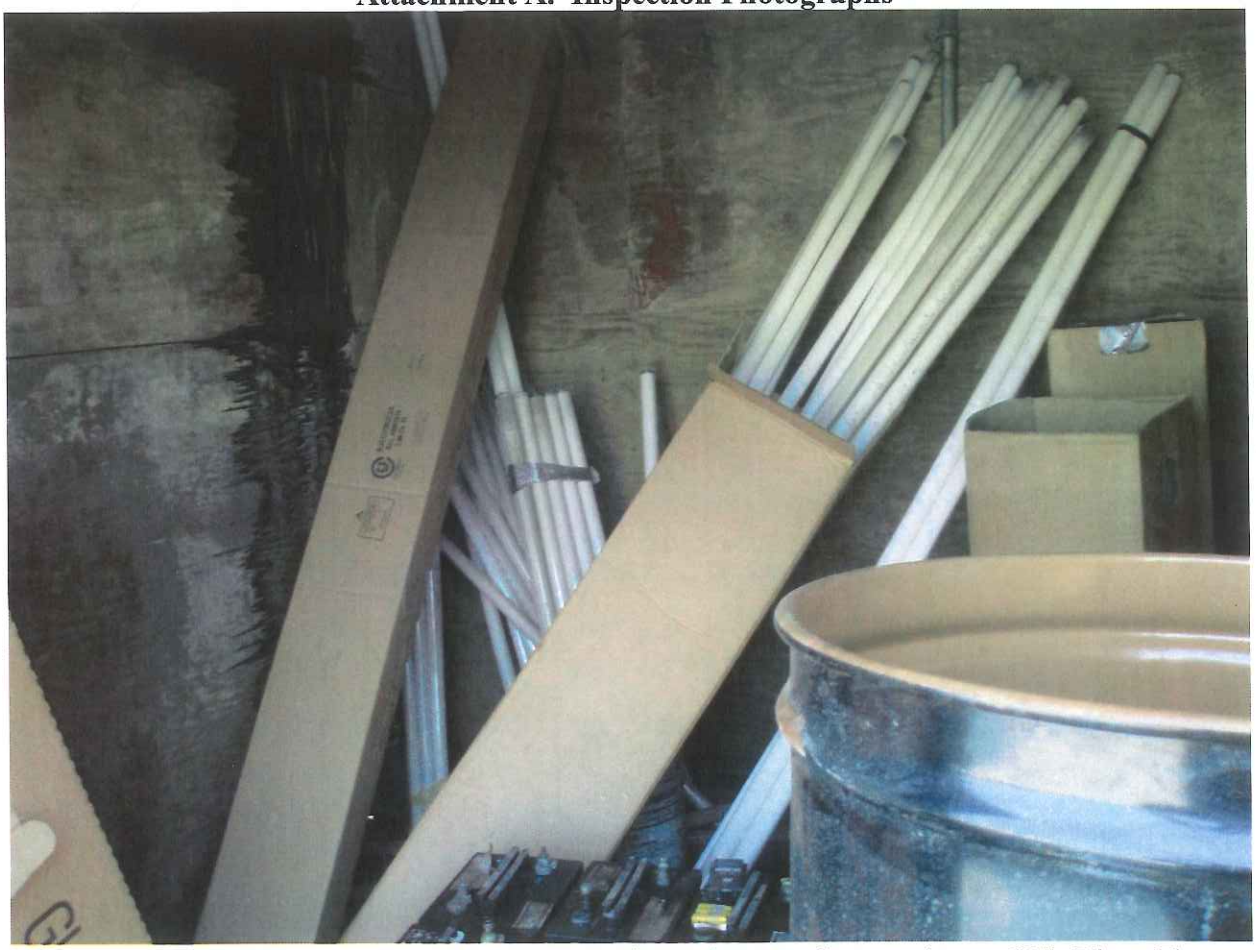


Photograph 2: Label on the 55-gallon container of hazardous waste featured in photograph 2. The digital photograph was taken on September 19, 2007, at approximately 9:27 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190002.

Attachment A. Inspection Photographs

Photograph 3: Universal waste lamps and batteries at the Universal Waste Storage Area of Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 9:32 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190003.

Attachment A. Inspection Photographs

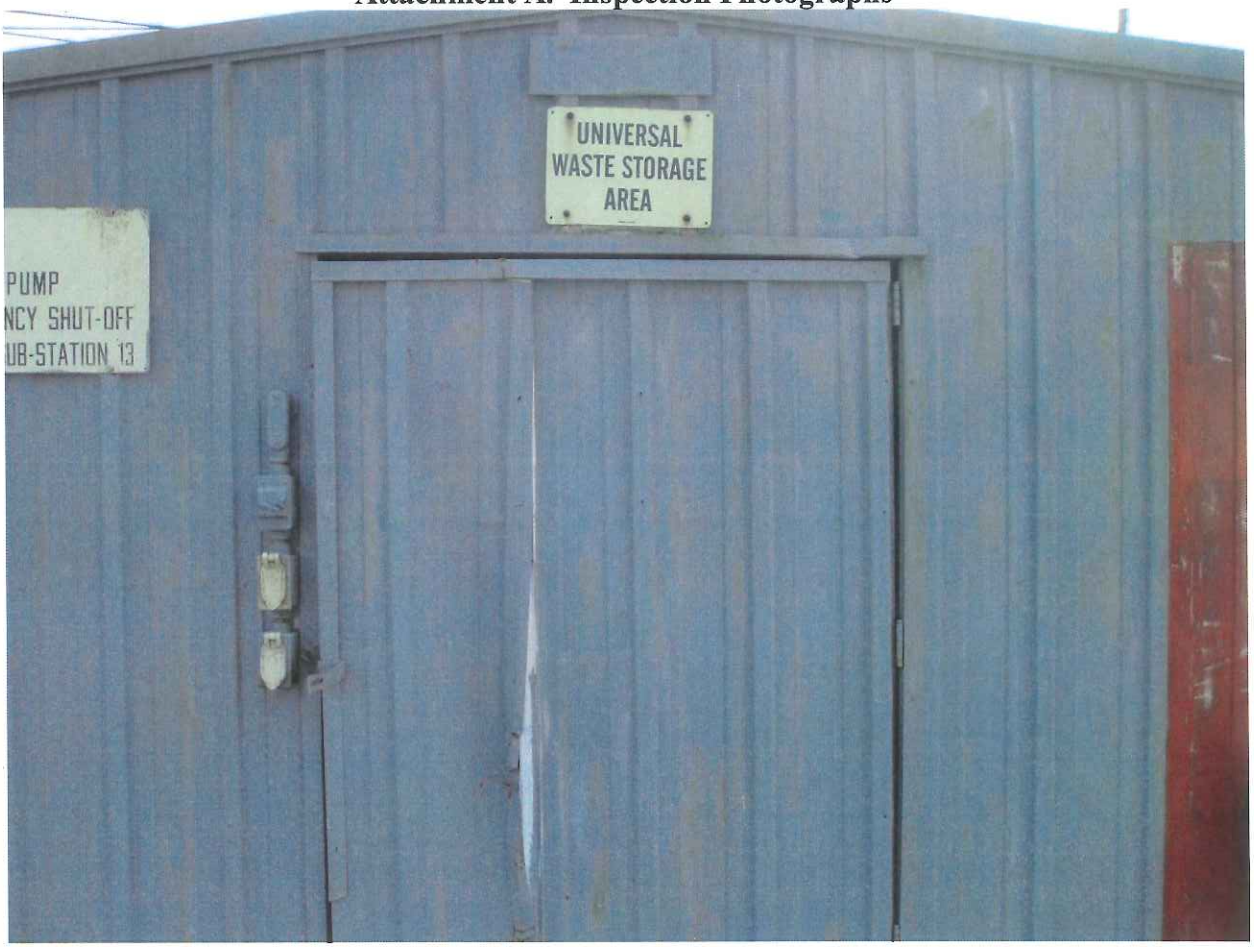


Photograph 4: Universal waste lamps at the Universal Waste Storage Area of Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 9:32 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190004.

Attachment A. Inspection Photographs

Photograph 5: Universal waste batteries at the Universal Waste Storage Area of Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 9:33 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190005.

Attachment A. Inspection Photographs



Photograph 6: Entrance to the Universal Waste Storage Area of Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 9:33 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190006.

Attachment A. Inspection Photographs

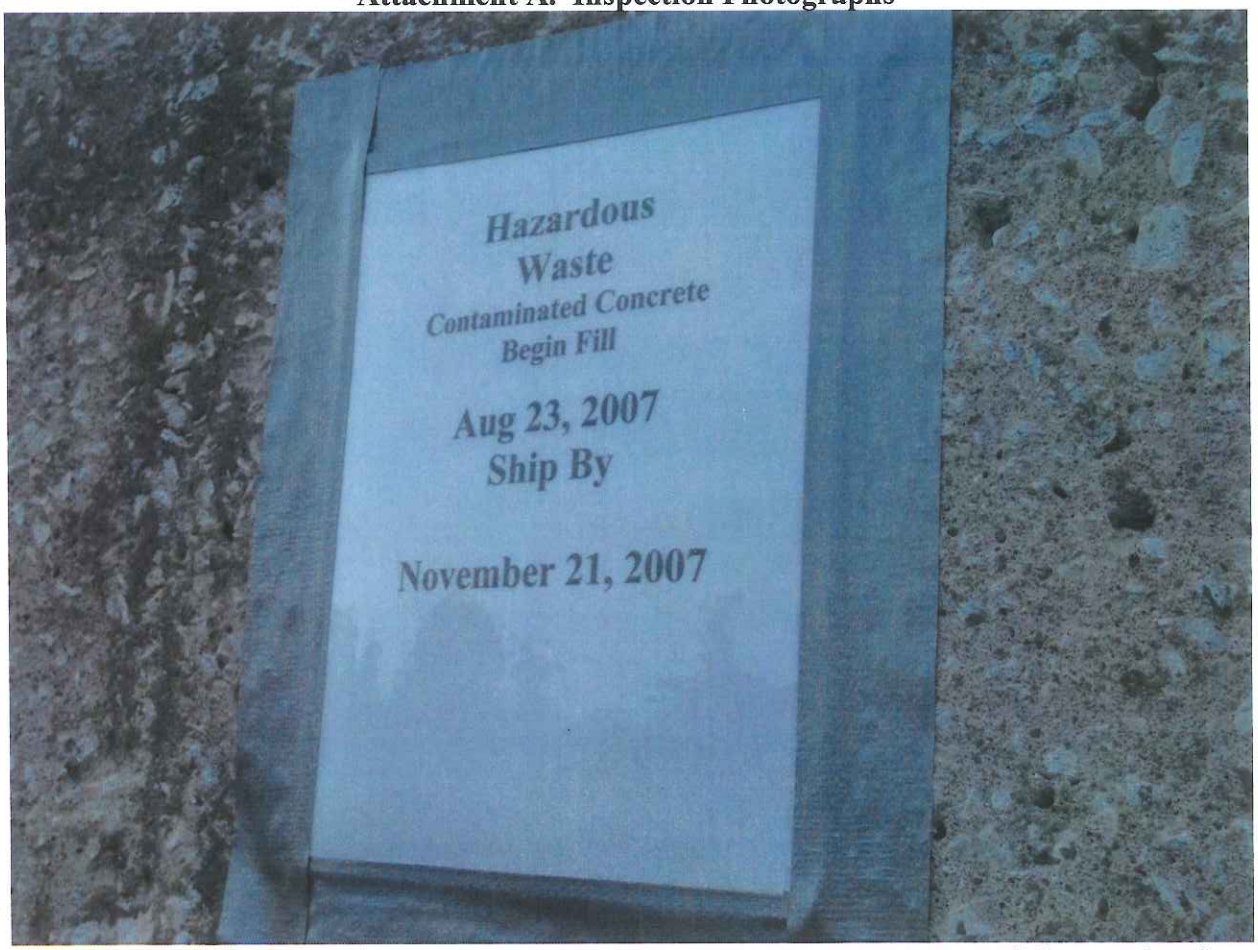
Photograph 7: Pile of hazardous waste concrete located along the north wall of the Concentrate Storage Building at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 9:58 A.M., while facing east. The photographer was Todd Brown, U.S. EPA. The filename if P9190007.

Photograph 8: Pile of hazardous waste concrete located along the north wall of the Concentrate Storage Building at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 10:00 A.M., while facing south. The photographer was Todd Brown, U.S. EPA. The filename if P9190010.

Attachment A. Inspection Photographs

Photograph 9: Sign located on the north wall of Concentrate Storage Building at Big River Zinc Corporation, Sauget, IL. The sign pertained to the pile of concrete located in front of the building. The digital photograph was taken on September 19, 2007, at approximately 9:59 A.M. The photographer was Todd Brown, U.S. EPA. The file name is P9190008.

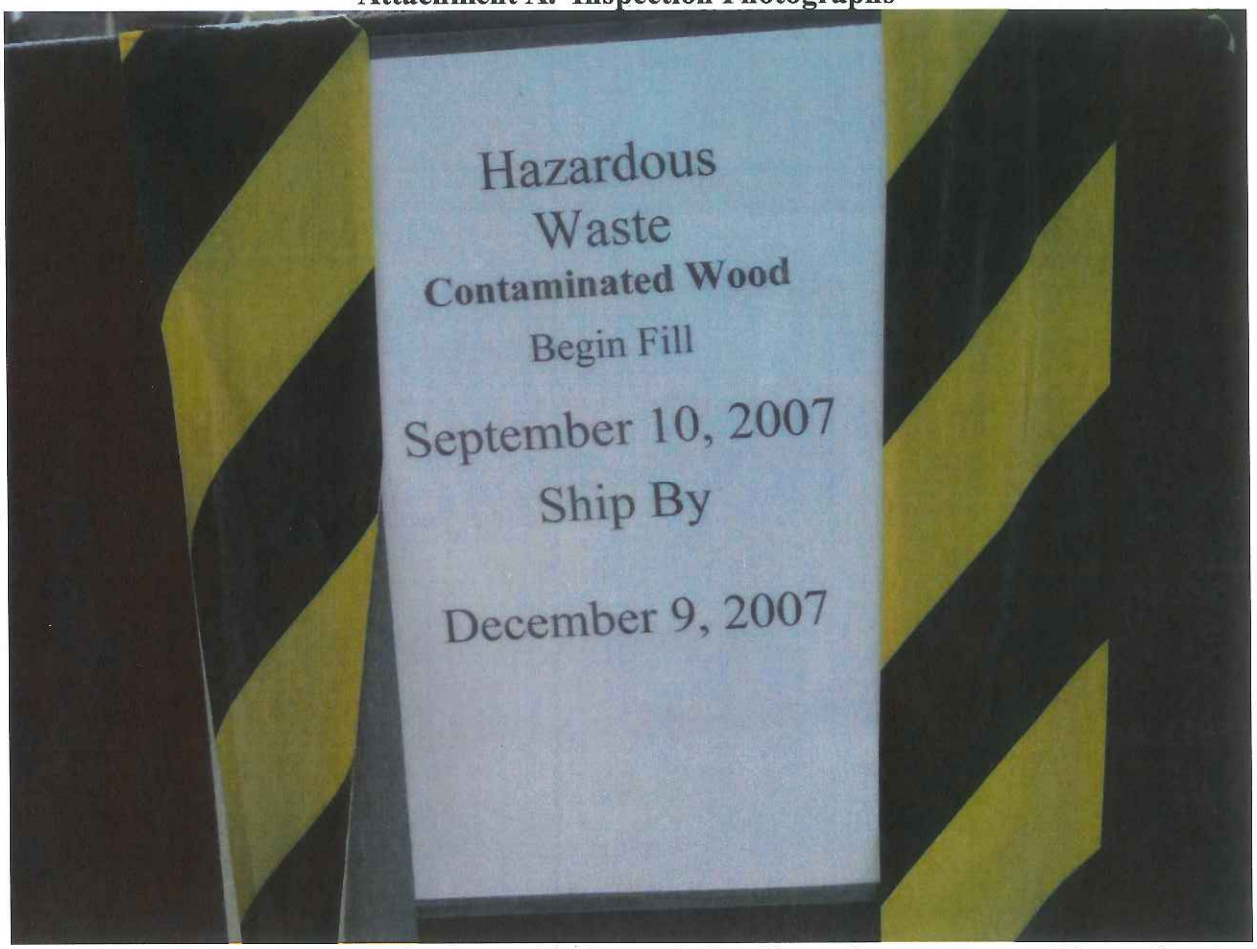
Attachment A. Inspection Photographs



Photograph 10: Close-up of sign on the north wall of Concentrate Storage Building at Big River Zinc Corporation, Sauget, IL. The sign pertained to the pile of concrete located in front of the building. The digital photograph was taken on September 19, 2007, at approximately 9:59 A.M. The photographer was Todd Brown, U.S. EPA. The file name is P9190009.

Attachment A. Inspection Photographs

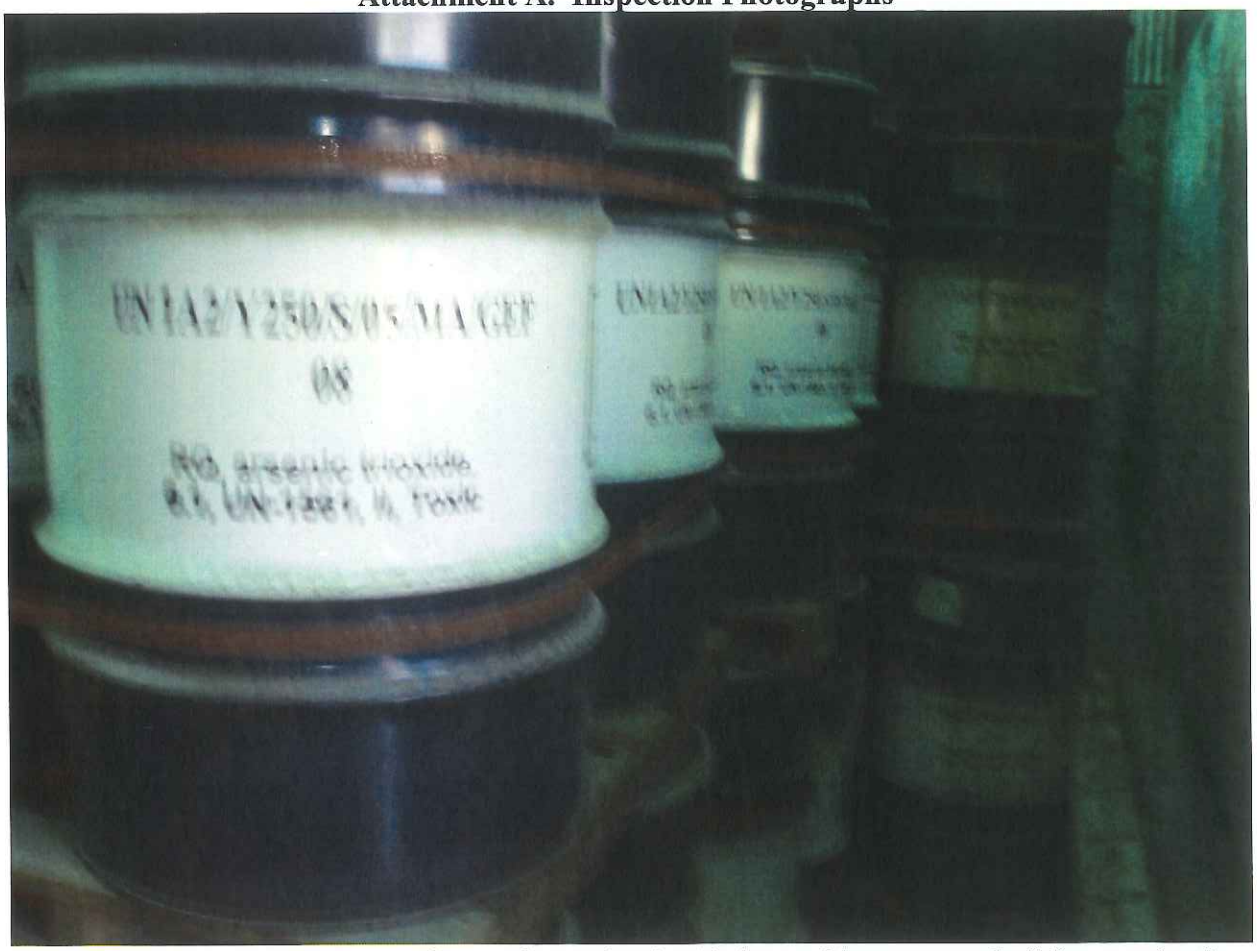
Photograph 11: Pile of hazardous waste wood located to the west of the Concentrate Storage Building at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 10:04 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190011.



Photograph 12: Close-up of sign located in front of pile of hazardous waste wood located to the west of the Concentrate Storage Building at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 10:05 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190012.

Photograph 13: Bags of vanadium oxide catalyst in the Casting Building at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 10:25 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190013.

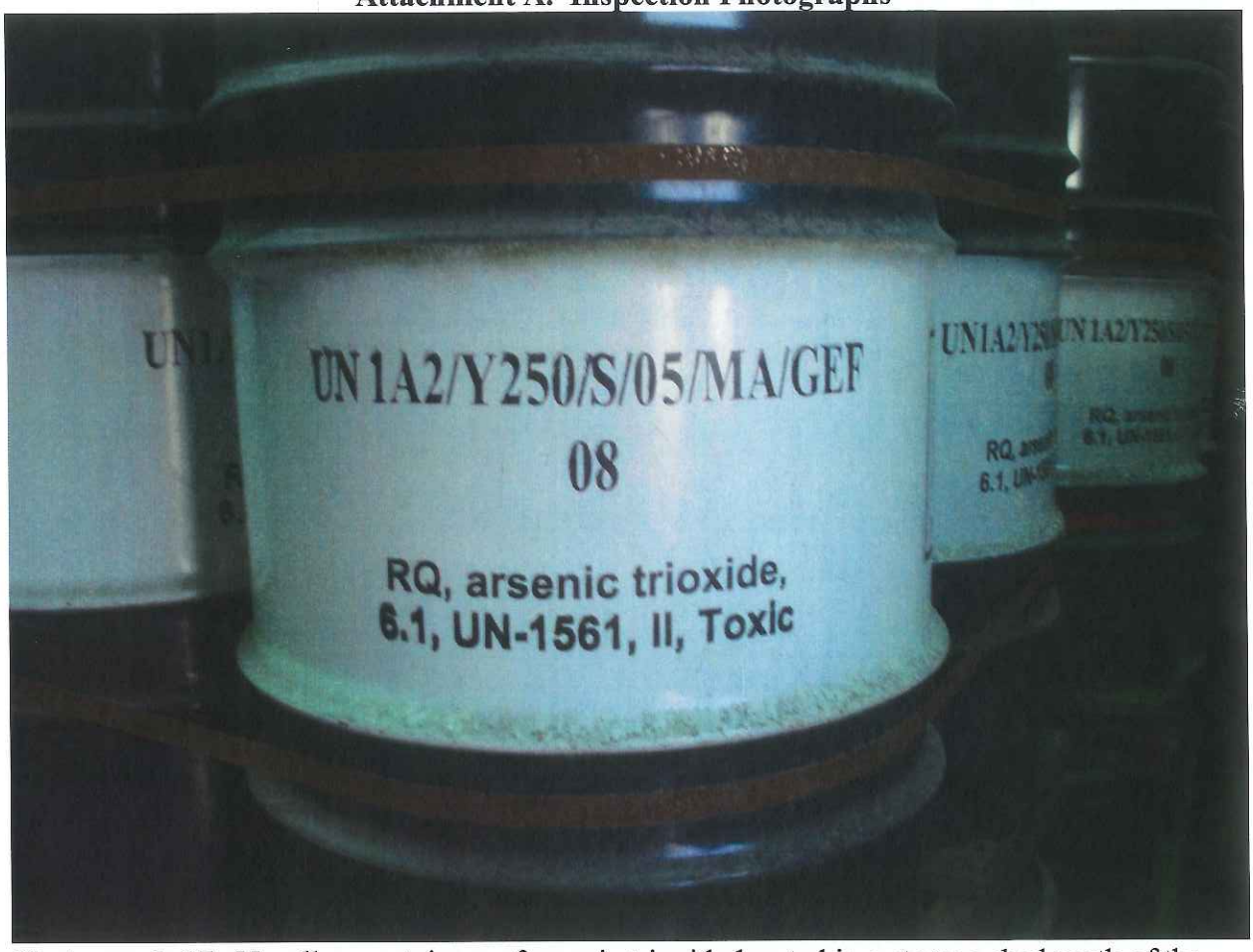
Attachment A. Inspection Photographs



Photograph 14: 55-gallon containers of arsenic trioxide located in a storage building north of the Leach Plant at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 10:32 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190014.

Photograph 15: 55-gallon containers of arsenic trioxide located in a storage building north of the Leach Plant at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 10:32 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190015.

Photograph 16: 55-gallon containers of arsenic trioxide located in a storage shed north of the Leach Plant at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 10:33 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190016.



Photograph 17: 55-gallon containers of arsenic trioxide located in a storage shed north of the Leach Plant at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 19, 2007, at approximately 10:32 A.M. The photographer was Todd Brown, U.S. EPA. The filename is P9190017.

ATTACHMENT B. Big River Zinc, Sauget, IL 09/19/07

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
	PART 722: STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE (>1000 KG/MO.)	
	SUBPART A: GENERAL	
722.111	**Section 722.111 Hazardous Waste Determination** Has the generator correctly determined if the solid waste(s) it generates is a hazardous waste? Yes ✓ No___ N/A___	722.111
	Have hazardous wastes been identified for purposes of compliance with Part 728? Yes ✓ No___ N/A___	
808.121(a)	Has the generator correctly determined if the solid waste(s) it generates is a special waste? Not inspected. Yes___ No___ N/A___	808.121(a)
722.112(a)	**Section 722.112 USEPA Identification Numbers** Has the generator obtained a USEPA identification number? Yes ✓ No___ N/A___	722.112(a)
722.112(c)	Has the generator offered its hazardous waste only to transporters or to treatment, storage or disposal facilities that have a USEPA identification number? Yes ✓ No___ N/A___	722.112(c)
	SUBPART B: THE MANIFEST	
722.120(a)	**Section 722.120 General Requirements** Does the facility manifest its waste off-site? Yes ✓ No___ N/A___	722.120(a)
722.120(b)	Does the manifest designate a facility permitted to handle the waste? Yes ✓ No___ N/A___	722.120(b)
722.120(d)	Has the generator shipped any waste that could not be delivered to the designated facility? Yes___ No ✓ N/A___	722.120(d)
722.121(a)	**Section 722.121 Acquisition of Manifests** Has the generator used: - an Illinois manifest for wastes designated to a facility within Illinois? UNIVERSAL MANIFEST. Yes___ No___ N/A___	722.121(a)
722.121(b)	- a manifest from the State to which the manifest is designated? Yes___ No___ N/A___ - an Illinois manifest if the State to which the waste is designated has no manifest of its own? Yes___ No___ N/A___	722.121(b)
722.122	**Section 722.122 Number of Copies** Does the manifest consist of at least 6 copies? Yes___ No___ N/A___	722.122
722.123(a)	**Section 722.123 Use of the Manifest** For each manifest reviewed, has the generator: - signed the certificate by hand? Yes ✓ No___ N/A___ - obtained the handwritten signature and the date of acceptance by the initial transporter? Yes ✓ No___ N/A___ - retained one copy as required by Section 722.140(a)? Yes ✓ No___ N/A___ - apparently sent a copy (part 5 for the Illinois manifest) to the Agency within 2 working days? Yes___ No___ N/A ✓	722.123(a)
722.123(b)	- has the generator apparently given the remaining copies to the transporter? Yes ✓ No___ N/A___	722.123(b)
722.123(c)	- has the generator followed the procedures prescribed in Section 722.123 for manifesting bulk shipments of hazardous waste by rail or water? Yes___ No___ N/A ✓	722.123(c)

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Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
	SUBPART C: PRE-TRANSPORT REQUIREMENTS	
	Is there any hazardous waste ready for transport off-site? Yes_____ No_✓_ N/A_____	
130	If so, is the generator complying with the pre-transport requirements in Subpart C? Yes_____ No_____ N/A_✓_	722.130
	Section 722.134 Accumulation Time	
(722.134(a))	Has the generator complied with the following requirements: Yes_____ No_____ N/A_✓_	
(722.134(a)(1))	A) For waste in containers, has the generator complied with the requirements of Part 725, Subpart I, AA, BB, and CC? Yes_____ No_____ N/A_✓_	
	and/or B) For waste in tanks, has the generator complied with the requirements of Part 725, Subpart J, AA, BB, and CC (except Sections 725.297(c) and 725.300)? Yes_____ No_____ N/A_✓_	
	and/or C) For waste on drip pads, has the generator complied with the requirements of Part 725, Subpart W and maintained the required records identified in this subsection? Yes_____ No_____ N/A_✓_	
	and/or D) For waste in containment buildings, has the generator complied with Part 725, Subpart DD and maintained the required records identified in this subsection? Yes_____ No_____ N/A_✓_	
(722.134(a)(2))	For waste in containers, has the generator marked and made visible for inspection on each container, the date upon which accumulation began? Yes_____ No_____ N/A_✓_	
(722.134(a)(3))	For waste in containers and tanks, has the generator marked or labeled each with the words "Hazardous Waste"? Yes_____ No_____ N/A_✓_	
(722.134(a)(4))	Has the generator complied with the requirements of Part 725, Subparts C and D, and Sections 725.116 and 728.107(a)(4)? Yes_____ No_____ N/A_✓_	
	Specifically, the requirements of items 1 and/or 4 above (listed by regulation) which need to be complied with are as follows:	
	Does the facility accumulate hazardous waste in containers? Yes_____ No_____ N/A_✓_ If "No", go to Subpart J.	
	SUBPART I: USE AND MANAGEMENT OF CONTAINERS	
(725.211) (725.214)	Has the generator closed an accumulation area? Yes_____ No_✓_ N/A_____	725.211
	If "Yes", was the accumulation area closed in accordance with Sections 725.211 and 725.214? Yes_____ No_____ N/A_✓_	725.214
(725.271)	If the containers have leaked or are in poor condition, has the owner/operator transferred the hazardous waste to a suitable container? Yes_____ No_____ N/A_✓_	
(725.272)	Is the waste compatible with the container and/or liner? Yes_____ No_____ N/A_✓_	
(725.273(a))	Are containers of hazardous waste always closed except to remove or add waste during accumulation? Yes_____ No_____ N/A_✓_	
73(b))	Are containers of hazardous waste being opened, handled, or stored in a manner which will prevent the rupture of the container or prevent it from leaking? Yes_____ No_____ N/A_✓_	

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Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.274)	Is the owner/operator inspecting the accumulation area(s) at least weekly, looking for leaks or deterioration? Yes_____ No_____ N/A_✓_ Is the accumulation area free from any evidence of leaking or deteriorating containers? (See also Section 725.131) Yes_____ No_____ N/A_✓_	
(725.276)	Are containers holding ignitable or reactive wastes located at least 15 meters (50 feet) from the facility's property line? Yes_____ No_____ N/A_✓_ **Note:** See Section 725.117(a) for additional requirements for ignitable, reactive or incompatible wastes.	
(725.277)	Is the owner/operator complying with the requirements concerning incompatible wastes? Yes_____ No_____ N/A_✓_ COMMENTS: One satellite Container of hazardous waste only. 2 open piles of hazardous waste. on NORTH END of property.	
(725.278)	**Section 725.278 Air Emission Standards** Is the owner or operator managiing all hazardous waste placed in containers in accordance with Subparts AA, BB and CC of Part 725? Yes_____ No_____ N/A_✓_ Comments:	
	Does the generator accumulate and/or treat hazardous waste in tanks? Yes_____ No_✓_ N/A_____ **Note:** If "No", go to Subpart C.	
	SUBPART J: TANK SYSTEMS	
	Has the generator closed an accumulation area? Yes_____ No_____ N/A_____	725.211
(725.211) (725.214)	If "Yes", was the accumulation area closed in accordance with Sections 725.211 and 725.214? Yes_____ No_____ N/A_____	725.214
(725.290)	Does the facility accumulate or treat hazardous waste in tanks? Yes_____ No_____ N/A_____ **Note:** A generator may treat hazardous waste in a tank for less than 90 days without a RCRA permit. If "No", skip Subpart J. a) Tank systems that are used to accumulate or treat hazardous waste which contains no free liquids (using the Paint Filter Liquids Test) and that are situated inside a building with an impermeable floor are exempted from the requirements in Section 725.293. b) Tank systems, including sumps, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 725.293(a). c) Tanks, sumps and other collection devices used in conjunction with drip pads (as defined in Section 720.110) and regulated under Subpart W, must meet the requirements of this Subpart.	

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Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.291(a))	For tanks **existing** prior to July 14, 1986 (see definition of tank system under 720.110) and not protected by a secondary containment system, has a written assessment been reviewed and certified by an IRPE(*) in accordance with Section 702.126(d) by January 12, 1988 [except as provided in Section 725.291(c)]? Yes_____ No_____ N/A_____	
(725.291(b))	Does this assessment consider at least the following: 1) design standards for the tank and ancillary equipment? Yes_____ No_____ N/A_____ 2) hazardous characteristics of the wastes? Yes_____ No_____ N/A_____ 3) existing corrosion protection measures? Yes_____ No_____ N/A_____ 4) documented age of the tank system? Yes_____ No_____ N/A_____ 5) results of a leak test, internal inspection, or other tank integrity examination? Yes_____ No_____ N/A_____ *IRPE = Independent Registered Professional Engineer	
(725.291(c))	Has a tank system assessment been performed within 12 months after the materials in the tank become a hazardous waste? Yes_____ No_____ N/A_____ **Note:** If an assessment indicates a tank system is leaking or unfit for use, the owner/operator must comply with the requirements of Section 725.291(b)(5).	
(725.292(a))	For **new** tanks (see definition of new tanks under Section 720.110) whose installation commenced after 07/14/86, has a written assessment been reviewed and certified by an IRPE in accordance with Section 702.126(d) prior to operation of the tank system? Yes_____ No_____ N/A_____ Does the assessment include, at a minimum, the following: 1) design standards for tanks and ancillary equipment? Yes_____ No_____ N/A_____ 2) hazardous characteristics of the waste(s) to be handled? Yes_____ No_____ N/A_____ 3) evaluation of potential for corrosion and corrosion protection measures for tank systems with metal components in contact with soil or water? Yes_____ No_____ N/A_____ 4) design or operational measures that will protect underground tank systems from potential damage resulting from vehicular traffic? Yes_____ No_____ N/A_____ 5) designs to ensure adequate foundations, anchoring to prevent flotation or dislodgment and the ability to withstand the effects of frost heave? Yes_____ No_____ N/A_____	
(725.292(g))	Has the owner/operator obtained and kept on file at the facility the written statements, including the certification statements [as required in Section 702.126(d)] of the design and installation requirements of Subsections (b) through (f)? Yes_____ No_____ N/A_____	

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Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.293(a))	Is secondary containment provided for any new tank system before being put into service? Yes_____ No_____ N/A_____ Does an existing tank, used to accumulate F020, F021, F022, F023, F026 or F027 waste(s), have secondary containment by 1/12/89? Yes_____ No_____ N/A_____ For an existing tank of documentable age, is secondary containment provided by 1/12/89 or when the tank is 15 years old, whichever is later? Yes_____ No_____ N/A_____ For an existing tank of undocumentable age, has secondary containment been provided by 1/12/95? Yes_____ No_____ N/A_____ or if the facility is older than 7 years, by the time the facility reaches 15 years of age or 1/12/89, whichever is later? Yes_____ No_____ N/A_____ For tanks that accumulate wastes that become hazardous after 1/12/87, has secondary containment been provided within the time intervals required in Subsections (a)(1) through (a)(4) substituting the date that a material becomes a hazardous waste for 1/12/87? Yes_____ No_____ N/A_____	
(725.293(b))	Is the secondary containment system designed, installed and operated to prevent migration of wastes or accumulated liquid out of the system at any time? Yes_____ No_____ N/A_____ Is the secondary containment system capable of detecting and collecting releases and accumulated liquids until the collected material is removed? Yes_____ No_____ N/A_____	
(725.293(c))	To meet the requirements of Subsection (b), is the secondary containment system: 1) compatible with the waste(s) in the tank and of sufficient strength and thickness to prevent failure? Yes_____ No_____ N/A_____ 2) placed on a foundation or base capable of providing support, providing resistance to pressure gradients and preventing failure due to settlement, compression of uplift? Yes_____ No_____ N/A_____ 3) provided with a leak detection system designed and operated to detect any release or accumulated liquid within 24 hours? Yes_____ No_____ N/A_____ 4) sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation? Yes_____ No_____ N/A_____ and is spilled or leaked waste and accumulated precipitation removed from the secondary containment within 24 hours? Yes_____ No_____ N/A_____ **Note:** A RCRA permit may allow for removal of liquids less frequently than 24 hours after accumulation.	
(725.293(d))	Does the secondary containment for tanks have one or more of the following: 1) a liner (external to the tank); or 2) a vault; or 3) a double-walled tank; or 4) an equivalent device (approved by the Board)? Yes_____ No_____ N/A_____	
(725.293(e))	Does the external liner system(s), vault system(s) and/or double-walled tank(s) meet the additional requirements identified in Section 725.293(e)? Yes_____ No_____ N/A_____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.293(f))	Is ancillary equipment protected by secondary containment that meets the requirement of Subsection (h) and (c)? Yes_____ No_____ N/A_____ If "No": 1) Is aboveground piping (exclusive of flanges, joints, valves and connections) inspected daily? Yes_____ No_____ N/A_____ 2) Are welded flanges, joints and connections inspected daily? Yes_____ No_____ N/A_____ 3) Are sealless or magnetic coupling pumps and sealless valves inspected daily? Yes_____ No_____ N/A_____ 4) Are pressurized aboveground piping systems with automatic shut-off devices inspected daily? Yes_____ No_____ N/A_____	
(725.293(i))	Until such time as secondary containment is provided, are the following requirements being met for all tank systems: 1) For non-enterable underground tanks, has an annual leak test that meets the requirements of 725.291(b)(5) been conducted? Yes_____ No_____ N/A_____ 2) For other than non-enterable underground tanks and ancillary equipment, has an annual leak test, internal inspection or other tank integrity examination by an IRPE been conducted? Yes_____ No_____ N/A_____ 3) Are written records maintained at the facility to document the assessments required under Subsections (i)(1) and (i)(2)? Yes_____ No_____ N/A_____ **Note:** If a tank system is found to be leaking or unfit for use as a result of a leak test or assessment, the owner/operator must comply with Section 725.296.	
(725.294(a))	Has the owner/operator placed hazardous wastes or treatment reagents in the tank system that could cause the system to rupture, leak, corrode or otherwise fail? Yes_____ No_____ N/A_____	
(725.294(b))	Do tanks and secondary containment have appropriate controls and practices to prevent spills and overflows including: 1) spill prevention controls? Yes_____ No_____ N/A_____ 2) overfill prevention controls? Yes_____ No_____ N/A_____ 3) sufficient freeboard in uncovered tanks? Yes_____ No_____ N/A_____	
(725.294(c))	**Note:** If a leak or spill has occurred in the tank system, the owner/operator shall comply with the requirements of Section 725.296.	
(725.295(a))	Does the owner/operator inspect, if present, at least each operating day, the following: 1) overfill/spill control equipment? Yes_____ No_____ N/A_____ 2) the aboveground portion of the tank system for corrosion or releases? Yes_____ No_____ N/A_____ 3) data from monitoring equipment? Yes_____ No_____ N/A_____ 4) the construction materials and the area immediately surrounding the external portion of the system? Yes_____ No_____ N/A_____	
(725.295(b))	If the tank system has cathodic protection, is the owner/operator complying with Section 725.295(b) to ensure that they are functioning properly? Yes_____ No_____ N/A_____	
(725.295(c))	Does the owner/operator document in the operating record, the results of tank inspections as required in Section 725.295(a) and (b)? Yes_____ No_____ N/A_____	

2B

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.296)	If the tank system or secondary containment system has a leak or spill or is unfit for use, has the owner/operator: a) immediately ceased using; prevented flow or addition of waste and inspected the system to determine the cause of the release? Yes_____ No_____ N/A_____ b) removed applicable waste from the system within 24 hours of detection? Yes_____ No_____ N/A_____ c) immediately conducted a visual inspection of the release and taken actions to contain visible releases to the environment, prevented further migration to soils or surface water and removed and properly disposed of any contaminated soil or water? Yes_____ No_____ N/A_____	
(725.296(d))	d) notified the Agency within 24 hours of detection of release? Yes_____ No_____ N/A_____ d)3) within 30 days of detection of release, submitted a report to the Agency that complies with the requirements of Section 725.296(d)(3)? Yes_____ No_____ N/A_____ **Note:** Notification and reports are not necessary if less than 1 pound of material is spilled and it was immediately contained and cleaned up.	
(725.296(e))	e) repaired the tank system prior to returning the tank system to service in the event that a leak has occurred from the primary tank system into the secondary containment system? Yes_____ No_____ N/A_____ e)4) provided secondary containment before returning a tank system to service in the event that the release was from a component of a tank system without secondary containment? Yes_____ No_____ N/A_____ e)4) met the requirements for a new tank system in the event that a component is replaced during repair? Yes_____ No_____ N/A_____ e)4) provided the entire component with secondary containment prior to being returned to use in the event that a leak has occurred in any portion of a component that is not readily accessible for visual inspection? Yes_____ No_____ N/A_____	
(725.296(f))	f) In the event that an extensive repair has been conducted in accordance with subsection (e), submitted to the Agency within 7 days after returning the tank system to use, a certification by an IRPE stating that the repaired system is capable of handling hazardous wastes without release for the intended life of the system? Yes_____ No_____ N/A_____ **Note:** If the owner/operator does not satisfy the requirements of subsections (e)(2) through (e)(4), the tank system must be closed in accordance with Section 725.297.	
(725.297(a))	At the time of closure of a tank system, has the owner/operator removed or decontaminated all waste residues, contaminated components, contaminated soils and structures and equipment and managed them as hazardous waste [unless Section 721.103(d) applies]? Yes_____ No_____ N/A_____	
(725.297(a))	Have the closure plan, closure activities, cost estimates for closure and financial responsibility for tank systems met all requirements specified in Subparts G and H? Yes_____ No_____ N/A_____	
(725.297(b))	If the tank system cannot be "clean" closed, has the owner/operator closed the tank system and performed post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (Section 725.410)? Yes_____ No_____ N/A_____ **Note:** Such a tank system is considered a landfill and must meet all of the requirements of landfills specified in Subparts G and H.	

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Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.298(a))	Are ignitable or reactive wastes placed in a tank system? Yes_____ No_____ N/A_____ If "No", skip to Section 725.299. Is the waste treated, rendered or mixed before or immediately after placement in the tank system so that: - the resulting waste, mixture or dissolved material is no longer ignitable or reactive? Yes_____ No_____ N/A_____ - Section 725.117(b) is complied with? Yes_____ No_____ N/A_____ or Is the waste accumulated or treated so that it is protected from any material or conditions which may lead to ignition or reaction? Yes_____ No_____ N/A_____ or Is the tank used solely for emergencies? Yes_____ No_____ N/A_____	
(725.298(b))	Is the facility complying with the requirements regarding maintenance of protective distances between the waste management area and any public ways, streets, alleys or any adjoining property line? Yes_____ No_____ N/A_____	
(725.299)	Are incompatible wastes/materials placed in the same tank? Yes_____ No_____ N/A_____ If "No", skip to Section 725.300. Is Section 725.117(b) being complied with? Yes_____ No_____ N/A_____ Has the tank system been properly decontaminated if it previously held an incompatible waste/material unless Section 725.117(b) is complied with? Yes_____ No_____ N/A_____ COMMENTS:	
(725.302)	**Section 725.302 Air Emission Standards** Is the owner or operator managing all hazardous waste placed in tanks in accordance with Subparts AA, BB and CC of Part 725? Yes_____ No_____ N/A_____ Comments:	

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Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.131)	**SUBPART C: PREPAREDNESS AND PREVENTION** Is the facility being operated and maintained to minimize the possibility of a fire, explosion or any release of hazardous waste or hazardous waste constituents which could threaten human health or the environment? Yes_____ No_____ N/A_____ OPEN WASTE PILES	
(725.132)	Is the facility equipped with the following, if necessary: a) an internal communication or alarm system(s)? Yes ✓ No_____ N/A_____ b) a telephone or other device to summon emergency assistance from local authorities? Yes ✓ No_____ N/A_____ c) portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment? Yes ✓ No_____ N/A_____ d) water at adequate volume and pressure for fire control? Yes ✓ No_____ N/A_____	Per contingency PLAN + INSPection
(725.133)	Is the facility testing and maintaining communication/alarm system(s), fire protection equipment, spill control equipment and decontamination equipment? Yes ✓ No_____ N/A_____	
(725.134)	a) Where hazardous waste is being handled, do all employees have immediate access to an internal alarm or other emergency communication device? Yes ✓ No_____ N/A_____ b) If there is ever just one employee on the premises when the facility is operating, does he/she have immediate access to a device capable of summoning external emergency assistance? Yes ✓ No_____ N/A_____	
(725.135)	Is the facility maintaining adequate aisle space? Yes ✓ No_____ N/A_____	
(725.137)	Has the facility attempted to make the following arrangements, as appropriate, for the type of facility and waste: - arrangements with local emergency authorities (i.e. police and fire departments, other emergency response agencies) to familiarize them with the layout of the facility, properties of hazardous waste handled, places where facility personnel would be working, entrances to roads inside the facility and evacuation routes? Yes ✓ No_____ N/A_____ - agreements designating the primary authority where more than one police or fire department might respond? Yes_____ No_____ N/A ✓ - agreements with State emergency response teams, contractors and equipment suppliers? Yes ✓ No_____ N/A_____ - arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the type of injuries or illnesses which could result from fires, explosions or releases at the facility? Yes ✓ No_____ N/A_____	
	SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES	
(725.151(a))	Is the contingency plan available? Yes ✓ No_____ N/A_____ If "No", skip to Section 725.155. Is the plan designed to protect human health and the environment from releases to the air, soil and water? Yes ✓ No_____ N/A_____	
(725.151(b))	Has there been a fire, explosion or release of hazardous waste? NO Yes_____ No ✓ N/A_____ If "Yes", has the contingency plan been carried out immediately? Yes_____ No_____ N/A ✓	
152(a))	Does the plan describe the actions required for response to: - fires? Yes ✓ No_____ N/A_____ - explosions? Yes ✓ No_____ N/A_____ - releases? Yes ✓ No_____ N/A_____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.152(c))	Does the plan describe arrangements with: - police and fire departments? Yes___ No ✓ N/A___ - hospitals? Yes___ No ✓ N/A___ - contractors? Yes___ No ✓ N/A___ - emergency response teams? Yes___ No ✓ N/A___	
(725.152(d)	Does the plan contain the current emergency coordinator's name, phone (office and home) and address? 2 Alternates. → home address not included. Yes ✓ No___ N/A___	
(725.152(e))	Does the plan identify all emergency equipment including: - description? Yes ✓ No___ N/A___ - capability? Yes___ No ✓ ~~N/A~~ - location? Yes ✓ No___ N/A___ Is the list of emergency equipment up-to-date? Not inspected. Yes___ No___ N/A___	No for Spill Response Kit.
(725.152(f))	Does the plan include: - an evacuation plan? Yes ✓ No___ N/A___ - an evacuation signal? Yes ✓ No___ N/A___ - alternate evacuation routes? Yes ✓ No___ N/A___	
* (725.153)	Has the contingency plan (including all revisions) been: a) maintained at the facility? Yes___ No___ N/A___ b) submitted to: - police department? Yes ✓ No___ N/A___ - fire department? Yes ✓ No___ N/A___ - hospital? Yes ✓ No___ N/A___ - emergency response teams? Yes___ No___ N/A ✓	
(725.154)	Has the contingency plan been reviewed and revised whenever: a) regulations are revised? Yes___ No___ N/A ✓ b) the plan fails in an emergency? Yes___ No___ N/A ✓ c) the facility changes in a way that modifies the emergency response necessary? Yes ✓ No___ N/A___ d) information regarding emergency coordinators changes? Yes ✓ No___ N/A___ e) information regarding equipment changes? Yes ✓ No___ N/A___	
(725.155)	Is the emergency coordinator on-site or on call at all times? Yes ✓ No___ N/A___ Is the emergency coordinator familiar with all facility activities, wastes, records, layout and contingency plan? Yes ✓ No___ N/A___ Does the emergency coordinator have the authority to commit the resources needed to carry out the actions specified in the contingency plan? Yes ✓ No___ N/A___	
(725.156)	If the facility has had a release, fire or explosion, have the procedures of this Section been followed regarding assessment, response and reporting? Yes___ No___ N/A ✓ **Note:** If the facility has had a release, explain in detail.	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.116(a))	**Section 725.116 Personnel Training** Does the facility have a training program? Yes ✓ No____ N/A____ Have facility personnel successfully completed a program of classroom or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 725? Yes ✓ No____ N/A____ Is the program directed by a person trained in hazardous waste management procedures? Yes ✓ No____ N/A____ Does the program teach facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed? Yes ✓ No____ N/A____ Does the program cover, at a minimum: - procedures to familiarize facility personnel with emergency procedures, emergency equipment and emergency systems? Yes____ No____ N/A____ - procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment? Yes____ No____ N/A____ - key parameters for automatic waste feed cut-off systems? Yes____ No____ N/A____ - communications or alarm systems? Yes____ No____ N/A____ - response to fire or explosions? Yes____ No____ N/A____ - response to groundwater contamination incidents? Yes____ No____ N/A____ - shutdown of operations? Yes____ No____ N/A____ no description	
(725.116(b))	Have new employees completed the program within 6 months of the date of employment or assignment to a position requiring them to manage hazardous waste? not inspected Yes____ No____ N/A____	
(725.116(c))	Have facility personnel received an annual review of the initial training? Yes ✓ No____ N/A____	
(725.116(d))	Are the following documents and records being maintained at the facility: 1) the job title for each position related to hazardous waste management and the name(s) of the employee(s) filling each job? Yes ✓ No____ N/A____ 2) a written job description for each position above, including the requisite skill, education or other qualifications and duties of personnel assigned to each position? Yes ✓ No____ N/A____ 3) a written description of the type and amount of both initial and continuing training that will be given to each person filling a position dealing with hazardous waste management? Yes____ No ✓ N/A____ 4) records documenting that the training or job experience has been given to and completed by facility personnel? Yes ✓ No____ N/A____	
(725.116(e))	Is the facility maintaining training records until closure of the facility and those of former employees for at least 3 years from the last date of employment? Yes ✓ No____ N/A____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
728.107(a)(5))	**Section 728.107 Waste Analysis and Recordkeeping** Has the generator who treats a prohibited waste in tanks or containers in order to meet the treatment standards developed and followed a waste analysis plan? Yes____ No____ N/A ✓ Is the plan on-site? Yes____ No____ N/A____ Does the plan include a detailed physical and chemical analysis? Yes____ No____ N/A____ Has the plan been filed with the Agency at least 30 days prior to commencement of treatment activity? Yes____ No____ N/A____ Has the generator submitted the required notification and certification that the waste meets treatment standards when the waste is shipped off-site? Yes____ No____ N/A____	
722.134(c)	**Section 722.134 Satellite Accumulation** Is the generator who accumulates hazardous waste at or near any point of generation where wastes initially accumulate and which is under the control of the operator of the process generating the waste, limiting such accumulation to 55 gallons of hazardous waste or 1 quart of **acutely** hazardous waste, complying with Sections 725.271, 725.272 and 725.273(a), and marking the containers with the words "Hazardous Waste" or other words identifying the contents? Yes ✓ No____ N/A____ Has the generator who accumulates more than 55 gallons of hazardous waste or 1 quart of **acutely** hazardous waste complied with the requirements of Section 722.134(a) within 3 working days? Yes____ No____ N/A ✓ If there are more than 55 gallons of hazardous waste or 1 quart of **acutely** hazardous waste in the satellite accumulation area, are the containers marked with the date accumulation began? Yes____ No____ N/A ✓ During the 3 day period, is the generator continuing to comply with the requirements of Section 722.134(c)(1) with respect to the excess waste? Yes____ No____ N/A ✓	
722.134(g)	**Note:** A generator that generates 1,000 kilograms or greater of hazardous waste per calendar month which also generates wastewater treatment sludges from electroplating operations that meet the listing description for the hazardous waste code F006 may have alternate accumulation requirements if the conditions of 722.134(g), (h), or (i) are fulfilled.	
	SUBPART D: RECORDKEEPING AND REPORTING	
722.140(a)	**Section 722.140 Recordkeeping** Has the generator retained for a period of 3 years: - a copy of each signed manifest? Yes ✓ No____ N/A____	722.140(a)
722.140(b)	Has the generator retained a copy of each Annual Report and Exception Report for a period of at least three years from the due date of the report (March 1)? Yes ✓ No____ N/A____	722.140(b)
722.140(c)	Has the generator retained for a period of 3 years: - copies of test results, waste analyses or other determinations made in accordance with Section 722.111? Yes ✓ No____ N/A____	722.140(c)
722.140(d)	Does a generator who is involved in any unresolved enforcement action or as requested by the Director continue to maintain the records required in subsections a) and c)? Yes____ No____ N/A ✓	722.140(d)
722.141(a)	**Section 722.141 Annual Reporting** Has the generator who ships hazardous waste off-site for treatment, storage or disposal filed an annual report with the Agency by March 1 for the preceding calendar year? Yes ✓ No____ N/A____ **Note:** If "No", or if deficiencies are noted with the annual report reviewed, contact the Planning and Reporting Section.	722.141(a)

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
722.141(b)	Has the generator who treats, stores or disposes of hazardous waste on-site, filed an annual report with the Agency by March 1 for the preceding calendar year? Yes_____ No_____ N/A_____	722.141(b)
	Section 722.142 Exception Reporting	
722.142(a)(1)	If the generator has not received a copy of the manifest from the TSD facility within 35 days of the date of delivery to the transporter, has the generator contacted the transporter or the TSD facility to determine the status of the hazardous waste? Yes_____ No_____ N/A_____	722.142(a)(1)
722.142(a)(2)	If the generator has not received a copy of the signed manifest within 45 days of the date of delivery to the transporter, has he filed an exception report with the Agency in accordance with the requirements of this Section? Yes_____ No_____ N/A_____	722.142(a)(2)
722.143	**Section 722.143 Additional Reporting** Has the generator furnished additional reports as required by the Director? Yes_____ No_____ N/A_____	722.143
	SUBPART E: EXPORTS OF HAZARDOUS WASTE	
722.150	Is the generator an exporter of hazardous waste? Yes_____ No_____ N/A_____ If "Yes", has the generator complied with the requirements of Subpart E? Yes_____ No_____ N/A_____	722.150
	SUBPART F: IMPORTS OF HAZARDOUS WASTE	
722.160	Is the generator an importer of hazardous waste? Yes_____ No_____ N/A_____ If "Yes", has the generator complied with the requirements of Subpart F? Yes_____ No_____ N/A_____	722.160
	SUBPART G: FARMERS	
722.170	Is the generator a farmer? Yes_____ No_____ N/A_____ If "Yes", has the generator complied with the requirements of Subpart G? Yes_____ No_____ N/A_____	722.170
	COMMENTS:	

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HB

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- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Michael Altepeter, Env. Manager
Big River Zinc Corporation
2401 Mississippi Avenue
Sauget, IL 62201

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* Susan Forney

B. Date of Delivery

C. Signature

X Susan Forney

☐ Agent
☐ Addressee

D. Is delivery address ~~different~~ from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☑ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

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Case Conclusion Data Sheet

Please click here for instructions for completing the form

Program Contact: Michael Cunningham
Phone: 886-4464

ORC Attorney: Craig Melodia
Phone: 353-8870

Status: ☒ Draft ☐ Final ☐ Update

CASE BACKGROUND

1. ICIS Enforcement Activity Number:
2. Regional Hearing Clerk Docket Number:
3. Program Docket Number:

4. Judicial Court Docket Number:
*5. Case Name (Add Defendants if other than case name) **Big River Zinc**
Additional Defendants:

FACILITY INFORMATION

6. EPA Program Facility ID: ILD 062 444 435
*7. Facility Name: Big River Zinc Corporation
*8. Facility Street Address: 2401 Mississippi Avenue
City, State, Zipcode: Sauget, IL 62201
County:

*9. Primary 4-digit NAICS/SICCode:
10. Other 4-digit NAICS/SIC codes:

STATUTES AND AUTHORIZING SECTION INFORMATION

***Media Program** **RCRA**
*11. Statute(s) and Section(s) Violated: RCRA 3005A
*12. Authorizing Section for Administrative Actions: RCRA 3008A
***Violation Type:** **RCRA Permit Evader**

ACTION TYPE

*13. Action Type: **Administrative penalty order (with or without injunctive relief)**
*14. Administrative Complaint Issuance Date:
14a. ALJ Decision:
14b. EAB Appeal Date:
14c. EAB Decision Date:
*15. Final Administrative Penalty Order Issuance Date:
*16a. Notice of Determination Date: **03/09/2000**

*16b. Field Citation Date: **03/09/2000**
16c. Notice of Violation Date:

17. Civil Judical Referral Date:
18. Civil Judicial Complaint Filed:

19. Consent Decree Lodge Date:
*20. Consent Decree Entry Date:

21. Was this a multi-media action? ○ Yes ● No

23. Was this action part of a geographic initiative: ● Yes ○ No
24. Which (Check all that apply)? Gateway

24a. Priority/Sector
25. Was this Agency activity taken in response to Environmental Justice Concerns?
○ Yes ● No
26. Is this a Small Business? ○ Yes ● No
26a. Was this a self-disclosure? ○ Yes ● No
27. Was Alternative Dispute Resolution used in this action? ○ Yes ● No

QUALITATIVE AND QUANTITATIVE INFORMATION

*28. Injunctive Relief/Compliance Activity: Include both actions completed prior to final settlement/order and actions to be taken by violator to return to compliance or meet additional requirements. Select responses from the following list. At least one action must be chosen:
No action/penalty only

*29. Provide Description of Injunctive Relief/Compliance Activity:

*30. Cost of actions described in previous question (Actual cost data supplied by violator is preferred figure)
Physical actions: Non-Physical Actions:

31. Acres in Violation:

32. Quantitative environmental impact of injunctive relief/compliance actions described in previous questions:
REDUCTIONS/ELIMINATIONS:

*Pollutant/Land Use	*Amount	*Units/Acres (Express in annual amounts)	*Percent% (of pollutant reduced/removed)	*Media

SUPPLEMENTAL ENVIRONMENTAL PROJECTS (SEPs)

PENALTY

37. Proposed Penalty: $3,271.00

38. Assessed Penalty: **$3,271.00**

39. If Shared Federal Share:

40. If Shared State or Local Share:

41. For multi-media actions: Federal amounts by Statute

Statute	Amount
CAA	
CERCLA	
CWA 402	
CWA 311	
CWA 404	
EPCRA 304/312/325	
EPCRA 313	
FIFRA	
RCRA	
RCRA/UST	
SDWA/UIC	
TSCA	

COST RECOVERY (SUPERFUND ONLY)

42. Amount of cost recovery award: State and/or Local government:
Other:

*PLEASE ADD ADDITIONAL INFORMATION, INCLUDING SHORT CASE SUMMARY:

Big River Zinc accepted secondary material which exhibited the characteristic for lead and cadmium. The material was used to make a product that is placed on the land, and was therefore a hazardous waste. Big River Zinc does not have a hazardous waste permit for acceptance and storage of hazardous waste.

DOCUMENT HISTORY

ILD 062 444 435

NPT D –

HARRIET CROKE

Big River Zinc
2401 Mississippi Avenue
Sauget, Illinois 62201

Phone 618 274 5000
Fax 618 274 4444

RECEIVED
FEB 22 2006
U.S. EPA REGION 5
OFFICE OF REGIONAL ADMINISTRATOR

February 17, 2006

Regional Administrator, Region V
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604.

RE: Excluded Materials

Dear Sir/Madam:

In accordance with the provisions of 40 CFR 261.4(a)(20)(iii)(D) the following report for materials received under this exclusion in 2005 is submitted.

Thank you for your assistance. If there are any questions, I can be reached at (618) 274-5000, extension ~~113~~ or 194.

Sincerely,

Michael A. Altepeter

Michael A. Altepeter
Environmental Manager/ Senior Process Engineer
maltepeter@bigriverzinc.com

Name	Address	Process	Quantity
AMERISTEEL	801 Ameristeel Road, Jackson, TN 38305	Crude Zinc Oxide (=EAF Dust)	0 lbs
US ZINC	6020 Navigation Blvd, Houston, TX 77001	Galvanizer Ash, Retort Zinc	303,366 lbs
METAL SOURCE	505 W. Canal, P.O. Box 238 Wabash, IN 46992	Zinc Dross from die-cast skimmings	0 lbs
IMPERIAL ZINC	1031 East 103rd Street, Chicago, IL 60628	Zinc Dross from die-cast skimmings	0 lbs
ZN NACIONAL	Serafin Pena # 938 Sur 64000 Monterrey, N.L Mexico	Crude Zinc Oxide (=EAF Dust)	1,020,000 lbs
NATIONAL ZINC PROCESSOR	1256 Milton Street Benton Harbor, MI 49022	Zinc Dross from die-cast skimmings	0 lbs
NATIONAL METALS	P.O. Box 102 Leeds, AL 35094	Bag house Fines	0 lbs
EXETER ENERGY	10 Exeter Dr., P.O. Box 188 Sterling, CT 06377	Bag house Fines	0 lbs
INGOT	111 Fenmar Dr. Weston, Ontario M9L 1M3 Canada	Bag house Fines	0 lbs
FALL RIVER	670 S. Main St. PO Box 38, Fall River WI 53932	Bag house Fines	0 lbs
OLIN CORPORATION	427 N Shamrock St. East Alton, IL 62024	Bag house Fines	0 lbs
CINSIDAR	357 Bay Street, Suite 300 Toronto, Ontario M5H 2T7	Bag house Fines	82,937 lbs
OUTOKUMPU Valleyfield	831 North Meade Street Appleton, WI 54912	Brass & Bronze producer	74,035 lbs
OUTOKUMPU American Brass	70 Sayre Street Buffalo, NY 14207	Brass & Bronze producer	198,353 lbs
CHEMTECH	10816 State Route 21, Suite D P.O. Box 914 Hillsboro, MO 63050	Zinc Oxide broker	2,400 lbs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5
77 W. Jackson Blvd.
Chicago, IL 60604

CONVERSATION RECORD

Subject: Big River Zinc Corp., site plan and FOIA

DATE: 12/02/05
TIME: 10:20 A.M

PERSON IN CONTACT WITH: George Obeldobel, CEO.
ORGANIZATION: Big River Zinc Corporation
PHONE #: (618) 274-6240

TYPE: TELEPHONE (x)

- *Incoming* (x)
- *Outgoing* ( )
- *Voice Mail* ( )

CONFERENCE ( )

- *Location*:

VISIT ( )

- *Location*:

SUMMARY

Mr. Obeledobel returned my call regarding Big River Zinc's Site Plan map, and its potential responsiveness to a FOIA from the National Mining Association. I explained to Mr. Obeledobel that at the time I received the map, no verbal claim of confidentiality was made by Big River Zinc. I read him the drawing number on the map and its date. I also read him the confidentiality disclaimer written on the map. He stated Big River Zinc had no objections to its release. Mr. Obeldobel also explained that the company will be shutting down operations in February of 2006.

Todd Brown

Todd Brown
Environmental Scientist
USEPA-Region 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5

CONVERSATION RECORD

SUBJECT: Big River Zinc

DATE: 10/25/05
TIME: 2:45 P.M.

PERSON IN CONTACT WITH: Janice Barrier

ORGANIZATION: Occupational Safety and Health Administration (OSHA)

PHONE #: (630) 632-8612

TYPE: TELEPHONE (X) **CONFERENCE ( )** **VISIT ( )**
***INCOMING* (X)** **LOCATION:**
***OUTGOING* ()**
***VOICE MAIL* ( )**

SUMMARY

Ms. Barrier returned my phone call regarding the storage of cadmium sponge at Big River Zinc. Ms. Barrier asked for my information, and if I would like a report on OSHA's investigation. I explained that I did not need any formal response from OSHA, but that I would be interested in the results of their investigation. I also explained to Ms. Barrier that my office is referring this matter to OSHA as a precaution only, and that at this time, we do not have any direct knowledge that workers are in fact being exposed to any hazardous posed by the cadmium sponge. However, I explained that my understanding of what the cadmium sponge was (i.e. pure cadmium metal) and the fact that it is stored in an open pile inside of a building, caused my management and I to be concerned about potential exposure to employees. I stated that for all I knew, employees were taking required safety precautions to protect themselves from exposure to the substance. I gave Ms. Barrier an explanation of what I knew about the cadmium sponge and how it is stored. I also gave Ms. Barrier an account of how much of the material was disposed of during the years of 2002-2004. I also told Ms. Barrier that I would e-mail her a photograph I took of the cadmium sponge as it was being stored during my inspection.

Todd Brown 10/25/05

Todd C. Brown
Environmental Scientist
Wastes, Pesticides and Toxics Division
Enforcement and Compliance Assurance Branch
U.S. EPA-Region 5

Todd Brown/R5/USEPA/US
10/25/2005 03:00 PM

To barrier.janice@dol.gov
cc
bcc

Subject Big River Zinc

Here is the digital photograph of the Cadmium Sponge I told you about. It is the grey sand like material i the photograph (I think I said blue in our phone conversation).

100_0537.JPG.zi

Thank you for your interest in looking into this. Please let me know if I can be of any help.

Sincerely:

Todd C. Brown
U.S. EPA - Region 5
Waste, Pesticides, and Toxics Division
Enforcement and Compliance Assurance Branch
(312) 886-6091
brown.todd@epa.gov

Attachment A: Photographs taken during CEI

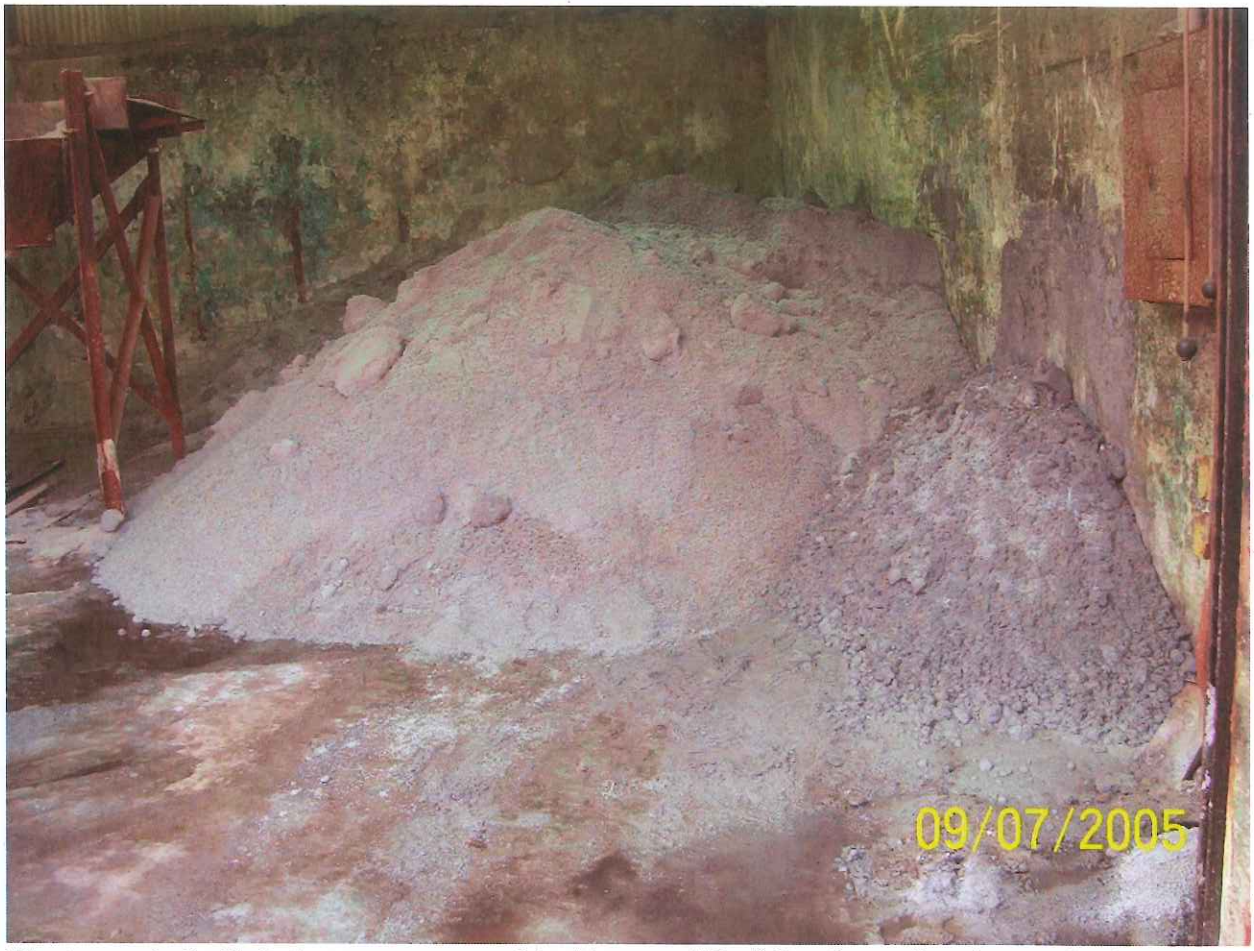
Photograph 1. Piles of zinc concentrates stored on a concrete pad at the north-eastern corner of the Big River Zinc Corporation plant in Sauget, IL. The digital photograph was taken on September 7, 2005, at approximately 9:50 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 2. Wastewater treatment solids (brown pile on right) and gypsum derived from the cell room (white pile on left) stored on a concrete pad outside the oxide treatment plant at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 7, 2005, at approximately 9:58 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 3. Pile of solid earthen material outside and to the north of the leach plant at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 8, 2005, at approximately 10:40 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 4. Silver concentrate derived from the leaching procedure, stored outside under a roofed area, adjacent to the leach plant, at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 7, 2005, at approximately 10:51 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 5. Silver concentrate derived from the leaching procedure, stored outside under a roofed area, adjacent to the leach plant, at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 7, 2005, at approximately 10:51 A.M. The photographer was Todd Brown, U.S. EPA.



Photograph 6. Cadmium sponge stored inside a small building located to the North of the leach plant at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 7, 2005, at approximately 11:05 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 7. "Copper Cement" stored in 55-gallon containers outside, and in close proximity to the leach plant at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 7, 2005, at approximately 11:14 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 8. Filter cloth lying on the ground and partially underneath a roll-off container used to store hazardous waste at Big River Zinc Corporation. As can be seen by the photograph, a white substance coats the ground in the vicinity of the filter cloth. The digital photograph was taken at approximately 11:15 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 9. Close-up of discarded filter cloth featured in photograph 8. The digital photograph was taken at approximately 11:15 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 10. Roll-off container of hazardous waste outside of the leach plant, at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 7, 2005, at approximately 11:20 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 11. Roll-off container of hazardous waste outside of the leach plant (also featured in photograph 10) at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 7, 2005, at approximately 11:20 A.M. The photographer was Todd Brown, U.S. EPA.

Photograph 12. Bags of zinc oxide and zinc dust stored under roof, outside of the casting plant at Big River Zinc Corporation, Sauget, IL. The digital photograph was taken on September 7, 2005, at approximately 11:55 A.M. The photographer was Todd Brown, U.S. EPA.

ATTACHMENT B: BIG RIVER ZINC Corporation INSPECTION 9/6-9/7/05

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
	PART 722: STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE (>1000 KG/MO.)	
	SUBPART A: GENERAL	
722.111	**Section 722.111 Hazardous Waste Determination** Has the generator correctly determined if the solid waste(s) it generates is a hazardous waste? APPEARS SO. Yes____ No____ N/A____ Have hazardous wastes been identified for purposes of compliance with Part 728? Yes ✓ No____ N/A____	722.111
808.121(a)	Has the generator correctly determined if the solid waste(s) it generates is a special waste? Yes ✓ No____ N/A NA	808.121(a)
722.112(a)	**Section 722.112 USEPA Identification Numbers** Has the generator obtained a USEPA identification number? Yes ✓ No____ N/A____	722.112(a)
722.112(c)	Has the generator offered its hazardous waste only to transporters or to treatment, storage or disposal facilities that have a USEPA identification number? APPEARS SO Yes ✓ No____ N/A____	722.112(c)
	SUBPART B: THE MANIFEST	
722.120(a)	**Section 722.120 General Requirements** Does the facility manifest its waste off-site? Yes ✓ No____ N/A____	722.120(a)
722.120(b)	Does the manifest designate a facility permitted to handle the waste? Yes ✓ No____ N/A____	722.120(b)
722.120(d)	Has the generator shipped any waste that could not be delivered to the designated facility? Yes____ No ✓ N/A____	722.120(d)
722.121(a) 722.121(b)	**Section 722.121 Acquisition of Manifests** Has the generator used: - an Illinois manifest for wastes designated to a facility within Illinois? Yes ✓ No____ N/A____ - a manifest from the State to which the manifest is designated? Yes ✓ No____ N/A____ - an Illinois manifest if the State to which the waste is designated has no manifest of its own? Yes ✓ No____ N/A____	722.121(a) 722.121(b)
722.122	**Section 722.122 Number of Copies** Does the manifest consist of at least 6 copies? Yes ✓ No____ N/A____	722.122
722.123(a) 722.123(b) 722.123(c)	**Section 722.123 Use of the Manifest** For each manifest reviewed, has the generator: - signed the certificate by hand? Yes ✓ No____ N/A____ - obtained the handwritten signature and the date of acceptance by the initial transporter? Yes ✓ No____ N/A____ - retained one copy as required by Section 722.140(a)? Yes ✓ No____ N/A____ - apparently sent a copy (part 5 for the Illinois manifest) to the Agency within 2 working days? Yes ✓ No____ N/A____ - has the generator apparently given the remaining copies to the transporter? Yes ✓ No____ N/A____ - has the generator followed the procedures prescribed in Section 722.123 for manifesting bulk shipments of hazardous waste by rail or water? Yes____ No____ N/A ✓	722.123(a) 722.123(b) 722.123(c)

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
	SUBPART C: PRE-TRANSPORT REQUIREMENTS	
.130	Is there any hazardous waste ready for transport off-site? Yes____ No ✓ N/A____ If so, is the generator complying with the pre-transport requirements in Subpart C? Yes____ No N/A ✓	722.130
	Section 722.134 Accumulation Time	
(722.134(a))	Has the generator complied with the following requirements: Yes____ No____ N/A____	
(722.134(a)(1))	A) For waste in containers, has the generator complied with the requirements of Part 725, Subpart I, AA, BB, and CC? Yes ✓ No____ N/A____ and/or B) For waste in tanks, has the generator complied with the requirements of Part 725, Subpart J, AA, BB, and CC (except Sections 725.297(c) and 725.300)? Yes____ No____ N/A ✓ and/or C) For waste on drip pads, has the generator complied with the requirements of Part 725, Subpart W and maintained the required records identified in this subsection? Yes____ No____ N/A ✓ and/or D) For waste in containment buildings, has the generator complied with Part 725, Subpart DD and maintained the required records identified in this subsection? Yes____ No____ N/A____	
(722.134(a)(2))	For waste in containers, has the generator marked and made visible for inspection on each container, the date upon which accumulation began? Yes ✓ No____ N/A____	
(722.134(a)(3))	For waste in containers and tanks, has the generator marked or labeled each with the words "Hazardous Waste"? Yes____ No____ N/A ✓	
(722.134(a)(4))	Has the generator complied with the requirements of Part 725, Subparts C and D, and Sections 725.116 and 728.107(a)(4)? NOT All Yes____ No ✓ N/A____	
	Specifically, the requirements of items 1 and/or 4 above (listed by regulation) which need to be complied with are as follows: See report	
	Does the facility accumulate hazardous waste in containers? Yes ✓ No____ N/A____ If "No", go to Subpart J.	
	SUBPART I: USE AND MANAGEMENT OF CONTAINERS	
(725.211)	Has the generator closed an accumulation area? Yes____ No ✓ N/A____	725.211
(725.214)	If "Yes", was the accumulation area closed in accordance with Sections 725.211 and 725.214? Yes____ No ✓ N/A____	725.214
(725.271)	If the containers have leaked or are in poor condition, has the owner/operator transferred the hazardous waste to a suitable container? Yes____ No____ N/A ✓	
(725.272)	Is the waste compatible with the container and/or liner? Yes ✓ No____ N/A____	
(725.273(a))	Are containers of hazardous waste always closed except to remove or add waste during accumulation? Yes ✓ No____ N/A____	
273(b))	Are containers of hazardous waste being opened, handled, or stored in a manner which will prevent the rupture of the container or prevent it from leaking? Yes ✓ No____ N/A____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.274)	Is the owner/operator inspecting the accumulation area(s) at least weekly, looking for leaks or deterioration? Only documented for sure [illegible] Yes ✓ No____ N/A____ Is the accumulation area free from any evidence of leaking or deteriorating containers? (See also Section 725.131) Yes ✓ No____ N/A____	
(725.276)	Are containers holding ignitable or reactive wastes located at least 15 meters (50 feet) from the facility's property line? Yes____ No____ N/A ✓ **Note:** See Section 725.117(a) for additional requirements for ignitable, reactive or incompatible wastes.	
(725.277)	Is the owner/operator complying with the requirements concerning incompatible wastes? Yes____ No____ N/A ✓ COMMENTS:	
(725.278)	**Section 725.278 Air Emission Standards** Is the owner or operator managiing all hazardous waste placed in containers in accordance with Subparts AA, BB and CC of Part 725? Yes____ No____ N/A ✓ Comments: Does the generator accumulate and/or treat hazardous waste in tanks? Yes____ No____ N/A ✓ **Note:** If "No", go to Subpart C.	
	SUBPART J: TANK SYSTEMS	
(725.211) (725.214)	Has the generator closed an accumulation area? Yes____ No____ N/A____ If "Yes", was the accumulation area closed in accordance with Sections 725.211 and 725.214? Yes____ No____ N/A____	725.211 725.214
(725.290)	Does the facility accumulate or treat hazardous waste in tanks? Yes____ No____ N/A____ **Note:** A generator may treat hazardous waste in a tank for less than 90 days without a RCRA permit. If "No", skip Subpart J. a) Tank systems that are used to accumulate or treat hazardous waste which contains no free liquids (using the Paint Filter Liquids Test) and that are situated inside a building with an impermeable floor are exempted from the requirements in Section 725.293. b) Tank systems, including sumps, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 725.293(a). c) Tanks, sumps and other collection devices used in conjunction with drip pads (as defined in Section 720.110) and regulated under Subpart W, must meet the requirements of this Subpart.	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.291(a))	For tanks **existing** prior to July 14, 1986 (see definition of tank system under 720.110) and not protected by a secondary containment system, has a written assessment been reviewed and certified by an IRPE(*) in accordance with Section 702.126(d) by January 12, 1988 [except as provided in Section 725.291(c)]? Yes_____ No_____ N/A_____	
(725.291(b))	Does this assessment consider at least the following: 1) design standards for the tank and ancillary equipment? Yes_____ No_____ N/A_____ 2) hazardous characteristics of the wastes? Yes_____ No_____ N/A_____ 3) existing corrosion protection measures? Yes_____ No_____ N/A_____ 4) documented age of the tank system? Yes_____ No_____ N/A_____ 5) results of a leak test, internal inspection, or other tank integrity examination? Yes_____ No_____ N/A_____ *IRPE = Independent Registered Professional Engineer	
(725.291(c))	Has a tank system assessment been performed within 12 months after the materials in the tank become a hazardous waste? Yes_____ No_____ N/A_____ **Note:** If an assessment indicates a tank system is leaking or unfit for use, the owner/operator must comply with the requirements of Section 725.291(b)(5).	
(725.292(a))	For **new** tanks (see definition of new tanks under Section 720.110) whose installation commenced after 07/14/86, has a written assessment been reviewed and certified by an IRPE in accordance with Section 702.126(d) prior to operation of the tank system? Yes_____ No_____ N/A_____ Does the assessment include, at a minimum, the following: 1) design standards for tanks and ancillary equipment? Yes_____ No_____ N/A_____ 2) hazardous characteristics of the waste(s) to be handled? Yes_____ No_____ N/A_____ 3) evaluation of potential for corrosion and corrosion protection measures for tank systems with metal components in contact with soil or water? Yes_____ No_____ N/A_____ 4) design or operational measures that will protect underground tank systems from potential damage resulting from vehicular traffic? Yes_____ No_____ N/A_____ 5) designs to ensure adequate foundations, anchoring to prevent flotation or dislodgment and the ability to withstand the effects of frost heave? Yes_____ No_____ N/A_____	
(725.292(g))	Has the owner/operator obtained and kept on file at the facility the written statements, including the certification statements [as required in Section 702.126(d)] of the design and installation requirements of Subsections (b) through (f)? Yes_____ No_____ N/A_____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.293(a))	Is secondary containment provided for any new tank system before being put into service? Yes_____ No_____ N/A_____ Does an existing tank, used to accumulate F020, F021, F022, F023, F026 or F027 waste(s), have secondary containment by 1/12/89? Yes_____ No_____ N/A_____ For an existing tank of documentable age, is secondary containment provided by 1/12/89 or when the tank is 15 years old, whichever is later? Yes_____ No_____ N/A_____ For an existing tank of undocumentable age, has secondary containment been provided by 1/12/95? Yes_____ No_____ N/A_____ or if the facility is older than 7 years, by the time the facility reaches 15 years of age or 1/12/89, whichever is later? Yes_____ No_____ N/A_____ For tanks that accumulate wastes that become hazardous after 1/12/87, has secondary containment been provided within the time intervals required in Subsections (a)(1) through (a)(4) substituting the date that a material becomes a hazardous waste for 1/12/87? Yes_____ No_____ N/A_____	
(725.293(b))	Is the secondary containment system designed, installed and operated to prevent migration of wastes or accumulated liquid out of the system at any time? Yes_____ No_____ N/A_____ Is the secondary containment system capable of detecting and collecting releases and accumulated liquids until the collected material is removed? Yes_____ No_____ N/A_____	
(725.293(c))	To meet the requirements of Subsection (b), is the secondary containment system: 1) compatible with the waste(s) in the tank and of sufficient strength and thickness to prevent failure? Yes_____ No_____ N/A_____ 2) placed on a foundation or base capable of providing support, providing resistance to pressure gradients and preventing failure due to settlement, compression of uplift? Yes_____ No_____ N/A_____ 3) provided with a leak detection system designed and operated to detect any release or accumulated liquid within 24 hours? Yes_____ No_____ N/A_____ 4) sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation? Yes_____ No_____ N/A_____ and is spilled or leaked waste and accumulated precipitation removed from the secondary containment within 24 hours? Yes_____ No_____ N/A_____ **Note:** A RCRA permit may allow for removal of liquids less frequently than 24 hours after accumulation.	
(725.293(d))	Does the secondary containment for tanks have one or more of the following: 1) a liner (external to the tank); or 2) a vault; or 3) a double-walled tank; or 4) an equivalent device (approved by the Board)? Yes_____ No_____ N/A_____	
(725.293(e))	Does the external liner system(s), vault system(s) and/or double-walled tank(s) meet the additional requirements identified in Section 725.293(e)? Yes_____ No_____ N/A_____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.293(f))	Is ancillary equipment protected by secondary containment that meets the requirement of Subsection (h) and (c)? Yes_____ No_____ N/A_____ If "No": 1) Is aboveground piping (exclusive of flanges, joints, valves and connections) inspected daily? Yes_____ No_____ N/A_____ 2) Are welded flanges, joints and connections inspected daily? Yes_____ No_____ N/A_____ 3) Are sealless or magnetic coupling pumps and sealless valves inspected daily? Yes_____ No_____ N/A_____ 4) Are pressurized aboveground piping systems with automatic shut-off devices inspected daily? Yes_____ No_____ N/A_____	
(725.293(i))	Until such time as secondary containment is provided, are the following requirements being met for all tank systems: 1) For non-enterable underground tanks, has an annual leak test that meets the requirements of 725.291(b)(5) been conducted? Yes_____ No_____ N/A_____ 2) For other than non-enterable underground tanks and ancillary equipment, has an annual leak test, internal inspection or other tank integrity examination by an IRPE been conducted? Yes_____ No_____ N/A_____ 3) Are written records maintained at the facility to document the assessments required under Subsections (i)(1) and (i)(2)? Yes_____ No_____ N/A_____ **Note:** If a tank system is found to be leaking or unfit for use as a result of a leak test or assessment, the owner/operator must comply with Section 725.296.	
(725.294(a))	Has the owner/operator placed hazardous wastes or treatment reagents in the tank system that could cause the system to rupture, leak, corrode or otherwise fail? Yes_____ No_____ N/A_____	
(725.294(b))	Do tanks and secondary containment have appropriate controls and practices to prevent spills and overflows including: 1) spill prevention controls? Yes_____ No_____ N/A_____ 2) overfill prevention controls? Yes_____ No_____ N/A_____ 3) sufficient freeboard in uncovered tanks? Yes_____ No_____ N/A_____	
(725.294(c))	**Note:** If a leak or spill has occurred in the tank system, the owner/operator shall comply with the requirements of Section 725.296.	
(725.295(a))	Does the owner/operator inspect, if present, at least each operating day, the following: 1) overfill/spill control equipment? Yes_____ No_____ N/A_____ 2) the aboveground portion of the tank system for corrosion or releases? Yes_____ No_____ N/A_____ 3) data from monitoring equipment? Yes_____ No_____ N/A_____ 4) the construction materials and the area immediately surrounding the external portion of the system? Yes_____ No_____ N/A_____	
(725.295(b))	If the tank system has cathodic protection, is the owner/operator complying with Section 725.295(b) to ensure that they are functioning properly? Yes_____ No_____ N/A_____	
(725.295(c))	Does the owner/operator document in the operating record, the results of tank inspections as required in Section 725.295(a) and (b)? Yes_____ No_____ N/A_____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.296)	If the tank system or secondary containment system has a leak or spill or is unfit for use, has the owner/operator: a) immediately ceased using; prevented flow or addition of waste and inspected the system to determine the cause of the release? Yes_____ No_____ N/A_____ b) removed applicable waste from the system within 24 hours of detection? Yes_____ No_____ N/A_____ c) immediately conducted a visual inspection of the release and taken actions to contain visible releases to the environment, prevented further migration to soils or surface water and removed and properly disposed of any contaminated soil or water? Yes_____ No_____ N/A_____	
(725.296(d))	d) notified the Agency within 24 hours of detection of release? Yes_____ No_____ N/A_____ d)3) within 30 days of detection of release, submitted a report to the Agency that complies with the requirements of Section 725.296(d)(3)? Yes_____ No_____ N/A_____ **Note:** Notification and reports are not necessary if less than 1 pound of material is spilled and it was immediately contained and cleaned up.	
(725.296(e))	e) repaired the tank system prior to returning the tank system to service in the event that a leak has occurred from the primary tank system into the secondary containment system? Yes_____ No_____ N/A_____ e)4) provided secondary containment before returning a tank system to service in the event that the release was from a component of a tank system without secondary containment? Yes_____ No_____ N/A_____ e)4) met the requirements for a new tank system in the event that a component is replaced during repair? Yes_____ No_____ N/A_____ e)4) provided the entire component with secondary containment prior to being returned to use in the event that a leak has occurred in any portion of a component that is not readily accessible for visual inspection? Yes_____ No_____ N/A_____	
(725.296(f))	f) In the event that an extensive repair has been conducted in accordance with subsection (e), submitted to the Agency within 7 days after returning the tank system to use, a certification by an IRPE stating that the repaired system is capable of handling hazardous wastes without release for the intended life of the system? Yes_____ No_____ N/A_____ **Note:** If the owner/operator does not satisfy the requirements of subsections (e)(2) through (e)(4), the tank system must be closed in accordance with Section 725.297.	
(725.297(a))	At the time of closure of a tank system, has the owner/operator removed or decontaminated all waste residues, contaminated components, contaminated soils and structures and equipment and managed them as hazardous waste [unless Section 721.103(d) applies]? Yes_____ No_____ N/A_____	
(725.297(a))	Have the closure plan, closure activities, cost estimates for closure and financial responsibility for tank systems met all requirements specified in Subparts G and H? Yes_____ No_____ N/A_____	
(725.297(b))	If the tank system cannot be "clean" closed, has the owner/operator closed the tank system and performed post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (Section 725.410)? Yes_____ No_____ N/A_____ **Note:** Such a tank system is considered a landfill and must meet all of the requirements of landfills specified in Subparts G and H.	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.298(a))	Are ignitable or reactive wastes placed in a tank system? Yes_____ No_____ N/A_____ If "No", skip to Section 725.299. Is the waste treated, rendered or mixed before or immediately after placement in the tank system so that: - the resulting waste, mixture or dissolved material is no longer ignitable or reactive? Yes_____ No_____ N/A_____ - Section 725.117(b) is complied with? Yes_____ No_____ N/A_____ or Is the waste accumulated or treated so that it is protected from any material or conditions which may lead to ignition or reaction? Yes_____ No_____ N/A_____ or Is the tank used solely for emergencies? Yes_____ No_____ N/A_____	
(725.298(b))	Is the facility complying with the requirements regarding maintenance of protective distances between the waste management area and any public ways, streets, alleys or any adjoining property line? Yes_____ No_____ N/A_____	
(725.299)	Are incompatible wastes/materials placed in the same tank? Yes_____ No_____ N/A_____ If "No", skip to Section 725.300. Is Section 725.117(b) being complied with? Yes_____ No_____ N/A_____ Has the tank system been properly decontaminated if it previously held an incompatible waste/material unless Section 725.117(b) is complied with? Yes_____ No_____ N/A_____ COMMENTS:	
(725.302)	**Section 725.302 Air Emission Standards** Is the owner or operator managing all hazardous waste placed in tanks in accordance with Subparts AA, BB and CC of Part 725? Yes_____ No_____ N/A_____ Comments:	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.131)	**SUBPART C: PREPAREDNESS AND PREVENTION** Is the facility being operated and maintained to minimize the possibility of a fire, explosion or any release of hazardous waste or hazardous waste constituents which could threaten human health or the environment? UNDETERMINED Yes____ No____ N/A____	
(725.132)	Is the facility equipped with the following, if necessary: a) an internal communication or alarm system(s)? Yes✓ No____ N/A____ b) a telephone or other device to summon emergency assistance from local authorities? Yes✓ No____ N/A____ c) portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment? Yes✓ No____ N/A____ d) water at adequate volume and pressure for fire control? Yes✓ No____ N/A____	
(725.133)	Is the facility testing and maintaining communication/alarm system(s), fire protection equipment, spill control equipment and decontamination equipment? Yes✓ No____ N/A____	
(725.134)	a) Where hazardous waste is being handled, do all employees have immediate access to an internal alarm or other emergency communication device? Yes✓ No____ N/A____ b) If there is ever just one employee on the premises when the facility is operating, does he/she have immediate access to a device capable of summoning external emergency assistance? Yes____ No____ N/A✓	
(725.135)	Is the facility maintaining adequate aisle space? Yes✓ No____ N/A____	
(725.137)	Has the facility attempted to make the following arrangements, as appropriate, for the type of facility and waste: - arrangements with local emergency authorities (i.e. police and fire departments, other emergency response agencies) to familiarize them with the layout of the facility, properties of hazardous waste handled, places where facility personnel would be working, entrances to roads inside the facility and evacuation routes? Sent them contingency plan Yes✓ No____ N/A____ - agreements designating the primary authority where more than one police or fire department might respond? Yes____ No____ N/A✓ - agreements with State emergency response teams, contractors and equipment suppliers? State ER did not want Yes____ No____ N/A____ - arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the type of injuries or illnesses which could result from fires, explosions or releases at the facility? sent them plan Yes✓ No____ N/A____	
	SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES	
(725.151(a))	Is the contingency plan available? Yes✓ No____ N/A____ If "No", skip to Section 725.155. Is the plan designed to protect human health and the environment from releases to the air, soil and water? Yes✓ No____ N/A____	
(725.151(b))	Has there been a fire, explosion or release of hazardous waste? Yes____ No✓ N/A____ If "Yes", has the contingency plan been carried out immediately? Yes____ No____ N/A✓	
152(a))	Does the plan describe the actions required for response to: - fires? Yes✓ No____ N/A____ - explosions? Yes✓ No____ N/A____ - releases? Yes✓ No____ N/A____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.152(c))	Does the plan describe arrangements with: - police and fire departments? Yes ✓ No___ N/A___ - hospitals? Yes ✓ No___ N/A___ - contractors? Yes ✓ No___ N/A___ - emergency response teams? Yes ✓ No___ N/A___	
(725.152(d)	Does the plan contain the current emergency coordinator's name, phone (office and home) and address? no address Yes___ No ✓ N/A___	
(725.152(e))	Does the plan identify all emergency equipment including: - description? Yes ✓ No___ N/A___ - capability? Yes ✓ No___ N/A___ - location? Yes ✓ No___ N/A___ Is the list of emergency equipment up-to-date? Yes ✓ No___ N/A___	
(725.152(f))	Does the plan include: - an evacuation plan? Yes ✓ No___ N/A___ - an evacuation signal? Yes ✓ No___ N/A___ - alternate evacuation routes? Yes___ No ✓ N/A___ referred to but not in plan	
(725.153)	Has the contingency plan (including all revisions) been: a) maintained at the facility? Yes ✓ No___ N/A___ b) submitted to: - police department? Yes ✓ No___ N/A___ - fire department? Yes ✓ No___ N/A___ - hospital? Yes ✓ No___ N/A___ - emergency response teams? Yes ✓ No___ N/A___	
(725.154)	Has the contingency plan been reviewed and revised whenever: a) regulations are revised? Yes ✓ No___ N/A___ b) the plan fails in an emergency? Yes ✓ No___ N/A___ c) the facility changes in a way that modifies the emergency response necessary? Yes ✓ No___ N/A___ d) information regarding emergency coordinators changes? Yes ✓ No___ N/A___ e) information regarding equipment changes? Yes ✓ No___ N/A___	
(725.155)	Is the emergency coordinator on-site or on call at all times? Yes ✓ No___ N/A___ Is the emergency coordinator familiar with all facility activities, wastes, records, layout and contingency plan? Yes ✓ No___ N/A___ Does the emergency coordinator have the authority to commit the resources needed to carry out the actions specified in the contingency plan? Yes ✓ No___ N/A___	
(725.156)	If the facility has had a release, fire or explosion, have the procedures of this Section been followed regarding assessment, response and reporting? Yes___ No___ N/A ✓ **Note:** If the facility has had a release, explain in detail.	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.116(a))	**Section 725.116 Personnel Training** Does the facility have a training program? Yes ✓ No____ N/A____ Have facility personnel successfully completed a program of classroom or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 725? Yes ✓ No____ N/A____ Is the program directed by a person trained in hazardous waste management procedures? Mike Witeperter Yes ✓ No____ N/A____ Does the program teach facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed? Yes ✓ No____ N/A____ Does the program cover, at a minimum: - procedures to familiarize facility personnel with emergency procedures, emergency equipment and emergency systems? Yes ✓ No____ N/A____ - procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment? Yes____ No____ N/A____ - key parameters for automatic waste feed cut-off systems? Yes____ No____ N/A____ - communications or alarm systems? Yes____ No____ N/A____ - response to fire or explosions? Yes____ No____ N/A____ - response to groundwater contamination incidents? Yes____ No____ N/A____ - shutdown of operations? Yes____ No____ N/A____ NOT Clear?	
(725.116(b))	Have new employees completed the program within 6 months of the date of employment or assignment to a position requiring them to manage hazardous waste? Don't know for sure Yes____ No____ N/A____	
(725.116(c))	Have facility personnel received an annual review of the initial training? NOT Clear Yes____ No____ N/A____	
(725.116(d))	Are the following documents and records being maintained at the facility: 1) the job title for each position related to hazardous waste management and the name(s) of the employee(s) filling each job? Yes ✓ No____ N/A____ 2) a written job description for each position above, including the requisite skill, education or other qualifications and duties of personnel assigned to each position? NOT Complete Yes____ No ✓ N/A____ 3) a written description of the type and amount of both initial and continuing training that will be given to each person filling a position dealing with hazardous waste management? NOT Complete Yes____ No ✓ N/A____ 4) records documenting that the training or job experience has been given to and completed by facility personnel? for OS yes Some seems missing for certain years Yes____ No ✓ N/A____	
(725.116(e))	Is the facility maintaining training records until closure of the facility and those of former employees for at least 3 years from the last date of employment? Yes____ No ✓ N/A____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(728.107(a)(5))	**Section 728.107 Waste Analysis and Recordkeeping** Has the generator who treats a prohibited waste in tanks or containers in order to meet the treatment standards developed and followed a waste analysis plan? Yes_____ No_____ N/A_____ ✓ Is the plan on-site? Yes_____ No_____ N/A_____ Does the plan include a detailed physical and chemical analysis? Yes_____ No_____ N/A_____ Has the plan been filed with the Agency at least 30 days prior to commencement of treatment activity? Yes_____ No_____ N/A_____ Has the generator submitted the required notification and certification that the waste meets treatment standards when the waste is shipped off-site? Yes_____ No_____ N/A_____ ✓	
722.134(c)	**Section 722.134 Satellite Accumulation** Is the generator who accumulates hazardous waste at or near any point of generation where wastes initially accumulate and which is under the control of the operator of the process generating the waste, limiting such accumulation to 55 gallons of hazardous waste or 1 quart of **acutely** hazardous waste, complying with Sections 725.271, 725.272 and 725.273(a), and marking the containers with the words "Hazardous Waste" or other words identifying the contents? Yes_____ No_____ N/A_____ Did not Inspect Has the generator who accumulates more than 55 gallons of hazardous waste or 1 quart of **acutely** hazardous waste complied with the requirements of Section 722.134(a) within 3 working days? Yes_____ No_____ N/A_____ If there are more than 55 gallons of hazardous waste or 1 quart of **acutely** hazardous waste in the satellite accumulation area, are the containers marked with the date accumulation began? Yes_____ No_____ N/A_____ During the 3 day period, is the generator continuing to comply with the requirements of Section 722.134(c)(1) with respect to the excess waste? Yes_____ No_____ N/A_____	
722.134(g)	**Note:** A generator that generates 1,000 kilograms or greater of hazardous waste per calendar month which also generates wastewater treatment sludges from electroplating operations that meet the listing description for the hazardous waste code F006 may have alternate accumulation requirements if the conditions of 722.134(g), (h), or (i) are fulfilled.	
	SUBPART D: RECORDKEEPING AND REPORTING	
722.140(a)	**Section 722.140 Recordkeeping** Has the generator retained for a period of 3 years: - a copy of each signed manifest? Yes_____ ✓ No_____ N/A_____	722.140(a)
722.140(b)	Has the generator retained a copy of each Annual Report and Exception Report for a period of at least three years from the due date of the report (March 1)? Yes_____ ✓ No_____ N/A_____	722.140(b)
722.140(c)	Has the generator retained for a period of 3 years: - copies of test results, waste analyses or other determinations made in accordance with Section 722.111? Yes_____ ✓ No_____ N/A_____	722.140(c)
722.140(d)	Does a generator who is involved in any unresolved enforcement action or as requested by the Director continue to maintain the records required in subsections a) and c)? Yes_____ No_____ N/A_____ ✓	722.140(d)
722.141(a)	**Section 722.141 Annual Reporting** Has the generator who ships hazardous waste off-site for treatment, storage or disposal filed an annual report with the Agency by March 1 for the preceding calendar year? Yes_____ ✓ No_____ N/A_____	722.141(a)
	Note: If "No", or if deficiencies are noted with the annual report reviewed, contact the Planning and Reporting Section.	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
722.141(b)	Has the generator who treats, stores or disposes of hazardous waste on-site, filed an annual report with the Agency by March 1 for the preceding calendar year? Yes_____ No_____ N/A_____	722.141(b)
722.142(a)(1)	**Section 722.142 Exception Reporting** If the generator has not received a copy of the manifest from the TSD facility within 35 days of the date of delivery to the transporter, has the generator contacted the transporter or the TSD facility to determine the status of the hazardous waste? Yes_____ No_____ N/A_____	722.142(a)(1)
722.142(a)(2)	If the generator has not received a copy of the signed manifest within 45 days of the date of delivery to the transporter, has he filed an exception report with the Agency in accordance with the requirements of this Section? Yes_____ No_____ N/A_____	722.142(a)(2)
722.143	**Section 722.143 Additional Reporting** Has the generator furnished additional reports as required by the Director? Yes_____ No_____ N/A_____	722.143
	SUBPART E: EXPORTS OF HAZARDOUS WASTE	
722.150	Is the generator an exporter of hazardous waste? Yes_____ No_____ N/A_____ If "Yes", has the generator complied with the requirements of Subpart E? Yes_____ No_____ N/A_____	722.150
	SUBPART F: IMPORTS OF HAZARDOUS WASTE	
722.160	Is the generator an importer of hazardous waste? Yes_____ No_____ N/A_____ If "Yes", has the generator complied with the requirements of Subpart F? Yes_____ No_____ N/A_____	722.160
	SUBPART G: FARMERS	
722.170	Is the generator a farmer? Yes_____ No_____ N/A_____ If "Yes", has the generator complied with the requirements of Subpart G? Yes_____ No_____ N/A_____	722.170
	COMMENTS:	

TM:jab\722LQG.doc

Todd Brown/R5/USEPA/US
08/30/2005 02:57 PM

To maltepeter@bigriverzinc.com
cc
bcc

Subject Document Review

Dear Mr. Altepeter:

Here is a list of documents I would like to review during the inspection next week.

1) Detailed process diagrams that include feedstocks and waste generation points (as available)

2). Map of the facility layout (to facilitate the walk-through inspection)

3). Hazardous waste Manifests and Land Disposal Restriction Notifications for the last 3 years

4). Waste analyses

5). Inspection records for hazardous waste storage tanks and/or container storage areas

6). Hazardous Waste Contingency Plan

7). Training Records for employees that have duties involving hazardous waste handling/management including:

a). Job titles and names of employees filling each position
b) Job description
c) Description of training given to the employee
d) Documents that record that initial and annual training has been given to each employee

8). Engineering assessments for any hazardous waste storage tanks

9). Last three Annual Hazardous Waste Reports

Please note that my main focus will be on identifying all solid and hazardous wastes that are generated during the manufacturing processes, as well as secondary materials, by-products, etc., that are used, reused or recycled on or off site. This is why I am requesting to have access to any detailed process diagrams that Big River Zinc may have, as these will undoubtedly facilitate this objective.

Thank you in advance for your cooperation. If you or your management have any questions or concerns please feel free to contact me.

Sincerely,

Todd C. Brown

U.S. EPA - Region 5
Waste, Pesticides, and Toxics Division
Enforcement and Compliance Assurance Branch
(312) 886-6091
brown.todd@epa.gov

Mike Altepeter

From: Nichole Baker [NBaker@ercweb.com]
Sent: Tuesday, September 06, 2005 3:00 PM
To: Mike Altepeter
Subject: RE: training

Mike,

Here is a list for your company's employee's we've trained since 2000. They are all for the 2-day complete course.

Please let me know if there is anything else I can help you with.

Floyd Gessford, Stephen Ash and Stephen French May 2000
Stephen Ash, Anthony Thomas and Stephen French May 2001
Stephen Ash, Anthony Thomas and Stephen French May 2002
Michael Riley, Anthony Thomas and Stephen French May 2003
Robert Palisch October 2003
Anthony Thomas, Steven Mcomber, and Mike Altepeter July 2004
Anthony Thomas and Mike Altepeter July 2005

Have a great afternoon!

Nichole Baker

Environmental Resource Center

101 Center Pointe Drive

Cary, NC 27513-5706

919-469-1585

FAX: 919-342-0807

nbaker@ercweb.com

http://www.ercweb.com

Are you in compliance with EPA, DOT, and OSHA regulations? Find out with a comprehensive audit. For details, click here.

-----Original Message-----
From: Mike Altepeter [mailto:maltepeter@bigriverzinc.com]
Sent: Tuesday, September 06, 2005 3:22 PM
To: Nichole Baker
Subject: RE: training

Can you help me? I need to confirm our training records.
I need to know who you all trained from 200 on from Big River Zinc and the
dates trained. The course was Hazardous Waste management either the long or
the short course. The one I really need a date for is Robert Palisch who was
there about November 2003, could be from september to December.

Thanks
mike Altepeter
Environmental manager

)urse History with Students

August 31, 2005, 10:17 AM

Course Title: Universal Waste Management

Category: EPA **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
8/13/1998		Training Room	15	4	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Chaudet, Daniel J	Pass			
Gamblin, Ronald	Pass			
Hogg, Terrence W	Pass			
Kurrelmeyer, John F	Pass			

8/17/1998	Riley, Michael W.	Training Room	15	13	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Allen, Clarence J	Pass			
Baugh, Mark	Pass			
Caler, Robert N	Pass			
Fanning, Earl P	Pass			
Luster, Cynthia A	Pass			
McClenahan, Steve C.	Pass			
Miller, Terry L	Pass			
Niemeyer, Melvin D	Pass			
Roettgers, William A.	Pass			
Shaw, Jon R	Pass			
Simpson, Thomas	Pass			
Smith, Herbert A	Pass			
Smith, Luety F	Pass			

8/25/1999	Riley, Michael W.	Training Room	15	12	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Allen, Clarence J	Pass			
Baugh, Mark	Pass			
Caler, Robert N	Pass			
Fanning, Earl P	Pass			
McClenahan, Steve C.	Pass			
Miller, Terry L	Pass			
Niemeyer, Melvin D	Pass			
Roettgers, William A.	Pass			
Shaw, Jon R	Pass			
Simpson, Thomas	Pass			
Smith, Herbert A	Pass			
Smith, Luety F	Pass			

8/26/1999	Riley, Michael W.	Training Room	15	9	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date

ɔurse History with Students

August 31, 2005, 10:17 AM

Course Title: Universal Waste Management

Category: EPA **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
8/26/1999	Riley, Michael W.	Training Room	15	9	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Baldus, Daniel J	Pass			
Carter, Ronnie	Pass			
Cotton, Keith A	Pass			
Doerr, Gary L	Pass			
Evans, Jr., John H	Pass			
Everson,Jr, William N	Pass			
Johnson, Cecil	Pass			
McCartney, Robert E	Pass			
McKinney, Betty J	Pass			

8/27/1999	Riley, Michael W.	Training Room	15	6	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Chaudet, Daniel J	Pass			
Gamblin, Ronald	Pass			
Hogg, Terrence W	Pass			
Kurrelmeyer, John F	Pass			
Luster, Cynthia A	Pass			
Morgan, Charles W	Pass			

8/23/2000	Riley, Michael W.	Training Room	15	13	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Ash, Steven L	Pass			
Clay, Freddie N	Pass			
Everson,Jr, William N	Pass			
French, Stephen H	Pass			
Funk, Ronald C	Pass			
Holton, Byron	Pass			
Johnson, Cecil	Pass			
Johnson, Earlest	Pass			
McCartney, Robert E	Pass			
McKinney, Betty J	Pass			
Pressnall, Douglas J	Pass			8/23/2001
Riley, Michael	Pass			8/23/2001
Whitehead, Noah L	Pass			

..5/2000	Riley, Michael W.	Training Room	15	4

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Chaudet, Daniel J	Pass			

ɔurse History with Students

August 31, 2005, 10:17 AM

Course Title: Universal Waste Management

Category: EPA **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
12/5/2000	Riley, Michael W.	Training Room	15	4	

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Hogg, Terrence W	Pass			
Kurrelmeyer, John F	Pass			
Morgan, Charles W	Pass			12/5/2001

12/8/2000	Riley, Michael W.	Training Room	15	13	

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Allen, Clarence J	Pass			
Baugh, Mark	Pass			
Caler, Robert N	Pass			
Fanning, Earl P	Pass			
Luster, Cynthia A	Pass			
McClenahan, Steve C.	Pass			
Miller, Terry L	Pass			
Niemeyer, Melvin D	Pass			
Roettgers, William A.	Pass			
Shaw, Jon R	Pass			
Simpson, Thomas	Pass			12/8/2001
Smith, Herbert A	Pass			12/8/2001
Smith, Luety F	Pass			

ıss Roster

Wednesday, August 31, 2005, 10:07 AM

Class: Hazardous Waste
Date: 11/6/1997
Location: Training Room
Time: 12:00 AM to 12:00 AM
Course Type:
Instructor: Riley, Michael W.
Written Exam: No **Length (days):** **Retraining Req. (months):** 0
Total Hours: 0.15 **CEU:** 0.0
Additional Schedule Information
Maximum Class Size: 30 **Students Scheduled:** 17 **Students Wait Listed:** 0

Student	Status	Priority	Job Title	Department	Office Phone
Alexander, Andy D	Pass		Production Supervisor	L/P	- -
Allen III, Clarence J	Pass		Production Supervisor	L/P	
Blake, Selita L	Pass		Laborer	L/P	
Bochantin, Ronald F	Pass		Laborer	Cell Rm	
Carothers, Alan B	Pass		Laborer	L/P	
Clay, Freddie N	Pass		Laborer	L/P	
Crowder Jr., Milton, N.	Pass		Laborer	L/P	
Everson Jr, William N	Pass		Laborer	L/P	
Haggitt, Vern L	Pass		Treatment Plant Operator	Yard	
Harper, Lindell P	Pass		L/P Superintendent	L/P	
Hemmer, Terry L	Pass		Shift Foreman	L/P	
Johnson, Cecil	Pass		Laborer	L/P	
McCartney, Robert E	Pass		Laborer	L/P	
McKinney, Betty J	Pass		Laborer	L/P	
Smith, Robert	Pass		2nd Stage Operator	L/P	
Smith, Robert	Pass		2nd Stage Operator	L/P	
Smith, Robert	Pass		2nd Stage Operator	L/P	
Smith, Robert	Pass		2nd Stage Operator	L/P	
Thompson, Ernest L	Pass		Shift Foreman	Cell Rm	
Thompson, Ernest L	Pass		Shift Foreman	Cell Rm	
Thompson, Ernest L	Pass		Production Supervisor	Cell Rm	- -
Thompson, Ernest L	Pass		Shift Foreman	Cell Rm	
Thompson, Richard L Sr	Pass		Laborer	L/P	
Thompson, Richard L Sr	Pass		TERM	Term.	
Thompson, Richard L Sr	Pass		Laborer	L/P	
Thompson, Richard L Sr	Pass		Laborer	L/P	

ɔurse History with Students

August 31, 2005, 10:12 AM

Course Title: Hazard Communication (Right to Know) / Employee Overview

Category: OSHA **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
9/16/1997	Riley, Michael W.	Training Room	15	3	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Brown, Kevin	Pass		100	
Johnson, Scott	Pass		100	
Waggoner, Jeff	Pass		100	

urse History with Students

August 31, 2005, 10:12 AM

Course Title: Hazardous Waste

Category: OSHA **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
11/6/1997	Riley, Michael W.	Training Room	30	17	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Alexander, Andy D	Pass			
Allen, III, Clarence J	Pass			
Blake, Selita L	Pass			
Bochantin, Ronald F	Pass			
Carothers, Alan B	Pass			
Clay, Freddie N	Pass			
Crowder, Jr., Milton	Pass			
Everson,Jr, William N	Pass			
Haggitt, Vern L	Pass			
Harper, Lindell P	Pass			
Hemmer, Terry L	Pass			
Johnson, Cecil	Pass			
McCartney, Robert E	Pass			
McKinney, Betty J	Pass			
Smith, Robert	Pass			
Thompson, Ernest L	Pass			
Thompson, Richard L Sr	Pass			

11/10/1997	Riley, Michael W.	Training Room	40	6	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Busby, Gaylon R	Pass			
Heitzman, Joe P	Pass			
Lang, Cris	Pass			
McCallister, Gene	Pass			
Stevison, Willie S	Pass			
Winder, Rick	Pass			
Zacha, Cynthia A	Pass			

11/12/1997	Riley, Michael W.	Training Room	40	4	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Holton, Byron	Pass			
Hutchings III, William J	Pass			
Kohl, Daniel F.	Pass			
Patek, Michael B	Pass			

/1999	Riley, Michael W.	Training Room	40	7	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Burton, Sr., Robert L	Pass			

ɔurse History with Students

August 31, 2005, 10:12 AM

Course Title: Hazardous Waste

Category: OSHA **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
10/7/1999	Riley, Michael W.	Training Room	40	7	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Doerr, Gary L	Pass			
Freimuth, Ralph L	Pass			
Gessford, Floyd E	Pass			
Haggitt, Vern L	Pass			
Reeder, Isaiah K	Pass			
Walker, Alvin J	Pass			

10/8/1999	Riley, Michael W.	Training Room	40	11	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Baldus, Daniel J	Pass			
Carter, Ronnie	Pass			
Caswell, Jimmie C	Pass			
Cotton, Keith A	Pass			
Doerr, Gary L	Pass			
Evans, Jr., John H	Pass			
Everson,Jr, William N	Pass			
Johnson, Cecil	Pass			
McCartney, Robert E	Pass			
McKinney, Betty J	Pass			
Riley, Michael	Pass			

10/8/1999	Riley, Michael W.	Training Room	40	2	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Lang, Cris	Pass			
McCallister, Gene	Pass			

10/9/1999	Riley, Michael W.	Training Room	40	10	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Alfred, Neal B	Pass			
Bean, Wayne T	Pass			
Busby, Gaylon R	Pass			
Heitzman, Joe P	Pass			
Holton, Byron	Pass			
Kohl, Daniel F.	Pass			
Lawson, Mary Jane	Pass			
Patek, Michael B	Pass			
Winder, Rick	Pass			
Zacha, Cynthia A	Pass			

urse History with Students

August 31, 2005, 10:12 AM

Course Title: Hazardous Waste

Category: OSHA **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
11/20/1999	Riley, Michael W.	Training Room	40	9	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Alfred, Neal B	Pass			
Bean, Wayne T	Pass			
Evans, Jr., John H	Pass			
Funk, Ronald C	Pass			
Lance, James L	Pass			
Walker, John A	Pass			
Wallace, James P	Pass			
Whitehead, Noah L	Pass			
Wright, Timothy L	Pass			

12/17/1999	Riley, Michael W.		40	12	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Barragan, Javier	Pass			
Bovee Sr, Scott	Pass			
Burnett, Larry	Pass			
Culter, Sheila	Pass			
Ferrell, Donna	Pass			
Gossman, Richard	Pass			
Hernandez, Ageo	Pass			
Huck, Michele	Pass			
Meyer, Jeffrey	Pass			
Schultheis, Edward	Pass			
Woodard, Patrick	Pass			
Woody, Rex	Pass			

ɔurse History with Students

August 31, 2005, 10:12 AM

Course Title: Hazardous Waste Management

Category: EPA **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
5/15/2001		Off-site	15	3	

(Day 1 of 2)

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Ash, Steven L	Pass			
French, Stephen H	Pass			
Thomas, Anthony L	Pass			5/15/2002

urse History with Students

August 31, 2005, 10:12 AM

Course Title: Hazardous Waste Operations and Emergency Response

Category: Seminars **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
3/22/2001		Off-site		2	

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
French, Stephen H	Pass			
Riley, Michael	Pass			

3/14/2002		Off-site		2	

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
French, Stephen H	Pass			
Riley, Michael	Pass			3/14/2003

ɔurse History with Students

August 31, 2005, 10:12 AM

Course Title: Hazwoper Retraining

Category: OSHA **Type:**

Class Date	Instructor Name	Location	# Max	# Scheduled	# Wait Listed
2/17/2000		Off-site	5	1	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Trefny, Hans W.	Pass			

2/27/2002		Off-site	5	1	0

Student Name	Status	Pre-Test Grade	Grade	Retrain Date
Trefny, Hans W.	Pass			

Names of People requiring Hazardous Waste Training 2005	
Leaching and Purification Departments	
Department Superintendent	Paul Harper
Prod Supervisor	Terry Hemmer
	Ron Funk
	C J Allen III
	Stan Meyers
	Noah Whitehead
Pressmen	Wayne Henderson
	Johnny Walker
	Mike Franklin
	Eloi Rodriguez
	Mike Jenkins
	Calvin Jennings
	Ronnie Carter
	Tim Webber
Laborers	Freddie Clay
	Bob Mccartney
	Salita Blake
	Betty McKinney
	John Evans
	Jim Brown
	Phil Henderson
	Kieth Horne

Roaster and Acid departments	
Department Superintendent	Dale Lattina
Production Supervisors	Tom Carril
	Larry Mueller
	Keith Reeder
	Alvin Walker
Equipment Operators	Keith Cotton , Ralph Freimuth
	Gary Doerr, Kevin Groth
Yard Labor	Frank Hubbard
	E.T.Henry

Maintenance Department*	
Department Superintendent	John Swafford
Maintenance Supervisors	Mark Baugh
	Dan Chaudet
	Tom Doran
	Randy Ingram
	Joe Rook
	Don Traiteur
Vehicle Mechanics	Ron Morgan
	Jerry Luster
	Terry Hogg
Oiler	Gary Dane
	Terry Coleman
	Mike Munie
	Toni Monterrusso
Electricians	Terry Miller
	John Shaw
	C. Luster
	Earl Fanning
	Smith
	Roettgers

*Need Hazardous Waste training and Universal Waste Training

Security	
Chief of Security	Anthony Thomas
Officers	Joanne Baxton
	Bill Carlile
	Patrick Shea
	Michael Blackard
	Earl Devore
	John Meketa

Engineering Department**	
Senior Project Manager	Rick Schroeder
Plant Project Engineer	Pat Darmody

** Mgt Waste for Construction and Maintenance Projects

RCRA CONTINGENCY PLAN
AND EMERGENCY RESPONSE PROCEDURES

BIG RIVER ZINC CORPORATION
SAUGET, ILLINOIS

Revised July 22, 2006

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APPENDICES

Appendix A Facility Site Diagrams
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1.0 INTRODUCTION

This RCRA Contingency Plan and associated Emergency Response Procedures (ERP) have been prepared for the Big River Zinc Corporation (BRZ) facility in Sauget, Illinois, in compliance with the requirements outlined in the U.S. Environmental Protection Agency (USEPA) rules and regulations for the Resource Conservation and Recovery Act (RCRA) - Hazardous Waste 40 CFR Part 264. Specifically, this document contains the requirements set forth by RCRA regarding a facility's Contingency Plan and Emergency Procedures for the accidental release of hazardous waste (40 CFR Part 264, Subpart D).

This Plan will be updated if the plan fails in an emergency, the facility changes in a way that increases the potential for fires, explosions, or releases of hazardous waste, or there is a change in the emergency coordinators or emergency equipment lists.

2.0 DESCRIPTION OF FACILITY

Big River Zinc Corporation (BRZ), Sauget, Illinois is engaged in the production of zinc. Sulfuric acid, copper cake, lead/silver concentrate, copper precipitate, and cadmium oxide are sold as by-products. The manufacturing process begins with fluid bed roasting of zinc sulfide concentrates. Sulfur dioxide is produced during the roasting process and is used to create sulfuric acid. The impure zinc oxide from the roaster is treated in several stages with sulfuric acid to leach out metals such as zinc, copper, cobalt, and cadmium. These metals are recovered and are sold as by-products to other industries, as is the lead and silver contained in the insoluble lead concentrate recovered from the leaching steps. The zinc goes through several additional steps and is recovered from solution by an electrowinning process. The sheets are washed and fed into an electric induction melting furnace. The zinc is then poured into a mold, cooled, and shipped to the customers.

The facility is located at Route 3 and Monsanto Ave., Sauget, Illinois (Figure 1). The facility has three production shifts. Facility personnel are on site 24 hours per day, 7 days per week. The facility property is oriented on a north-south axis and comprises 35.4 acres with approximately 60% of the property under roof or paved.

BRZ has one hazardous waste roll-off container which is located west of the cadmium building. Filters containing metals are disposed of in the roll-off container. The roll-off is emptied at least every 90 days.

3.0. EMERGENCY REPORTING PROCEDURES

At all times, there is at least one employee at the facility or individuals who can be contacted with the responsibility for coordinating all internal emergency response measures at the facility. As required by federal regulations, the Emergency Coordinator (EC), or his alternate, is thoroughly familiar with all aspects of the ERP, all operations and activities at the facility, and the location of appropriate facility records. The EC and alternates may be reached through the security department.

3.1 Implementation of the Emergency Response Plan

The primary or the alternate Emergency Coordinators will decide which portions of this ERP are to be implemented following an evaluation of the site conditions. The basis of the EC's decision is his assessment of the magnitude of the emergency. The EC will determine if the emergency presents an actual or possible threat to human health and the environment, or if the situation can be controlled by Big River Zinc personnel.

Some types of emergencies that require full implementation of the ERP include:

- A fire that could spread off site;
- A fire that is too large to extinguish with a portable fire extinguisher;
- A spill or release of hazardous material that results in airborne constituents; and
- Uncontainable runoff due to a large fire, spill or release of material.

3.2 Internal Notification Procedures

<u>Personnel</u>

Upon discovering a situation that may represent an emergency, plant personnel will:

a. Report the situation to a supervisor immediately or call security if the supervisor cannot be found immediately; and

b. Verbally warn other personnel if the situation is an immediate threat to their safety.

<u>Supervisor/Security</u>

When notified of an emergency situation, the supervisor/security will:

a. Take necessary steps to prevent injury to personnel, damage to equipment, and any potential fire hazard; and

b. Contact the Emergency Coordinator or alternate.

Emergency Coordinator

The primary EC (or an alternate) will follow the procedures below in the event of a release, explosion, fire, or other emergency:

- Assess the situation and if warranted:

  Declare an emergency and notify all plant personnel with instructions by two-way radios. If there is a release, fire, or explosion that could threaten human health or environment outside the facility, the EC is to immediately declare an emergency.

  Notify security to call for police and/or fire department. The police or fire departments have the responsibility for coordinating outside response efforts. Telephone numbers of emergency response agencies are located in Section 3.3. A two-way radio connection is also available in the security office for contacting the police and fire departments.

- Commit and direct activities of any and all resources available that are necessary to carry out the ERP. The EC will focus on measures to eliminate potential harm to human health and the environment.

Whenever there is a release, fire, or explosion, the EC will act without delay to identify the character, exact source, amount, and aerial extent of the released materials. This may be accomplished by observation or review of facility records, manifests, and, if necessary, by chemical analysis. The EC will inspect for possible hazards to human health or the environment, both direct and indirect. This assessment will consider onsite and offsite effects as required.

Throughout the emergency, the EC will take measures which are reasonable and necessary to ensure that fires and/or releases do not have an effect on any other substances at the facility.

3.3 Emergency Contact Phone List

Security	Ext. 110 (Internal Plant Phone) (618) 274-5000 ext. 110 (Outside Phone) Plant Radio

Primary Emergency Coordinator

Mike Altepeter	(618) 274-5000 Ext.194 (office) (314) 846-8093 (Home) (618)410-8021 (cell)

Alternate Emergency Coordinator

Anthony Thomas	(618) 274-5000 Ext. 198 (office) (618) 410-8020 (cell)

Second Alternate Emergency Coordinator

Steve Ash	(618 0 274 5000 ext 243 (office) (618) 410 4703 (cell)

Federal	National Response Center (Release of Hazardous Substances)	(800) 424-8802
	USEPA Region V	(312) 353-2000
State	Illinois Emergency Management Agency	(800) 782-7860

Local Emergency Response: Sauget Police, Fire, Ambulance 911

Local Emergency Planning Committee (LEPC) (618) 277-3012

Mr. Don Feher
Local Emergency Planning Committee
321 W. "F" Street
Belleville IL 62220-1193

Hospital

Memorial Hospital Emergency (618) 257-5840
Attn. Mr. Don Schneider
4500 Memorial Drive
Belleville, IL 62226

Contractor Support

Heritage Environmental Attn: Mr. Dan Hans 1188 Pershall Road Bellfountaine, MO 63137	(800) 388-3500
Onyx Industrial Services Fred Davidson 121 East Chain of Rocks Road Mitchell, IL 62040	(618) 931 0010

Big River Zinc has discussed the contents of this plan, and has provided a copy of the plant location to the Sauget Fire and Police Departments, the LEPC, Heritage Environmental and Memorial Hospital.

3.4 Evacuation Plan

The EC will assist the fire department in determining the need for evacuation of the area surrounding the plant. This assessment is based on the EC's knowledge of the hazardous materials involved, the site conditions, and the current weather conditions. The role of the EC in this situation is an advisory one, and the decision to evacuate an area is the responsibility of the appropriate agencies.

The EC and alternates are responsible for the plant-wide evacuations only. Designated evacuation routes for plant personnel are displayed on Figure 2. Communication of evacuation to employees is by two-way radios, alarms, intercom, and other personnel to insure that all employees are informed and evacuated. The fire alarms are tested monthly to ensure they are in proper working condition. If an evacuation is ordered, plant personnel shall discontinue operation of all equipment and evacuate the area as soon as possible. Evacuation routes are determined according to the plant area affected.

Upon receiving instruction by two-way radio or by activation of an audible warning device, supervisors are to instruct employees to leave the facility according to their predetermined exit routes. The employees are to go to the designated assembly point, west of the facility, in the employee parking lot. Once the plant is evacuated, the supervisor of each area takes a prompt and accurate account of all personnel to ensure that everyone is accounted for.

The fire department is responsible for evacuation plans within the surrounding area and for coordinating local resources, including the police department and hospitals to assist in the implementation of the evacuation plan.

The EC, in consultation with the fire department and other local agencies, as necessary, will decide when reoccupation of the facility is possible. Only after following all the post-emergency procedures (see Section 5.0) can the facility resume operation.

3.5 Emergency Response Procedures

3.5.1 Fire and Explosion Emergency Response

An employee, upon detecting a fire or imminent explosion in the facility, will initiate the following actions:

- Use hand-held fire extinguishers to control or extinguish the fire if the fire is in an initial, controllable stage and no potential for imminent explosion exists.
- Contact his supervisor or security. Security will locate the EC and inform him of the fire and its location. Activate the alarm system. The supervisor will begin response preparation.
- Upon receiving available information, the EC or security will call the fire department to inform them of the situation and receive instruction.

After following the steps outlined above for emergency situations, the EC or, in his absence, the supervisor, must do the following:

- Take action to shut off electrical power and any gas in the vicinity of the fire location. Stop process and/or operations that may interfere with the emergency response actions;
- Take action, if necessary and safe to do so, to place absorbent materials around drains to prevent spilled hazardous waste from entering the sewer system;
- Notify all unauthorized personnel to vacate the area per evacuation plans; and
- Follow any instruction given by the fire department.

In addition, the EC must also:

- Note the current weather conditions and estimate the current wind direction and speed;
- Identify the character, source, amount, and aerial extent of any released hazardous materials by observation and review of facility records, manifests, and, if necessary, by chemical analysis; and
- Determine if the situation necessitates complete evacuation of the plant site. Furthermore, the EC will assist the Fire Department in their decision to evacuate the surrounding area.

If the situation meets the criteria for full implementation, at the first opportunity, the EC shall report the emergency to the National Response Center (800-424-8802) and the Illinois Emergency Management Agency (800-782-7860). This verbal report includes:

- Name, address, and telephone number of the reporter;
- Name and address of the facility;
- Time and type of incident;
- Name and reportable quantity of material involved to the extent known;
- Extent of injuries, if any; and
- Possible hazards offsite to human health and the environment.

3.5.2 Spill Emergency Response

Any employee discovering a hazardous waste spill is to immediately notify his supervisor or security. Security will notify the EC or alternate. The EC will assess the situation and act as follows:

- Clear the area of unauthorized personnel. Stop process and/or operations that may interfere with the emergency response;
- Identify the source or cause of the release material and obtain a Material Safety Data Sheet(s) (MSDS). Use MSDS information to guide response and determine personal protective equipment (PPE) required;
- Direct trained personnel to don the appropriate PPE, as used in normal job duties, and re-containerize the spilled material;
- Alert local authorities if material may reach outside facility property;
- Rope off and/or barricade the area to prevent entry of unauthorized personnel;
- Take measures to contain the spill;
- Direct cleanup so that all hazardous materials are placed in properly labeled containers;
- Ensure that spill material, water, and adsorbents are placed in Department of Transportation (DOT) approved containers for ultimate disposal; and
- Insure that no incompatible wastes are stored within the spill area until cleanup is complete.

4.0 RELEASE REPORTING REQUIREMENTS

4.1 General

In the event of external release of a hazardous material, the procedures outlined in Section 3.0 will be followed. Prior to contacting state and local agencies, the EC will gather as much information about the incident as quickly as possible. The concerned agencies will then be contacted with initial information. The appropriate agencies will be kept informed of any new, additional, or changed information regarding the incident.

4.2 Release of RCRA Hazardous Waste

In case of a fire, explosion, or release of hazardous waste (equal to or greater than the reportable quantity for the material), as defined under RCRA (40 CFR, Section 261) which could threaten human health or the environment outside the facility, concerned agencies will be contacted as soon as possible by the EC. If the evacuation of surrounding areas may be required, local emergency response teams will be alerted. The following agencies will be contacted by the EC:

Federal	National Response Center	(800) 424-8802
	USEPA Region V	(312) 353-2000
State	Illinois Emergency Management Agency	(800) 782-7860
Local	Sauget Fire, Police, Ambulance	911
	Mr. Don Feher Local Emergency Planning Committee (LEPC) 321 W. "F" Street Belleville, IL 62220-1193	(618) 277-3012

Contractor Support:

Heritage Environmental Attn. Mr. Dan Hans 1188 Pershall Road Bellfountaine, MO 63137	(800) 377-2440

or

Onyx Industrial Services Fred Davidson 121 East Chain-of- Rocks Road Mitchell, IL 62040	(618) 931 0010

5.0 POST-EMERGENCY PROCEDURES

When the emergency is contained, and a threat to human health and the environment no longer exists, the EC will take the following post-emergency actions:

- Decontamination/cleanup;
- Waste management;
- Post-emergency reporting; and
- Post-emergency assessment.

5.1 Decontamination/Cleanup

All of the equipment used in the emergency response procedures will be either decontaminated or properly containerized for disposal. Any non-emergency response equipment, such as materials or machinery, also affected by the emergency response will be decontaminated or disposed. The EC is responsible for arranging immediate replacement of any spent emergency response materials.

5.2 Waste Management

Waste residual materials, along with emergency response equipment needing disposal, will be collected and containerized in accordance with applicable regulations governing the management of such materials. Once all hazardous material is properly containerized, storage and disposal will be conducted according to applicable regulations.

5.3 Post-Emergency Reporting

The EC is responsible for ensuring the preparation and submittal of all required reports. A release, fire or explosion requires a written report to the USEPA Region V within 15 days of the event and the IEPA upon request only. The report will include:

- Name, address, and telephone number of the facility;
- USEPA identification number for the site;
- Date, time, and type of incident (e.g., fire, spill, etc.);
- Name and quantity of material(s) involved;
- Extent of injuries, if any;

- Assessment of any actual or potential hazards to human health or the environment;
- Procedures followed to reduce and remove released materials;
- Estimated quantity and disposition of the recovered material that resulted from the incident;
- Corrective measures taken;
- Whether an evacuation was required; and
- Name of individuals who have also been contacted or notified.

5.4 Post-Emergency Assessment

After the emergency episode, the EC will determine the causes of the emergency and analyze the effectiveness of emergency response procedures. The ERP will be modified if it is determined that procedures are inadequate or ineffective. If equipment capabilities are found unacceptable, necessary improvements will be made.

6.0 EMERGENCY EQUIPMENT

6.1 Communication Systems

Four different communication systems are available in the case of an emergency. They are described below.

Type	Description	Inspection Required
Two-Way Radios	The base station for the two-way radios is located in the main Security Office at the main gate house. Six two-way radios are located in the security department. Each of the four departments has a minimum of two radios that are normally carried by the supervisors. Many of the operators also have two-way radios. Fourteen radios are assigned to maintenance supervisors and the "rotating shift" electrician and mechanic. Two way radio communications with the police and fire departments of Sauget is available to security. A weather monitor is available 24-hours per day in case of a weather emergency.	Radios are in use daily so any problems with the system or individual radios would be detected immediately.
Telephones	There are three lines into the Security Office. Telephones are located in all supervisors offices, all control rooms, all administrative offices, and in various maintenance areas. Inner plant phones do not have access to outside lines so security must be called in case of emergency.	Telephones are in use daily so any problems would be detected immediately.
Cell Phones	There are 19 Cell Phones issued to Key company management personnel. These can be used to contact people needed while outside or inside the plant. The cell phones can be used as normal phone or "walkie talkie" mode.	The cell phones are in use daily so any problems would be detected immediately.
Message Center Operations	A continuing liaison can be maintained through the Security Office for needed information by using the telephone communications. However, emergency communications would generally be handled through the two way radios and Cell Phones for faster response time.	N/A

6.2 Fire Equipment

Fire response equipment is located throughout the facility. This includes sprinkler systems, hand held fire extinguishers, and fire equipment boxes.

A smoke detection system is located in the computer room on the bottom floor of the administrative building and in the Safety Office. These systems sound in the main security office when activated. Five automatic deluge sprinkler systems are located throughout the plant. These systems and the twelve fire hydrants are supplied with water under pressure through the fire protection pump. An alarm siren and warning light are located on the outside of the building to alert personnel that the system is in use. The sprinkler systems are checked once a month by the maintenance department.

A list of the location and contents of the hand held fire extinguishers is located in Table 1 of Appendix B. The extinguishers are inspected by the department supervisors on a weekly basis. Documented inspections of the fire extinguishers are located in the safety department. In other areas, a designated person inspects the extinguishers on a monthly basis. Fire extinguisher training is held annually for all employees. Ne employees are trained when hired.

There are seven fire equipment boxes located throughout the facility. A list of these locations and contents of the boxes are provided in Table 2 of Appendix B. The boxes are inspected on a monthly basis by the security department.

6.3 Personnel Protective Equipment

In case of a release, fire, or explosion, goggles, face shields, respiratory protection, full body acid suits, and barrier cream are available from the Safety Department. Rubber dielectric boots, heavy duty rubber gloves, neoprene gloves, vinyl and latex gloves, and Tyvek disposable clothing are available from the store room.

6.4 First Aid

Stretchers are available in the foreman's office of every department. Safety showers are located at various locations in each department. Stokes basket and confined space rescue equipment are stored in the respirator room.

6.5 Spill Response Kits

Spill response kits containing appropriate tools and sorbent materials are located throughout the facility. A list of the spill kits and their locations are presented in Table 3 of Appendix B.

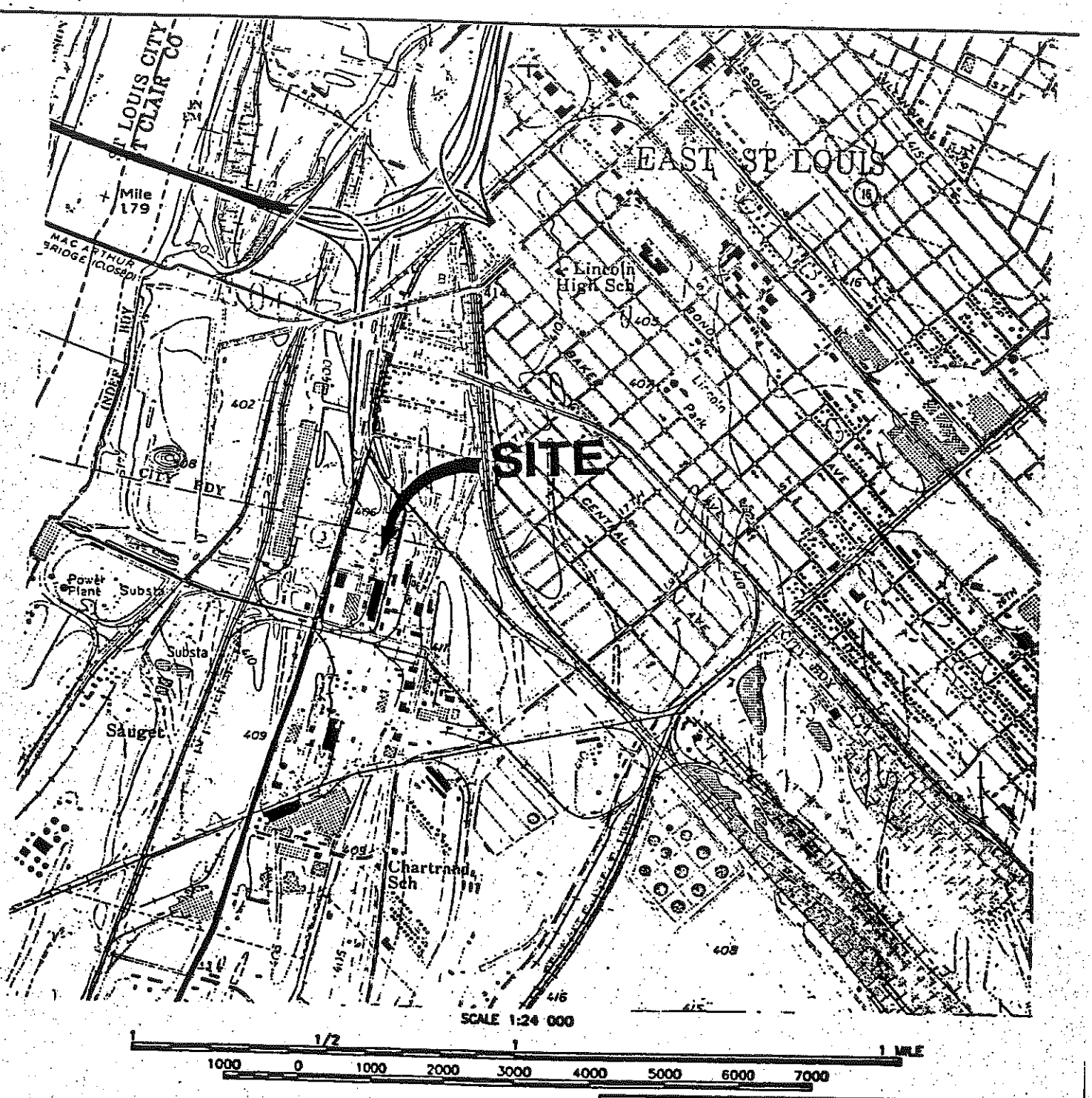
7.0 Training

The details of the training program for personnel involved in contingencies involving hazardous waste will be kept in the Safety department. Copies of the training will also be kept in the Environmental manager's files.. As a minimum the program will document:

a. The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.
b. A written job description for each position described above.
c. A written description of the type and amount of both introductory and continuing training that will be given to each person described above.
d. Training records detailing training given will be kept for at least three years from the date the employee last worked for the company.

APPENDIX A

FACILITY SITE DIAGRAMS



QUADRANGLE LOCATION

Map Reference
USGS Quadrangle Map, 7½ minute series
Cahokia, Ill.-Mo., 1954, revised 1993.

FIGURE 1
SITE VICINITY MAP

BIG RIVER ZINC CORPORATION
ROUTE 3 AND MONSANTO AVENUE
SAUGET, ILLINOIS

DATE: May 12, 1998	
JOB NO.: 33608-002-045	
DRAWN BY JMS	CHK'D BY JAT
SCALE: AS SHOWN	

DAMES & MOORE GROUP
A DAMES & MOORE GROUP COMPANY
721 EMERSON ROAD, SUITE 220
ST. LOUIS, MISSOURI 63141
PHONE: 314-993-4599
FAX: 314-993-4895

EQUIPMENT TABLES

Table 1
Location and Content of Fire Equipment Boxes
Big River Zinc Corporation
Sauget, Illinois

Box Number	Location
A	South of main Casting Dept. - East of the South Contracting Gate
B	South of the Vehicle Shop along the West fence line
C	East of Cellroom along East fence line
D	East of Leach/Purification along East fence line
E	East of the Specialty Casting Building - West of Cellroom Unit #3
F	At the Oil House
G	Northwest of the Acid Plant Converter, by the railroad tracks

Contents of Fire Equipment Boxes

QUANTITY	ITEM	DESCRIPTION/USE
One	1 1/2 in. Nozzle	Combination, Adjusts to fog or straight stream
One	Reducer	To reduce hydrant outlet to the fire hose (2 1/2 in. down to 1 1/2 in.)
Two	Universal Spanner Wrenches	Cast aluminum 'C' shaped wrench. Use to tighten reducer to hydrant and to connect fire hoses.
One	Hydrant Wrench	Adjustable combination hydrant and spanner wrench to be used to open the hydrant by turning the top post.
Three	Fire Hoses	50 foot sections of 1 1/2 in. industrial strength fire hose
One	Axe	Wood handle fireman axe

Table 2
Spill Response Kit Locations and Contents
Big River Zinc Corporation
Sauget, Illinois

Spill Kit #	Name of SPCC Area	Location Description	Contents Code
1	Drum Storage Area # 2	Roaster Mechanics area outside the south outer wall	1
2	#5 Substation-pad mounted transformer	Inside doorway, SE corner of skimmings plant	1
3	Waste Oil # 2	Outside the NW corner of the oil house	1
4	Diesel & Gasoline dispensing area	Above ground tanks, located west of RR tracks and S of cafeteria	1
5	Waste Oil # 1	Outside of building at the SW corner of the vehicle shop	1
6	Substation # 13A & 13B Pad mounted transformer	Substation located N of special casting & S of the purified storage tanks	1
7	# 4 Substation transformer	Inside E wall of the special casting bldg. N of the T-metal furnace	1
8	Substation # 6, 6A & 6B, Pad mounted transformer	S end of the main casting bldg. Inside the fenced area of the transformer yard	1
9	Substation # 11, Pad mounted transformer	S of cellroom unit # 3	1
10	Satellite Kerosene storage tank (winter only)	Outside SE corner of the Quonset storage	1
11	Substation # 1, Pad mounted transformer	Fenced transformer area, south end of cellroom	1
12	Substation # 2, Pad mounted transformer	SE corner of fenced transformer yard, S end of cellroom	1
13	Substation # 9, Pad mounted transformer	E side of ground level L/P, south of residue loading	1
14	Hazardous waste storage	N of leach bldg. W Cd storage building	2

Contents Code	1	2
	6 ea. 3'x10' socks 4 ea. Absorbent Pillows 75 ea. Absorbent mats 10 ea. Disposable Bags/ties	Shovels, pushbrooms, and 15 lb fire extinguisher located in Leach Building. 20 lb CO fire extinguisher to be installed in Cd storage building by Sep 1, 2005.

Table 3
Fire Extinguisher Locations
Big River Zinc Corporation
Sauget, Illinois

DEPARTMENT	LOCATION	Location 2	BRZ #	B/C UNIT	B/C SITE	TYPE
Admin Bldg	SE Entry			3ZHFC	3ZHFD	20 lb ABC DRY CHEM
Admin Bldg	O/S Accounting			3ZHFR	3ZHFS	20 lb ABC DRY CHEM Cart-Op
Admin bldg	Sample Room			3ZHGO	3ZHG1	20 lb BC DRY CHEM Cart-OP
Admin Bldg	Lobby			3ZHFF	3ZHFG	5 lb ABC DRY CHEM
Admin Bldg	East Hallway	By Judy Tilk's office				
Admin Bldg	Basement Break room			3ZHFW	3ZHFX	5 lb ABC DRY CHEM Cart-OP
Admin Bldg	Lab 1 East			3ZHG2	3ZHG3	5 lb ABC DRY CHEM Cart-Op
Admin Bldg	Lab 2 East			3ZHG4	3ZHG5	5 lb ABC DRY CHEM Cart-Op
Admin Bldg	Computer Room			3ZHFH	3ZHFJ	17 lb Halon 1211
Admin Bldg	Computer Room			3ZHFK	3ZHFL	17 lb Halon 1211
Admin Bldg	Computer Room			3ZHFM	3ZHFN	17 lb Halon 1211
Admin Bldg	Computer Room			3ZHFP	3ZHFQ	17 lb Halon 1211
Admin Blding	Mail Room			3ZHFT	3ZHFV	15 lb Carbon Dioxide
Admin Blding	Lab 1 West		Q41	3ZHFY	3ZHFZ	15 lb Carbon Dioxide
Casting	@ Furnace	Under Baghouse	C7	3ZHGJ	3ZHGK	10 lb Carbon Dioxide
Casting	Skimming - Platform	Skimmings Downstairs	C33	3ZHF7	3ZHF8	15 lb Carbon Dioxide
Casting	Skimming- Platform	Skimmings Upstairs	C34	3ZHF9	3ZHFB	15 lb Carbon Dioxide
Casting	Electric Room 1	Zn Dust MCC North	C11	3ZHGX	3ZHGY	15 lb Carbon Dioxide
Casting	Electric Room 2	Zn Dust MCC West	C12	3ZHGZ	3ZHHO	15 lb Carbon Dioxide
Casting	Ship Office	Outside foremans office ?		3ZHG6	3ZHG7	20 lb Carbon Dioxide
Casting	Electric Room	MCC North	C9	3ZHGN	3ZHGP	20 lb Carbon Dioxide
Casting	Cadmium	Cd West Basement Wall	C31	3ZHHC	3ZHHD	20 lb Carbon Dioxide
Casting	East Building Platform	Die Cast Up	C24	3ZHJ2	3ZHJ3	20 lb Carbon Dioxide
Casting	Back Dr E maint	West Wall		3ZHJD	3ZHJF	20 lb Carbon Dioxide
Casting	Center Fl	Cathode Floor	C10	3ZHGV	3ZHGW	10 lb ABC Dry Chem
Casting	East Building North Door	Die cast North end	C26	3ZHHT	3ZHHV	20 lb ABC DRY CHEM
Casting	New Sub Station	East	C36	3ZHMR	3ZHMS	20 lb ABC DRY CHEM
Casting	Ship Office	Foremans Office	C1	3ZHG8	3ZHG9	20 lb ABC DRY CHEM Cart-Op
Casting	Ship Office	O/S Metal Analyzing room	C2	3ZHGB	3ZHGC	20 lb ABC DRY CHEM Cart-OP
Casting	By Scale	East Middle	C3	3ZHGD	3ZHGF	20 lb ABC DRY CHEM Cart-Op
Casting	SE corner	South East Corner	C6	3ZHGG	3ZHGH	20 lb ABC DRY CHEM Cart-Op
Casting	West wall	West Middle	C5	3ZHGQ	3ZHGR	20 lb ABC DRY CHEM Cart-Op
Casting	North end	M/L holding Conveyor	C4	3ZHGS	3ZHGT	20 lb ABC DRY CHEM Cart-Op
Casting	Dust Hopper	Zn Dust East wall	C13	3ZHH7	3ZHH8	20 lb ABC DRY CHEM Cart-Op
Casting	Cadmium	Cd south basement wall	C30	3ZHHF	3ZHHG	20 lb ABC DRY CHEM Cart-Op

Table 3
Fire Extinguisher Locations
Big River Zinc Corporation
Sauget, Illinois

DEPARTMENT	LOCATION	Location 2	BRZ #	B/C UNIT	B/C SITE	TYPE
Casting	Cadmium	Cd oxide room basement	C29	3ZHHH	3ZHHJ	20 lb ABC DRY CHEM Cart-Op
Casting	Cadmium office	Cd office	C28	3ZHHK	3ZHHL	20 lb ABC DRY CHEM Cart-Op
Casting	By W Ramp	Cd west door	C32	3ZHHM	3ZHHN	20 lb ABC DRY CHEM Cart-Op
Casting	Center Wall	Zn Dust Baghoust	C17	3ZHHP	3ZHHQ	20 Lb ABC DRY CHEM Cart-Op
Casting	East Bldg Center Hoist	T Metal pin press	C35	3ZHHW	3ZHHX	20 lb ABC DRY CHEM Cart-Op
Casting	East Bldg S Dr	Die Cast down	C23	3ZHJO	3ZHJ1	20 lb ABC DRY CHEM Cart-Op
Casting	Maintenance Warehouse	Old Zn dust 2nd floor E	C20	3ZHJG	3ZHJH	20 lb ABC DRY CHEM Cart-Op
Casting	Maintenance 2nd Level	Old Zn dust 2nd floor N	C21	3ZHJL	3ZHJM	20 lb ABC DRY CHEM Cart-Op
Casting	3rd Level Maintenance	Old Zn Dust 3rd floor	C22	3ZHJN	3ZHJP	20 lb BC DRY CHEM Cart-Op
Casting	Maintenance Whse	Old Zn dust north wall	C19	3ZHJQ	3ZHJR	20 lb BC DRY CHEM Cart -Op
Casting	Maintenance Front Door	Old Zn dust East wall	C18	3ZHJS	3ZHJT	20 lb BC DRY CHEM Cart-Op
Casting	Dust Hopper	Zn dust North Blowbin	C14	3ZHH1	3ZHH2	30 lb Class D Cart-Op
Casting	Dust Hopper	Zn dust South blowbin	C15	3ZHH3	3ZHH4	30 lb Class D Cart-Op
Casting	Dust Hopper	Zn dust basement	C16	3ZHH5	3ZHH6	30 lb Class D Cart-Op
Casting	Dust Hopper	Zn dust baghouse	C17	3ZHH9	3ZHHB	30 lb Class D Cart-Op
Casting	Electric room	MCC South	C8	3ZHGL	3ZHGM	20 lb Carbon Dioxide
Casting	New Sub Station	West	C37	3ZHMT	3ZHMV	20 lb ABC DRY CHEM
Casting	East Bldg W Wall	Die Cast west wall	C25	3ZHHY	3ZHHZ	20 lb ABC DRY CHEM Cart-Op
Cellroom	Unit 1 Substation	1st Floor, East of Store rm	M5	3ZHM3	3ZHM4	15 lb Carbon Dioxide
Cellroom	Unit 1 Substation	1st Floor North wall -Center		3ZHM5	3ZHM6	15 lb Carbon Dioxide
Cellroom	Unit 1 Substation	1st Floor North of Stairs		3ZHM7	3ZHM8	15 lb Carbon Dioxide
Cellroom	Unit 1 Substation	2nd Floor Top of Stairs		3ZHM9	3ZHMB	15 lb Carbon Dioxide
Cellroom	Unit 1 Substation	Electrician office - West side		3ZHMC	3ZHMD	15 lb Carbon Dioxide
Cellroom	Sub Station #8	By South Door		3ZHMP	3ZHMQ	20 lb Carbon Dioxide
Cellroom	Unit 1 Substation	2nd floof center, wheel unit		3ZHMF	3ZHMG	50 lb Carbon Dioxide
Cellroom	Unit 1 Substation	2nd floor North, wheel unit		3ZHMH	3ZHMJ	50 lb Carbon Dioxide
Cellroom	Unit 1 Substation	1st floor by drill press		3ZHM1	3ZHM2	20 lb ABC DRY CHEM cart-Op
Cellroom	Unit 1 Substation	2nd floor by west door		3ZHMK	3ZHML	20 lb ABC DRY CHEM Cart-OP
Cellroom	Unit 1 Substation	2nd floor, South center wall		3ZHMM	3ZHMN	20 lb ABC DRY CHEM Cart-Op
Cellroom	Elect room	MCC Below Office	Y7	3ZHLL	3ZHLM	10 lb Carbon Dioxide
Cellroom	Sub Station 2	East wall - North	M17	3ZHLV	3ZHLW	10 lb Carbon Dioxide
Cellroom	Sub Station 2	East Wall - Center	M18	3ZHLX	3ZHLY	10 lb Carbon Dioxide
Cellroom	Sub Station 2	East Wall - South	M19	3ZHLZ	3ZHMO	10 lb Carbon Dioxide
Cellroom	Prod Area	North - By steps		3ZHLS	3ZHLT	15 lb Carbon Dioxide
Cellroom	Sub 13	Outside East Door		3ZHJV	3ZHJW	20 lb Carbon Dioxide

Table 3
Fire Extinguisher Locations
Big River Zinc Corporation
Sauget, Illinois

DEPARTMENT	LOCATION	Location 2	BRZ #	B/C UNIT	B/C SITE	TYPE
Cellroom	Control room	W. Foremans Office	T6	3ZHLP	3ZHLN	20 lb ABC DRY CHEM
Cellroom	TCA Towers Ground N	Column	T14	3ZHLO	3ZHL1	20 lb ABC DRY CHEM Cart-Op
Cellroom	TCA Towers Ground N	By catwalk over hot sump	T14	3ZHL2	3ZHL3	20 lb ABC DRY CHEM Cart-Op
Cellroom	TCA Towers SW	Fan Floor		3ZHL4	3ZHL5	20 lb ABC DRY CHEM Cart-Op
Cellroom	TCA Towers NW	Fan Floor		3ZHL6	3ZHL7	20 lb ABC DRY CHEM Cart-Op
Cellroom	South	S. Basement	T8	3ZHLD	3ZHLF	20 lb ABC DRY CHEM Cart-Op
Cellroom	Center	Center Basement West	T9	3ZHLG	3ZHLH	20 lb ABC DRY CHEM Cart-Op
Cellroom	Center	Basement West		3ZHLJ	3ZHLK	20 lb ABC DRY CHEM Cart-Op
Cellroom	Control room	S. Cellroom	T3	3ZHLQ	3ZHLR	20 lb ABC DRY CHEM Cart-Op
Cellroom	Head Tankman Shack	Outside East Door	T12	3ZHQZ	3ZHRO	20 lb ABC DRY CHEM Cart-Op
Cellroom	TCA Shack	By Water fountain		3ZHL8	3ZHL9	5 lb ABC DRY CHEM Cart-Op
Cellroom	Unit # 3	Stripping floor - North		3FZSL	3FZSM	20 lb ABC DRY CHEM
Cellroom	Unit # 3	Stripping floor - Mid		3FZSK	3FZSJ	20 lb ABC DRY CHEM
Cellroom	Unit # 3	Stripping floor- South		3FZSH	3FZSG	20 lb ABC DRY CHEM
Cellroom	Unit # 3	Basement - South		3FZSQ	3FZSR	20 lb ABC DRY CHEM
Cellroom	Unit # 3	Basement - North		3FZSS	3FZST	20 lb ABC DRY CHEM
Cellroom	Sub # 11	West wall		3FZS4	3FZS5	20 lb Carbon Dioxide
Cellroom	Sub # 11	East wall		3FZSB	3FZSC	20 lb Carbon Dioxide
Cellroom	Sub # 11	North wall -West		3FZS6	3FZS7	20 lb Carbon Dioxide
Cellroom	Sub # 11	North wall - East		3FZS8	3FZS9	20 lb Carbon Dioxide
Cellroom	Clean-up cells	Southwest corner		3FZSN	3FZSP	20 lb ABC DRY CHEM
Cellroom	Gypsum removal towers	Top- Northeast corner		3ZHQX	3ZHQY	20 lb ABC DRY CHEM
Cellroom	North Basement	NE of high press. pump	L17	3ZHPK	3ZHPL	20 lb ABC DRY CHEM cart-Op
Engineering	Copy room	On floor by door		3ZHNN	3ZHNP	20 lb ABC DRY CHEM
Leach Purification	Weak Acid Leach	By # 1 tank, North by door		3ZHP5	3ZHP6	20 lb ABC DRY CHEM
Leach/Purification	MCC by paper press area	Inside MCC (Blueroom)		3ZHQS	3ZHQT	10 lb Carbon Dioxide
Leach/Purification	# 9 Substation	North End		3ZHP7	3ZHP8	15 lb Carbon Dioxide
Leach/Purification	# 9 Substation	South End	L31	3ZHP9	3ZHPB	15 lb Carbon Dioxide
Leach/Purification	O/S Maint			3ZHPH	3ZHPJ	15 lb Carbon Dioxide
Leach/Purification	1st Stage	Midway by air drier		3ZHQ0	3ZHQ1	15 lb Carbon Dioxide
Leach/Purification	Leach	South of #3 Leach Tank		3ZHPT	3ZHPV	20 lb Carbon Dioxide
Leach/Purification	2nd Stage	West pole by #1 Tank		3ZHQ4	3ZHQ5	20 lb Carbon Dioxide
Leach/Purification	2nd Stage	East of Presses		3ZHQ8	3ZHQ9	20 lb Carbon Dioxide
Leach/Purification	Eimco Floor	West of #3 Eimco	L1	3ZHQ6	3ZHQ7	20 lb ABC DRY CHEM

Table 3
Fire Extinguisher Locations
Big River Zinc Corporation
Sauget, Illinois

DEPARTMENT	LOCATION	Location 2	BRZ #	B/C UNIT	B/C SITE	TYPE
Leach/Purification	Residue	North of Floc Make-up tank		3ZHQL	3ZHQM	20 lb ABC DRY CHEM
Leach/Purification	1st Stage new presses	Southeast corner		3ZHQN	3ZHQP	20 lb ABC DRY CHEM
Leach/Purification	ZSM	MCC Blower room		3ZHPC	3ZHPD	20 lb ABC DRY CHEM Cart-Op
Leach/Purification	ZSM	South pole by locker	L32	3ZHPM	3ZHPN	20 lb ABC DRY CHEM cart-op
Leach/Purification	ZSM	Cd precip tanks by steps		3ZHPP	3ZHPQ	20 lb ABC DRY CHEM Cart-Op
Leach/Purification	Leach	South of # 1 Leach Tank		3ZHPR	3ZHPS	20 lb ABC DRY CHEM cart-op
Leach/Purification	Leach	N. Calcine bin top	L07	3ZHPW	3ZHPX	20 lb ABC DRY CHEM cart-op
Leach/Purification	1st Stage	1st Stage North	L8	3ZHPY	3ZHPZ	20 lb ABC DRY CHEM cart-op
Leach/Purification	1st Stage	1st Stage South	L09	3ZHQ2	3ZHQ3	20 lb ABC DRY CHEM cart-op
Leach/Purification	Residue MCC	Outside	L23	3ZHQB	3ZHQC	20 lb ABC DRY CHEM Cart-op
Leach/Purification	Residue	Control room	L24	3ZHQD	3ZHQF	20 lb ABC DRY CHEM Cart-Op
Leach/Purification	Residue Room	South Residue press		3ZHQG	3ZHQH	20 lb ABC DRY CHEM cart-op
Leach/Purification	Residue Room	North press control panel		3ZHQJ	3ZHQK	20 lb ABC DRY CHEM Cart-Op
Leach/Purification	Foremans Office	South wall	L14	3ZHQQ	3ZHQR	20 lb ABC DRY CHEM cart-Op
Leach/Purification	Press paper area	South	L15	3ZHQV	3ZHQW	20 lb ABC DRY CHEM Cart-OP
Leach/Purification	Eimco Sump	East of deep leg pit	L18	3FZRV	3FZRT	
Leach/Purification	Southwest Leach-down	S.W. of Leach tanks	L2	3FZRY	3FZRZ	
Leach/Purification	Inside North door	North of # 3 Leach Tank	L3	3FZSO		
Leach/Purification	East of Classifier/Ball mill	On pole by ramp	L4	3FZRW		
Maintenance	Leach/Purification	Northwest of Maint. Shack		3ZHPF	3ZHPG	20 lb ABC DRY CHEM
Maintenance	Casting-Near back door	Mounted to work bench		3ZHJB	3ZHJC	20 lb ABC DRY CHEM Cart-Op
Maintenance	Cadmium	Maintenance shop		3ZHHR	3ZHHS	5 lb ABC DRY CHEM Cart-OP
Maintenance	Cellroom Maintenance area	Northwest of welding booth		3ZHLB	3ZHLC	20 lb ABC DRY CHEM Cart-Op
Maintenance	Gas pumps	west side		3ZHKP	3ZHKQ	20 lb ABC DRY CHEM Cart-Op
Maintenance	Main Compressor Room	Near West door		3ZHK5	3ZHK6	20 lb Carbon Dioxide
Maintenance	Main Compressor Room	Between #7 & 8 Air Control		3ZHK3	3ZHK4	20 lb ABC DRY CHEM Cart-Op
Maintenance	Oil house	North side		3ZHK7	3ZHK8	20 lb ABC DRY CHEM
Maintenance	Oil house	South side		3ZHK9	3ZHKB	20 lb ABC DRY CHEM Cart-Op
Maintenance	Quanset Hut	Front door		3ZHJ4	3ZHJ5	20 lb ABC DRY CHEM Cart-Op
Maintenance	Quanset hut	Center		3ZHJ6	3ZHJ7	20 lb ABC DRY CHEM Cart-Op
Maintenance	Quanset hut	Back door		3ZHJ8	3ZHJ9	20 lb ABC DRY CHEM Cart-Op
Maintenance	Vehicle Shop	By bulk oil drum		3ZHN4	3ZHN5	15 lb Carbon Dioxide
Maintenance	Pump Shop	By parts wash	M27	3ZHND	3ZHNF	15 lb Carbon Dioxide
Maintenance	CRNE AP308	CP5		3ZHMW	3ZHMX	2.5 ABC DRY CHEM
Maintenance	SW Pole	East of hand wash area	M24	3ZHN6	3ZHN7	20 lb ABC DRY CHEM Cart-OP

Table 3
Fire Extinguisher Locations
Big River Zinc Corporation
Sauget, Illinois

DEPARTMENT	LOCATION	Location 2	BRZ #	B/C UNIT	B/C SITE	TYPE
Maintenance	Vehicle Shop	South door	M25	3ZHN8	3ZHN9	20 lb ABC DRY CHEM Cart-Op
Maintenance	Welding Shop	Near South door	M26	3ZHNB	3ZHNC	20 lb ABC DRY CHEM Cart-Op
Maintenance	Instrument Shop	South wall		3ZHNJ	3ZHNK	20 lb ABC DRY CHEM Cart-Op
Maintenance	Crane CP1	Drott Go-Devil		3ZHNO	3ZHN1	5 lb ABC DRY CHEM
Maintenance	Crane 2			3ZHMY	3ZHMZ	5 lb ABC DRY CHEM Cart-Op
Maintenance	Cart CS7			3ZHN2	3ZHN3	5 lb ABC DRY CHEM Cart-Op
Maintenance	Office	Northwest Corner		3ZHNL	3ZHNM	5 lb ABC DRY CHEM Cart-OP
Maintenance	Near north wall on workbench	West of horrizontal mill		3ZHNG	3ZHNH	30 lb Class D Cart-Op
Maintenance	Roast/Acid maint shack	Inside on column		3ZHCF	3ZHCG	15 lb Carbon Dioxide
Pre-Leach	By Maint.			3ZHBS	3ZHBT	15 lb Carbon Dioxide
Pre-Leach	N By Steps	WT Vaccum pump at steps	R31	3ZHBX	3ZHBY	15 lb Carbon Dioxide
Pre-Leach	O/S Oil HS	Oil House	R17	3ZHCH	3ZHCJ	20 lb ABC DRY CHEM
Pre-Leach	Conveyor			3ZHBV	3ZHBW	20 lb ABC DRY CHEM Cart -OP
Pre-Leach	Pump room Basement			3ZHBZ	3ZHCO	20 lb ABC DRY CHEM Cart-Op
Pre-Leach	By Hopper			3ZHC3	3ZHC4	20 lb ABC DRY CHEM Cart-Op
Pre-Leach	Line Cnter			3ZHC5	3ZHC6	20 lb ABC DRY CHEM Cart-Op
Pre-Leach	Line East			3ZHC7	3ZHC8	20 lb ABC DRY CHEM Cart--Op
Pre-Leach	Pump House			3ZHCC	3ZHCD	20 lb ABC DRY CHEM Cart-Op
Pre-Leach	By sub # 7	East of Pre heater on Post	R33	3ZHCK	3ZHCL	20 lb ABC DRY CHEM Cart-Op
Pre-Leach	Control room	Control room	R21	3ZHC1	3ZHC2	20 lb Carbon Dioxide
Purchasing	Store room	Southwest Corner	S3	3ZHNS	3ZHNT	20 lb ABC DRY CHEM Cart-Op
Purchasing	Store room	West pole	S2	3ZHNV	3ZHNW	20 lb ABC DRY CHEM cart-Op
Purchasing	Store room	East pole		3ZHNX	3ZHNY	20 lb ABC DRY CHEM Cart-Op
Purchasing	Hallway	Between restrooms		3ZHNQ	3ZHNR	5 lb ABC DRY CHEM Cart-Op
Roast/ Acid	Ore shed - Center	Conc. Storage center	R2	3ZHCT	3ZHCV	15 lb Carbon Dioxide
Roast/Acid	Acid plant	Coolong Tower	R20	3ZHCP	3ZHCQ	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	Acid Control Room	Acid Control	R19	3ZHCM	3ZHCN	15 lb Carbon Dioxide
Roast/Acid	SE Substation	Motor Control Room-east	R15	3ZHD4	3ZHD5	15 lb Carbon Dioxide
Roast/Acid	Elect Room SW	Motor Control Room-South	R18	3ZHD8	3ZHD9	15 lb Carbon Dioxide
Roast/Acid	Sub Station # 7	Motor Control Room-West	R16	3ZHDB	3ZHDC	15 lb Carbon Dioxide
Roast/Acid	Sub Station # 7	Substation 7	R34	3ZHDD	3ZHDF	15 lb Carbon Dioxide
Roast/Acid	Roaster Southeast			3ZHDL	3ZHDM	15 lb Carbon Dioxide
Roast/Acid	Roaster East Stair			3ZHDQ	3ZHDR	15 lb Carbon Dioxide
Roast/Acid	Roof Center	Hoist house 5th	R5	3ZHF5	3ZHF6	15 lb Carbon Dioxide
Roast/Acid	Ore Shed North	Conc. Storage north	R3	3ZHCR	3ZHCS	20 lb ABC DRY CHEM Cart-OP

Table 3
Fire Extinguisher Locations
Big River Zinc Corporation
Sauget, Illinois

DEPARTMENT	LOCATION	Location 2	BRZ #	B/C UNIT	B/C SITE	TYPE
Roast/Acid	Ore Shed South	Conc. Storage South	R1	3ZHCW	3ZHCX	20 lb ABC DRY CHEM Cart-OP
Roast/Acid	Ore Shed Train Dock NW	Conc. unloading SW	R25	3ZHCY	3ZHCZ	20 lb ABC DRY CHEM Cart-OP
Roast/Acid	Ore Shed Train Dock SW	Conc. Unloading E	R26	3ZHDO	3ZHD1	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	Ore Shed Train Dock SE	Conc. Unloading- East	R27	3ZHD2	3ZHD3	20 lb ABC DRY CHEM Cart-OP
Roast/Acid	Roaster North	Roaster 1st Flr Windbox	R14	3ZHD6	3ZHD7	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	Roaster West Stairs	Air Compressor Building	R35	3ZHDG	3ZHDH	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	Roaster SW	Roaster 2nd Flr mid-West	R13	3ZHDJ	3ZHDK	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	Roaster Center			3ZHDN	3ZHDP	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	Roaster SE	Roaster 3rd floor-east	R9	3ZHDS	3ZHDT	20 lb ABC DRY CHEM Cart-OP
Roast/Acid	Roaster SW	Roaster 3rd floor-west	R8	3ZHDV	3ZHDW	20 lb ABC DRY CHEM Cart-OP
Roast/Acid	By Hoppers			3ZHDX	3ZHDY	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	By Hoppers	Roaster 4th floor	R6	3ZHDZ	3ZHFO	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	By Hoppers	Roaster 4th floor	R7	3ZHF1	3ZHF2	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	Bin control	Shaker Screne room	R29	3ZHF3	3ZHF4	20 lb ABC DRY CHEM Cart-Op
Roast/Acid	Foremans Office	Foremans office	R36	3ZHC9	3ZHCB	5 lb ABC DRY CHEM
Roast/Acid	Spill Kit(Hazardous Waste)	Sludge Pad Sump		3ZHRS	3ZHRT	15 lb Carbon Dioxide
Roast/Acid	Spill Kit(Hazardous Waste)	Sludge Pad Sump		W-878545		20lb Carbon Dioxide
Safety	Wash room			3ZHKW	3ZHKX	20 lb ABC DRY CHEM
Safety	Store room			3ZHKY	3ZHKZ	20 lb ABC DRY CHEM
Security	Lunchroom	South wall by light switch	S09	3ZHKT	3ZHKV	20 lb ABC DRY CHEM
Security	Mens Locker room	Dirty side E wall by coat rack	S10	3ZHP3	3ZHP4	15 lb Carbon Dioxide
Security	Mens locker room	W wall next to boiler room	S12	3ZHNZ	3ZHPO	20 lb ABC DRY CHEM Cart-Op
Security	Mens locker room	S Wall next to thermostat	S11	3ZHP1	3ZHP2	20lb ABC DRY CHEM Cart-Op
Security	Guard shack lobby	North wall clock alley	S16	3ZHKR	3ZHKS	20 lb ABC DRY CHEM Cart-Op
Security	Womens locker room	S wall in hall/salary side	S15	3ZHJZ	3ZHKO	20 lb ABC DRY CHEM
Security	Womens Locker room	N wall in hall/hourly side	S14	3ZHK1	3ZHK2	5 lb ABC DRY CHEM
Spare	Safety Storage			3ZHRJ	3ZHRK	10 lb ABC Dry Chem
Spare	Safety storage			3ZHR1	3ZHR5	20 lb ABC DRY CHEM
Spare	Safety Storage			3ZHR2	3ZHR5	20 lb ABC DRY CHEM
Spare	Safety Storage			3ZHR3	3ZHR5	20 lb ABC DRY CHEM
Spare	Safety Storage			3ZHR4	3ZHR5	20 lb ABC DRY CHEM
Spare	Safety Storage			3ZHR6	3ZHRC	20 lb ABC DRY CHEM Cart_op
Spare	Safety Storage			3ZHRT	3ZHRC	20 lb ABC DRY CHEM Cart-Op
Spare	Safety Storage			3ZHR9	3ZHRC	20 lb ABC DRY CHEM Cart-Op

Table 3
Fire Extinguisher Locations
Big River Zinc Corporation
Sauget, Illinois

DEPARTMENT	LOCATION	Location 2	BRZ #	B/C UNIT	B/C SITE	TYPE
Spare	Safety Storage			3ZHRB	3ZHRC	20 lb BC DRY CHEM Cart-Op
Spare	Safety Storage			3ZHRD	3ZHRF	30 lb Class D Cart-Op
Spare	Safety Storage			3ZHRG	3ZHRH	17 lb Halon 1211
Spare	Safety Storage			3ZHRQ	3ZHRR	2.5 Gallon Pressurized Water
Spare	Safety Storage			3ZHR8	3ZHRC	20 lb ABC DRY CHEM Cart-Op
Spare	Safety Storage			3ZHRL	3ZHRM	5 lb ABC DRY CHEM
Test Plant	Pilot Bay	By telephone		3ZHKK	3ZHKL	20 lb Carbon Dioxide
Test Plant	Annex	By East door		3ZHKC	3ZHKD	20 lb ABC DRY CHEM
Test Plant	Zinc Powder			3ZHKF	3ZHKG	20 lb ABC DRY CHEM
Test Plant	Office	By Restroom		3ZHKM	3ZHKN	5 lb ABC DRY CHEM cart-OP
Test Plant	Zinc Powder	Platform		3ZHKH	3ZHKJ	30 lb Class D Cart-Op

Hazardous Waste Management

Off Site "Hazardous Waste Management The Complete Course" by Environmental Resource Center

July 11-12, 2005	Michael A Altepeter, Environmental Manager Anthony Thomas, Chief of Security
July 12-13, 2004	Michael A. Altepeter, Environmental Manager Anthony Thomas, Chief of Security Steve McComber, Industrial Hygenist
November, 2003	Robert Palisch, Manager Environment & Quality Control
May 14,15, 2003	Anthony Thomas, Chief of Security Steve French, Head of Safety/ Health/ Environment Mike Riley, Training & Environmental Manager

Certificate

This is to certify that

Mike Altepeter
Big River Zinc Corporation

has successfully completed

Hazardous Waste Management: The Complete Course

in accordance with 40 CFR 265.16

presented by

ENVIRONMENTAL RESOURCE CENTER

101 Center Pointe Drive, Cary, NC 27513 919-469-1585
www.ercweb.com

Darryl Shaver

Darryl Shaver, Instructor

July 11-12, 2005

Date

Certificate Number: 96474

Certificate

This is to certify that

Mike Altepeter
Big River Zinc Corporation

has successfully completed

Hazardous Waste Management: The Complete Course

in accordance with 40 CFR 265.16

presented by

ENVIRONMENTAL RESOURCE CENTER

101 Center Pointe Drive, Cary, NC 27513 919-469-1585
www.ercweb.com

Darryl Shaver, Instructor

July 12-13, 2004
Date

Certificate Number: 96474

0/2

Big River Zinc

2401 Mississippi Avenue
Sauget, IL 62201

Phone 618 274 5000
Fax 618 274 4444

Re: WI 9 LP.2 L/P Hazardous Waste Management Revision Change

The last shipment of Cadmium Sponge as Hazardous Waste occurred on 4/21/04. The Cadmium market has grown and the sponge is once again a product. It is packaged and sold. Therefore the parts of the WI enclosed concerning Cadmium Sponge as a waste no longer apply as of 4/21/04.

The Press Cloth Hazardous Waste dumpster will be moved from Roast Acid as noted in the WI to Leach Purification next to the Cadmium Sponge storage building. The area is paved and any spillage is caught and returned by sump to the process. The possibility of spillage during transport is reduced because the container is much closer to the point of generation.

WORK INSTRUCTION

WI 9.LP2 L/P Department Hazardous Waste Management

1.0 PURPOSE

The purpose of this Work Instruction is to detail complete requirements for handling materials permitted for disposal as hazardous wastes from the L/P Department. The cadmium briquettes/sponge and the press paper and cloth from L/P Department filter presses are currently approved for disposal. This Work Instruction is designed to meet all regulations for accumulation, storage and shipment of these permitted hazardous wastes.

2.0 SCOPE

This Work Instruction applies to the cadmium process from collection at the wash box, storage in the cadmium storage building and shipment to the disposal facility. It also pertains to the collection of press paper and cloth from all L/P Department filter presses, storage in the 30-yard containers on the North pad and shipment to the disposal facility.

3.0 RESPONSIBLITIES

L/P Supervision	Oversee daily operations, monitor personnel and storage areas to ensure requirements of Cadmium Standard and RCRA Hazardous Waste Standard are met, conduct weekly inspection of storage areas
L/P Laborers	Perform the task of moving cadmium from the wash box to the storage building and completing any required cleanup, both at the wash box and the storage building
Press Attendants	Perform the task of moving press paper and cloth following collection from the filter presses to the 30 yard storage/shipping container on the North pad. Complete any required cleanup, both at the collection area in L/P and the storage pad
Safety Department	Ensure requirements of Cadmium Standard are met, conduct weekly inspections of storage areas, complete air monitoring where required
Security Supervisor	Prepare and sign required manifests, ensure no trucks depart plant overloaded
Environmental Manager	Ensure requirements of RCRA Hazardous Waste Standard are met, conduct weekly inspections of storage areas, complete required agency notifications and maintain required records

Change History

Date	Change
6/13/01	Initial issue

Approved Quality Assurance	Approved L/P General Supervisor	Approved Department Superintendent

4.0 DEFINITIONS – see reference documents for any required definitions.

5.0 REFERENCES

SP9S2, Cadmium Compliance Program
40 CFR 261, Waste Management

6.0 RECORDS

Cadmium Storage Building Inspection Log (completed)
North pad/Container Inspection Sheets (completed)
Hazardous Waste Manifest for each shipment

7.0 ATTACHMENTS

Attachment I	Cadmium Storage Building Inspection Log
Attachment II	Manifest template for cadmium sponge shipment
Attachment III	Manifest template for press paper shipment
Attachment IV	North pad/Container Inspection Sheet

Section I, Cadmium Briquette/Sponge Disposal

8.0 General

A portion of the cadmium production will be stored in the newly designated Cadmium Storage Building awaiting shipment to a permitted disposal facility. This cadmium may be stored in bulk inside the building, both in briquette and sponge form directly from the wash box.

NOTE: No other material may be mixed with this cadmium. The disposal permit allows only for pure cadmium. If anyone should notice that foreign material has been placed into the storage building immediately notify both L/P Supervision and the Environmental Manager.

The storage building must be inspected and the log sheet completed by the inspector weekly at a minimum in accordance with the inspection checklist provided at the bottom of Attachment I, the Cadmium Storage Building Inspection Log. These inspections may be accomplished by a L/P Supervisor, a Safety Department representative, or the Environmental Manager. Big River Zinc is considered a large quantity generator of hazardous waste; therefore material accumulated for shipment as hazardous waste must not be stored longer than 90 days on site. The storage building doors must be kept closed except when adding material to storage, or removing material for shipment.

9.0 INSTRUCTIONS

9.1 L/P Laborers

The L/P Laborers will move the material from the cadmium production area to the storage building and dump it inside the building. Upon completion of that day's movement of material care must be taken to clean up any material not contained within the building and ensure it is contained. Wheeled vehicles will be utilized to both dump the material into the building and load it into trucks for shipment so every effort must be made including washing off the vehicle tires to prevent a cadmium contamination problem from the movement of these vehicles.

9.2 L/P Supervision

L/P Supervision will oversee the daily cadmium operations to ensure all pertinent requirements are met, including the OSHA Cadmium Standard, RCRA Hazardous Waste standards, and Big River Zinc's operating requirements. L/P Supervision will schedule shipments as necessary through the Environmental Manager to ensure storage capacity is not exceeded and the ninety-day shipment rule is observed.

9.3 Environmental Manager

The Environmental Manager will schedule trucks through the Transportation Company to meet as closely as possible the dates requested by L/P Supervision. Upon scheduling a shipment the Security Supervisor and the L/P General Supervisor will be notified of the schedule. The Environmental Manager has overall responsibility to ensure the requirements of the RCRA Hazardous Waste regulations are met.

9.4 Safety Department

Safety Department Representatives will conduct the required air monitoring tests to determine requirements for compliance with the Cadmium Standard. Additionally, the necessary warning and identification signs for the cadmium storage building will be procured and maintained by the Safety Department.

9.5 Security Supervisor

The Environmental Manager will schedule the trucks for material pickup, then will notify the Security Supervisor of the upcoming schedule. Upon notification the Security Supervisor will ensure sufficient manifests are available for the loads scheduled. If manifests are not available will request manifests from the Environmental Manager. Upon arrival of the truck Security will notify the L/P Supervisor and will page the Payloader to load the truck. **NOTE:** The truck must be loaded and ready to depart within one hour in order to avoid demurrage charges. After completion of loading and weighing the truck the Security Supervisor will make the appropriate entries onto the manifest and sign the manifest as the generator's representative. See Attachment II for a template for the manifest. Should any questions arise contact the Environmental Manager or the Safety Director prior to allowing the truck to depart the plant. In the Security Supervisors absence the Environmental Manager or the Safety Director may complete and sign the manifest.

Section II, Press Paper/Cloth Disposal

10.0 General

All paper removed from the filter presses along with cloth that cannot be laundered for reuse will be stored in the 30 yard containers at the North pad for disposal.

NOTE: The only other material that may be placed into this container is the PPE collected by the cadmium operators at the satellite accumulation point outside the cadmium oxide operator office. Should any other material be placed into this container notify L/P Supervision, Security, Safety or the Environmental Manager immediately.

The North pad storage area and the 30 yard containers must be inspected and the log sheet completed by the inspector weekly. The log sheet for this inspection is kept on a clipboard in the Safety office. These inspections may be accomplished by a Safety Department representative or the Environmental Manager. Big River Zinc is considered a large quantity generator of hazardous waste; therefore material accumulated for shipment as hazardous waste must not be stored longer than 90 days on site. The storage container must be kept closed except when adding material to the container.

11.0 INSTRUCTIONS

11.1 Press Attendants

The Press Attendants will move the material from the collection area to the storage area and dump it into the 30-yard container. Each load will be weighed and the weight ticket provided to the Security Supervisor. Upon completion of that day's movement of material care must be taken to clean up any material not contained within the container and ensure it is contained. Any time material is not being added into the container, the container must be closed.

11.2 L/P Supervision

L/P Supervision will oversee daily press operations to ensure all pertinent requirements are met, including the OSHA Cadmium Standard, RCRA Hazardous Waste standards, and Big River Zinc's operating requirements. L/P Supervision will schedule shipments as necessary through the Environmental Manager to ensure storage capacity is not exceeded and the ninety-day shipment rule is observed.

11.3 Environmental Manager

The Environmental Manager will schedule trucks through the Transportation Company to meet as closely as possible the dates requested by L/P Supervision. Upon scheduling a shipment the Security Supervisor and the L/P General Supervisor will be notified of the schedule. The Environmental Manager has overall responsibility to ensure the requirements of the RCRA Hazardous Waste regulations are met.

11.4 Safety Department

Safety Department Representatives may conduct the weekly inspection of the pad and the onsite containers.

11.5 Security Supervisor

The Environmental Manager will schedule the trucks for material pickup, then will notify the Security Supervisor of the upcoming schedule. Upon notification the Security Supervisor will ensure sufficient manifests are available for the loads scheduled. If manifests are not available will request manifests from the Environmental Manager. Upon arrival of the truck Security will direct the driver to the North pad (usually) to drop off an empty container and to pick up the container to be shipped. After completion of loading and weighing the truck the Security Supervisor will make the appropriate entries onto the manifest and sign the manifest as the generator's representative. See Attachment III for a template for the manifest. Should any questions arise contact the Environmental Manager or in an emergency the Safety Director prior to allowing the truck to depart the plant. In the Security Supervisors absence the Environmental Manager or the Safety Director may complete and sign the manifest.

Attachment I
Cadmium Storage Building Inspection Log

DATE	COMMENTS	SIGNATURE

During inspections check the following items: (Inspections are required at least weekly).

1. *Doors closed unless material being added or removed from building.*
2. *Cadmium signs posted in three places and in good condition.*
3. *Both primary and secondary sump pumps checked operating properly.*
4. *Log each date material shipped; check to be sure that 90 days have not passed since last shipment.*

Approved Quality Assurance	Approved L/P General Supervisor	Approved Department Superintendent

This page for cadmium/sponge manifest template

Attachment II continued
Directions for completion and copy retention
of cadmium briquette/sponge shipment
Manifests

The attached copy of an Illinois Uniform Hazardous Waste Manifest is completed and signed properly. It may be used as a guide to complete future manifests for shipments of this material. Blocks which may/will change each shipment are indicated below.

- Manifest Document No. – this number will be provided by the Security Supervisor. It is a set of numbers sequentially assigned which are used to help keep track of all loads. The format for these shipments is the letters Cd0XXX where the XXX is the number for the next shipment.
- Block 12, Container Type – 20 or 30 yard containers are designated CM. Dump trucks are designated DT. Enter the appropriate code here.
- Block 13, Total Quantity – enter the net weight of the shipment here.

Upon completion of the manifest including all required signatures, provide copies 1-4 to the truck driver along with a copy of the weight ticket. Staple a copy of the weight ticket to copies #5 & 6 along with any paperwork provided by the driver and submit the package to the Environmental Manager for agency notification and record retention.

This page for press paper/cloth manifest template

Attachment III continued
Directions for completion and copy retention
of press paper/cloth shipment
Manifests

The attached copy of a Michigan Uniform Hazardous Waste Manifest is completed and signed properly. It may be used as a guide to complete future manifests for shipments of this material. Blocks which may/will change each shipment are indicated below.

- Block 12, Container Type – 20 or 30 yard containers are designated CM. Dump trucks are designated DT. Enter the appropriate code here.
- Block 13, Total Quantity – enter the net weight of the shipment here.

Upon completion of the manifest including all required signatures, provide all copies of the manifest except the top copy and the generator 1st and 2nd copies to the truck driver along with a copy of the weight ticket. Staple a copy of the weight ticket to the top copy and the generator 1st and 2nd copies along with any paperwork provided by the driver and submit the package to the Environmental Manager for agency notification and record retention.

Attachment IV
North pad/Container Inspection Sheet
Hazardous Waste Inspection Form
90 day accumulation

Container Description Midwest Waste Box # _____ (30 yd Container)

Contents Press paper Profile # 052898MO

Accumulation Period Expires (90 days from accumulation start)

Date		Comments
		Received - Accumulation began

Check List

1. Labels attached and legible
2. Cover/Lid secured
3. Visible damage/deterioration of container
4 Visible leaking
5. Combustible materials stored near container

Approved Quality Assurance	Approved L/P General Supervisor	Approved Department Superintendent

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SEP 30 2003

DE-9J

Via Facsimile (217) 524-4193

William Child, Chief
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702–3998

Re: Big River Zinc Corporation
ILD 062 444 435

Dear Mr Child:

I am providing notice pursuant to 3008(a)(2) of the Resource Conservation Recovery Act (RCRA), 42 U.S.C.§ 6928(a), that the United States Environmental Protection Agency (U.S. EPA) is preparing to file a Consent Agreement and Final Order (CAFO) under Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), and Sections 22.01(a)(4), 22.13, and 22.37 of the "Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation, Termination, or Suspension of Permits", 40 CFR Part 22, to resolve an alleged violation against the Big River Zinc Corporation (BRZ) located at 2401 Mississippi Avenue, Sauget, Illinois. The alleged violation was originally referred to U.S. EPA in a March 9, 2000, letter from the Illinois Environmental Protection Agency, regarding BRZ's acceptance and management of secondary materials which constitute hazardous waste under RCRA.

If you have any questions regarding this case, please contact Michael Cunningham of my staff at (312) 886-4464.

Sincerely,

Joseph M. Boyle

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SEP 30 2003

DE-9J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. George M. Obeldobel
President and CEO
Big River Zinc Corporation
2401 Mississippi Avenue
Sauget, Illinois 62201

Re: Consent Agreement and Final Order
Big River Zinc Corporation
EPA ID No. ILD 062 444 435

RCRA-05- 2003 0018

Dear Mr. Obeldobel:

Enclosed please find an original signed fully-executed Consent Agreement and Final Order (CAFO) in resolution of the violation cited therin. The originals were filed on September 30th, 2003 with the Regional Hearing Clerk (RHC).

Please pay the civil penalty in the amount of $3,271 in the manner prescribed in paragraph A of the CAFO, and reference all checks with the number BD 054203010. Your payment is due within 30 calendar days of the effective date of the CAFO.

Thank you for your cooperation in resolving this matter.

Sincerely,

Joseph M. Boyle

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division

Enclosure

cc: Todd Marvel, IEPA (w/CAFO)

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 50% Recycled Paper (20% Postconsumer)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5

IN THE MATTER OF:	)	
	)	Docket No. RCRA-05- 2003 0018
Big River Zinc Corporation	)	
2401 Mississippi Avenue	)	Proceeding to Assess an Administrative Penalty
Sauget, Illinois 62201	)	Under Section 3008(a) of the Resource Conservation
	)	and Recovery Act, 42 U.S.C. §6928(a).
EPA ID No. ILD 062 444 435	)	

CONSENT AGREEMENT AND FINAL ORDER

I. JURISDICTION

1. This is a civil administrative action instituted and settled pursuant to Section 3008(a) of the Solid Waste Disposal Act, also known as the Resource Conservation and Recovery Act of 1976, as amended (RCRA), 42 U.S.C. § 6928(a), and the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation, Termination or Suspension of Permits (Consolidated Rules), 40 C.F.R. Part 22.

2. Jurisdiction for this action is conferred upon the United States Environmental Protection Agency (U.S. EPA) by Sections 3006(b) and 3008 of RCRA; 42 U.S.C. §§ 6926(b) and 6928.

3. The complainant is, by lawful delegation, the Chief, Enforcement & Compliance Assurance Branch, Waste, Pesticides & Toxics Division, Region 5, U.S. EPA.

4. U.S. EPA has promulgated regulations, codified at 40 C.F.R. Parts 260 through 279, governing generators and transporters of hazardous waste and facilities that treat, store and dispose of hazardous waste.

5. Pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, the Administrator of U.S. EPA may authorize a state to administer a RCRA hazardous waste program in lieu of the federal program when the Administrator finds that the state program meets certain conditions. Any violation of regulations promulgated pursuant to Subtitle C (Sections 3001-3023 of RCRA, 42 U.S.C. §§ 6921-6939e) or of any state provision authorized pursuant to Section 3006 of RCRA, constitutes a violation of RCRA, subject to the assessment of civil penalties and issuance of

compliance orders as provided in Section 3008 of RCRA, 42 U.S.C. § 6928.

6. Pursuant to Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), the Administrator of U.S. EPA granted the State of Illinois final authorization to administer a state hazardous waste program in lieu of the federal government's base RCRA program effective January 31, 1986. 51 Fed. Reg.3778 (January 31, 1986). The Administrator of U.S. EPA granted Illinois final authorization to administer certain HSWA and additional RCRA requirements effective March 5, 1988, 53 Fed. Reg.126 (January 5, 1988); April 30, 1990, 55 Fed. Reg. 7320 (March 1, 1990); June 3, 1991, 56 Fed. Reg. 13595 (April 3, 1991); August 15, 1994, 59 Fed. Reg. 30525 (June 14, 1994); May 14, 1996, 61 Fed. Reg.10684 (March 15, 1996); and October 4, 1996, 61 Fed. Reg. 40520 (August 5, 1996). The U.S. EPA-authorized Illinois regulations are codified at 35 Illinois Administrative Code (IAC) Part 703 *et seq.* See also 40 C.F.R. § 272.700 *et seq.*.

7. U.S. EPA has provided notice of the issuance of this Order to the State of Illinois pursuant to Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2).

II. FACTUAL ALLEGATIONS

8. Respondent is the Big River Zinc Corporation, organized under the laws of the State of Delaware and with a place of business at 2401 Mississippi Avenue, Sauget, Illinois (the "installation").

9. Respondent is a "person" as defined at 35 IAC § 720.110, Section 1004(15) of RCRA, 42 U.S.C. § 6903(15), and 40 C.F.R. § 260.10, who owns and operates an installation that generates, treats, stores, or disposes of hazardous waste, and is subject to the regulations promulgated pursuant to Subtitle C of RCRA, 42 U.S.C. §§ 6921-6939.

10. Respondent's operations at the installation include an electrolytic zinc refinery process. In this operation, Respondent uses various zinc-containing materials as feedstock.

11. U.S. EPA alleges that on March 24, 2000, Respondent stored at the installation zinc oxide secondary

material from the Mueller Brass Company's air pollution control baghouse. This material was recycled in the installation's electrolytic zinc refinery process.

12. An analysis of the samples taken from this zinc oxide secondary material by representatives of the Illinois Environmental Protection Agency indicate that the material exhibited the hazardous characteristic of toxicity for lead and cadmium.

13. One of the materials manufactured from this zinc oxide secondary material processing, zinc sulfate monohydrate, was used or contained in a product which was applied to or placed on the land.

14. Pursuant to 35 IAC § 721.102(c)(I) and 40 CFR § 261.2(c)(1)(B), the zinc oxide secondary material stored at the installation on March 24, 2000 was a solid and hazardous waste

15. Respondent did not have a RCRA permit or interim status for the installation on March 24, 2000, nor has Respondent's installation ever had a RCRA permit or interim status.

16. Respondent's storage on March 24, 2000, of zinc secondary material which was a hazardous waste was a violation of Section 3005(a) of RCRA, 42 U.S.C. §6925(a).

17. U.S. EPA and Respondent agree that the settlement of this matter pursuant to 22.13(b) of the Consolidated Rules, 40 C.F.R. §22.13(b), is in the public interest and that the entry of this Consent Agreement and Final Order (CAFO) without engaging in litigation is the most appropriate means of resolving this matter.

III. STIPULATIONS

18. Respondent admits the jurisdictional allegations in Section I of this CAFO.

19. Respondent admits the factual allegations in paragraphs 8, 9, 10, 11, 12, 15, and 17 of Section II of this CAFO.

20. Respondent denies the factual allegations in paragraphs 13, 14, and 16 of Section II of this CAFO.

21. Respondent consents to the issuance of the Final Order hereinafter set forth and hereby consents to the

payment of a civil penalty as described below. Pursuant to Sections 3008(a) and 3008(g) of RCRA, 42 U.S.C. §§ 6928(a) and 6928(g), the nature of the alleged violation, and other relevant factors, U.S. EPA has determined that an appropriate civil penalty to settle this action is three thousand two hundred seventy one dollars ($3,271). Respondent agrees not to claim or attempt to claim a Federal income tax deduction or credit covering all or any part of the cash civil penalty paid to the U.S. Treasury.

22. Respondent waives any and all rights under any provisions of law to a hearing on the allegations contained in this CAFO. Respondent also waives any right to contest or appeal the factual allegations in Section II of this CAFO and any right to appeal the terms and conditions of this Consent Agreement or the Final Order that accompanies this Consent Agreement.

23. If Respondent fails to comply with any provision contained in this CAFO, Respondent waives any rights it may possess in law or equity to challenge the authority of U.S. EPA to bring a civil action in the appropriate United States District Court to compel compliance with this CAFO and/or seek an additional penalty for noncompliance with the CAFO.

24. This CAFO shall become effective on the date it is signed by the Acting Director of the Waste, Pesticides and Toxics Division, U.S. EPA, Region 5.

IV. FINAL ORDER

Based on the foregoing stipulations, the Parties agree to the entry of the following Final Order:

A. Within thirty (30) days of the effective date of this CAFO, Respondent shall submit a cashier's or certified check, to the order of "Treasurer, United States of America," in the amount of three thousand two hundred seventy one dollars ($3,271). The check shall be mailed to: U.S. EPA, Region V, Regional Finance Office, P.O. Box 70753, Chicago, Illinois 60673. The name of the Respondent and the Docket Number of this proceeding shall be clearly marked on the face of the check. Copies of the transmittal of the payment shall be sent to: Regional

Hearing Clerk, Planning and Management Division (M-19J); Craig Melodia, Associate Regional Counsel (C-14J); and Michael Cunningham, WPTD Enforcement and Compliance Assurance Branch (DE-9J); U.S. EPA, 77 West Jackson Boulevard, Chicago, Illinois 60604-3590. Interest and late charges shall be paid as specified in Section V below.

B. Whenever, under the terms of this CAFO, notice is required to be given or a document sent by one Party to another, it shall be directed to the individuals at the addresses specified below:

As to EPA:

Sonja Brooks
Regional Hearing Clerk (M-19J)
United States Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Craig Melodia
Office of Regional Counsel (C-14J)
United States Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Michael Cunningham
Enforcement & Compliance Assurance Branch (DE-9J)
United States Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

As to Respondent:

George M. Obeldobel
President and C.E.O.
2401 Mississippi Avenue
Sauget, Illinois 62201-1078

C. Respondent shall also submit a copy of all documents and correspondence regarding this CAFO to Mr. Chris Cahnovsky, Illinois Environmental Protection Agency, 2009 Mall Street, Collinsville, Illinois 61103.

V. AMOUNTS OVERDUE

Pursuant to 31 U.S.C. §3717, Respondent shall pay the following amounts on any amount overdue under this CAFO:

A. **Interest.** Any unpaid portion of a civil penalty shall bear interest at the rate established by the Secretary of the Treasury pursuant to 31 U.S.C. §3717(a)(1). Interest will therefore begin to accrue on a civil penalty if it is not paid by the last date required. Interest will be assessed at the rate of the United States Treasury tax and loan account rate in accordance with 4 C.F.R. §102.13(c).

B. **Monthly Handling Charge.** Respondent shall pay a late payment handling charge of $15.00 on any late payment, with an additional charge of $15.00 for each subsequent 30 calendar day period over which an unpaid balance remains.

C. **Non-Payment Penalty.** On any portion of a civil penalty more than 90 calendar days past due, Respondent shall pay a non-payment penalty of twelve percent (12%) per annum, which will accrue from the date the penalty payment became due and is not paid. This non-payment is in addition to charges which accrue or may accrue under subparagraphs A and B above.

VII. EFFECT OF SETTLEMENT

A. This CAFO constitutes the entire settlement between the parties, and constitutes final disposition of the violation alleged in Section II of this CAFO.

B. Respondent waives any right it may have pursuant to 40 C.F.R. § 22.8 to be present during discussions with, or to be served with and reply to, any memorandum or communication addressed to the Director, Waste, Pesticides and Toxics Division, or his superiors, where the purpose of such discussion, memorandum or communication is to persuade such an official to accept and issue this CAFO.

C. This CAFO terminates when U.S. EPA determines that Respondent has fully complied with all terms

and conditions of this CAFO, including payment, in full, of all penalties due and owing. U.S. EPA shall send Respondent a written notice within 30 days of receipt of all penalties due under this CAFO.

D. The information required to be maintained or submitted pursuant to this CAFO is not subject to the Paperwork Reduction Act of 1980, as amended, 44 U.S.C. §§ 3501 et seq.

E. Each party shall bear its own costs and attorney fees in connection with the action resolved by this CAFO.

VII. RESERVATION OF RIGHTS

Notwithstanding any other provision of this CAFO, U.S. EPA expressly reserves any and all rights to bring an enforcement action pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973, or other statutory authority should U.S. EPA find that the handling, storage, treatment, transportation, or disposal of solid waste or hazardous waste at the installation may present an imminent and substantial endangerment to health or the environment. U.S. EPA also expressly reserves the right: (a) for any matters other than violations alleged herein, to take any action authorized under Section 3008 of RCRA; (b) to take any action under 40 C.F.R. Parts 124 and 270; and (c) to enforce compliance with this CAFO.

V. SIGNATORIES

Each undersigned representative of a party to this Consent Agreement and Final Order certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Agreement and Final Order and to bind legally such party to this document.

RECEIVED
REGIONAL HEARING
CLERK
SEP 30 P3:07
U.S. ENVIRONMENTAL
PROTECTION AGENCY
REGION V

Agreed to this 23RD day of SEPTEMBER, 2003.

George M. Ouellette
PRESIDENT — BIG RIVER ZINC CORP

George M. Obeldobel
President and C.E.O.
Big River Zinc Corporation

Agreed to this 30th day of September, 2003.

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division
U.S. EPA, Region 5

RECEIVED
REGIONAL HEARING
CLERK
'03 SEP 30 P3:07
US ENVIRONMENTAL
PROTECTION AGENCY
REGION V

The above being agreed and consented to, it is so ordered

this 30th day of September, 2003.

By:

Margaret M. Guerriero, Acting Director
Waste, Pesticides and Toxics Division
U.S. EPA Region 5

IN THE MATTER OF:
Big River Zinc Corporation
2401 Mississippi Avenue
Sauget, Illinois 62201

RCRA-05- 2003 0018

CASE NAME: Big River Zinc Corporation
DOCKET NO: RCRA-05- 2003 0018

CERTIFICATE OF SERVICE

I hereby certify that today I filed the original of this **Consent Agreement and Final Order** and this **Certificate of Service** in the office of the Regional Hearing Clerk (E-19J), United States Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604-3590.

I further certify that I then caused a true and correct copy of the filed document to be mailed via **Certified Mail, Return Receipt Requested** to:

George M. Obeldobel
President and C.E.O.
Big River Zinc Corporation
2401 Mississippi Avenue
Sauget, Illinois 62201-1078

Certified Mail Receipt # **7001 0320 0006 0176 7134**

Dated: September 30, 2003

Katrina D. Jones
Administrative Program Assistant
Enforcement & Compliance Assurance Branch
United States Environmental Protection Agency
77 W. Jackson Boulevard
DE-9J
Chicago, Illinois 60604-3590

U.S. ENVIRONMENTAL PROTECTION AGENCY REGION V
2003 SEP 30 P 3:07
RECEIVED REGIONAL HEARING CLERK

BIG RIVER ZINC CORPORATION
2401 MISSISSIPPI AVENUE
SAUGET, ILLINOIS 62201-1078

TEL: 618-274-5000
FAX: 618-274-4444

240

May 9, 2002

Mr. Michael Cunningham
Enforcement and Compliance
Assurance Branch
USEPA Region 5
ATTN: DE-9J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: Pre-Filing Notice and Opportunity to Confer
Big River Zinc Corporation

Dear Mr. Cunningham:

I received Mr. Joseph M. Boyle's letter dated May 2, 2002, concerning an alleged violation of "certain requirements of the Resource Conservation and Recovery Act" by storing "sludge which was used to produce a product that was applied to the land."

Big River Zinc Corporation has not violated these requirements and would welcome the opportunity to confer with you and demonstrate this fact. Please advise me when it is convenient for you to confer, and I shall make arrangements to meet with you.

Very truly yours,

George M. Obeldobel

George M. Obeldobel
President & C.E.O.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

MAY 02 2002

DE-9J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

George M. Obeldobel, President and CEO
Big River Zinc Corporation
Route 3 & Monsanto Avenue
Sauget, Illinois 62201

RE: Pre-filing Notice and Opportunity to Confer
Big River Zinc Corporation

Dear Mr. Obeldobel:

This letter is to notify you that the United States Environmental Protection Agency (U.S. EPA) is prepared to file an administrative complaint for civil penalties against the Big River Zinc Corporation (BRZ). We are also offering you an opportunity to confer with us in advance of our filing a complaint.

On March 9, 2000, the Illinois Environmental Protection Agency (IEPA) referred violations to U.S. EPA regarding BRZ located at Route 3 & Monsanto Avenue, Sauget, Illinois. Based on information in the referral, information collected during subsequent inspections conducted by IEPA, and documents provided by BRZ, U.S. EPA has determined that BRZ may have violated certain requirements of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 et seq., as amended. Specifically, BRZ stored zinc oxide sludge which was used to produce a product that was applied to the land. The zinc oxide sludge exhibited the characteristic for toxicity and was therefore a hazardous waste. BRZ has not applied for or obtained a RCRA hazardous waste permit for storage, and therefore the management of this hazardous waste was in violation of 35 IAC 703.121(a) [40 CFR §270.1(c)].

Based on information currently available to us, the penalty we currently intend to seek in the complaint is $17,263.

Recycled/Recyclable . Printed with Vegetable Oil Based Inks on 100% Recycled Paper (50% Postconsumer)

This letter is not a demand to pay a penalty. We will not ask you to pay a penalty until we file the complaint or a final order. Before filing the complaint, we are giving you the opportunity to present any information that you believe we should consider. You may present this information in writing or in a meeting with U.S. EPA representatives. Relevant information might include evidence that you did not violate the law; evidence that you relied on compliance assistance from U.S. EPA or a State agency; evidence that we identified the wrong party; or financial data bearing on your ability to pay a penalty.

If you believe that you will be unable to pay a $17,263 penalty because of financial reasons, please give us certified financial statements, including balance sheets, and your company's income tax returns with all schedules, for the past five years.

You may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B, for any portion of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent allowed by 40 C.F.R. Part 2, Subpart B. If you fail to assert a business confidentiality claim, U.S. EPA may make all submitted information available, without further notice, to any member of the public who requests it.

If you choose to respond to this letter or to confer with us, you should contact Michael Cunningham, of the Enforcement and Compliance Assurance Branch, in writing within ten (10) business days of your receipt of this Notice. Please be advised that this conference is not a settlement negotiation covered by Federal Rule of Evidence 408; we may use any information you submit in support of an administrative, civil or criminal action.

If you decide not to respond to this letter or to confer with us, U. S. EPA may proceed with enforcement action against BRZ as authorized under Sections 3007 and 3008(a) of RCRA, 42 U.S.C. §§ 6927 and 6928(a), including, if appropriate, the assessment of additional civil penalties.

If you have any technical questions regarding the alleged violations, please contact Michael Cunningham at (312) 886-4464.

Legal inquiries should be directed to Ms. Jacqueline Kline, Associate Regional Counsel, at (312) 886-7163.

Sincerely,

Joseph M. Boyle

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division

cc: Todd Marvel, IEPA
Chris Chanovsky, IEPA, Collinsville

bcc: Jacqueline Kline, ORC
Author's copy
Section Copy
Branch Copy

ENFORCEMENT AND COMPLIANCE ASSURANCE BRANCH

SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY
				MAS 02 MAY 02
AUTHOR/ TYPIST	COMPLIANCE SECTION 1 SECTION CHIEF	COMPLIANCE SECTION 2 SECTION CHIEF	CA SECTION SECTION CHIEF	ECAB BRANCH CHIEF
MP 5-1-02		5-1-02		5/2/02

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

2009 MALL STREET, COLLINSVILLE, ILLINOIS 62234

THOMAS V. SKINNER, DIRECTOR

618/346-5120
FAX: 618/346-5155

March 17, 2000

Big River Zinc Corporation
Attn: George Obeldobel, President and CEO
Rt. 3 and Monsanto Avenue
Sauget, Illinois 62201

Re: LPC #1631215009 -- St. Clair County
Big River Zinc Corporation
ILD062444435
Compliance File

Dear Mr. Obeldobel:

On February 28, 2000, your facility was inspected by Chris Cahnovsky of the Illinois Environmental Protection Agency. The purpose of this inspection was to determine your facility's compliance with the Illinois Environmental Protection Act and 35 Illinois Administrative Code Part 703, Subparts A-B; Part 722, Subparts A-H; Part 725, Subparts A-E; Part 726, Subpart C; Part 728, Subparts A-E; Part 739, Subparts A-C. At the time of the inspection, apparent violations found in previous inspections remain unresolved at this time.

For your information, a copy of this inspection report is enclosed. Should you have any questions regarding this inspection, please contact Chris Cahnovsky at 618/346-5120.

Sincerely,

Kenneth G. Mensing

Kenneth G. Mensing
Regional Manager
Bureau of Land

KGM:CNC:cas
Enclosure

cc: Mike Cunningham, USEPA, Region V
bcc: BOL - Records Unit
bcc: DLC - Chris Perzan
bcc: BOL - Collinsville

PRINTED ON RECYCLED PAPER

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #: ILD062444435 IEPA ID #: 1631215009

Facility Name: Big River Zinc Corporation Phone #: 618/274-5000

Location: Route 3 and Monsanto Avenue County: St. Clair

City: Sauget State: Illinois Zip Code: 62201

Region: Collinsville Inspection Date: February 28, 2000 Time: 13:00 - 16:15

Weather:

TYPE OF FACILITY

Notified As: G-1 Regulated As: G-1

TYPE OF INSPECTION

CEI: X CME/O&M: CSI: NRR: F/U to: / / CCI: PIF: CVI: CSE: CAO: Other:

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 08/18/80 (initial) / / (subsequent)

PART A PERMIT INFORMATION (EPA 3510-3)

Part A Date: / / Amended: / / Withdrawn: / /

PART B PERMIT INFORMATION

Part B Submitted/Issued (circle one): / /

ACTIVE ENFORCEMENT

Has the company been referred to: USEPA: / / IAGO: / / County State's Attorney: / /

ACTIVE ENFORCEMENT ORDERS

CACO: / / CAFO: / / Federal Court Order: / /

Consent Decree: / / IPCB Order: / / State Court Order: / /

TSD FACILITY ACTIVITY SUMMARY

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during insp?	Exempt per 35 IAC Sec:	On Annual Report 19 19 19
							/ /
							/ /
							/ /
							/ /
							/ /
							/ /
							/ /
							/ /
							/ /
							/ /

OWNER		OPERATOR	
Name: Big River Zinc Corporation		Name: Big River Zinc Corporation	
Address: Rt 3 and Monsanto Avenue		Address: Rt 3 and Monsanto Road	
City: Sauget		City: Sauget	
State: Illinois	Zip Code: 62201	State: Illinois	Zip Code: 62201
Phone #: 618/274-5000		Phone #: 618/274-5000	

PERSON(S) INTERVIEWED	TITLE	PHONE #
Steve Ash	Environmental Manager	618/274-5000 ext 113
Stephen H. French	Director Safety, Health and Environ.	618/274-5000
George Obeldobel	President	618/274-6240

INSPECTION PARTICIPANT(S)	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120
Mike Grant	IEPA/BOL	618/346-5120

PREPARED BY	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X
ACT	21(f)	X
ACT	21(h)	X
DOR	703.121(a)	X
DMR	725.175	X

AREA	SECTION	X

AREA	SECTION	X

x = Continuing Violation

1631215009 – St. Clair County
Big River Zinc Corporation
Date of Inspection: February 28, 2000
Prepared by: Chris Cahnovsky

NARRATIVE

On February 28, 2000, Mike Grant and I conducted a Compliance Evaluation Inspection at Big River Zinc Corporation in Sauget, Illinois. Present during this inspection were Steve Ash, Environmental Manager; Steve French, Director Safety, Health and Environment; and George Obeldobel, President.

Big River Zinc Corporation (BRZ) is an electrolytic zinc refinery. The facility's principal products include zinc metal, zinc alloys, zinc powders, zinc oxide, zinc sulfate monohydrate, sulfuric acid, and cadmium oxide. Other products obtained from the refining operations include a lead/iron/silver concentrate, copper cement, and a copper/nickel/cobalt concentrate (copper cake). The principal raw materials used at the facility are zinc sulfide concentrates obtained from mines in Southeast Missouri, Tennessee, Illinois, Canada, Mexico and Peru. BRZ also receives zinc bearing secondary material such as galvanizing ash, zinc oxides from the brass and bronze industry, die-cast ash from the die-cast industry baghouse dusts and zinc oxide material recovered from electric arc furnace dust (K061) by high treatment metals recovery process. A schematic of the facility's manufacturing operations is included as Figure 1.

Big River Zinc submitted Hazardous Waste Reports for the years 1998 and 1999 that identified the facility as a Large Quantity Generator of Hazardous Waste. Currently, BRZ is regulated as a Large Quantity Generator. BRZ generates cadmium and lead contaminated hazardous waste solids consisting of PPE, press cloths, purification residues and cadmium oxide baghouse bags. These wastes are characteristically hazardous for lead (D008) and cadmium (D006). Other hazardous wastes generated by BRZ include demolition debris (D006 and D008), lab packs (U, D and P wastes), and solvent filters (D008 and D006). The nonhazardous special wastes generated by BRZ include used oil, wastewater treatment sludge and PCB waste. BRZ also generates universal waste flourescent light tubes and batteries.

I conducted a record review of BRZ's RCRA related documents. No discrepancies were noted during the review of BRZ's 1998 and 1999 Hazardous Waste Reports, 1998, 1999 and 2000 Uniform Hazardous Waste Manifests, training program, contingency plan and weekly container inspection forms.

I conducted a plant tour of the BRZ facility. BRZ maintains a parts washer in the Main Maintenance Building. ZEP DYNA 143 is used in this parts washer. The solvent is replenished as it is consumed in the process. No liquid solvent waste is generated from this parts washer. The solvent is circulated through a filter. The spent filters are hazardous for lead (D008) and cadmium (D006). I observed one 55-gallon steel satellite accumulation drum of spent filters. This drum was properly labeled.

BRZ is using a small metal shed as its universal waste storage area. In this shed, BRZ stores flourescent light tubes and batteries. BRZ has fixed a sign to the building that reads "Universal Waste Storage Area". In this building, I observed nine batteries and one box of bulbs. BRZ is a small handler of universal waste. BRZ has two 500-gallon used oil tanks. One tank is at the Main Maintenance Building and the other is at the Oil Storage Building. Both tanks were properly labeled.

BRZ has constructed a hazardous waste accumulation area on the west side of the plant behind the Pre-Leach Plant. In this area, BRZ accumulates hazardous waste solids (D006 and D008). I observed a 20-yd^3 roll-off box of hazardous waste solids. This roll-off was covered, labeled and dated February 24, 2000. BRZ has staged this roll-off on a curbed concrete pad.

On September 24, 1998, BRZ filed a petition for an adjusted standard under 35 Ill. Adm. Code 720.131(c). BRZ asked the Illinois Pollution Control Board (Board) to determine that zinc oxide material recovered from electric arc furnace dust (K061) by high treatment metals recovery process is not a solid waste. The Illinois Environmental Protection Agency recommended that the Board grant the adjusted standard with conditions. The Board granted BRZ the adjusted standard with conditions on April 15, 1999 and amended the adjusted standard on May 6, 1999. BRZ now accepts zinc oxide material recovered from electric arc furnace dust (K061) by high treatment metals recovery process as a product.

In 1999, BRZ constructed a zinc oxide receiving, washing, filtering and conveying system. The receiving system consists of a truck and rail unloading operation. Hopper rail cars and hopper trucks are pneumatically unloaded into one of two silos. These silos feed the washing and filtering system. I observed a partial unloading of a truck during this inspection. I did not observe any fugitive dust emissions associated with this unloading. I did observe zinc oxide on the floor of the rail car unloading area. No rail car was being unloaded at the time of this inspection. Apparently, when the hose was unhooked from the last rail car unloaded, zinc oxide spilled on the pad. Zinc oxide was also observed in the transfer hose. This material is very light and can become easily airborne. Mr. Obeldobel stated that any spilled zinc oxide is washed to the facility's sewer system. The Agency recommends that any spilled zinc oxide be immediately swept up or vacuumed up and placed in the day tank for recycling. Also, the end of the transfer hoses should be capped when not in use.

BRZ's feedstock is made up of about 2% to 4% metal-bearing byproducts. These metal-bearing byproducts include galvanizing ash, zinc oxides from the brass and bronze industry and die-cast ash from the die-cast industry, which might be characteristically hazardous. According to BRZ, about 2% of the pure zinc sulfate is sold as zinc sulfate-monohydrate (i.e., fertilizer) to be placed on land, used in a manner constituting disposal.

Pursuant to 35 Illinois Administrative Code (IAC) 726.120(b) products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation under this Subpart if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in 35 IAC Code 728.Subpart D (or applicable prohibition levels in 35 IAC 728.132 or 728.139, where no treatment standards have been established) for each recyclable material (i.e., hazardous waste) that they contain. Commercial fertilizers that are produced for the general public's use that contains recyclable materials also are not presently subject to regulation, provided they meet the same treatment standards or prohibition levels for each recyclable material they contain. In September 1997, BRZ sampled the ZSM to determine if it met the LDR standards. The September results showed that the ZSM meets the LDR standards promulgated in the May 26, 1998 Federal Register.

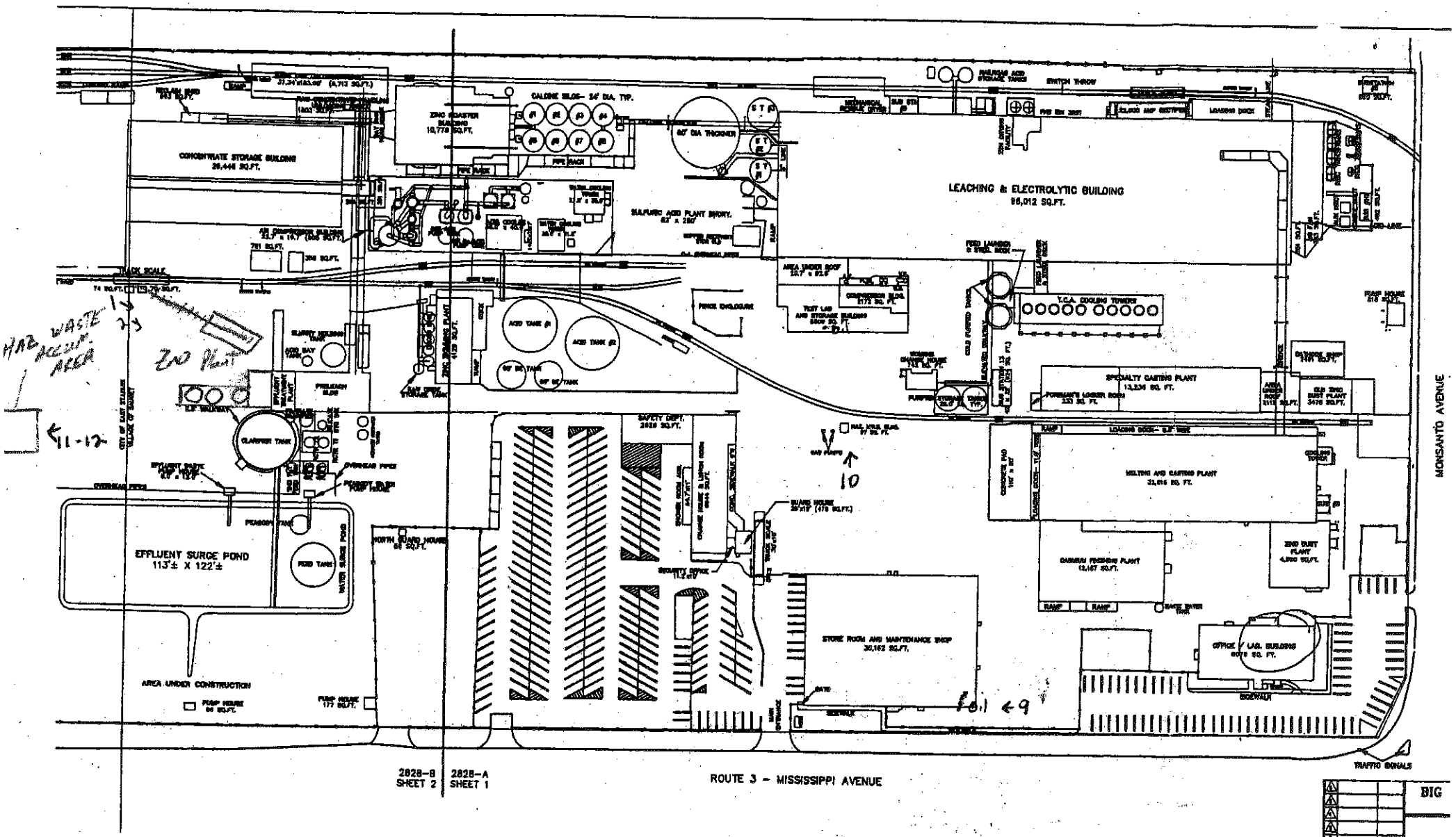
The ZSM produced by BRZ does not meet the definition of a solid waste. However, it appears that the secondary metal-bearing byproducts (i.e., baghouse dust and sludge) received by BRZ to make the ZSM is a solid waste because the material is being used in a manner constituting disposal. The baghouse dust and sludge shipped to BRZ from generating facilities that are characteristically hazardous and are used to produce products applied to land meets the definition of a solid waste under 35 IAC 721.102(c) and, subsequently are hazardous wastes. On March 11, 1998, the Illinois Environmental Protection Agency (Agency) sent BRZ a Violation Notice (VN-L-1998-01094) for accepting metal-bearing by-products that are characteristically hazardous without a permit issued by the Agency. The apparent violations of 21(f), 21(h), 703.121(a) and 725.175 remain outstanding at this time.

No new RCRA violations were observed during this inspection. However, the Agency makes the following recommendations:

1. Any spilled zinc oxide from the rail or truck unloading area should be immediately swept up or vacuumed up and placed in the day tank for recycling; and

2. The end of the transfer hoses should be capped when not in use.

CNC/brz6.cei.wpd



THIS DRAWING IS THE PROPERTY OF BIG RIVER ZINC CORP. AND IS LENT TO YOU ON THE EXPRESSED CONDITION THAT IT SHALL NOT BE COPIED, LENT, OR DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY OTHER PURPOSE THAN FOR WHICH IT IS SPECIFICALLY FURNISHED WITHOUT THE PRIOR WRITTEN CONSENT OF BIG RIVER ZINC. CORP.

FacilityName:	Big River Zinc Corp.	USEPA ID #:	ILD062444435
Inspection Date:	February 28, 2000	IEPA ID #:	1631215009

WASTE DISPOSITION FORM

Waste Name	Generating Process	Date of Last Analysis	USEPA HW #	On Notification? (8700-12)	On Part A Appl? (3510-3)	On Annual Report for Years: 19 97 / 19 98 / 19 99	Amount On-Site	Rate of Generation	Last Manifested Shipment	Disposition of Waste
Hazardous waste Solid	PPE, CaO Bags, Filter press Cloths	12/18/99	D006 D008	Yes	N/A	Yes / Yes / Yes	20yd³	~1000Kg/ month	2/24/00	Michigan Disposal Co. Belleville, MI.
Hazardous waste Solid	Demolition Activities	8/19/99	D006	Yes	N/A	No / No / Yes	0	VARIES	8/26/99	Wayne Disposal Co.
Cadmium waste	Cd waste Dross	10/6/98	D006	Yes	N/A	No / Yes / No	0	one-time	11/5/98	Chem-met Services
Lab Packs	Off-spec Chemicals	12/17/97	U196 D001	Yes	N/A	No / Yes / No	0	VARIES	2/5/98	Clean Harbors Chicago
Universal waste	Lights + Batteries	U.W.	U.W.	N/A	N/A	N/A / N/A / N/A	9-Batt 1-Bulb	VARIES	Bat 2/24/00 Light 1/2000	Lens Master St. Louis Overland Metals
USED Oil	maintenance + Oil Shop	6/4/98	N.H.	N/A	N/A	N/A / N/A / N/A	0	200gal/ month	2/22/00	Gateway Pet. East St. Louis
WWTP Sludge	Sludge from Pre-Leaching	1/17/96	N.H.	N/A	N/A	N/A / N/A / N/A	Not Det	6 loads/ day	2/28/00	Roxana Landfill
PCB waste	PCB oil + Debris	8/99	N.H.	N/A	N/A	N/A / N/A / N/A	0	one-time	Oil 8/31/99 Debris 10/14/99	CWM - S.K. K.C. MO.
Solvent Filters	Filters from Parts washer	P.K.	D008 D006	Yes	N/A	N/A / N/A / N/A	1 drum	VARIES	None Shipped off-site yet.	
						/ /				
						/ /				
						/ /				
						/ /				
						/ /				
						/ /				
						/ /				

Boyle

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/782-5544
217/782-9143 (TDD)

March 9, 2000

Mr. Norm Neidergang
Assistant Regional Administrator
United States Environmental Protection Agency, Region 5
Mail Code RMD-9J
77 West Jackson Blvd.
Chicago, Illinois 60604

Re: Big River Zinc Company
16312150009 – St. Clair County
ILD062444435

Dear Mr. Neidergang:

This letter is to refer apparent violations at Big River Zinc Co. ("BRZ") to the United States Environmental Protection Agency ("USEPA"), Region 5, for further investigation and enforcement as necessary. The violations stem from its acceptance and management of secondary materials which constitute hazardous wastes under the Resource Conservation and Recovery Act ("RCRA") without a RCRA permit. The facility is within the Region 5 Gateway Initiative area and this referral is being made under that Initiative.

BRZ is an electrolytic zinc refinery located in Sauget, Illinois, near East St. Louis. Its address is Route 3 and Monsanto Avenue, Sauget, Illinois 62201. BRZ refines primary zinc concentrates and secondary zinc oxides into various end products, including zinc metal and zinc sulfate monohydrate, which is sold for use as an ingredient in fertilizer.

The secondaries are accepted from sources such as steel mills, brass and bronze manufacturers, diecasters and secondary copper smelters. The secondary materials accepted by BRZ generally contain elevated levels of lead. The Illinois EPA does not have TCLP sample results from the secondary materials. However, based on experience, such materials ordinarily exceed TCLP limits for lead. BRZ's figures show a varied composition of the zinc secondaries, with as high as 18.50 % lead content. See materials provided by BRZ to the Illinois EPA, attached as Exhibit 1. Assuming that this material exceeds TCLP limits, it is considered a solid waste because it is a material which is recycled and ultimately placed on the land. 35 Ill.Adm. Code 721.102(c)(1) (40 C.F.R. 261.2(c)(1)). Because a portion of the end product is ultimately placed on the land, it is considered to have been used in a manner constituting disposal. Some of the incoming secondary materials are listed hazardous wastes (K061) and some most likely are characteristically hazardous for the presence of lead and possibly cadmium. See Exhibit 2.

The Illinois EPA has acquired TCLP results on the end product zinc sulfate monohydrate which is incorporated into fertilizer. These results show that the material, after refining at BRZ, is below LDR limits for metals of concern. See Exhibit 2.

BRZ applied for and received an adjusted standard (referred to by federal regulations as a variance) for partially reclaimed hazardous wastes carrying the code K061 from the Illinois Pollution Control Board. The adjusted standard was granted under the terms of 35 Ill.Adm. Code 720.131(c) (40 C.F.R. 260.31(c)). The adjusted standard was issued on April 15, 1999 and modified on May 6, 1999. See Exhibits 3 and 4. Therefore, this stream of incoming materials is not considered a hazardous waste when accepted and managed by BRZ. However, this adjusted standard only covers the materials covered by the K061 listing. Secondary materials which are characteristically hazardous are not addressed by the adjusted standard.

Illinois EPA issued a violation notice ("VN") dated March 11, 1998 to BRZ. See Exhibit 5. The violations cited were 415 ILCS 5/21(f)(1) and (2), 415 ILCS 5/21(h), 35 Ill.Adm. Code 703.121(a) (40 C.F.R. 270.1(c)), and 35 Ill.Adm. Code 725.175 (40 C.F.R. 265.75). After receiving the VN, BRZ contacted USEPA Headquarters to inquire as to the availability of site specific or regulatory relief. No such relief was achieved. BRZ continues to accept the material despite the VN, and has orally advised the Illinois EPA that it will continue to do so until USEPA orders it to cease.

The Illinois EPA requests that USEPA Region 5 take appropriate investigative and enforcement action at BRZ. BRZ must cease accepting materials which are considered hazardous wastes until such time as it has proper permit authorization to do so. BRZ should be made to pay an appropriate penalty for accepting hazardous wastes without proper authorization.

The Illinois EPA attorney assigned to this case is Christopher P. Perzan, who can be reached at 217/782-5544. The Illinois EPA inspector assigned to the case from the Region 6 Office (Collinsville) is Chris Cahnovsky, who can be reached at 618/346-5120. The Illinois EPA requests that Region 5 keep the appropriate Illinois EPA personnel advised as to the progress of the case.

We look forward to working with Region 5 on this case. Thank you for your attention to this matter.

Sincerely,

Joseph E. Svoboda
Chief Legal Counsel

Enclosures

LAW OFFICES OF
PELLEGRINI AND O'KEEFE
A PROFESSIONAL CORPORATION
SUITE 390
GATEWAY ONE ON THE MALL
701 MARKET STREET
ST. LOUIS, MISSOURI 63101

FRANK L. PELLEGRINI
JULIE EMMERICH O'KEEFE

TELEPHONE (314) 241-7445
FAX (314) 241-7449

September 10, 1999

Ms. Leslie Kirby
Assistant Regional Counsel
U. S. Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, Illinois 60604

RE: Big River Zinc Corporation - Docket No: 5-MM-98-001 -
Completion Report for Supplemental Environmental Project

Dear Leslie:

Pursuant to Paragraph 17 of the Consent Agreement and Consent Order, enclosed is the Completion Report for Supplemental Environmental Project. Please do not hesitate to contact me if you have any questions concerning the report. Thank you very much for your continued cooperation.

Sincerely yours,

Julie O'Keefe

JO/sb

Enc.

(Rev. 12/98)

RCRA 3008(a) CONSENT AGREEMENT AND CONSENT ORDER SIGN-OFF

PART I Background

OECA DOCKET NUMBER
INSTALLATION NAME Big River Zinc EPA ID# ILD062444435
DOCKET NUMBER
ECAB ASSIGNEE Mike Cunningham ASST. REG. COUNSEL Craig Melodia
PHONE 6-4464 PHONE 3-8870

PART II Concurrences on Proposed CACO

	INITIALS	DATE	CONCUR	CONCUR AS NOTED	NON-CONCUR
1. ECAB ASSIGNEE	MC	8/13/03	(✓)	( )	( )
2. CHIEF, ECAB SEC.	[illegible]	8/14/03	(✓)	( )	( )
3. ASST. REG. COUNSEL	CM	8/27/03	(✓)	( )	( )
4. CHIEF, ECAB		__/__/__	( )	( )	( )

PART III Return to ECAB Assignee for Corrections (if necessary) and Delivery to Asst. Regional Counsel for Transmittal of Two Original Copies of Proposed CACO to Respondent.

	DATE	INITIALS
1. Proposed CACO mailed	9/15/03	CM
2. EPA Received Both Copies of Respondent-Signed Proposed CACO	9/29/03	CM

PART IV Final CACO Approval, After Respondent Has Signed Both Copies of Proposed CACO.

	INITIALS	DATE	CONCUR	NON-CONCUR
1. ECAB ASSIGNEE	MC	9/29/03	(✓)	( )
2. CHIEF, ECAB SEC	[illegible]	9/30/03	(✓)	( )
3. ASST. REG. COUNSEL	CM	9/29/03	(✓)	( )
4. ORC SECTION CHIEF	[illegible]	9/29/03	(✓)	( )
5. CHIEF, ECAB	[illegible]	9/30/03	(✓)	( )
6. DIRECTOR, WPTD	[illegible]	9/30/03	(✓)	( )
7. ~~REGIONAL ADM.[1]~~	~~__~~	~~__/__/__~~	~~( )~~	~~( )~~

PART V Filed

1. ECAB Secretary KDA 09/30/03
2. Billing Document Number 0342030010

[1] If necessary due to multi-statute CACO.

9/30/03

INSTRUCTIONS FOR FILING
RCRA
Consent Agreement and Consent Order (CACO)

A. Include the following documents, in the order indicated, in a 6 section folder using the blue "RCRA Consent Agreement and Consent Order Signoff" (RCACOS) sheet[1] stapled to the front with Part I filled out:
   1. Transmittal letter on Agency letterhead to Respondent's attorney, for signature of Assistant Regional Counsel.
   2. Proposed CACO.
   3. Settlement penalty calculation sheets, including worksheets supporting calculations of the economic benefit of noncompliance.
   4. Photocopy of initial (or most recent amended) complaint.
   5. Photocopies of initial complaint penalty calculation sheets and, if any, subsequent settlement penalty calculation sheets.
   6. Draft press release, including a description of the environmental impacts of the violation(s).

B. ECAB section secretary mails two (2) copies of proposed CACO to Respondent's attorney.

C. After Respondent has returned two original signed copies of proposed CACO, insert the following documents, in the order indicated, in a 6 section folder using the blue "RCRA Consent Agreement and Consent Order Signoff" (RCACOS) sheet stapled to the front with Parts I and II filled out:
   1. Memorandum (with official file copy placed underneath for initialing) to WPTD Director from ECAB Branch Chief and ORC Section Chief, marked **ENFORCEMENT CONFIDENTIAL**, recommending the entry of the CACO.
   2. Transmittal letter[2] (with official file copy placed underneath for initialing) on Agency letterhead to Respondent (to be signed by ECAB Branch Chief immediately after CACO has been signed by WPTD Director).
   3. **Both** CACOs bearing the original signature of the Respondent.
   4. The completed[3] Case Conclusion Data Sheet.
   5. Addressed envelopes and postal Certified Mail/Return Receipt Requested documents.
   6. Final[4] press release.

D. Obtain concurrences in Part IV of RCACOS.

E. ECAB secretary[5] files CACO with Regional Hearing Clerk and mails transmittal letter and CACO, and distributes copies.

---

[1]Available from ECAB secretary.

[2]The letter must be one of the two required in the February 6, 1998 Regional Hearing Clerk Procedures, depending upon whether the penalty payment is required to be made in one lump sum or installments.

[3]Except for date of CACO, which is to be filled in after the CACO has been signed.

[4]Except for date of CACO, which is to be filled in after the CACO has been signed.

[5]In the absence of the ECAB secretary, the ECAB Section secretary is expected to perform this task.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

NOV 09 1999

REPLY TO THE ATTENTION OF

DE-9J

Mr. Barry L. Motycka
Superintendent, Maintenance Department
Big River Zinc Corporation
Route 3 & Monsanto Avenue
Sauget, Illinois 62201

Re: Supplemental Environmental Project
Completion Report
Docket No. 5-MM-98-001

Dear Mr. Motycka:

The United States Environmental Protection Agency (U.S. EPA) received the September 10, 1999, Supplemental Environmental Project Completion Report (SEP Report) submitted by the Big River Zinc Corporation (BRZ). Submittal of the SEP Report was required under paragraph 21 of the October 30, 1998, Consent Agreement and Consent Order (CACO) (Docket No. 5-MM-98-001).

Based on the information provided in the SEP Report, U.S. EPA has determined that BRZ has satisfactorily completed the Supplemental Environmental Project described in the Scope of Work attached to the CACO and has complied with the total expenditure requirements, necessary permit approvals, and SEP Report terms outlined in paragraphs 17 through 21 of the CACO.

If you have any questions regarding this matter please contact me at (312) 886-4464.

Sincerely,

Michael Cunningham
Environmental Scientist
Compliance Section 2
Enforcement and Compliance Assurance Branch

cc: Julie O'Keefe, Pellegrini and O'Keefe

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(Rev. 12/98)

RCRA 3008(a) ADMINISTRATIVE COMPLAINT SIGN-OFF

PART I Background

OECA DOCKET NUMBER _____
INSTALLATION NAME Big River Zinc Corp. EPA ID# ILD 062 444 435
ECAB ASSIGNEE Michael Cunningham ASST. REG. COUNSEL Jacqueline Kline
PHONE 6-4464 PHONE 6-7167

Type(s) and date(s) of evaluations in which alleged violations were detected:

Date of referral, if any, by State: 3/9/00
Located in environmental justice area[1]? (✓) yes ( ) no
Small business per SBREFA[2] ( ) yes; date of SBREFA letter __/__/__ (✓) no
History of noncompliance[3]? ( ) yes (✓) no
Significant noncomplier[4]? ( ) yes; date of SNC determination __/__/__ (✓) no

Name of recipient_____ and date __/__/__ of notice to State.

PART II Concurrences on proposed complaint

	INITIALS	DATE	CONCUR	CONCUR AS NOTED	NON CONCUR
1. ECAB ASSIGNEE	[illegible]	3/29/02	(✓)	( )	( )
2. ECAB SECTION CHIEF	[illegible]	4/5/02	(✓)	( )	( )
3. ASST. REG. COUNSEL	[illegible]	4/11/02	(✓)	( )	( )
4. ECAB CHIEF	JMB	4/17/02	(✓)	( )	( )

PART III Return to ECAB assignee for any necessary revisions.

PART IV Concurrence on complaint.

	INITIALS	DATE	CONCUR	CONCUR AS NOTED	NON CONCUR
1. ECAB ASSIGNEE	_____	__/__/__	( )	( )	( )
2. ECAB SECTION CHIEF	_____	__/__/__	( )	( )	( )
3. ASST. REG. COUNSEL	_____	__/__/__	( )	( )	( )
4. ECAB CHIEF	_____	__/__/__	( )	( )	( )
5. WPTD DIRECTOR[5]	_____	__/__/__	( )	( )	( )
6. REG. ADMINISTRATOR[6]	_____	__/__/__	( )	( )	( )

PART V	**Complaint filed.**	**INITIALS**	**DATE**	**R5 HEARING CLERK DOCKET #**
	1. ECAB Secretary	_____	__/__/__	_____

---

1 Per 10/30/97 draft "Region 5 Interim Guidelines for Identifying and Addressing Potential Environmental Justice Case."

2 Small Business Regulatory Enforcement Fairness Act

3 Per RCRA Civil Penalty Policy

4 Per Hazardous Waste Civil Enforcement Response Policy

5 If necessary due to multi-statute complaint.

6 If necessary due to multi-statute complaint.

INSTRUCTIONS FOR FILING
RCRA
Administrative complaint (3008(a))

A. Insert the following documents, in the order indicated, in a 6 section folder[1] using the yellow "RCRA 3008(a) Administrative Complaint Signoff" sheet[2] (RACS) stapled to the front with Parts I and II[3] filled out:

1. Final transmittal letter on Agency letterhead (with official file copy placed underneath for initialing) to registered agent (if one exists) identifying recipients of:
   a. "cc" with complaint
      - the State enforcement contact
      - the respondent's installation representative, if known
   b. "bcc" with enclosed complaint
      - ORC attorney
      - ECAB staff
      - ECAB file
   c. "bcc" without enclosed complaint
      - section chief in Waste Management Branch.
2. Complaint, including penalty table identified as Attachment 1.
3. Certificate of Service.
4. (a) Photocopy of letter (or other record of communication) documenting notice to State noted in Part IV of the RACS.
   (b) Final[4] press release, including a description of the environmental impact of the violation(s).
5. Penalty calculation sheets, including photocopy of Attachment 1 of the complaint, and worksheets supporting calculations of the economic benefit of noncompliance.
6. Photocopy of (a) current version of 40 CFR Part 22 and (b) RCRA Civil Penalty Policy.
7. Addressed envelopes and postal Certified Mail/Return Receipt Requested documents.

B. Obtain concurrences in Part III of the RACS.

C. Enter the recipient and date of notice to the State in Part IV of the RACS.

D. Obtain concurrences in Part V of the RACS.

E. ECAB secretary[5] files complaint with Regional Hearing Clerk and mails complaint and copies.

---

[1]GSA "Classification Folder" (National Stock Number 7530-00-990-8884) or equivalent.

[2]Available from the ECAB secretary.

[3]Use Part II to indicate whether respondent is a small business (as defined by the Small Business Regulatory Enforcement Fairness Act (SBREFA)) for purposes of the Equal Access to Justice Act.

[4]Except for date of complaint, which ECAB assignee is to fill in after the complaint is filed.

[5]In the absence of the ECAB secretary, the ECAB Section secretary is expected to perform this task.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF: C-14J

Via Facsimile and First Class Mail

November 4, 1998

Julie Emmerich
Pellegrini and Emmerich
A Professional Corporation
Suite 390
Gateway One on the Mall
701 Market Street
St. Louis, Missouri 63101

Re: Big River Zinc Corporation
Docket No. 5-MM-98-001

Dear Ms. Emmerich:

In order to avoid any possible confusion with the United States Environmental Protection Agency accounting, please provide the following billing number to your clients: **050699001**. This number should be included on Big River Zinc's check to the Agency for the above referenced matter. If you have any questions, or wish to discuss the matter further, I may be contacted at (312) 886-7166.

Sincerely,

Leslie A. Kirby
Assistant Regional Counsel

cc: Michael Cunningham, U.S. EPA
Regional Hearing Clerk

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

OCT 30 1998

REPLY TO THE ATTENTION OF:
DRE-9J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Superintendent, Maintenance Department
Big River Zinc Corporation
Route 3 & Monsanto Avenue
Sauget, Illinois 62201

Re: Consent Agreement and Final Order
Big River Zinc Corporation
Docket No. 5-MM-98-001

Dear Superintendent:

Enclosed is one original of a fully executed Consent Agreement and Consent Order (CACO) entered into by the Big River Zinc Corporation and the United States Environmental Protection Agency. The other original was filed with the Regional Hearing Clerk.

Within 30 days of receipt of the enclosed CACO, please pay the civil penalty in the manner prescribed in paragraph 33 of the CACO, and reference your check with the number 5-MM-98-001.

Thank you for your cooperation in resolving this matter.

Sincerely yours,

Paul Little

for Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division

Enclosure

cc: Regional Hearing Clerk, R-19J (w/enclosure)
Honorable Administrative Law Judge Pearlstein, (w/enclosure)
Leslie Kirby, ORC (w/enclosure)
Ms. Julie Emmerich (w/enclosure)
Pellegrini and Emmerich

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A Professional Corporation
Suite 390
Gateway One on the Mall
701 Market Street
St. Louis, Missouri 63101

ENFORCEMENT AND COMPLIANCE ASSURANCE BRANCH

SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY
AUTHOR/ TYPIST	MINN/OHIO SECTION CHIEF	MICHIGAN/ WISCONSIN SECTION CHIEF	ILLINOIS/ INDIANA SECTION CHIEF	ECAB BRANCH CHIEF	WPTD DIVISION DIRECTOR
for MC 10/28/98			10/28/98	10/29/98	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	DOCKET NO. 5-MM-98-001
	)	
BIG RIVER ZINC CORPORATION	)	CONSENT AGREEMENT AND
ROUTE 3 & MONSANTO AVENUE	)	CONSENT ORDER
SAUGET, ILLINOIS 62201	)	
	)	
EPA ID NO.: ILD 062 444 435	)	

'98 OCT 30 P4:22
U.S. ENVIRONMENTAL PROTECTION AGENCY REGION V
RECEIVED REGIONAL HEARING CLERK

I. PREAMBLE

On December 3, 1997, a Complaint was filed in this matter pursuant to Section 3008(a) of the Resource Conservation and Recovery Act, as amended (RCRA), 42 U.S.C. Section 6928(a), and the United States Environmental Protection Agency's Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR Part 22. The Complainant is the Acting Regional Administrator, United States Environmental Protection Agency (U.S. EPA), Region 5. The Respondent is the Big River Zinc Corporation.

II. STIPULATIONS

The parties, desiring to settle this action, enter into the following stipulations:

1. Respondent has been served with a copy of the original Complaint (Docket No. 5-MM-98-001) in this matter. The Complaint is incorporated herein by reference.

2. Respondent is a Delaware corporation whose registered agent is Mr. Lonny L. Ludwig, Route 3 and Monsanto Avenue, Sauget, Illinois. Respondent owns and operates a facility

located at Route 3 and Monsanto Avenue, Sauget, Illinois (the "Facility").

3. Respondent admits that Complainant has jurisdiction to issue the Complaint in this matter and jurisdiction to enter into this Consent Agreement and Consent Order (CACO). Respondent agrees not to contest such jurisdiction in any proceeding to enforce the provisions of this CACO.

4. Respondent neither admits nor denies the specific factual allegations contained in the Complaint other than admissions made in Respondent's Answer. Respondent further states that Respondent is entering into this CACO in the interest of good faith and continued cooperation with U.S. EPA and in order to avoid costly and protracted litigation.

5. On October 8, 1998, Judge Pearlstein granted U.S. EPA's motion to withdraw the EPCRA counts I-IV alleged in the Complaint without prejudice.

6. Respondent explicitly withdraws its request for a hearing and waives any and all rights under any provisions of law to a hearing on the allegations contained in the Complaint or to challenge the terms and conditions of this CACO.

7. Except as set forth in the stipulated penalties relating to performance of the Supplemental Environmental Project (SEP), if Respondent fails to comply with any provision contained in this CACO, Respondent waives any rights it may possess in law or equity to challenge the authority of the U.S. EPA to bring a civil action in the appropriate United States District Court to

compel compliance with the CACO and/or to seek an additional penalty for noncompliance with the CACO. Respondent reserves the right in any such action to raise any defenses, but can not challenge the authority of the U.S. EPA to bring a civil action.

8. Respondent consents to the issuance of the Consent Order hereinafter set forth without further notice and hereby consents to the payment of a civil penalty and performance of a SEP as described in the Statement of Work (SOW) attached to and incorporated herein. Pursuant to Sections 3008(a) and 3008(g) of RCRA, 42 U.S.C. §§ 6928(a) and 6928(g); the nature of the violations; Respondent's agreement to perform a SEP; and other relevant factors, EPA has determined that an appropriate civil penalty to settle this action is TWENTY FIVE THOUSAND FOUR HUNDRED SIX DOLLARS ($25,406). Respondent agrees not to claim or attempt to claim a Federal income tax deduction or credit covering all or any part of the cash civil penalty paid to the U.S. Treasury.

9. Respondent hereby certifies that, as of the date of this CACO: (a) Respondent is not required to perform or develop the SEP by any Federal, State or local law or regulation; (b) Respondent is not funding any aspect of the SEP with any funding provided by a Federal, State, or local grant; (c) except for this Order (Docket No. 5-MM-98-001), Respondent is not required to perform or develop the SEP in settlement of any Federal, State, or local enforcement action; and (d) Respondent has not received, and is not presently negotiating to receive, credit in any other

enforcement action for the SEP.

10. Until the termination of this CACO, Respondent shall give notice and a copy of this CACO to any successor in interest prior to any transfer of ownership or operational control of the Facility. This CACO is binding on Respondent and any successors in interest.

11. Nothing in this CACO shall be construed to relieve Respondent from its obligation to comply with all applicable Federal, State and local statutes and regulations, including the RCRA Subtitle C requirements at 40 CFR Parts 260 through 270. Additionally, nothing in this CACO shall be construed to constitute U.S. EPA approval of the equipment or technology installed by Respondent in connection with the SEP under the terms of this CACO.

12. This CACO shall become effective on the date it is signed by the Acting Regional Administrator, U.S. EPA, Region 5.

III. CONSENT ORDER

Based on the foregoing stipulations, the Parties agree to the entry of the following Consent Order:

13. Respondent shall, prior to treating any hazardous debris, submit a one-time notification to the U.S. EPA Regional Waste, Pesticides and Toxics Division Director or State authorized to implement Part 268 requirements which includes the name and address of the Subtitle D facility receiving the treated debris, a description of the hazardous debris as initially generated,

including the applicable EPA Hazardous Waste Number(s), and the technology from Table 1 of 40 CFR §268.45 used to treat the debris.

14. Respondent shall keep records of all inspections, evaluations, and analyses of treated hazardous debris that are made to determine compliance with the treatment standards found at 40 CFR §268.45, or any data or information that identifies key operating parameters of the treatment unit used to treat the hazardous debris. Respondent shall also keep a signed certification of compliance with the treatment standards for each shipment of treated debris in the Respondent's files at the Facility.

15. Respondent shall develop and maintain a contingency plan for the Facility which meets the requirements of 35 IAC 725.151(a) [40 CFR §265.51(a)].

16. Respondent shall provide to Facility personnel a program of classroom instruction or on-the-job training which meets the requirements of 35 IAC 725.116 [40 CFR §265.16]. Respondent shall maintain all documents and records required by 35 IAC 725.116(d) [§265.16(d)] for the time periods described in 35 IAC 725.116(e) [40 CFR §265.16(e)].

17. Respondent shall undertake the SEP pursuant to the attached SOW and the schedule set forth in the SOW (Attachment A). The SEP's time frame as set forth in the attached SOW shall

begin to run on September 1, 1999. The parties agree that the SEP will provide environmental and public health benefits. As more fully set forth in the SOW, the SEP consists of designing, purchasing, installing, operating and maintaining a permanent fiberglass cover for the #1 thickener tank. This tank contains an impure zinc sulfate solution containing cadmium and lead. The fiberglass cover will replace the Styrofoam covers currently utilized for this tank which become contaminated with cadmium and lead and must be periodically disposed of as a hazardous waste.

18. The total expenditure for the SEP shall not be less than ONE HUNDRED EIGHTY FIVE THOUSAND FIVE HUNDRED SIXTY TWO DOLLARS ($185,562).

19. Respondent shall apply for and obtain all permits and approvals necessary for the implementation and completion of the SEP activities.

20. Whether Respondent has complied with the terms, conditions and schedule of the SEP shall be solely determined by U.S. EPA.

21. Respondent shall submit a SEP Completion Report (SEP Report) to U.S. EPA within thirty (30) calendar days of completion of the work required in the SOW. The SEP Report shall contain the following information:

(a) A detailed description of the SEP as implemented;

(b) A description of any operating problems encountered and the solutions thereto and identification of any deviations from the SOW, an explanation of why the

deviation occurred and what occurred in its place;

(c) Itemized costs, documented by copies of purchase orders and receipts or canceled checks; and

(d) Certification that the SEP has been fully implemented pursuant to the provisions of this CACO.

22. Any public statement, oral or written, made by Respondent making reference to the SEP shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action taken by the U.S. Environmental Protection Agency alleging violations of the Resource Conservation and Recovery Act, as amended."

23. Respondent shall allow U.S. EPA to inspect the Facility at any time in order to confirm that the SEP is operating properly and in conformity with the representations made herein, and that all records pertaining to the SEP will be kept at the Facility and made available to U.S. EPA and Illinois Environmental Protection Agency inspectors upon request, and any other parties requesting such information.

24. For 3 years after formal approval of the SEP report, Respondent shall maintain legible copies of documentation of the underlying research and data for any and all documents or reports submitted to U.S. EPA pursuant to this CACO. Respondent shall provide the documentation of any such underlying research and data to U.S. EPA within seven (7) days of a request for such information. In the SEP Report, and all supplemental reports submitted to U.S. EPA pursuant to this CACO, Respondent shall, by

its officers, sign and certify under penalty of law that the information contained in such document or report is true, accurate, and not misleading by signing the following statement:

> I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

25. (a) In the event that Respondent fails to comply with any of the terms or provisions of this CACO relating to the performance of the SEP described in paragraphs 17 through 24 above and/or to the extent that the actual expenditures for the SEP do not equal or exceed the cost of the SEP described in paragraph 18 above, Respondent shall be liable for stipulated penalties according to the provisions set forth below:

(i) Except as provided in subparagraph (ii) immediately below and paragraph 30, if the SEP has not been completed satisfactorily pursuant to paragraph 17 above, Respondent shall pay a stipulated penalty to the United States in the amount of FIFTY THOUSAND DOLLARS ($50,000.00).

(ii) If the SEP is not completed satisfactorily, but Respondent: (1) made good faith and timely efforts to complete the project; and (2) certifies, with supporting documentation, that at least ninety percent (90%) of the amount of money which was required to be spent was expended on the SEP, Respondent shall not pay any stipulated penalty.

(iii) If the SEP is satisfactorily completed, but Respondent spent less than ninety percent (90%) of the amount of money required to be spent for the project, Respondent shall pay a stipulated penalty to the United States in the amount of the difference between the actual expenditure and ninety percent of the money required to be spent on the SEP.

(iv) If the SEP is satisfactorily completed, and Respondent spent at least ninety percent (90%) of the amount of money required to be spent for the project, Respondent shall not pay any stipulated penalty.

(v) For failure to submit the SEP Completion Report required by paragraph 21 above, Respondent shall pay a stipulated penalty in the amount of TWO THOUSAND DOLLARS ($2,000.00) for each calendar day after the due date until the report is received by U.S. EPA.

(b) The determinations of whether the SEP has been satisfactorily completed and whether Respondent has made a good faith, timely effort to implement the SEP shall be in the sole discretion of U.S. EPA.

26. In the event that Respondent fails to provide the notice required pursuant to paragraph 10, Respondent shall pay a stipulated penalty to the United States in the amount of FIVE THOUSAND DOLLARS ($5,000).

27. Respondent shall pay stipulated penalties within fifteen (15) calendar days of receipt of written demand by U.S. EPA for such penalties. Method of payment shall be in accordance

with the provisions of paragraph 33 herein. Interest and late charges shall be paid as stated in paragraph 34 herein.

28. Except for the violations alleged in the Complaint, nothing in this CACO shall be construed as prohibiting, altering or in any way limiting the ability of U.S. EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this CACO or of the statutes and regulations upon which this CACO is based, or for Respondent's violation of any applicable provision of law.

29. This CACO shall not relieve Respondent of its obligation to comply with all applicable provisions of Federal, State or local law, nor shall the CACO be construed to be a ruling on, or determination of, any issue related to any Federal, State or local permit.

30. (a) If any event occurs which causes or may cause delays in the completion of the SEP as required under this CACO, Respondent shall notify Complainant in writing within ten (10) calendar days of the delay or Respondent's knowledge of the anticipated delay, whichever is earlier. The notice shall describe in detail the anticipated length of the delay, the precise cause or causes of the delay, the measures taken and to be taken by Respondent to prevent or minimize the delay, and the timetable by which those measures will be implemented. Respondent shall adopt all reasonable measures to avoid or minimize any such delay. Failure by Respondent to comply with the notice requirements of this paragraph shall render this

paragraph void and of no effect as to the particular incident involved and constitute a waiver of Respondent's right to request an extension of its obligation under this CACO based on such incident.

(b) If the parties agree that the delay or anticipated delay in compliance with this CACO has been or will be caused by circumstances beyond the control of Respondent, the time for performance hereunder may be extended for a period no longer than the delay resulting from such circumstances. In such event, the parties shall stipulate in writing to such extension of time.

(c) In the event that the U.S. EPA does not agree that the delay in achieving compliance with the requirements of this CACO has been or will be caused by circumstances beyond the control of Respondent, U.S. EPA will notify Respondent in writing of U.S. EPA's decision and any delays in the completion of the SEP shall not be excused.

(d) The burden of proving that any delay is caused by circumstances beyond the control of Respondent shall rest with Respondent. Increased costs or expenses associated with the implementation of actions called for by this CACO shall not, in any event, be a basis for changes in this CACO or extensions of time under section (b) of this paragraph. Delay in achievement of one interim step shall not necessarily justify or excuse delay in achievement of subsequent steps.

31. Whenever, under the terms of this CACO, notice is required to be given or a document sent by one Party to another,

it shall be directed to the individuals at the addresses specified below:

As to U.S. EPA:

Michael Cunningham
Enforcement & Compliance Assurance Branch (DE-9J)
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

As to Respondent:

Superintendent, Maintenance Department
Big River Zinc Corporation
Route 3 & Monsanto Avenue
Sauget, Illinois 62201

32. Respondent shall also submit a copy of all documents and correspondence regarding this CACO to Leslie Kirby, Office of Regional Counsel (C-14J), United States Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604 and to Brian White, Illinois Environmental Protection Agency, Compliance Section, 1021 North Grand Avenue East, Springfield, Illinois 62702-3998.

33. Respondent shall pay a civil penalty in the amount of TWENTY FIVE THOUSAND FOUR HUNDRED SIX DOLLARS ($25,406) within thirty (30) calendar days of the effective date of this CACO. Payment shall be made by certified or cashier's check payable to the "Treasurer of the United States of America." The check shall be mailed to U.S. EPA, Region 5, Regional Finance Office, P.O. Box 70753, Chicago, Illinois 60673. The name of the Respondent, the proceeding's Docket Number (5-MM-98-001) and the billing document number shall be clearly marked on the face of the check.

Copies of the transmittal of the payment shall be sent to: the Regional Hearing Clerk, Resource Management Division (M-19J); Leslie A. Kirby, Office of Regional Counsel (C-14J), and Michael Cunningham, Enforcement and Compliance Assurance Branch (DE-9J); at U.S. EPA, 77 West Jackson Boulevard, Chicago, Illinois 60604.

34. Pursuant to 31 U.S.C. Section 3717, Respondent shall pay the following amounts on any amount overdue under this CACO:

(a) Interest. Any unpaid portion of a civil or stipulated penalty shall bear interest at the rate established by the Secretary of the Treasury pursuant to 31 U.S.C. Section 3717(a)(1). Interest will thereafter begin to accrue on a civil or stipulated penalty if it is not paid by the last date required. Interest will be assessed at the rate of the United States Treasury tax and loan rate in accordance with 4 CFR § 102.13(c).

(b) Monthly Handling Charge. Respondent shall pay a late payment handling charge of TWENTY DOLLARS ($20.00) on any late payment, with an additional charge of TEN DOLLARS ($10.00) for each subsequent thirty (30) calendar day period over which an unpaid balance remains.

(c) Non-Payment Penalty. On any portion of a civil or stipulated penalty more than ninety (90) calendar days past due, Respondent shall pay a non-payment penalty of six percent (6%) per annum, which will accrue from the date the penalty payment became due and is not paid. This non-payment is in addition to charges which accrue or may accrue under subparagraphs (a) and

(b) immediately above.

35. Except as set forth in paragraphs 25 and 26, failure to comply with any requirement of this CACO may subject Respondent to liability for a penalty of up to TWENTY-SEVEN THOUSAND FIVE HUNDRED DOLLARS ($27,500.00) for each day of continued non-compliance with the terms of the CACO. U.S. EPA is authorized to assess such penalties pursuant to RCRA Section 3008(c).

36. This CACO and the attached SOW constitute the entire settlement between the parties, and constitute final disposition of the Complaint filed in this case and stipulations cited above.

37. Each party shall bear its own costs and attorneys' fees in the action resolved by this CACO.

38. Respondent's obligations under this CACO shall end when it has satisfied all of the requirements of this CACO.

39. The information required to be maintained or submitted pursuant to this CACO is not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. §§ 3501 et. seq.

40. Notwithstanding any other provision of this CACO, U.S. EPA expressly reserves any and all rights to bring an enforcement action pursuant to Section 7003 of RCRA, 42 U.S.C. Section 6973, or other statutory authority should U.S. EPA find that the handling, storage, treatment, transportation, or disposal of solid waste or hazardous waste at the Facility may present an imminent and substantial endangerment to human health or the environment. U.S. EPA also expressly reserves the right: (a) for any matters other than violations alleged in Complaint, to take

any action authorized under Section 3008 of RCRA; (b) for any matters other than violations alleged in Complaint, to enforce compliance with the applicable provision of the Illinois Administrative Code; (c) for any matters other than violations alleged in Complaint, to take any action under 40 CFR Parts 124 and 270; and (d) to enforce compliance with this CACO.

IV. SIGNATORIES

Each undersigned representative of a Party to this CACO consisting of fifteen (15) pages certifies that he is fully authorized to enter into the terms and conditions of this CACO and legally to bind such party to this document.

Agreed to this 27th day of October, 1998.

By George M. Obeldobel
George Obeldobel, President
Big River Zinc Corporation

Agreed this 29th day of October, 1998.

By Robert Springer
Robert L. Springer, Director
Waste, Pesticides and Toxics Division

The above agreed and consented to, it is so ordered

this 30th day of October, 1998.

By David A. Ullrich

David A. Ullrich, Acting Regional Administrator
U.S. Environmental Protection Agency, Region 5

IN THE MATTER OF:
BIG RIVER ZINC CORPORATION
ROUTE 3 & MONSANTO AVENUE
SAUGET, ILLINOIS 62201
DOCKET NO. 5-MM-98-001

ATTACHMENT A

BIG RIVER ZINC CORPORATION
ROUTE 3 & MONSANTO AVENUE
SAUGET, ILLINOIS 62201

TEL: 618-274-5000
FAX: 618-274-4444

#1 THICKENER LAUNDER & COVER SCOPE OF WORK

1) Modify existing walkway supports - resupport walkway to sidewall of thickener by drilling concrete and installing epoxy anchors.

- Remove existing support: on top wall of thickener to allow new dome to rest on wall. (2 weeks to complete).

2) Replace overflow launder on #1 thickener - scope includes fabrication of temporary work platform to prevent debris from old launder falling into the thickener.

- Demolition of existing wood launder and supports 250 feet total length.
- Install new 316 stainless steel launder around inside perimeter of thickener. (2 weeks to complete).

3) Install new fiberglass dome - The dome will be shipped in approximately 24 segments that will be assembled on the thickener using a crane.Total weight of dome is 17,243lbs.

- Installation of dome will be supervised by manufacturers representative.
- Assembly will start with installation of center compression ring and then installation of panels as directed by manufacturer. (2 weeks to complete).

Attached are the design specifications and drawings of the new dome.

CERTIFICATE OF SERVICE

I hereby certify that the original of this Consent Agreement and Consent Order was filed with the Regional Hearing Clerk and that copies were sent via regular U.S. mail to the following persons:

Andrew S. Pearlstein
Administrative Law Judge
United States Environmental
Protection Agency (1900)
401 M. Street NW
Washington, D.C. 20460

Counsel for Respondent:

Julie A. Emmerich
Pellegrini and Emmerich
701 Market Street
Suite 390
St. Louis, MO 63101

Anita Perry
U.S. EPA, Region 5

Dated: 10-30-98

RECEIVED
REGIONAL HEARING
CLERK
'98 OCT 30 P4:22
US ENVIRONMENTAL
PROTECTION AGENCY
REGION V

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

DATE: OCT 29 1998

SUBJECT: CACO for the Big River Zinc Corporation, Sauget, Illinois

FROM: Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch

TO: Robert L. Springer, Director
Waste, Pesticides and Toxics Division

The attached CACO package has been negotiated to resolve our December 3, 1997, Complaint for violations of the generator regulations found at 40 CFR Part 262 Subpart C and the land disposal regulations found at 40 CFR Part 268 Subpart A at the Big River Zinc Corporation (BRZ) located in Sauget, Illinois (ILD 062 444 435). BRZ failed to maintain an adequate contingency plan and training program on site and failed to notify and keep adequate records for the treatment of hazardous debris.

In this Order, BRZ has agreed to pay a civil penalty of $25,406 and complete a supplemental environmental project. The RCRA civil penalty proposed in the Complaint was $75,150. A penalty mitigation amount of $49,743 was applied based on the after-tax SEP cost of $99,488 pursuant to U.S. EPA's 1998 Final SEP Policy. The Order requires payment of the penalty within 30 days of the effective date.

I recommend that you sign this Order. Please submit the CACO package to the RA's office for signature.

Attachments

10/30/98

ENFORCEMENT AND COMPLIANCE ASSURANCE BRANCH

SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY
AUTHOR/ TYPIST	MINN/OHIO SECTION CHIEF	MICHIGAN/ WISCONSIN SECTION CHIEF	ILLINOIS/ INDIANA SECTION CHIEF	ECAB BRANCH CHIEF	WPTD DIVISION DIRECTOR
10/28/98			10/28/98	10/29/98	10/29/98

10/30/98

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF: C-14J

FOR SETTLEMENT PURPOSES ONLY

VIA FEDERAL EXPRESS

October 16, 1998

Julie Emmerich, Esq.
Pellegrini and Emmerich
A Professional Corporation
Suite 390
Gateway One On the Mall
701 Market Street
St. Louis, Missouri 63101

Re: **Big River Zinc Corp.** **Docket No. 5-MM-98-001**

Dear Ms. Emmerich:

Enclosed are two copies of the draft Consent Agreement and Consent Order (CACO) we discussed. Please be advised that the terms of this CACO remain subject to review and approval of United States Environmental Protection Agency. After you have had a chance to review the CACO, if you have any revisions please contact me as quickly as possible. I would like to have your client's signature on both copies of the CACO no later than October 20, 1998. This accelerated schedule is necessary due to the pending hearing on October 27, 1998, for this matter. I may be reached at (312) 886-7166.

Sincerely,

Leslie A. Kirby
Assistant Regional Counsel

cc: Mike Cunningham, U.S. EPA (w/o Encl.)

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 50% Recycled Paper (20% Postconsumer)

CONSENT

RCRA CONSENT AGREEMENT AND ~~FINAL~~ ORDER SIGN-OFF

PART I BACKGROUND

Facility Name The Big River Zinc Corporation

Facility EPA ID Number ILD062 444 435

Docket Nmber 5-MM-98-001

ECAB Assignee/Phone Michael Cunningham ~~6-4464~~ ORC Assignee/Phone Leslie Kirby/6-7166

Summary of Agreement Pay penalty of $25, 406, complete SEP, submit debris treatment notification, analysis, and contingency plan.

PART II CONCURRENCES ON PROPOSED CAFO (PROPOSAL NO. _____)

		Initials	Date	Agree	Disagree
1.	ECAB Assignee	MC	10/8/98	✓	
2.	Chief, ECAB Section	MW	10/13/98	✓	
3.	Asst. Regional Counsel	lak	10/13/98	✓	
4.	Chief, ECAB	JMB	10/16/98	✓	

PART III RETURN TO ORC ASSIGNEE FOR TRANSMITAL OF TWO ORIGINAL COPIES OF DRAFT TO RESPONDENT.

PART IV FINAL CAFO APPROVAL, AFTER RESPONDENT HAS SIGNED BOTH COPIES OF PROPOSED CAFO

		Initials	Date	Agree	Disagree
1.	ECAB Assignee	MW + MC	10/28/98	X	
2.	Chief, ECAB Section	MW	10/28/98	X	
3.	Asst. Regional Counsel	lak	10/28/98	X	
4.	ORC Section Chief	[illegible]	10/28/98	X	
5.	Chief, ECAB	JMB	10/29/98	X	
6.	Director, WPTD	RS	10/29/98	X	
7.	Regional Administrator	[illegible]	10/30/98	X	

PART V RETURN TO A. PERRY, DRE-9J, FOR MAILING

☐ **HAVE YOU COMPLETED THE CASE CONCLUSION DATA SHEET? DO NOT FORWARD IF IT IS NOT INCLUDED IN SIGN-OFF PACKAGE.**

CACO to be filed on or before 10/30 per ALJ order.

~~Settlement prior to hearing set for 10/27/98.~~

BIG RIVER ZINC CORPORATION
ROUTE 3 & MONSANTO AVENUE
SAUGET, ILLINOIS 62201

TEL: 618-274-5000
FAX: 618-274-4444

September 21, 1998

Mr. Michael Cunningham
U.S. Environmental Protection Agency
DE-9-J
77 West Jackson Blvd.
Chicago, IL 60604

Dear Mr. Cunningham:

This letter is in response to our telephone conversation on September 17, 1998, during which you asked several questions regarding the #1 thickener cover project. These three main questions included (1) quantity and waste code of old styrofoam cover and wooden launder; (2) time for completion of the project; and (3) verification of cost of equipment purchased.

1. The solution in the #1 thickener is an impure zinc sulfate with cadmium and lead present. The styrofoam cover is contaminated with these materials. (Waste code D006 and D008.) The materials removed weighed ~7 tons and were delivered to Chemical Waste Management of Indiana.

   The wooden launder will add ~ 2 tons additional waste to be disposed.

2. The project will take 6-8 weeks to complete and we expect it to be finished before the end of the year.

3. Attached please find copies of purchase orders to cover the procurement of the fiberglass dome and stainless steel launder.
   a) Fiberglass structures and tank were issued P.O. #23336 for $118,009 plus one addendum for $5,680 = total of $123,689.
   b) Metro Manufacturing, Inc. was issued P. O. #23657 to fabricate the new stainless steel launder for $19,783, plus extra work for $2,090 = total of $21,873.
   c) The labor required to complete the project is estimated to cost $40,000. The exact scope could not be firmly quoted because close coordination and possible delays involved with the launder removal could not be adequately defined for the contractor.

If you have any additional questions, please contact me.

Sincerely,

Barry L. Motycka
Superintendent, Maintenance Department

Attachments
c:\EPA

ATTACHMENT A

BIG RIVER ZINC CORPORATION
ROUTE 3 & MONSANTO AVENUE
SAUGET, ILLINOIS 62201

TEL: 618-274-5000
FAX: 618-274-4444

#1 THICKENER LAUNDER & COVER SCOPE OF WORK

1) Modify existing walkway supports - resupport walkway to sidewall of thickener by drilling concrete and installing epoxy anchors.

- Remove existing support: on top wall of thickener to allow new dome to rest on wall. (2 weeks to complete).

2) Replace overflow launder on #1 thickener - scope includes fabrication of temporary work platform to prevent debris from old launder falling into the thickener.

- Demolition of existing wood launder and supports 250 feet total length.
- Install new 316 stainless steel launder around inside perimeter of thickener. (2 weeks to complete).

3) Install new fiberglass dome - The dome will be shipped in approximately 24 segments that will be assembled on the thickener using a crane.Total weight of dome is 17,243lbs.

- Installation of dome will be supervised by manufacturers representative.
- Assembly will start with installation of center compression ring and then installation of panels as directed by manufacturer. (2 weeks to complete).

Attached are the design specifications and drawings of the new dome.

5 — ORIGINATORS

BIG RIVER ZINC CORPORATION

ROUTE 3 & MONSANTO AVE., SAUGET, IL 62201

No. 23336

DATE OF ORDER 1/13/98

DATE RECEIVED	BY	Partial	Complete
/ /		☐	☐
DATE RECEIVED / /		☐	☐
DATE RECEIVED / /		☐	☐
DATE RECEIVED / /		☐	☐

PRO NUMBER ☐ Prepaid

FRT. AMT. ☐ Collect

DELY. BY

DELIVER TO

EXPEDITING SECTION

DATE CALLED	PROMISED SHIP DATE	VIA	PRO NO.

REQUIRED DELIVERY DATE →

FIBERGLASS STRUCTURES & TANK
P.O. BOX 582
26615 FALLBROOK AVE.
WYOMING, MN 55092

SHIP TO: BIG RIVER ZINC CORP., ROUTE 3 & MONSANTO AVE., SAUGET, IL 62201

ORDERING DEPT.

ITEM NO.	QUANTITY	DESCRIPTION	COST CENTER	ORIGINATOR / LOCATION
1	1 EA	81'6" DIAMETER FIBERGLASS DOME FOR #1 THICKENER TANK HAVING 6' RISE CONSISTING OF 30 INTERLOCKING WEATHERTIGHT GASKETED PANELS. INDENTED POCKETS INCLUDING HINGES ACCESS HATCHES IN EACH PANEL TO CLEAN OVERFLOW LAUNDER AND COVERED APEX COMPRESSION RING. REFERENCE DWG. NO. 109590. ALL PANELS TO INCLUDE SURFACE VEIL WITH VINYL ESTER RESIN CONSTRUCTION. ALL 316 SS HARDWARE FOR ASSEMBLY AND ERECTION PROCEDURES. FREIGHT TO JOB SIZE INCLUDED. FSC FURNISH FIELD SUPERVISION AT $450.00/DAY PLUS TRAVEL & SUBSTENANCE. VENDOR TO PROVIDE DESIGN DATA WITH SHOP DRAWINGS ASAP FOR APPROVAL - SNOWLOAD 15 PSF (CONTINUED ON NEXT PAGE)	118.009.0000 20099.7801.9731	R.MOTYC

TERMS | F.O.B. | VIA

V# 01139730
PAGE 1

EXEMPT FROM ILL. USE TAX ☑ SUBJECT TO ILL. USE TAX ☐ MATERIAL ONLY SUBJECT TO ILLINOIS USE TAX ☐

REMARKS

FORM Z 0002A (REV. 6-92)

5 — ORIGINATORS

BIG RIVER ZINC CORPORATION

ROUTE 3 & MONSANTO AVE., SAUGET, IL 62201

No. 23335

DATE OF ORDER 1/13/98

DATE RECEIVED	BY	Partial	Complete
/ /		☐	☐
DATE RECEIVED / /		☐	☐
DATE RECEIVED / /		☐	☐
DATE RECEIVED / /		☐	☐

PRO NUMBER ☐ Prepaid

FRT. AMT. ☐ Collect

DELY. BY

DELIVER TO

EXPEDITING SECTION

DATE CALLED	PROMISED SHIP DATE	VIA	PRO NO.

REQUIRED DELIVERY DATE →

FIBERGLASS STRUCTURES & TANK
P.O. BOX 582
26616 FALLBROOK AVE.
WYOMING, MN 55092

SHIP TO: BIG RIVER ZINC CORP., ROUTE 3 & MONSANTO AVE., SAUGET, IL 62201

ORDERING DEPT.

ITEM NO.	QUANTITY	DESCRIPTION	COST CENTER	ORIGINATOR / LOCATION
		(CONTINUED) 80 MPH WIND LOAD. WARRANTY TO BE 3 YEARS AFTER INSTALLATION. VIA: BEST WAY CONFIRMING: DO NOT DUPLICATE		

TERMS | F.O.B. | VIA

EXEMPT FROM ILL. USE TAX ☐ SUBJECT TO ILL. USE TAX ☐ MATERIAL ONLY SUBJECT TO ILLINOIS USE TAX ☐

REMARKS

V# 01139730
PAGE 2

FORM Z 0002A (REV. 6-92)

5 – ORIGINATORS

BIG RIVER ZINC CORPORATION

ROUTE 3 & MONSANTO AVE., SAUGET, IL 62201

No. 23657

DATE OF ORDER 12/02/97

EXPEDITING SECTION			
DATE CALLED	PROMISED SHIP DATE	VIA	PRO NO.

REQUIRED DELIVERY DATE →

DATE RECEIVED	BY	Partial	Complete
/ /		☐	☐
DATE RECEIVED / /		☐	☐
DATE RECEIVED / /		☐	☐
DATE RECEIVED / /		☐	☐

PRO. NUMBER ☐ Prepaid

FRT. AMT. ☐ Collect

DELY. BY

DELIVER TO

METRO MFG. INC.
3145 NORTH 14TH STREET
ST. LOUIS MO 63107

SHIP TO: BIG RIVER ZINC CORP., ROUTE 3 & MONSANTO AVE., SAUGET, IL 62201

ORDERING DEPT.

ITEM NO.	QUANTITY	DESCRIPTION	COST CENTER	ORIGINATOR / LOCATION
1	1 LO	TO COVER LABOR & MATERIALS REQUIRED TO FABRICATE 1 FT. WIDE X 20" TALL X 248' LONG 316 SS LAUNDER AS SHOWN ON SKETCH BY V. BLAYLOCK DATED 11/13/97. MATERIAL TO BE 10 GAUGE FOR LAUNDER SECTION.	19,783.0000 20099.8201.9731	B.MOTYCI

CONFIRMING: DO NOT DUPLICATE

TERMS | F.O.B. | VIA

EXEMPT FROM ILL. USE TAX [XX] SUBJECT TO ILL. USE TAX [ ] MATERIAL ONLY SUBJECT TO ILLINOIS USE TAX [ ]

V# 01130704
PAGE 1

REMARKS

FORM Z 0002A (REV. 6-92)

A.S.M.E. Code Tanks,
Ductwork, Bins,
Conveyors, Tubing,
Plate Burning, Shearing
Bending, Rolling,
Welding, Plasma Burnin
Angle Rolling,
Structural Shapes Rolle

SHIP TO

BILL TO
Big River Zinc
Route 3 and Monsanto Ave

East Saint Louis, IL 62201
ATTN: Vern Blaylock

METRO MFG. INC.
3145 North 14th Street
St. Louis, MO. 63107
(314)-421-2443

INVOICE

NUMBER	DATE
2379	12/31/97

CUSTOMER NO.	CUSTOMER P.O. NO.	OUR ORDER	SHIP VIA	TERMS
	23657	14721		

QUANTITY	DESCRIPTION	AMOUNT
1	316 SS wier per sketch	1 $19,783.00
1	Additions	$2,090.00
	Sub Total:	$21,873.00
	Sales Tax:	$0.00

Barry
~~Vern~~
Please Approve
additional charges

80 ft Thickner
adder Cut Down to
10' length + move
Cross Straps To miss
openings V.H.B.

1/14/98
9731-8201

2% Discount If Paid By:	1/10/98	$21,435.54		INVOICE TOTAL
Payment Due By	1/30/98	$21,873.00	Total:	$21,873.00

LAW OFFICES OF
PELLEGRINI AND EMMERICH
A PROFESSIONAL CORPORATION
SUITE 390
GATEWAY ONE ON THE MALL
701 MARKET STREET
ST. LOUIS, MISSOURI 63101

FRANK L. PELLEGRINI
JULIE A. EMMERICH

TELEPHONE (314) 241-7445
FAX (314) 241-7449

May 1, 1998

VIA - FACSIMILE - (312) 886-0747

Ms. Leslie Kirby
Assistant Regional Counsel
USEPA, Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

RE: *Big River Zinc Corporation*
Docket No. 5-MM-98-001

Dear Leslie:

This is in response to your April 9, 1998 letter which requested information concerning the proposed SEPs. This letter will provide information concerning the construction of the cover for the thickener tank. Your questions, and the answers to those questions, are as follows:

1. "What material in the vessel causes the high emissions of zinc and sulfuric acid?"

RESPONSE: My previous letter to you stated that the tank contains sulfuric acid. The tank contains no sulfuric acid. In addition to that, my letter might have created the impression that there were actual emissions from the tank. My letter referred to "potential" emissions. There are no actual emissions that we are aware of. The tank is covered with styrofoam and the contents are not pressurized nor heated. There is no evaporation. Therefore, the answer to your question is that there is no material that causes high emissions of zinc and sulfuric acid.

2. "Why are these emissions not subject to 40 C.F.R. Part 265 Subpart CC?"

RESPONSE: Again, Big River Zinc is aware of no actual emissions. In addition to that, the materials in the tank do not constitute hazardous waste and are not treated here and, therefore, would not be subject to 40 C.F.R. Part 265, even assuming there were such emissions.

3. "What is the estimated emission mass for volume of zinc and sulfuric acid?"

RESPONSE: As previously stated, the tank contains no sulfuric acid. Also, there is no emission mass or volume of zinc.

4. "How much of this volume or percentage would be prevented by this SEP?"

RESPONSE: There would be no volume or percentage of zinc emissions that would be actually prevented under normal circumstances unless there were some type of unexpected release. If the SEP is implemented, that will eliminate the need for the styrofoam cover. The styrofoam cover is disposed of approximately one time per year, and generates approximately seven tons of styrofoam waste per year which is disposed as hazardous waste. That waste stream would be eliminated if the styrofoam were eliminated and replaced with a permanent cover, thereby falling within the "pollution prevention" category of SEPs. The styrofoam would be eliminated by the construction of the proposed covered.

5. "Where would these constituents go if the SEP was not used (i.e., landfill, water, reclaimed)?"

RESPONSE: If the SEP were not used, the styrofoam would be, and currently is, disposed of in a landfill.

6. "How did Big River Zinc arrive at the cost estimation provided? Specifically, we need to receive more information on capital costs, any one-time non depreciable costs, and the number of years that annual operations costs or savings will be expended in performing this project. Additionally, what overall cost savings, if any, will this project generate?"

RESPONSE: Big River Zinc is in the process of compiling this information and we hope to provide this to you Monday.

Also, with respect to the capacitor destruction proposal, I hope to provide information to you concerning how that project falls within the parameters of an SEP. Thanks very much for your continued cooperation.

Sincerely yours,

Julie A. Emmerich

JAE/rp

2/4/98

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE ADMINISTRATOR

In the Matter of	)	
	)	
BIG RIVER ZINC CORPORATION	)	Docket No. 5-MM-98-001
	)	
Respondent.	)	

PREHEARING ORDER

As you have been previously notified, I have been designated to preside in the above captioned matter. This proceeding arises under the authority of Section 325 of the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA), 42 U.S.C. Section 11045, Section 3008(a)(1) of the Resource Conservation and Recovery Act of 1976, as amended (RCRA), 42 U.S.C. Section 6928(a)(1), and Sections 22.01(a)(4) and (8), 22.13, 22.37 and 22.40 of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 C.F.R. Sections 22.01(a)(4) and (8), 22.13, 22.37 and 22.40.

As provided in the Rules, §22.18(a), it is the Agency's policy to encourage settlement of proceedings without the necessity of a formal hearing. However, the continuation of settlement negotiations will not provide good cause for not meeting the following schedule set in this Prehearing Order.

The schedule can now be set for the filing of prehearing exchanges under 40 C.F.R. §22.19 in accord with the following procedure:

1. Each party must submit a list of all expert and other witnesses it intends to call with a brief narrative summary of their expected testimony; and copies of all documents and exhibits it intends to introduce into evidence. The exhibits should include a c.v. or resume for each proposed expert witness. However, lengthy documents known to be in the possession of, or easily available to, the opposing party may be cited instead of copied or exchanged.

2. The Complainant must submit a statement explaining in detail how the proposed penalty amount was determined, including a description of how the specific provisions of any EPA penalty or enforcement policies or guidelines were applied in calculating the penalty.

3. If the Respondent intends to take the position that it is unable to pay the proposed penalty, or that payment will have an adverse effect on Respondent's ability to continue in business, Respondent must furnish supporting documentation such as financial statements or tax returns.

4. Each party should submit its views on the place for the hearing pursuant to §§22.21(d) and 22.19(d) of the Rules. Each party may also indicate when they would be available for the hearing, and give an estimate of the time needed to present its direct case.

The Complainant must make its initial prehearing exchange by April 23, 1998. The Respondent must make its initial prehearing exchange by May 14, 1998. If Respondent does not intend to present a direct case, but does wish to cross-examine Complainant's witnesses, it must submit a statement to that effect instead of a prehearing exchange. After the initial exchanges, the parties may file supplements to their prehearing exchanges (including any reply or rebuttal material), without motion, until 30 days before the date scheduled for the hearing. I will schedule the hearing after I receive the parties' initial exchanges.

The original of all filings, with attachments, shall be sent to the Regional Hearing Clerk, and copies sent to the opposing party and the Administrative Law Judge.

Andrew S. Pearlstein

Andrew S. Pearlstein
Administrative Law Judge

Dated: February 6, 1998
Washington, D.C.

Attachment B

RCRA CIVIL PENALTY POLICY

I. SUMMARY OF THE POLICY

The penalty calculation system established through EPA's RCRA Civil Penalty Policy consists of (1) determining a gravity-based penalty for a particular violation, from a penalty assessment matrix, (2) adding a "multi-day" component, as appropriate, to account for a violation's duration, (3) adjusting the sum of the gravity-based and multi-day components, up or down, for case specific circumstances, and (4) adding to this amount the appropriate economic benefit gained through non-compliance. More specifically, the Revised RCRA Civil Penalty Policy establishes the following penalty calculation methodology:

Penalty Amount =	gravity-based component	+ multiday component	+ adjust-ments	+ economic benefit

In administrative civil penalty cases, EPA will perform two separate calculations under this policy: (1) to determine an appropriate amount to seek in the administrative complaint and subsequent litigation, and (2) to explain and document the process by which the Agency arrived at the penalty figure it has agreed to accept in settlement. The methodology for these calculations will differ only in that no downward adjustments (other than those reflecting a violator's good faith efforts to comply with applicable requirements) will usually be included in the calculation of the proposed penalty for the administrative complaint. In those instances where the respondent or reliable information demonstrates prior to the issuance of the complaint that applying further downward adjustment factors (over and above those reflecting a violator's good faith efforts to comply) is appropriate, enforcement personnel may in their discretion (but are not required to) make such further downward adjustments in the amount of the penalty proposed in the complaint.

In determining the amount of the penalty to be included in the complaint, enforcement personnel should consider all possible ramifications posed by the violation and resolve any doubts (e.g., as to the application of adjustment factors or the assumptions underlying the amount of the economic benefit enjoyed by the violator) against the violator in a manner consistent with the facts and findings so as to preserve EPA's ability to litigate for the strongest penalty possible. It should be noted that assumptions underlying any upward adjustments or refusal to apply downward adjustments in the penalty amount are subject to revision later as new information becomes available.

In civil judicial cases, EPA will use the narrative penalty assessment criteria set forth in the policy to argue for as high a penalty as the facts of a case justify should the case go to trial, and will prepare a calculation which applies this policy to lay out the rationale behind any penalty amount the Agency agrees to accept in settlement.

Two factors are considered in determining the gravity-based penalty component:

- potential for harm; and
- extent of deviation from a statutory or regulatory requirement.

These two factors constitute the seriousness of a violation under RCRA, and have been incorporated into the following penalty matrix from which the gravity-based component will be chosen:

MATRIX

Extent of Deviation from Requirement

Potential for Harm	MAJOR	MODERATE	MINOR
MAJOR	$25,000 to 20,000	$19,999 to 15,000	$14,999 to 11,000
MODERATE	$10,999 to 8,000	$7,999 to 5,000	$4,999 to 3,000
MINOR	$2,999 to 1,500	$1,499 to 500	$499 to 100

The policy also explains how to factor into the calculation of the gravity component the presence of multiple and multi-day (continuing) violations. The policy provides that for days 2 through 180 of multi-day violations, multi-day penalties are mandatory, presumed, or discretionary, depending on the "potential for harm" and "extent of deviation" of the violations. For each day for which multi-day penalties are sought, the penalty amounts must be determined using the multi-day penalty matrix. The penalty amounts in the multi-day penalty matrix range from 5% to 20% (with a minimum of $100 per day) of the penalty amounts in the corresponding gravity-based matrix cells. Regions also retain discretion to impose multi-day penalties (1) of up to $25,000 per day, when appropriate under the circumstances, and (2) for days of violation after the first 180, as needed to achieve deterrence.

Where a company has derived significant savings or profits by its failure to comply with RCRA requirements, the amount of economic benefit from noncompliance gained by the violator will be calculated and added to the gravity-based penalty amount. The Agency has developed and made available to Agency personnel a computer model that can quickly and accurately calculate economic benefit - BEN.[1]

After the appropriate gravity-based penalty amount (including the multi-day component) has been determined, it may be adjusted upward or downward to reflect particular circumstances surrounding the violation. Except in the unusual circumstances outlined in Section VIII the amount of any economic benefit enjoyed by the violator is not subject to adjustment. When adjusting the gravity-based penalty amount the following factors should be considered:

- good faith efforts to comply/lack of good faith (upward or downward adjustment);
- degree of willfulness and/or negligence (upward or downward adjustment);
- history of noncompliance (upward adjustment);
- ability to pay (downward adjustment);
- environmental projects to be undertaken by the violator (downward adjustment); and
- other unique factors, including but not limited to the risk and cost of litigation (upward or downward adjustment).

These factors (with the exception of (i) upward adjustment factors such as history of noncompliance, and (ii) the statutory downward adjustment factor reflecting a violator's good faith efforts to comply) should usually be considered after the penalty in the complaint has been proposed, i.e., during the settlement stage.

A detailed discussion of the policy follows. In addition, this document includes a few hypothetical cases where the step-by-step assessment of penalties is illustrated. The steps included are choosing the correct penalty cell on the matrix, calculating the economic benefit of noncompliance, where

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[1] For more information regarding the BEN model, call the Office of Enforcement Policy located within the Office of Enforcement, at 475-8777.

appropriate, and adjusting the penalty assessment on the basis of the factors set forth above.

II. INTRODUCTION

To respond to the problem of improper management of hazardous waste, Congress amended the Solid Waste Disposal Act with the Resource Conservation and Recovery Act (RCRA) of 1976. Although the Act has several objectives, Congress' overriding purpose in enacting RCRA was to establish the basic statutory framework for a national system that would ensure the proper management of hazardous waste. Since 1976, the Solid Waste Disposal Act has been amended by the Quiet Communities Act of 1978, P.L. 95-609, the Used Oil Recycling Act of 1980, P.L. 96-463, the Hazardous and Solid Waste Amendments of 1984, P.L. 98-221, the Safe Drinking Water Act Amendments of 1986, P.L. 99-39, the Superfund Amendments and Reauthorization Act of 1988, P.L. 99-499, and most recently, the Medical Waste Tracking Act of 1988, P.L. 100-582. For simplicity and convenience, the Solid Waste Disposal Act, as amended, will hereinafter be referred to as "RCRA."

Section 3008(a) of RCRA, 42 U.S.C. §6928(a), provides that if any person has violated or is in violation of a requirement of Subtitle C, the Administrator of the Environmental Protection Agency (EPA) may, among other options, issue an order assessing a civil penalty of up to $25,000 per day for each violation. Section 3008(a)(3), 42 U.S.C. §6928(a)(3), provides that any order assessing a penalty shall take into account:

- the seriousness of the violation, and
- any good faith efforts to comply with the applicable requirements.

Section 3008(g) applies to civil judicial enforcement actions and establishes liability to the United States for civil penalties of up to $25,000 per day for each violation of Subtitle C.

This document sets forth the Agency's policy and internal guidelines for determining penalty amounts which (1) should be sought in administrative complaints filed under RCRA[2]

---

[2] This policy is in no way intended to limit the penalty amounts <u>sought</u> in civil judicial actions. In civil judicial actions brought pursuant to RCRA the United States will at its discretion continue to file complaints requesting up to the statutory maximum civil penalty amount and to litigate for the maximum amount justifiable on the facts of the case.

and (2) would be acceptable in settlement of administrative and judicial enforcement actions under RCRA. This policy also governs civil penalty calculations under the Medical Waste Tracking Act of 1988, 42 U.S.C. § 6922 et seq., and supersedes the guidance document entitled, "Applicability of RCRA Penalty Policy to LOIS Cases (November 16, 1987). It does not, however, apply to penalties assessed under Subtitle I (UST) of RCRA, 42 U.S.C. § 6991 et seq.

The purposes of the policy are to ensure that RCRA civil penalties are assessed in a fair and consistent manner; that penalties are appropriate for the gravity of the violation committed; that economic incentives for noncompliance with RCRA requirements are eliminated; that penalties are sufficient to deter persons from committing RCRA violations; and that compliance is expeditiously achieved and maintained.

This document does not address whether assessment of a civil penalty is the correct enforcement response to a particular violation. Rather, this document focuses on determining the proper civil penalty amount that the Agency should obtain once a decision has been made that a civil penalty is the proper enforcement remedy to pursue. For guidance on when to assess administrative penalties, enforcement personnel should consult the RCRA Enforcement Response Policy, December 21, 1987. The Enforcement Response Policy provides a general framework for identifying violations and violators of concern as well as guidance on selecting the appropriate enforcement action n response to various RCRA violators.

The 1990 RCRA Civil Penalty Policy is immediately applicable and should be used to calculate penalties sought in all RCRA administrative complaints or accepted in settlement of both administrative and judicial civil enforcement actions brought under the statute after the date of the policy, regardless of the date of the violation. To the maximum extent practicable, the policy shall also apply to the settlement of administrative and judicial enforcement actions instituted prior to but not yet resolved as of the date the policy is issued.

The procedures set out in this document are intended solely for the guidance of government personnel. They are not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the United States. The Agency reserves the right to at variance with this policy and to change it at any time without public notice.

III. RELATIONSHIP TO AGENCY PENALTY POLICY

The RCRA Civil Penalty Policy sets forth a system for pursuing penalties consistent with the established goals of the Agency's civil penalty policy which was issued on February 16, 1984. These goals consist of:

- Deterrence;
- Fair and equitable treatment of the regulated community; and
- Swift resolution of environmental problems.

The RCRA penalty policy also adheres to the Agency policy's framework for assessing civil penalties by:

- Calculating a preliminary deterrence amount consisting of a gravity component and a component reflecting a violator's economic benefit of noncompliance; and
- Applying adjustment factors to account for differences between cases.

IV. DOCUMENTATION AND RELEASE OF INFORMATION

A. DOCUMENTATION FOR PENALTY SOUGHT IN ADMINISTRATIVE COMPLAINT/LITIGATION

In order to support the penalty proposed in the complaint, enforcement personnel must include in the case file an explanation of how the proposed penalty amount was calculated. As a sound case management practice in administrative cases, a case "record" file should document or reference all factual information on which EPA will need to rely to support the penalty amount sought in the complaint. Full documentation of the reasons and rationale for the penalty complaint amount is important to expeditious, successful administrative enforcement of RCRA violations. The documentation should include all relevant information and documents which served as the basis for the penalty complaint amount and were relied upon by the Agency decision-maker. In general, only final documents, but not preliminary documents, such as drafts and internal memoranda reflecting earlier deliberations, should be included in the record file. All documentation supporting the penalty calculation should be in the record file at the time the complaint is issued. The documentation should be supplemented to

include a justification for any adjustments to the penalty amount in the complaint made after initial issuance of the complaint, if such adjustments are necessary.

Additionally, Agency regulations governing administrative assessment of civil penalties, at 40 CFR 22.14(a)(5) and (c), require that the complaint contain a statement which sets forth the Agency's basis for requesting the actual amount of the penalty being sought. To ensure that RCRA administrative complaints comply with the statute and the rules, as long as sufficient facts are alleged in the complaint, enforcement personnel may plead the following:

> Based upon the facts alleged in this Complaint and upon those factors which the Complainant must consider pursuant to Section 3008(a)(3) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §6928(a)(3) (as discussed in the RCRA Civil Penalty Policy), including the seriousness of the violations, any good faith efforts by the respondent to comply with applicable requirements, and any economic benefit accruing to the respondent, as well as such other matters as justice may require, the Complainant proposes that the Respondent be assessed the following civil penalty for the violations alleged in this Complaint:
>
> Count 1 ..... $25,000
> Count 2 ..... $80,000

Enforcement personnel may use the above general language in the complaint, but must be prepared to present at the pre-hearing conference or evidentiary hearing more detailed information reflecting the specific factors weighed in calculating the penalty proposed in the complaint. For example, evidence of specific instances where the violation actually did, could have, or still might result in harm could be presented to the trier of fact to illustrate the potential for harm factor of the penalty. Experience also suggests that the Agency may be called upon, before the hearing, to present to the trier of fact and the respondent the penalty computation worksheet supporting the proposed penalty amount sought in the complaint.[3]

Usually the record supporting the penalty amount specified in the complaint should include a penalty computation worksheet which explains the potential for harm, extent of deviation from statutory or regulatory requirements, economic benefit of non-

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[3] See City of Kalamazoo Water Reclamation Plant, CWA-AO-01-89 (March 16, 1989), where the Administrative Law Judge required EPA to provide its penalty computation worksheet to respondent during the prehearing exchange.

compliance, and any adjustment factors applied (e.g., good faith efforts to comply). Also the record should include any inspection reports and other documents relating to the penalty calculation.

B. DOCUMENTATION OF PENALTY SETTLEMENT AMOUNT

Until settlement discussions or pre-hearing information exchange are held with the respondent, mitigating and equitable factors and overall strength of the Agency's enforcement case may be difficult to assess. Accordingly, preparation of a penalty calculation worksheet for purposes of establishing the Agency's settlement position on penalty amount may not be feasible prior to the time that negotiations with the violator commence. Once the violator has presented the Region with its best arguments relative to penalty mitigation the Region may, at its discretion, complete a penalty calculation worksheet to establish its initial "bottom line" settlement position. However, at a minimum, prior to final approval of any settlement, whether administrative or judicial, enforcement personnel should complete a final worksheet and narrative explanation which provides the rationale for the final settlement amount to be included in the case file for internal management use and oversight purposes only. As noted above enforcement personnel may, in arriving at a penalty settlement amount, deviate significantly from the penalty amount sought in an administrative complaint, provided such discretion is exercised in accordance with the provisions of this policy.

C. RELEASE OF INFORMATION

Release of information to members of the public relating to the use of the 1990 RCRA Civil Penalty Policy in enforcement cases is governed by the Freedom of Information Act (FOIA) 5 USC §552, and the Agency regulations implementing that act, 40 CFR Part 2. FOIA as implemented through Agency regulations, sets forth procedural and substantive requirements governing the disclosure of information by Federal agencies. While the Agency maintains a policy of openness and freely discloses much of what is requested by the public, there are a number of exemptions in FOIA which allow the Agency to withhold and protect from disclosure certain documents and information in appropriate circumstances.

In ongoing enforcement cases, documents and other material that deal with establishing the appropriate amount of a civil penalty (particularly penalty computation worksheets) may be covered by two different FOIA exemptions. Documents that support or relate to the amount of the civil penalty the Agency would be willing to accept in settlement are likely to fall within the scope of these exemptions and in many cases can be withheld. Documents that support or relate to the amount of a penalty the Agency has

proposed in an administrative complaint may also qualify for protection under the exemptions.

FOIA, Exemption 7, as codified at 40 CFR 2.118(a)(7), allows such documents to be withheld if release could reasonably be expected to interfere with an enforcement proceeding. This exemption extends to all stages of law enforcement activities, from initial investigation to completion. Once the enforcement action has been completed, however, this exemption can no longer be used to withhold information. Nonetheless, there is potentially another avenue under FOIA which may be used in appropriate circumstances to protect sensitive documents.

FOIA, Exemption 5, as codified at 40 CFR 2.118(a)(5), protects from disclosure Agency documents and information that are classified as attorney work product, as well as pre-decisional deliberative documents. The attorney work product privilege protects sensitive decisions and recommendations made in analyzing and choosing appropriate enforcement options, and planning legal strategy, in response to violations of legal requirements. Such documents must be prepared in anticipation of litigation by, or at the direction of, an attorney. The purpose of the deliberative process privilege is to preserve the quality of Agency decisions by encouraging honest and frank discussion within the Agency. The process of developing penalty calculations may fall within the parameters of both attorney work product and deliberative process; thus, withholding under FOIA Exemption 5 may be appropriate.

An important distinction between the two exemptions discussed is that the protective scope of Exemption 5 does not end when the enforcement process is completed. Thus, under Exemption 5, penalty calculations may be protected from disclosure at any time.

The Agency may waive the protection afforded by FOIA and release exempt documents in its discretion in appropriate cases, without jeopardizing future use of a FOIA exemption in another case. Such discretionary waivers should be made on a case-by-case basis, balancing the public interest served by allowing the release and the Agency's policy of openness against the harm to the Agency caused by release. Generally, such releases should only be made when settlement will be facilitated. Because issues relating to FOIA and application of its exemptions require special attention, the Regional Freedom of Information Act Officer or appropriate attorney in the Office of Regional Counsel should be consulted whenever any request is made by a member of the public relating to the application of the RCRA Penalty Policy in general or in a specific enforcement action.

The penalty computation worksheet to be included in the case file is attached. (See: Section X, Appendix.)

V. RELATIONSHIP BETWEEN PENALTY AMOUNT SOUGHT IN AN ADMINISTRATIVE COMPLAINT AND ACCEPTED IN SETTLEMENT

When read together, 40 C.F.R. 22.14(a) and (c) suggest that the Agency must include in any administrative complaint filed pursuant to RCRA Section 3008(a) a proposed penalty (the dollar amount of which has been determined in accordance with the applicable Agency penalty policy) and a statement of the reasoning behind this proposed penalty. Indeed, in several cases such a requirement has been imposed on the Agency in administrative enforcement actions subject to the 40 C.F.R. Part 22 hearing procedures.[4] The penalty policy not only facilitates compliance with the cited regulations by requiring that enforcement personnel calculate a proposed penalty (and include this amount and the underlying rationale for adopting it in the complaint), but also establishes a methodology for calculating penalty amounts which would be acceptable to EPA in settlement of administrative and judicial enforcement actions. The Agency expects that the dollar amount of the proposed penalty included in the administrative complaint will often exceed the amount of the penalty the Agency would accept in settlement. This may be so for several reasons.

First, at the time the complaint is filed, the Agency will often not be aware of mitigating factors (then known only to the respondent) on the basis of which the penalty may be adjusted downward. Second, it is appropriate that the Agency have the enforcement discretion to accept in settlement a lower penalty than it has sought in its complaint, because in settling a case the Agency is able to avoid the costs and risks of litigation. Moreover respondents must perceive that they face some significant risk of higher penalties through litigation to have appropriate incentives to agree to penalty amounts acceptable to the Agency in settlement.

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[4] See, Katzson Bros. Inc. v. EPA, 839 F. 2d 1396, (10th Cir. Feb. 22, 1988), in which the court held that administrative reviews of the default penalty amount for a FIFRA violation were inadequate because they failed to analyze the factual basis for the civil penalty; and Environmental Protection Corporation v. Thomas, No.87-447, slip op. (E.D. Cal. July 14, 1988), where the court held that 40 CFR 22.14(a) requires that the Agency provide defendants with the factual basis and rationale for the Agency's penalty determination for a RCRA violation, so as to allow the person being penalized an opportunity to mount a defense in the matter.

Therefore, Agency enforcement personnel should, as necessary, prepare two separate penalty calculations for each administrative proceeding -- one to support the initial proposed penalty included in the complaint and the other to be placed in the administrative file as support for the final penalty amount the Agency accepts in settlement. [5] In calculating the amount of the proposed penalty to be included in the administrative complaint, Agency personnel should total (1) the gravity-based penalty amount (including any multi-day component) and (2) an amount reflecting upward adjustments [6] of the penalty and subtract from this sum an amount reflecting any downward adjustments in the penalty based solely on respondent's "good faith efforts [7] to comply with applicable requirements" about which the Agency is aware. This total should then be added to the amount of any economic benefit accruing to the violator. The result will be the proposed penalty the Agency will seek in its complaint.

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[5] In judicial actions it will generally only be necessary to calculate a penalty amount to support any penalty the Agency is to accept in settlement. The United States is, of course, free to argue to the court in judicial actions that the penalty figure it seeks is consistent with the rationale underlying the penalty policy.

[6] While the Agency may at this early juncture have limited knowledge of facts necessary to calculate any upward adjustments in the penalty it should be remembered that amendments to the complaint (including the amount of the proposed penalty) may be made after an answer is filed only with the leave of the presiding officer. See 40 C.F.R. 22.14(d).

[7] Since Section 3008(a)(3) of RCRA requires that a violator's "good faith efforts to comply with applicable requirements" be considered by the Agency in assessing any penalty, it is appropriate that this factor be weighed in calculating the proposed penalty based on information available to EPA. While Section 3008(a)(3) also requires that the Agency weigh the seriousness of the violation in assessing a penalty, this requirement is satisfied by including a gravity-based component which reflects the seriousness (i.e., the potential for harm and extent of deviation from applicable requirements) of the violation. As noted above, enforcement personnel may in their discretion further adjust the amount of the proposed penalty downward where the violator or information obtained from other sources has convincingly demonstrated prior to the time EPA files the administrative complaint that application of additional downward adjustment factors is warranted.

The methodology for determining and documenting the penalty figure the Agency accepts in settlement should be basically identical to that employed in calculating the proposed penalty included in the complaint, but should also include consideration of (1) any new and relevant information obtained from the violator or elsewhere, and (2) all other downward adjustment factors (in addition to the "good faith efforts" factor weighed in calculating the proposed penalty appearing in the complaint).

It may be noted here that the RCRA Penalty Policy serves as guidance not only to Agency personnel charged with responsibility for calculating appropriate penalty amounts for RCRA violations but also under 40 CFR §22.27(b) to judicial officers presiding over administrative proceedings at which proper penalty amounts for violations redressable under RCRA Sections 3008(a) and (g) are at issue. Such judicial officers thus have discretion to apply most of the upward or downward adjustment factors described in this policy in determining what penalty should be imposed on a violator. However, judgments as to whether a penalty should be reduced in settlement because (1) the violator is willing to undertake an environmental project in settlement of a penalty claim, or (2) the Agency faces certain litigative risks in proceeding to hearing or trial, are decisions involving matters of policy and prosecutorial discretion which by their nature are only appropriate to apply in the context of settling a penalty claim. It is therefore contemplated that decisionmakers in administrative proceedings would not adjust penalty amounts downward based upon their assessment of either the litigative risks faced by the Agency or a violator's willingness to undertake an environmental project in lieu of paying part of a penalty.

VI. DETERMINATION OF GRAVITY-BASED PENALTY AMOUNT

RCRA Section 3008(a)(3) states that the seriousness of a violation must be taken into account in assessing a penalty for the violation. The gravity-based component is a measure of the seriousness of a violation. The gravity-based penalty amount should be determined by examining two factors:

- potential for harm; and
- extent of deviation from a statutory or regulatory requirement.

A. POTENTIAL FOR HARM

The RCRA requirements were promulgated in order to prevent harm to human health and the environment. Thus, noncompliance with any RCRA requirement can result in a situation where there is a potential for harm to human health or the environment. Even violations such as recordkeeping violations create a risk of harm to the environment or human health by jeopardizing the integrity of the RCRA regulatory program. Accordingly, the assessment of the potential for harm resulting from a violation should be based on two factors:

- the risk of human or environmental exposure to hazardous waste and/or hazardous constituents that may be posed by noncompliance, and
- the adverse effect noncompliance may have on statutory or regulatory purposes or procedures for implementing the RCRA program.

1. Risk of Exposure

The risk of exposure presented by a given violation depends on both the likelihood that human or other environmental receptors may be exposed to hazardous waste and/or hazardous constituents and the degree of such potential exposure. Evaluating the risk of exposure may be simplified by considering the factors which follow below.

a. Probability of Exposure

Where a violation involves the actual management of waste, a penalty should reflect the probability that the violation could have resulted in, or has resulted in a release of hazardous waste or constituents, or hazardous conditions creating a threat of exposure to hazardous waste or waste constituents. The determination of the likelihood of a release should be based on whether the integrity and/or stability of the waste management unit is likely to have been compromised.

Some factors to consider in making this determination would be:

- evidence of release (e.g., existing soil or groundwater contamination)
- evidence of waste mismanagement (e.g., rusting drums), and
- adequacy of provisions for detecting and preventing

a release (e.g., monitoring equipment and inspection procedures).

A larger penalty is presumptively appropriate where the violation significantly impairs the ability of the hazardous waste management system to prevent and detect releases of hazardous waste and constituents.

b. Potential Seriousness of Contamination

When calculating risk of exposure, enforcement personnel should weigh the harm which would result if the hazardous waste or constituents were in fact released to the environment.

Some factors to consider in making this determination would be:

- o quantity and toxicity of wastes (potentially) released
- o likelihood or fact of transport by way of environmental media (e.g., air and groundwater), and
- o existence, size, and proximity of receptor populations (e.g., local residents, fish, and wildlife, including threatened or endangered species) and sensitive environmental media (e.g., surface waters and aquifers).

In considering the risk of exposure, the emphasis is placed on the potential for harm posed by a violation rather than on whether harm actually occurred. The presence or absence of direct harm in a noncompliance situation is something over which the violator may have no control. Such violators should not be rewarded with lower penalties simply because the violations happened not to have resulted in actual harm.

2. <u>Harm To The RCRA Regulatory Program</u>

There are some requirements of the RCRA program which, if violated, may not be likely to give rise directly or immediately to a significant risk of contamination. Nonetheless, all regulatory requirements are fundamental to the continued integrity of the RCRA program. Violations of such requirements may have serious implications and merit substantial penalties where the violation undermines the statutory or regulatory purposes or procedures for implementing the RCRA program. Some examples of this kind of regulatory harm include:

- o failure to notify as a generator or transporter of hazardous waste, and/or owner/operator of a hazardous waste facility pursuant to section 3010
- o failure to comply with financial assurance requirements
- o failure to submit a timely/adequate Part B application
- o failure to respond to a formal information request
- o operating without a permit or interim status
- o failure to prepare or maintain a manifest
- o failure to install or conduct adequate groundwater monitoring.

3. General

a. Evaluating the Potential for Harm

Enforcement personnel should evaluate whether the potential for harm is major, moderate, or minor in a particular situation. The degree of potential harm represented by each category is defined as:

MAJOR (1) the violation poses or may pose a substantial risk of exposure of humans or other environmental receptors to hazardous waste or constituents; and/or

(2) the actions have or may have a substantial adverse effect on statutory or regulatory purposes or procedures for implementing the RCRA program.

MODERATE (1) the violation poses or may pose a significant risk of exposure of humans or other environmental receptors to hazardous waste or constituents; and/or

(2) the actions have or may have a significant adverse effect on statutory or regulatory purposes or procedures for implementing the RCRA program.

MINOR (1) the violation poses or may pose a relatively low risk of exposure of humans or other environmental receptors to hazardous waste or constituents; and/or

(2) the actions have or may have a small adverse effect on statutory or regulatory purposes or procedures for implementing the RCRA program.

The examples which follow illustrate the differences between major, moderate, and minor potential for harm. Just as important as the violation involved are the case specific factors surrounding the violation. Enforcement personnel should avoid automatic classification of particular violations.

b. Examples

1. Major Potential for Harm

40 CFR §265.143 requires that owners or operators of hazardous waste facilities establish financial assurance to ensure that funds will be available for proper closure of facilities. Under §265.143(a)(2), the wording of a trust agreement establishing financial assurance for closure must be identical to the wording specified in 40 CFR §264.151(a)(1). Failure to word the trust agreement as required may appear inconsequential. However, even a slight alteration of the language could change the legal effect of the financial instrument so that it would no longer satisfy the intent of the regulation thereby preventing the funds from being available for closure. Such a facility could potentially become another abandoned hazardous waste site. When the language of the agreement differs from the requirement such that funds would not be available to close the facility properly, the lack of identical wording would have a substantial adverse effect on the regulatory scheme (and, to the extent the closure process is adversely affected, could pose a substantial risk of exposure). This violation would therefore be assigned to the major potential for harm category.

2. Moderate Potential for Harm

Under 40 CFR §262.34, a generator may accumulate hazardous waste on-site for 90 days or less without having interim status or a permit provided that, among other requirements, each container or tank of waste is marked clearly with the words "Hazardous Waste." In a situation where a generator is storing compatible wastes, has labeled half of its containers, and has clearly identified its storage area as a hazardous waste storage area, there is some indication that the unlabeled containers hold hazardous waste. However, because there is a chance that the unlabeled containers could be removed from the storage area, and because it would be difficult to determine whether hazardous waste had been stored for more than 90 days, this situation poses a significant likelihood of exposure to hazardous waste (although

the likelihood is not as great as it would be if neither the storage area nor any of the containers were marked). The moderate potential for harm category would be appropriate in this case.

3. Minor Potential for Harm

Owners or operators of hazardous waste facilities must, under 40 CFR §265.53, submit a copy of their contingency plans to all police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services. If a facility has a complete contingency plan, including a description of arrangements agreed to by local entities to coordinate emergency services (§265.52), but had failed to submit copies of the plan to all of the necessary agencies, this would create a potential for harm. Enforcement personnel would need to examine the impact that failure to send the plan to the necessary agencies would have on these agencies' ability to respond in an emergency situation. If a complete plan existed and arrangements with all of the local entities had been agreed to, the likelihood of exposure and adverse effect on the implementation of RCRA may be relatively low. The minor potential for harm category could be appropriate for such a situation.

B. EXTENT OF DEVIATION FROM REQUIREMENT

The "extent of deviation" from RCRA and its regulatory requirements relates to the degree to which the violation renders inoperative the requirement violated. In any violative situation, a range of potential noncompliance with the subject requirement exists. In other words, a violator may be substantially in compliance with the provisions of the requirement or it may have totally disregarded the requirement (or a point in between). In determining the extent of the deviation, the following categories should be used:

- MAJOR: the violator deviates from requirements of the regulation or statute to such an extent that most (or important aspects) of the requirements are not met resulting in substantial noncompliance.

- MODERATE: the violator significantly deviates from the requirements of the regulation or statute but some of the requirements are implemented as intended.

- MINOR: the violator deviates somewhat from the regulatory or statutory requirements but most (or all important aspects) of the requirements are met.

A few examples will help demonstrate how a given violation is to be placed in the proper category:

Example 1 - Closure Plan

40 CFR §265.112 requires that owners or operators of treatment, storage, and disposal facilities have a written closure plan. This plan must identify the steps necessary to completely or partially close the facility at any point during its intended operating life. Possible violations of the requirements of this regulation range from having no closure plan at all to having a plan which is somewhat inadequate (e.g., it omits one minor step in the procedures for cleaning and decontaminating the equipment while complying with the other requirements). Such violations should be assigned to the "major" and "minor" categories respectively. A violation between these extremes might involve failure to modify a plan for increased decontamination activities as a result of a spill on-site and would be assigned to the moderate category.

Example 2 - Failure to Maintain Adequate Security

40 CFR §265.14 requires that owners or operators of treatment, storage, and disposal facilities take reasonable care to keep unauthorized persons from entering the active portion of a facility where injury could occur. Generally, a physical barrier must be installed and any access routes controlled.

The range of potential noncompliance with the security requirements is quite broad. In a particular situation, the violator may prove to have totally failed to supply any security systems. Total noncompliance with regulatory requirements such as this would result in classification into the major category. In contrast, the violation may consist of a small oversight such as failing to lock an access route on a single occasion. Obviously, the degree of noncompliance in the latter situation is less significant. With all other factors being equal, the less significant noncompliance should draw a smaller penalty assessment. In the matrix system this is achieved by choosing the minor category.

C. PENALTY ASSESSMENT MATRIX

Each of the above factors--potential for harm and extent of deviation from a requirement-forms one of the axes of the penalty assessment matrix. The matrix has nine cells, each containing a penalty range. The specific cell is chosen after determining which category (major, moderate, or minor) is appropriate for the

potential for harm factor, and which category is appropriate for the extent of deviation factor. The complete matrix is illustrated below:

Extent of Deviation from Requirement

Potential for Harm	MAJOR	MODERATE	MINOR
MAJOR	$25,000 to 20,000	$19,999 to 15,000	$14,999 to 11,000
MODERATE	$10,999 to 8,000	$7,999 to 5,000	$4,999 to 3,000
MINOR	$2,999 to 1,500	$1,499 to 500	$499 to 100

The lowest cell (minor potential for harm/minor extent of deviation) contains a penalty range from $100 to $499. The highest cell (major potential for harm/major extent of deviation) is limited by the maximum statutory penalty allowance of $25,000 per day for each violation.

The selection of the exact penalty amount within each cell is left to the discretion of enforcement personnel in any given case. The range of numbers provided in each matrix cell serves as a "fine tuning" device to allow enforcement personnel to better adapt the penalty amount to the gravity of the violation and its surrounding circumstances. In selecting a dollar figure from this range it is appropriate to consider such factors as the seriousness of the violation (relative to other violations falling within the same matrix cell), efforts at remediation or the degree of cooperation evidenced by the facility (to the extent this factor is not to be accounted for in subsequent adjustments to the penalty amount), the size and sophistication of the violator, the number of days of violation, and other relevant matters. For guidance on recalculation of the gravity based penalty based on new information see Section IX A.2.

VII. MULTIPLE AND MULTI-DAY PENALTIES

A. PENALTIES FOR MULTIPLE VIOLATIONS

In certain situations, EPA may find that a particular firm has violated several different RCRA requirements. A separate penalty should be sought in a complaint and obtained in

settlement or litigation for each separate violation that results from an independent act (or failure to act) by the violator and is substantially distinguishable from any other charge in the complaint for which a penalty is to be assessed. A given charge is independent of, and substantially distinguishable from, any other charge when it requires an element of proof not needed by the others. In many cases, violations of different sections of the regulations constitute independent and substantially distinguishable violations. For example, failure to implement a groundwater monitoring program, 40 CFR §265.90, and failure to have a written closure plan, 40 CFR §265.112, are violations which can be proven only if the Agency substantiates different sets of factual allegations. In the case of a firm which has violated both of these sections of the regulations, a separate count should be charged for each violation. For litigation or settlement purposes, each of the violations should be assessed separately and the amounts added to determine a total penalty to pursue.

It is also possible that different violations of the same section of the regulations could constitute independent and substantially distinguishable violations. For example, in the case of a firm which has open containers of hazardous waste in its storage area, 40 CFR §265.173(a), and which also ruptured these or different hazardous waste containers while moving them on site, 40 CFR §265.173(b), there are two independent acts. While the violations are both of the same regulatory section, each requires distinct elements of proof. In this situation, two counts with two separate penalties would be appropriate. For penalty purposes, each of the violations should be assessed separately and the amounts totalled.

Penalties for multiple violations also should be sought in litigation or obtained in settlement where one company has violated the same requirement in substantially different locations. An example of this type of violation is failure to clean up discharged hazardous waste during transportation, 40 CFR §263.31. A transporter who did not clean up waste discharged in two separate locations during the same trip should be charged with two counts. In these situations the separate locations present separate and distinct risks to public health and the environment. Thus, separate penalty assessments are justified.

Similarly, penalties for multiple violations are appropriate when a company violates the same requirement on separate occasions not cognizable as multi-day violations (See Section VII.B.) An example would be the case where a facility fails for a year to take required quarterly groundwater monitoring samples.

In general, penalties for multiple violations may be less likely to be appropriate where the violations are not independent or substantially distinguishable. Where a charge derives from or merely restates another charge, a separate penalty may not be warranted. For example, if a corporate owner/operator of a facility submitted a permit application with a cover letter, signed by the plant manager's secretary, but failed to sign the application, 40 CFR §270.11 (a), and also thereby failed to have the appropriate responsible corporate officer sign the application, 40 CFR §270.11 (a)(1) the owner/operator has violated the requirement that the application be signed by a responsible corporate officer. EPA has the discretion to view the violations resulting from the same factual event, failure to sign the application at all, and failure to have the person legally responsible for the permit application sign it, as posing one legal risk. In this situation, both sections violated should be cited in the complaint, but one penalty, rather than two, may be appropriate to pursue in litigation or obtain in settlement, depending upon the facts of a case. The fact that two separate sections were violated may be taken into account in choosing higher "potential for harm" and "extent of deviation" categories on the penalty matrix.

There are instances where a company's failure to satisfy one statutory or regulatory requirement either necessarily or generally leads to the violation of numerous other independent regulatory requirements. Examples are the case where (1) a company through ignorance of the law fails to obtain a permit or interim status as required by Section 3005 of RCRA and as a consequence runs afoul of the numerous other (regulatory) requirements imposed on it by 40 CFR Part 265, or (2) a company fails to install groundwater monitoring equipment as required by 40 CFR §§ 265.90 and 265.91 and is thus unable to comply with other requirements of Subpart F of Part 265 (e.g., requirements that it develop a sampling plan, keep the plan at the facility, undertake quarterly monitoring, prepare an outline of a groundwater quality assessment program, etc.). In cases such as these where multiple violations result from a single initial transgression, assessment of a separate penalty for each distinguishable violation may produce a total penalty which is disproportionately high. Accordingly, in the specifically limited circumstances described, enforcement personnel have discretion to forego separate penalties for certain distinguishable violations, so long as the total penalty for all related violations is appropriate considering the gravity of the offense and sufficient to deter similar future behavior and recoup economic benefit.

B. PENALTIES FOR MULTI-DAY VIOLATIONS

RCRA provides EPA with the authority to assess in administrative actions or seek in court civil penalties of up to $25,000 per day of non-compliance for each violation of a requirement of Subtitle C (or the regulations which implement that subtitle). This language explicitly authorizes the Agency to consider the duration of each violation as a factor in determining an appropriate total penalty amount. Accordingly, any penalty assessed should consist of a gravity-based component, economic benefit component, and to the extent that violations can be shown or presumed to have continued for more than one day, an appropriate multi-day component. The multi-day component should reflect the duration of the violation at issue, subject to the guidelines set forth in Section VII C., below.

After it has been determined that any of the violations alleged has continued for more than one day, the next step is to determine the length of time each violation continued and whether a multi-day penalty is mandatory, presumed, or discretionary. In most instances, the Agency should only seek to obtain multi-day penalties, if a multi-day penalty is appropriate, for the number of days it can document that the violation in question persisted. However, in some circumstances reasonable assumptions as to the duration of a violation can be made. For example, a violation by an owner/operator of a land disposal facility for operating after it had lost interim status pursuant to RCRA §3005(e)(2) can generally be deemed to have begun on November 8, 1985, and continued at least until the time of the last inspection in which it was determined the facility was being operated without interim status. In the case where an inspection reveals that a facility has no groundwater monitoring wells in place it can be assumed, in the absence of evidence to the contrary, that the facility has never had any wells. Here the violation can be treated as having commenced on the day that waste management operations triggering the Part 265, subpart F requirements began or the effective date of the regulations, whichever is later. A multi-day penalty could then be calculated for the entire period from the date the facility was required to have wells in place until the date of the inspection showing they did not.[8]

Conversely, in cases where there is no statutory or regulatory deadline from which it may be assumed compliance obligations began to run, a multi-day penalty should account only for each day for which information provides a reasonable basis

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[8] Where EPA determines that a violation persists, enforcement personnel may calculate the penalty for a period ending on the date of compliance or the date the complaint is filed, provided documentation (or a reasonable assumption) to support such a finding is available.

for concluding that a violation has occurred. For example, if an inspection revealed that unlabeled drums of hazardous wastes were being stored by a generator for more than 90 days in violation of 40 CFR 262.31 and 262.34, enforcement personnel should allege in the complaint and present evidence as to the number of days each violation lasted. Documentation in a case such as this might consist of an admission from a facility employee that drums were stored improperly for a certain number of days. In such a case, a multi-day penalty would then be calculated for the number of days stated.

C. CALCULATION OF THE MULTI-DAY PENALTY

After the duration of the violation has been determined, the multi-day component of the total penalty is calculated, pursuant to the Multi-Day Matrix, as follows:

(1) Determine the gravity-based designations for the violation, e.g., major-major, moderate-minor, or minor-minor.

(2) Determine, for the specific violation, whether multi-day penalties are mandatory, presumed, or discretionary, as follows:

Mandatory multi-day penalties: Multi-day penalties are mandatory for days 2-180 of all violations with the following gravity-based designations: major-major, major-moderate, moderate-major. The only exception is when they have been waived, in "highly unusual cases" with prior Headquarters (HQ) consultation, as described below. Multi-day penalties for days 181+ are discretionary.

Presumption in favor of multi-day penalties: Multi-day penalties are presumed appropriate for days 2-180 of violations with the following gravity-based designations: major-minor, moderate-moderate, minor-major. Therefore, multi-day penalties must be sought, unless case-specific facts overcoming the presumption for a particular violation are documented carefully in the case files. The presumption may be overcome for one or more days. Multi-day penalties for days 181+ are discretionary.

Discretionary multi-day penalties: Multi-day penalties are discretionary, generally, for all days of all violations with the following gravity-based designations: moderate-minor, minor-moderate, minor-minor. In these cases, multi-day penalties should be sought where case-specific facts support such an assessment. Discretionary multi-day penalties may be imposed for some or all days. The bases for decisions to impose or not impose any discretionary multi-day penalties must be documented in the case files.

(3) Locate the corresponding cell in the following Multi-Day Matrix. Multiply a dollar amount selected from the appropriate

cell in the multi-day matrix (or, where appropriate, a larger dollar amount not to exceed $25,000) by the number of days the violation lasted. (Note: the duration used in the multi-day calculation is the length of the violation minus one day, to account for the first day of violation at the gravity-based penalty rate).

MULTI-DAY MATRIX OF MINIMUM DAILY PENALTIES (in dollars)

		Extent of Deviation		
		MAJOR	MODERATE	MINOR
Potential for Harm	MAJOR	$5,000 to 1,000	$4,000 to 750	$3,000 to 550
	MODERATE	$2,200 to 400	$1,600 to 250	$1,000 to 150
	MINOR	$600 to 100	$300 to 100	$100

The dollar figure to be multiplied by the number of days of violation will generally be selected from the range provided in the appropriate multi-day cell. The figure selected should not be less than the lowest number in the range provided. Selections of a dollar figure from the range of penalty amounts can be made at the Region's discretion based on an assessment of case-specific factors, including those discussed below.

In determining whether to assess multi-day penalties for days 2-180 of violations for which multi-day penalties are presumed appropriate or are discretionary, as well as for days 180+ of all violations, as well as in selecting the appropriate dollar figure from the range of penalty amounts in the multi-day matrix, the Regions must analyze carefully the specific facts of the case to determine that the penalties selected are appropriate. This analysis should be conducted in the context of the penalty policy's broad goals of (1) ensuring fair and consistent penalties which reflect the seriousness (gravity) of violations, (2) promoting prompt and continuing compliance, and (3) deterring future non-compliance.

Additional factors which may be relevant in analyzing these factors in the context of a specific case include the seriousness

of the violation relative to other violations falling within the same matrix cell, efforts at remediation or the promptness and degree of cooperation evidenced by the facility (to the extent not otherwise accounted for in the proposed penalty or settlement amount), the size and sophistication of the violator, the total number of days of violation, and other relevant considerations. All of these factors must be analyzed in light of the overriding goals of the penalty policy to determine the appropriate penalties in a specific case.

As discussed above, this penalty policy permits a Region to waive multi-day penalties, when mandatory for a violation, in a "highly unusual case." Such a waiver may be exercised only with prior Headquarters (HQ) consultation. Because EPA has determined that almost all continuing "major" violations warrant multi-day penalties, it is anticipated that such waivers will be sought very infrequently.

While this policy provides general guidance on the use of multi-day penalties, nothing in this policy precludes or should be construed to preclude the assessment of penalties of up to $25,000 for each day after the first day of any given violation. Particularly in circumstances where significant harm has in fact occurred and immediate compliance is required to avert a continuing threat to human health or the environment, it may be appropriate to demand the statutory maximum.

VIII. EFFECT OF ECONOMIC BENEFIT OF NONCOMPLIANCE

The Agency civil penalty policy mandates the recapture of any significant economic benefit of noncompliance that accrues to a violator. Enforcement personnel shall evaluate the economic benefit of noncompliance when penalties are calculated. A fundamental premise of the policy is that economic incentives for noncompliance are to be eliminated. If violators are allowed to profit by violating the law, there is little incentive to comply. Therefore, it is incumbent on all enforcement personnel to calculate economic benefit. In accordance with the goals of the Agency policy, the RCRA Civil Penalty Policy sets forth the RCRA requirements. An "economic benefit component should be calculated and added to the gravity-based penalty component when a violation results in "significant" economic benefit to the violator, as defined below.

The following are examples of regulatory areas for which violations are particularly likely to present significant economic benefits: groundwater monitoring, financial requirements, closure/post-closure, surface impoundment retrofitting, improper land disposal of restricted waste, clean-up of discharges, part B submittals, and minimum technology requirements.

For certain RCRA requirements the economic benefit of noncompliance may be relatively insignificant (e.g., failure to submit a report on time). In the interest of simplifying and expediting an enforcement action, enforcement personnel may forego calculating the benefit component where it appears that the amount of the component is likely to be less than $2,500 for all violations alleged in the complaint. However, this decision should be documented on the Penalty Computation Worksheet.

It is generally the Agency's policy not to settle cases (i.e., the penalty amount) for an amount less than the economic benefit of noncompliance. However, the Agency civil penalty policy explicitly sets out three general ares where settling the total penalty amount for less than the economic benefit may be appropriate. The RCRA policy has added a fourth exception for cases where ability to pay is a factor. The four exceptions are:

- the economic benefit component consists of an insignificant amount (i.e., less than $2,500);
- there are compelling public concerns that would not be served by taking a case to trial;
- it is unlikely, based on the facts of the particular case as a whole, that EPA will be able to recover the economic benefit in litigation;
- the company has documented an inability to pay the total proposed penalty.

If a case is settled for less than the economic benefit component, a justification must be included on the Penalty Computation Worksheet in Section X, under the heading, "Economic Benefit."

A. ECONOMIC BENEFIT OF DELAYED COSTS AND AVOIDED COSTS

Compliance/enforcement personnel should examine two types of economic benefit from noncompliance in determining the economic benefit component:

- benefit from delayed costs; and
- benefit from avoided costs.

Delayed costs are expenditures which have been deferred by the violator's failure to comply with the requirements. The violator eventually will have to spend the money in order to achieve compliance. Delayed costs are the equivalent of capital costs. Examples of violations which result in savings from delayed costs are:

- o failure to timely install ground-water monitoring equipment;
- o failure to timely submit a Part B permit application; and
- o failure to timely develop a waste analysis plan.

Avoided costs are expenditures which are nullified by the violators's failure to comply. These costs will never be incurred. Avoided costs include the usual operating and maintenance costs which would include any annual periodic costs such as leasing monitoring equipment. Examples of violations which result in savings from avoided costs are:

- o failure to perform annual and semi-annual ground-water monitoring sampling and analysis;
- o failure to use registered medical waste transporters;
- o failure to perform waste analysis before adding waste to tanks, waste piles, incinerators; and
- o failure to install secondary containment around a tank, where such a containment is never installed because the violator chooses closure rather than correction and continued operation.

B. CALCULATION OF ECONOMIC BENEFIT

Because the savings that are derived from delayed costs differ from those derived from avoided costs, the economic benefit from delayed and avoided costs are calculated in a different manner. For avoided costs, the economic benefit equals the cost of complying with the requirements, adjusted to reflect anticipated rate of return and income tax effects on the company. For delayed costs, the economic benefit does not equal the cost of complying with the requirements, since the violator will eventually have to spend the money to achieve compliance. The economic benefit for delayed costs consists of the amount of interest on the unspent money that reasonably could have been earned by the violator during noncompliance. If noncompliance

s continued for more than a year, compliance/enforcement
:rsonnel should calculate the economic benefit of both the
:layed and avoided costs for each year.

Since the fall of 1984, it has been Agency policy to use
he BEN computer model to calculate the economic benefit of
oncompliance. The model can perform a calculation of economic
:enefit based on delayed/avoided costs with as few as only seven
lata inputs (see first seven below). The rest of the data inputs
:onsist of optional data items and standard values already
:contained in the program (see Ben Worksheet in Section X). The
following is a list and short explanation of each input.

INPUTS

1. CASE NAME - Self explanatory.

** 2. INITIAL CAPITAL INVESTMENT - This is essentially a depreciable investment such as the initial cost of equipment.

** 3. ONE-TIME NONDEPRECIABLE EXPENDITURE - This is an expense that will only be incurred once and does not involve capital investments. It may or may not be tax deductible, but it is not depreciable. Some examples are reporting requirements, purchase of land, or permit application costs and fees.

** 4. ANNUAL OPERATION AND MAINTENANCE - This expense category is for routine annual expenses such as the costs of operating equipment, cost of leasing equipment, or cost of annual insurance premiums.

* 5. FIRST MONTH OF NONCOMPLIANCE - Self explanatory.

* 6. COMPLIANCE DATE - This could be off in the future. The key is to make a reasonable estimate. (For TSD facilities this date could be the date on which the facility certifies closure rather than the date on which compliance is achieved).

* 7. PENALTY PAYMENT DATE - Again, this may be in the future. Enforcement personnel should make a reasonable estimate for date of payment.

+ 8. USEFUL LIFE OF EQUIPMENT - Here the model accounts for the fact that the equipment purchased in input two has a useful life of limited duration. The model assumes it will last 15 years, then it must be replaced, however the model is being adjusted to address this matter.

+ 9. MARGINAL INCOME TAX RATE - This is the rate at which the last dollar of earnings was taxed. It almost always will be the highest tax rate, as most businesses meet the maximum rate quickly.

+ 10. ANNUAL INFLATION RATE - Self explanatory.

+ 11. DISCOUNT RATE - This is the rate of return the violator expects to obtain on its investment. The money needed for pollution control was invested in something else and we assume the rate of return was the discount rate.

+ 12. AMOUNT OF LOW INTEREST FINANCING - This is the amount of subsidized financing for pollution control equipment. This almost always is 0.

* Required Input
** Required if Applicable
\+ Standard Values Available

As noted above, the BEN model may be used to calculate only the economic benefit accruing to a violator through delay or avoidance of the costs of complying with applicable requirements of RCRA and its implementing regulations. There are instances in which the BEN methodology either cannot compute or will fail to capture the actual economic benefit of noncompliance. In those instances, it will be appropriate for the Agency to include in its penalty analysis a calculation of economic benefits in a manner other than those provided for in the BEN methodology. A recurring example is the case where an entity unlawfully operated a land disposal facility without interim status and thus has reaped profits as a proximate result of the violation which are greater than the costs the defendant would have incurred by taking the further actions needed to avoid losing interim status. In such a case, the economic benefit component of the penalty calculation would include the profits proximately attributable to the violation of the applicable RCRA requirement. [9] In contrast, consider a large manufacturing facility which, but for the storage of a few drums of wastes over 90 days, is otherwise in compliance with RCRA. The facility's profits, earned almost entirely as a result of lawful activity, would not be considered properly attributable to the facility's noncompliance. Thus, care must be taken to insure that any calculation of profits included in an alternative economic benefit component of the penalty calculation does not include profits attributable to lawful operations of the facility or delayed or avoided costs already accounted for in the BEN calculation.

Enforcement personnel should have a copy of the revised BEN User's Manual (May 1987). The manual describes how to use BEN, a computer program that calculates the economic benefit for any type of entity. It is designed to aid enforcement personnel with

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[9] Of course, penalties may not exceed the statutory maximim of $25,000 per day of noncompliance. 42 U.S.C. § 6928.

procedures for entering data in BEN, and to explain the program's results.[10] BEN supersedes previous methodologies used to calculate the economic benefit for civil penalties.

The economic benefit formula provides a reasonable estimate of the economic benefit of noncompliance. If a respondent believes that the economic benefit it derived from noncompliance differs from the estimated amount, it should present all relevant information documenting its actual savings to enforcement personnel at the settlement stage.

IX. ADJUSTMENT FACTORS AND EFFECT OF SETTLEMENT

A. ADJUSTMENT FACTORS

1. Background

As mentioned in Section VI of this document, the seriousness of the violation is considered in determining the gravity-based penalty component. The reasons the violation was committed, the intent of the violator, and other factors related to the violator are not considered in choosing the appropriate cell from the matrix. However, any system for calculating penalties must have enough flexibility to make adjustments that reflect legitimate differences between separate violations of the same provision. RCRA §3008(a)(3) states that in assessing penalties, EPA must take into account any good faith efforts to comply with the applicable requirements. The Agency civil penalty policy sets out several other adjustment factors to consider. These include the degree of willfulness and/or negligence, history of noncompliance, ability to pay, and other unique factors. This revised RCRA policy also includes an additional adjustment factor for environmental projects undertaken by the respondent.

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[10] Enforcement personnel are encouraged to use whatever cost documentation is available to calculate RCRA compliance costs. (e.g., contractors and commercial brochures). If it is disputed, the burden will then shift to the respondent to present cost documentation to the contrary to be entered and run in BEN. Data provided by respondent relating to economic benefit should not be run in BEN unless its accuracy and legitimacy have been verified by the Region. Additionally, OSW's Guidance Manual: Cost Estimates for Closure and Post-Closure Plans, November, 1986, provides information regarding cost estimates for input data for BEN.

2. Recalculation of Penalty Amount

Before EPA considers mitigating the penalty contained in the complaint and applies the adjustment factors, it may be necessary, under certain circumstances, for enforcement personnel to recalculate the gravity-based or economic benefit component of the penalty figure. If new information becomes available after the issuance of the complaint which makes it clear that the initial calculation of the penalty contained in the complaint is in error, enforcement personnel should adjust this figure. Enforcement personnel should document on the Penalty Computation Worksheet the basis for recalculating the gravity-based or economic benefit component of the penalty sought in litigation or obtained in settlement.

For example, if after the issuance of the complaint, information is presented which indicates that much less waste is involved than was believed when the complaint was issued, it may be appropriate to recalculate the gravity-based penalty component. Thus, if enforcement personnel had originally believed that the violator had improperly stored ten barrels of acutely hazardous wastes but it was later determined that only a single container of characteristic hazardous waste was improperly stored, it may be appropriate to recalculate the "potential for harm" component of the gravity-based penalty from "major" to "moderate" or "minor."

On the other hand, if enforcement personnel initially believed a violator had fully complied with a specified requirement but subsequently determine that this is not the case, it would be appropriate to amend the complaint as necessary to add a new count, and revise the total penalty amount upward to account for this previously undiscovered violation. Likewise, if new information shows that a previously known violation is more serious than initially thought, an upward revision of the penalty amount may be required.

Furthermore, if the violator presented new information which established that the work performed was technically inadequate or useless (e.g., the violator drilled wells in the wrong spot or did not dig deep enough), it may be more appropriate to keep the gravity-based penalty as originally calculated and evaluate whether it would be appropriate to mitigate the penalty based on the "good faith efforts" adjustment factor.

When information is presented which makes it clear that the gravity-based or economic benefit penalty component is in error, enforcement personnel may, of course, choose to formally amend

the complaint to correct the original penalty component, as well as carefully document the basis for the recalculation on the Penalty Computation Worksheet in the enforcement file.

3. Application of Adjustment Factors

The adjustment factors can increase, decrease or have no effect on the penalty amount obtained from the violator. Adjustments should generally be applied to the sum of the gravity-based and multi-day components of the penalty for a given violation. Note, however, that after all adjustment factors have been applied the resulting penalty shall not exceed the statutory maximum of $25,000 per day of violation. As indicated previously, all supportable upward adjustments of the penalty amount of which EPA is aware ordinarily should be made prior to issuance of the complaint, while downward adjustments (with the exception of those reflecting good faith efforts to comply) should generally not be made until after the complaint has been issued, at which time the burden of persuasion that downward adjustment is proper should be placed on respondent. Enforcement personnel should use whatever reliable information on the violator and violation is readily available at the time of assessment.

Application of the adjustment factors is cumulative, i.e., more than one factor may apply in a case. For example, if the base penalty derived from the gravity-based and multi-day matrices is $109,500, and upward adjustments of 10% will be made for both history of noncompliance and degree of willfulness and/or negligence, the total adjusted penalty would be $131,400 ($109,500 + 20%).

For any given factor (except ability to pay and litigative risk) enforcement personnel can, assuming proper documentation, adjust the sum of the gravity-based and multi-day penalty components for any given violation up or down (1) by as much as 25% of that sum in ordinary circumstances or (2) from 26% to 40% of that sum, in unusual circumstances. Downward adjustments based on inability to pay or litigative risk will vary in amount depending on the individual facts present in a given case and in certain circumstances may be applied to the economic benefit component.

However, if a penalty is to achieve deterrence, both the violator and the general public must be convinced that the penalty places the violator in a worse position than those who have complied in a timely fashion. Moreover, allowing a violator to benefit from noncompliance punishes those who have complied by placing them at a competitive disadvantage. For these reasons, the Agency should at a minimum, absent the special circumstances enumerated in section VIII, recover any significant economic

benefits resulting from failure to comply with the law. If violators are allowed to settle for a penalty less than their economic benefit of noncompliance, the goal of deterrence is undermined. Except in extraordinary circumstances, which include cases where there are demonstrated limitations on a respondent's ability to pay or very significant litigative risks, the final adjusted penalty should also include a significant gravity-based component beyond the economic benefit component.

Finally, as has been noted above, it is intended that only Agency personnel, as distinct from an administrative law judge charged with determining an appropriate RCRA penalty, will consider adjusting the amount of a penalty downward based on the litigative risks confronting the Agency or the willingness of a violator to undertake an environmental project in settlement of a penalty claim. This is because these factors are only relevant in the settlement context.

The following discussion of the adjustment factors to consider is consistent with the general Agency civil penalty policy issued in 1984.

(a) Good Faith Efforts To Comply/Lack Of Good Faith

Under § 3008(a)(3) of RCRA, good faith efforts to comply with applicable requirements must be considered in assessing a penalty. The violator can manifest good faith by promptly identifying and reporting noncompliance or instituting measures to remedy the violation before the Agency detects the violation. Assuming self-reporting is not required by law and the violations are expeditiously corrected, a violator's admission or correction of a violation prior to detection may be cause for mitigation of the penalty, particularly where the violator institutes significant new measures to prevent recurrence.
Lack of good faith, on the other hand, can result in an increased penalty.

No downward adjustment should be made if the good faith efforts to comply primarily consist of coming into compliance. Moreover, no downward adjustment should be made because respondent lacks knowledge concerning either applicable requirements or violations committed by respondent. EPA will also apply a presumption against downward adjustment for respondent's efforts to comply or otherwise correct violations after the Agency's detection of violations (failure to undertake such measures may be cause for upward adjustment as well as multi-day penalties), since the amount set in the gravity-based penalty component matrix assumes good faith efforts by a respondent to comply after EPA discovery of a violation.

If a respondent reasonably relies on written statements by the state or EPA that an activity will satisfy RCRA requirements and it later is determined that the activity does not comply with RCRA, a downward adjustment in the penalty may be warranted if the respondent relied on those assurances in good faith. Such claims of reliance should be substantiated by sworn affidavit or some other form of affirmation. On the other hand, claims by a respondent that "it was not told" by EPA or the State that it was out of compliance should not be cause for any downward adjustment of the penalty.

(b) Degree of willfulness and/or negligence

While "knowing" violations of RCRA will support criminal penalties pursuant to Section 3008(d), there may be instances of heightened culpability which do not meet the criteria for criminal action. In cases where civil penalties are sought for actions of this type, the penalty may be adjusted upward for willfulness and/or negligence. Conversely, although RCRA is a strict liability statute, there may be instances where penalty mitigation may be justified based on the lack of willfulness and/or negligence.

In assessing the degree of willfulness, and/or negligence, the following factors should be considered, as well as any others deemed appropriate:

- how much control the violator had over the events constituting the violation;
- the foreseeability of the events constituting the violation;
- whether the violator took reasonable precautions against the events constituting the violation;
- whether the violator knew or should have known of the hazards associated with the conduct; and
- whether the violator knew or should have known of the legal requirement which was violated.

It should be noted that this last factor, lack of knowledge of the legal requirement, should never be used as a basis to reduce the penalty. To do so would encourage ignorance of the law. Rather, knowledge of the law should serve only to enhance the penalty.

The amount of control which the violator had over how quickly the violation was remedied also is relevant in certain circumstances. Specifically, if correction of the environ-

mental problem was delayed by factors which the violator can clearly show were not reasonably foreseeable and out of his or her control and that of his or her agents, the penalty may be reduced.

(c) History of noncompliance (upward adjustment only)

Where a party previously has violated RCRA or State hazardous waste law at the same or a different site, this is usually clear evidence that the party was not deterred by the previous enforcement response. Unless the current or previous violation was caused by factors entirely out of the control of the violator, this is an indication that the penalty should be adjusted upwards.

Some of the factors that enforcement personnel should consider are the following:

- how similar the previous violation was;
- how recent the previous violation was;
- the number of previous violations; and
- violator's response to previous violation(s) in regard to correction of problem.

A violation generally should be considered "similar" if the Agency's or State's previous enforcement response should have alerted the party to a particular type of compliance problem. A prior violation of the same RCRA or State requirement would constitute a similar violation. Nevertheless, a history of noncompliance can be established even in the absence of similar violations, where there is a pattern of disregard of environmental requirements contained in RCRA or another statute.

For purposes of this section, a "prior violation" includes any act or omission for which a formal or informal enforcement response has occurred (e.g., EPA or State notice of violation, warning letter, complaint, consent agreement, final order, or consent decree).

It also includes any act or omission for which the violator has previously been given written notification, however informal, that the Agency believes a violation exists.

In the case of large corporations with many divisions or wholly-owned subsidiaries, it is sometimes difficult to determine whether a previous instance of noncompliance should trigger the adjustments described in this section. New ownership often raises similar problems. In making this determination,

enforcement personnel should attempt to ascertain who in the organization had control and oversight responsibility for compliance with RCRA or other environmental laws. The violation will be considered part of the compliance history of any regulated party whose officers had control or oversight responsibility.

In general, enforcement personnel should begin with the assumption that if the same corporation was involved, the adjustments for history of noncompliance should apply. In addition, enforcement personnel should be wary of a party changing operators or shifting responsibility for compliance to different persons or entities as a way of avoiding increased penalties. The Agency may find a consistent pattern of noncompliance by many divisions or subsidiaries of a corporation even though the facilities are at different geographic locations. This often reflects, at best, a corporate-wide indifference to environmental protection. Consequently, the adjustment for history of noncompliance probably should apply unless the violator can demonstrate that the other violating corporate facilities are independent.

(d) Ability to Pay (downward adjustment only)

The Agency generally will not assess penalties that are clearly beyond the means of the violator. Therefore, EPA should consider the ability of a violator to pay a penalty. At the same time, it is important that the regulated community not see the violation of environmental requirements as a way of aiding a financially troubled business. EPA reserves the option, in appropriate circumstances, to seek penalties that might put a company out of business. It is unlikely, for example, that EPA would reduce a penalty where a facility refuses to correct a serious violation. The same could be said for a violator with a long history of previous violations. That long history would demonstrate that less severe measures are ineffective.

The burden to demonstrate inability to pay rests on the respondent, as it does with any mitigating circumstances. Thus, a company's inability to pay usually will be considered at the settlement stage, and then only if the issue is raised by the respondent. If the respondent fails to fully provide sufficient information, then compliance/enforcement personnel should disregard this factor in adjusting the penalty.

There are several sources available to assist the Regions in determining a firm's ability to pay. First, the Region should consult the Agency's guidance on Determining a Violator's Ability to Pay A Civil Penalty, Dec 16, 1986. Second, the National Enforcement Investigations Center (NEIC) can help obtain information assessing the ability to pay of publicly held

corporations. ABEL, the Agency's computer model is available to help analyze inability to pay claims. Although ABEL was designed with privately held corporations in mind, it can be used as one possible way to analyze other forms of business entities, including partnerships, and it may serve as an adjunct to other programs available through NEIC (e.g., the Superfund Financial Assessment System).

When EPA determines that a violator cannot afford the penalty prescribed by this policy, or that payment of all or a portion of the penalty will preclude the violator from achieving compliance or from carrying out remedial measures which the Agency deems to be more important than the deterrence effect of the penalty (e.g., payment of penalty would preclude proper closure/post-closure), the following options should be considered in the order presented:

- Consider an installment payment plan with interest.

- Consider a delayed payment schedule with interest. Such a schedule might even be contingent upon an increase in sales or some other indicator of improved business.

- Consider straight penalty reductions as a last recourse.

As indicated above, the amount of any downward adjustment of the penalty is dependent on the individual facts of the case regarding the financial capability of the defendant/respondent and the nature of the violations at issue.

(e) Environmental Projects (downward adjustment only)

Under certain circumstances the Agency may consider adjusting the penalty amount downward in return for an agreement by the violator to undertake an appropriate environmentally beneficial project. The following criteria are provided to determine the appropriateness of the use of environmentally beneficial mitigation projects in settlements. Mitigation projects serve as an incentive to settlement and shall be allowed only in prelitigation agreements (prior to the actual hearing), except in extraordinary circumstances. EPA will consider on a case-by-case basis accepting only those projects that satisfy all the following criteria.

(i) The activity must be initiated in addition to all statutory and regulatory compliance obligations, and not be used for penalty mitigation in any other enforcement action. The project may not be a substitute for full compliance; rather, it

must be designed to provide an environmental benefit beyond the benefits of full compliance and may not be part of the company's normal business practice or a project the company was already planning to do.

(ii) In order to attain the deterrent objectives of the civil penalty policy, penalty reductions shall reflect the actual cost of undertaking the activity, taking into account the tax benefits that accrue. With consideration of tax benefits, the actual cost of the project to the respondent shall equal or exceed the value of the mitigation. If the respondent fails to complete the agreed upon project, the settlement document should provide that a commensurate amount of any previous downward adjustment of the penalty be reinstated. For more information enforcement personnel should consult the Guidance on Calculating After Tax Net Present Value of Alternative Payments, Oct, 28, 1986, General Enforcement Policy Compendium, GM-51, or the Office of Enforcement Policy.

(iii) The activity must demonstrate a good-faith commitment to statutory compliance and environmental improvement. One test of good faith is the degree to which the violator takes the initiative to identify and propose specific, potential mitigation projects. In addition, the project must be primarily designed to benefit the environment and general public rather than to benefit the violator or any governmental unit.

(iv) Mitigation based on the defendant's activity must not detract significantly from the general deterrent effect of the settlement as a whole. In the settlement context the government should continue to consider mitigation projects as the exception rather than the rule. Efforts should be made to eliminate any potential perception by the regulated community that the government lacks the resolve to impose significant penalties for substantial violations. The government should seek penalties in conjunction with mitigation activities which deter both the specific violator and also the entire regulated community. Accordingly, every settlement should include a substantial monetary penalty component.

(v) Judicially-enforceable consent decrees must meet the statutory and public interest criteria for consent decrees and cannot contain provisions which would be beyond the power of the court to order under the particular statute which had been violated. Additional guidance on the appropriate scope of relief might be found in the statute, the legislative history or the implementing regulations.

(vi) The activity or project must require little EPA oversight. The project should be designed to minimize the need for EPA monitoring of implementation.

(vii) Any settlement which includes a mitigation project shall require that any public statement by the violator regarding the environmental or general public benefits of the project must include a statement that funding for the project is in partial settlement of an enforcement case brought by EPA.

(viii) Qualifying activities must provide a discernable response to the perceptible risk or harm caused by the violations which are the focus of the government's enforcement action. The activity is most likely to be an acceptable basis for mitigating penalties if it closely addresses the environmental effects of the violations.

Other Considerations

The Agency should exercise case-by-case judgment in deciding whether to accept a mitigation project based upon the above criteria and, should consider the difficulty of monitoring the implementation of the proposed project in light of the anticipated benefits of the project. Any final cross-media guidance on environmental projects should be consulted to determine if they supplement or supersede the "Environmental Projects" section of this penalty policy. In particular, the Agency is currently developing cross-media guidance on penalty mitigation projects, to supersede the "Alternative Payments" section of the Agency's February 16, 1984 penalty policy (GM-22). When the final guidance is issued, penalty mitigation projects under all statute-specific penalty policies will be required to conform to the new guidance.

(f) Other unique factors

This policy allows an adjustment for factors which may arise on a case-by-case basis. When developing its settlement position, EPA should evaluate every penalty with a view toward the potential for protracted litigation and attempt to ascertain the maximum civil penalty the court or administrative law judge is likely to award if the case proceeds to hearing or trial. The Agency should take into account, inter alia, the inherent strength of the case, considering, for example, the probability of proving violations, the probability that the government's legal arguments will be accepted, the opportunities which exist to establish a useful precedent or send a signal to the regulated community, the availability and potential effectiveness of the government's evidence, including witnesses, and the potential strength of the violator's equitable and legal defenses. Where the Agency determines that significant litigative risks exist, it may also take into account any disproportionate resource outlay involved in litigating a case that it might avoid by entering into a settlement. Downward adjustments of the proposed penalty for settlement purposes may be warranted depending on the Agency's assessment of these litigation considerations. The extent of the adjustments will depend, of course, on the specific litigation considerations presented in any particular case. The August 9, 1990 memorandum, "Documenting Penalty Calculations and Justifications in EPA Enforcement Actions," discusses further the requirements for legal and factual "litigation risk" analyses.

However, where the magnitude of the resource outlay necessary to litigate is the only significant litigation consideration dictating downward adjustment in the penalty amount, the Agency should still obtain a penalty which not only recoups the economic benefit the violator has enjoyed, but includes an additional amount sufficient to create a strong economic disincentive against violating applicable RCRA requirements.

If lengthy settlement negotiations cause the violation(s) to continue significantly longer than initially anticipated, the initial proposed penalty amount should be increased, as appropriate, with a corresponding amendment of the complaint. The revised figure would be calculated in accordance with this policy, and account for the increasing economic benefit and protracted non-compliance.

B. EFFECT OF SETTLEMENT

The Consolidated Rules of Practice for the Assessment of Civil Penalties incorporates the Agency policy of encouraging settlement of a proceeding at any time as long as the settlement is consistent with the provisions and objectives of RCRA and its regulations. 40 CFR §22.18(a). If the respondent believes that it is not liable or that the circumstances of its case justify mitigation of the penalty proposed in the complaint, the Rules of Practice allow it to request a settlement conference.

In many cases, the fact of a violation will be less of an issue than the amount of the proposed penalty. Once the Agency has established a prima facie case, the burden is always on the violator to justify any mitigation of the proposed penalty. The mitigation, if any, of the penalty proposed in the complaint should follow the guidelines in the Adjustment Factors section of this document.

Attachment C

LAW OFFICES OF
PELLEGRINI AND EMMERICH
A PROFESSIONAL CORPORATION
SUITE 390
GATEWAY ONE ON THE MALL
701 MARKET STREET
ST. LOUIS, MISSOURI 63101

FRANK L. PELLEGRINI
JULIE A. EMMERICH

TELEPHONE (314) 241-7445
FAX (314) 241-7449

December 24, 1997

Regional Hearing Clerk,
Planning and Management Division
U. S. Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, Illinois 60604

IN RE: Big River Zinc Corporation
Docket No. 5-MM-98-001

Dear Clerk:

Enclosed for filing is the Answer of Big River Zinc Corporation to Complaint. Thank you for your consideration.

Sincerely yours,

Julie A. Emmerich

JAE/sb

cc: Leslie Kirby

permit or interim status.

69. Based on the information collected during the July 1996, multi-media inspection, Respondent did not have a contingency plan for the Facility which complies with Subpart D of 35 IAC Part 725 [Subpart D of 40 CFR Part 265] for the calendar months when the Facility generated greater than 1000 kilograms of hazardous waste.

70. Based on the information collected during the July 1996, multi-media inspection, Facility personnel did not complete a program of classroom instruction or on-the-job training as required by 35 IAC 725.116(a)(1) [40 CFR §265.16(a)(1)]for the calendar months when the Facility generated greater than 1000 kilograms of hazardous waste. Respondent has not maintained the documents and records required by 35 IAC 725.116(d) [§265.16(d)] since at least January 1, 1993.

71. Therefore, Respondent is in violation of 35 IAC 722.134(a)(4) [40 CFR §262.34(a)(4)], and is subject to penalties under Section 3008(a)(1) of RCRA,42 U.S.C. §6928(a)(1).

COUNT IX

72. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

73. Pursuant to 35 IAC 728.107(a)(7) [40 CFR §268.7(a)(7)], generators must retain on-site a copy of all land disposal restriction notification forms for manifests that include restricted wastes for at least five years from the date that the waste was last sent to on-site or off-site treatment, storage, or

disposal.

74. Based on the information collected during the July 1996, multi-media inspection, Respondent did not retain on site copies of the land disposal restriction notification forms for four manifests, numbers INA1162009, INA1162032, INA1047308, and INA0973225, in violation of 35 IAC 728.107(a)(7) [40 CFR §268.7(a)(7)], and is therefore subject to penalties under Section 3008(a)(1) of RCRA, 42 U.S.C. §6928(a)(1).

COUNT X

75. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

76. Pursuant to 35 IAC 722.123(a), generators must send a copy of all hazardous waste manifests produced by their facility to the IEPA.

77. Based on the information collected during the July 1996, multi-media inspection, Respondent did not send copies of two manifests, numbers IL6794095 and IL6794096, to IEPA in violation of 35 IAC 722.123(a), and is therefore subject to penalties under Section 3008(a)(1) of RCRA, 42 U.S.C. §6928(a)(1).

COMPLIANCE ORDER

Based on the foregoing findings and pursuant to the authority of Section 3008 of RCRA, 42 U.S.C. §6928, IT IS HEREBY ORDERED THAT:

A. Respondent shall, prior to treating any hazardous debris, submit a one-time notification to the U.S. EPA Regional hazardous waste management division director or State authorized

to implement Part 268 requirements which includes the name and address of the Subtitle D facility receiving the treated debris, a description of the hazardous debris as initially generated, including the applicable EPA Hazardous Waste Number(s), and the technology from Table 1 of 40 CFR §268.45 used to treat the debris.

B. Respondent shall keep records of all inspections, evaluations, and analyses of treated hazardous debris that are made to determine compliance with the treatment standards found at 40 CFR §268.45, or any data or information that identifies key operating parameters of the treatment unit used to treat the hazardous debris. Respondent shall also keep a signed certification of compliance with the treatment standards for each shipment of treated debris in the Facility's files.

C. Respondent shall develop and maintain a contingency plan for the Facility which meets the requirements of 35 IAC 725.151(a) [40 CFR §265.51(a)].

D. Respondent shall provide to Facility personnel a program of classroom instruction or on-the-job training which meets the requirements of 35 IAC 725.116 [40 CFR §265.16]. Respondent shall maintain all documents and records required by 35 IAC 725.116(d) [§265.16(d)] for the time periods described in 35 IAC 725.116(e) [40 CFR §265.16(e)].

E. Respondent shall submit and implement a closure plan pursuant to 40 CFR Part 265 Subpart G and maintain financial

assurance pursuant to 40 CFR Part 265 Subpart H for all units at the Facility which were used to treat hazardous waste.

F. Respondent shall notify U.S. EPA in writing upon achieving compliance with this Order or any part thereof. This notification shall be submitted to:

U.S. EPA, Region 5
Waste, Pesticides and Toxics Division, DRE-9J
Enforcement and Compliance Assurance Branch
77 West Jackson Boulevard
Chicago, Illinois 60604
Attention: Michael Cunningham

G. A copy of these documents and all correspondence with U.S. EPA regarding this Order shall also be submitted to:

William Child, Chief
Division of Land Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

Notwithstanding any other provision of this Order, an enforcement action may be brought pursuant to Section 7003 of RCRA or other statutory authority where the handling, storage, treatment, transportation or disposal of solid or hazardous waste at this facility may present an imminent and substantial endangerment to human health or the environment. Failure to comply with any provision of this Order or to pay the civil penalty assessed below shall subject Respondent to liability for a civil penalty of up to TWENTY-SEVEN THOUSAND FIVE HUNDRED DOLLARS ($27,500) for each day of continued non-compliance, pursuant to Section 3008(c) of RCRA, 42 U.S.C. §6928(c).

PROPOSED CIVIL PENALTY

EPCRA

Section 325(b) of EPCRA, 42 U.S.C. § 11045(b), authorizes U.S. EPA to assess a penalty not to exceed $25,000 per day, for each day a violation continues, for violations of EPCRA Section 304. Pursuant to 40 C.F.R. 19.4, civil penalties of up to $27,500 per day per violation may be assessed for violations occuring on or after January 31, 1997. Civil penalties under Section 325(b), 42 U.S.C. § 11045(b) may be assessed by the Administrator. On the basis of the activities described above, Complainant alleges that Respondent is subject to penalties for violations of EPCRA Sections 304. Accordingly, Complainant proposes an EPCRA penalty totaling TWENTY-NINE THOUSAND SEVEN HUNDRED DOLLARS ($29,700) pursuant to the authority of Section 325 of EPCRA, 42 U.S.C. § 11045, as set forth below:

Count I	42 U.S.C. § 11004(a)	$ 8,250
Count II	42 U.S.C. § 11004(a)	$ 8,250
Count III	42 U.S.C. § 11004(c)	$ 6,600
Count IV	42 U.S.C. § 11004(c)	$ 6,600

The proposed civil penalty has been determined in accordance with Section 325 of EPCRA, 42 U.S.C. § 11045. For purposes of determining the amount of any penalty to be assessed, U.S. EPA considered the nature, circumstances, extent and gravity of the violations, and with respect to the Respondent, its ability to pay, prior history of violations, degree of culpability, economic benefit or savings resulting from the violation, and such other matters as justice may require. To develop the proposed penalty

in this Complaint, Complainant has taken into account the particular facts and circumstances of this case with specific reference to U.S. EPA's "Final Penalty Policy for Sections 302, 303, 304, 311, and 312 of the Emergency Planning and Community Right-to-Know Act and Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (dated June 13, 1990)," a copy of which is enclosed with this Complaint. (Attachment A). This policy provides a rational, consistent and equitable calculation methodology for applying the statutory penalty factors enumerated above to particular cases.

RCRA

Section 3008 of RCRA, 42 U.S.C. §6928, authorizes the assessment of a civil penalty of up to $25,000 per day for each violation of Subtitle C of RCRA. Pursuant to 40 C.F.R. 19.4, civil penalties of up to $27,500 per day per violation may be assessed for violations occuring on or after January 31, 1997. Based upon the facts alleged in this Complaint, and in consideration of the seriousness of the violations cited herein, the potential harm to human health and the environment, the continuing nature of the violations and the ability of Respondent to pay penalties, Complainant proposes a RCRA civil penalty totaling SEVENTY-FIVE THOUSAND ONE HUNDRED FIFTY DOLLARS ($75,150) for the violations alleged in this Complaint, as set forth below:

Count V	35 IAC 722.134(c)(A)	$ 600
Count VI	40 CFR §268.7(d)(1)	$ 6,500

Count VII	40 CFR §268.7(d)(3)	$40,250
Count VIII	35 IAC 722.134(a)(4)	$26,000
Count IX	35 IAC 728.107(a)(7)	$ 1,200
Count X	35 IAC 722.123(a)	$ 600

The Complainant has taken into account the particular facts and circumstances of this case with specific reference to U.S. EPA's "1990 RCRA Civil Penalty Policy", a copy of which is enclosed with this Complaint. (Attachment B). Attachment C of this Complaint provides a detailed summary of the proposed RCRA civil penalty.

OPPORTUNITY TO REQUEST A HEARING

In accordance with the Administrative Procedure Act (the APA), 5 U.S.C. §§551 et seq., you have the right to request a hearing to contest any material fact contained in this Complaint and Compliance Order, and/or to contest the appropriateness of the proposed compliance schedule or amount of the penalty. Any hearing that you request will be held and conducted in accordance with the provisions of the APA, 5 U.S.C. §§551 et seq., and the "Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits"(Consolidated Rules), 40 CFR Part 22. A copy of these rules accompanies this Complaint. (Attachment D).

If you wish to avoid being found in default, you must file a written answer to this Complaint with the Regional Hearing Clerk, Planning and Management Division (R-19J),

U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, within twenty (20) days of service of this Complaint. Pursuant to Section 22.15 of the Consolidated Rules, the Answer must clearly and directly admit, deny or explain each of the factual allegations contained in the Complaint with respect to which Respondent has any knowledge, or clearly state that Respondent has no knowledge as to particular factual allegations in the Complaint. The Answer should also state:

1. The circumstances or arguments that you allege constitute the grounds of defense;

2. The facts that you intend to place at issue; and

3. Whether you request a hearing.

Failure to deny any of the factual allegations in this Complaint constitutes admission of the undenied allegations.

A copy of this Answer and any subsequent documents filed in this action should be sent to Ms. Leslie Kirby, Assistant Regional Counsel, Office of Regional Counsel (C-29A), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604. She may be telephoned at (312) 886-7166.

If you fail to file a written Answer, with or without a Request for Hearing, by the required date, the Regional Administrator or Presiding Officer may issue a Default Order. Issuance of this Default Order will constitute a binding

admission of all facts alleged in the Complaint and a waiver of your right to a hearing under RCRA. The civil penalty proposed in this Complaint shall then become due and payable without further proceedings sixty (60) days after a Final Order of Default is issued pursuant to 40 CFR §22.17(a). In addition, the default penalty is subject to the provisions relating to imposition of interest, penalty and handling charges set forth in the Federal Claims Collection Act of 1966,
31 U.S.C. §3717. Interest will accrue on the default penalty at the rate established by the Secretary of the Treasury pursuant to 31 U.S.C. §3717. U.S. EPA will impose a late payment handling charge of $15.00 for each subsequent thirty (30) day period over which an unpaid balance remains. In addition, U.S. EPA will apply a six (6) percent per annum penalty on any principal amount not paid within ninety (90) days of the date that the Default Order is signed by the Regional Administrator or Presiding Officer.

SETTLEMENT CONFERENCE

Whether or not you request a hearing, you may request an informal conference in order to discuss the facts of this case and to arrive at a settlement. A request for an informal conference should be made in writing to:

Michael Cunningham
Enforcement and Compliance Assurance
Branch (DRE-9J)
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

and

Silvia Palomo
Office of Chemical Emergency Preparedness
and Prevention (SC-4J)
U.S. EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Your request for an informal settlement conference does not extend the twenty (20) day period during which you must submit a written Answer and Request for Hearing. You may pursue the informal conference procedure simultaneously with the adjudicatory hearing procedure.

U.S. EPA encourages all parties against whom a civil penalty is proposed to pursue the possibility of settlement through an informal conference. However, U.S. EPA will not reduce the penalty simply because such a conference is held. Any settlement that may be reached as a result of such conference shall be embodied in a written Consent Agreement and Final Order (CAFO) issued by the Regional Administrator, U.S. EPA, Region V. The issuance of such a CAFO shall constitute a waiver of your right to request a hearing on any stipulated matter in the Agreement.

Payment of Penalty

Instead of filing a written Answer, requesting a hearing or requesting an informal settlement conference, the Respondent may

choose to pay the proposed penalty. Such payment must be made by sending a certified or cashier's check in the amount of the penalty assessed in this Complaint to the address identifed below. The Respondent's check must be payable to the Treasurer, the United States of America, and remit to:

U.S. Environmental Protection Agency, Region 5
P.O. Box 70753
Chicago, Illinois 60673

A copy of the check shall be sent to:

Ms. Leslie Kirby
Office of Regional Counsel (C-29A)
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

A transmittal letter identifying this Complaint shall accompany the remittance and the copy of the check.

Dated this 21st day of November, 1997.

David A. Ullrich
Acting Regional Administrator
U.S. Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, Illinois 60604-3590

5-[redacted] '98 - 0 0 1
MM

IN THE MATTER OF BIG RIVER ZINC CORPORATION, Respondent

CERTIFICATE OF SERVICE

I certify that on December 3, 1997, the foregoing Complaint, Compliance Order and Notice of Opportunity for Hearing were sent in the following manner to the addressees listed below:

Original by Hand Delivery to:

Sonja Brooks
Regional Hearing Clerk
U.S. EPA, Region V (R-19J)
77 West Jackson Blvd.
Chicago, IL 60604-3507

Copy by Certified Mail - Return Receipt Requested to:

Respondent:

Lonny L. Ludwig, Registered Agent
Big River Zinc Corporation
Route 3 and Monsanto Avenue
Sauget, Illinois 62201

Copy by First Class Mail to:

William Child, Chief
Division of Land Pollution Control
Illinois Environmental Protection Agency
Springfield, Illinois 62702

Dean Schlee
Illinois Emergency Management Agency
110 East Adams Street
Springfield, Illinois 62701-9963

George M. Obeldobel
Big River Zinc Corporation
Route 3 and Monsanto Avenue
Sauget, Illinois 62201

Barbara A. Clark

Barbara A. Clark
Office of Regional Counsel
United States Environmental Protection Agency
Region V

Attachment A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

IN RE: BIG RIVER ZINC CORPORATION ROUTE 3 & MONSANTO AVENUE SAUGET, ILLINOIS 62201 U.S. EPA I.D. NO.: ILD 062 444 435 Respondent	DOCKET NO. 5-~~EPCRA~~ MM '98-001

US ENVIRONMENTAL PROTECTION AGENCY REGION V
'97 DEC -3 A11:12
RECEIVED REGIONAL HEARING CLERK

COMPLAINT

Statutory and Regulatory Basis

1. This is a civil administrative action instituted pursuant to Section 325 of the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA), 42 U.S.C. § 11045, Section 3008(a)(1) of the Resource Conservation and Recovery Act of 1976, as amended (RCRA), 42 U.S.C. §6928(a)(1), and Sections 22.01(a)(4)and (8), 22.13, 22.37, and 22.40 of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits (Consolidated Rules),40 CFR §§22.01(a)(4) and (8), 22.13, 22.37 and 22.40.

2. The Administrator has delegated the authority to issue this Complaint to the Regional Administrator, United States Environmental Protection Agency (U.S. EPA), Region V.

EPCRA

3. Section 302(a)(2) of EPCRA, 42 U.S.C. § 11002(a)(2) requires the Administrator of U.S. EPA to publish a list of

extremely hazardous substances which, when released into the environment, may present substantial danger to public health or welfare or the environment and to promulgate regulations establishing the quantity of any extremely hazardous substance, the release of which was required to be reported under Section 304 of EPCRA.

4. Sulfur dioxide CAS#7446-09-5 is designated as an extremely hazardous substance under Section 302(a)(2) of EPCRA, 42 U.S.C. § 11002(a)(2), with a reportable quantity of 500 lbs. (40 C.F.R. 355 Appendix A).

RCRA

5. Section 3010(a) of RCRA, 42 U.S.C. §6930(a), requires any person who generates or transports hazardous waste, or owns or operates a facility for the treatment, storage, or disposal of hazardous waste, to notify U.S. EPA of such activity within 90 days of the promulgation of regulations under Section 3001 of RCRA, 42 U.S.C. §6921. Section 3010(a) of RCRA also provides that no hazardous waste subject to regulations may be transported, treated, stored, or disposed of unless the required notification has been given.

6. U.S. EPA first published regulations concerning the generation, transportation, treatment, storage or disposal of hazardous waste on May 19, 1980. These regulations are codified at 40 CFR Parts 260 et seq. Notification to U.S. EPA of hazardous waste activity was required in most instances no later

than August 18, 1980.

7. On August 18, 1980, Respondent submitted a notification of hazardous waste activity.

8. On January 31, 1986, the State of Illinois was granted Final Authorization by the Administrator of the U.S. EPA, pursuant to Section 3006(b) of RCRA, 42 U.S.C. §6926(b), to administer a hazardous waste program in lieu of the Federal program. See 51 Federal Register 3778 (1986). As a result, facilities in Illinois qualifying for interim status under Section 3005(e) of RCRA, 42 U.S.C. §6925(e), are regulated under the Illinois provisions found at 35 IAC Part 720 et. seq., rather than the Federal regulations set forth at CFR Part 260 et. seq., except for applicable requirements pursuant to provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA) for which Illinois is not authorized. Section 3008(a) of RCRA, 42 U.S.C. §6928(a), provides the U.S. EPA with the authority to enforce State regulations in those States authorized to administer a hazardous waste program. Notice to the State regarding this action was provided on September 4, 1997.

Statement of Facts

9. Respondent is the Big River Zinc Corporation, which is and was at all times relevant to this Complaint, a corporation incorporated under the laws of the State of Delaware with a place

of business at Route 3 & Monsanto Avenue, Sauget, Illinois (the Facility).

EPCRA

10. The Big River Zinc Corporation located at Sauget, St. Clair, Illinois (hereinafter the "Facility") is a facility as defined in Section 329(4) of EPCRA 42 U.S.C. § 11049(4).

11. Respondent is a "person" as that term is defined under Section 329(7) of EPCRA, 42 U.S.C. § 11049(7).

12. Respondent was the owner or operator of the facility during the relevent period described below.

13. U.S. EPA conducted a multi-media compliance inspection at the Facility from July 16 through 24, 1996.

14. Based on information provided by BRZ during the July, 1996, multi-media inspection, on August 7, 1995, when Respondent was in charge of the Facility, there was a release of an estimated 2,100 lbs. of sulfur dioxide, a quantity greater than the reportable quantity specified in 40 C.F.R. Part 355, Appendix A.

15. At all times relevant to this Complaint, and pursuant to Section 301(a) of EPCRA, 42 U.S.C. § 11001(a), the State Emergency Response Commission was the Illinois State Emergency Response Commission (herinafter the "SERC").

16. At all times relevant to this Complaint, and pursuant to Section 301(c) of EPCRA, 42 U.S.C. § 11001(c), the Local Emergency Planning Committee for the emergency planning district

containing the Facility was the St. Clair County Emergency Planning Committee (hereinafter the "LEPC").

RCRA

17. Respondent is a "person" as defined at Section 1004(15) of RCRA, 42 U.S.C. §6903(15), and Title 35 Illinois Administrative Code (35 IAC) §720.110, and is subject to the regulations promulgated pursuant to Subtitle C of RCRA, 42 U.S.C. §§6921-6939, and the analogous Illinois regulations as part of the applicable State hazardous waste management program for the State of Illinois.

18. Respondent generates waste personal protective equipment (PPE) such as tyvek coveralls, cloth and leather gloves in the cadmium oxide production building at the Facility.

19. The waste PPE meets the definition of debris found at 40 CFR §268.2(g).

20. During the July, 1996, multi-media inspection, Respondent's environmental manager, Mr. Ted Winchester, stated the waste PPE would exhibit the characteristic of cadmium toxicity based on his knowledge of the process and materials used and the fact that the waste contains visible amounts of cadmium dust.

21. Pursuant to 35 Illinois Administrative Code (IAC) 721.124(b) and 40 CFR §261.24(b), a solid waste that exhibits the characteristic of toxicity for cadmium has the hazardous waste number D006.

22. Pursuant to 40 CFR §268.2(h), debris which exhibits a characteristic of hazardous waste identified in 40 CFR Part 261, Subpart C is hazardous debris.

23. Waste PPE generated in the cadmium oxide production building are hazardous debris as defined at 40 CFR §268.2(h).

24. Pursuant to 40 CFR §268.45, hazardous debris must be treated prior to land disposal unless the debris is treated to the waste-specific treatment standard found in Subpart D of Part 268 for the waste contaminating the debris. Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table 1 of this section and that does not exhibit a characteristic of hazardous waste identified under subpart C, Part 261, after treatment is not a hazardous waste.

25. Respondent washed the waste PPE with detergent in a washing machine located in the cadmium oxide production building prior to disposal.

26. Respondent used this treatment on PPE prior to disposal from at least January 1, 1993, through July 16, 1996.

27. Water washing is one of the alternative treatment standards for hazardous debris listed in 40 CFR §268.45, Table 1.

28. Respondent has been treating hazardous debris generated from the cadmium oxide production building using the treatment technologies listed in 40 CFR §268.45, Table 1 from at least January 1, 1993, through July 16, 1996.

COUNT I

29. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

30. Section 304(a) of EPCRA, 42 U.S.C. § 11004(a), requires the owner or operator of a facility at which hazardous chemicals are produced, used, or stored, to immediately notify the SERC when there has been a release of a hazardous substance or extremely hazardous substance in an amount equal to or greater than the reportable quantity.

31. On August 7, 1995, when Respondent was the owner or operator of the Facility, there was a release from the Facility of an estimated 2,100 lbs. of sulfur dioxide, a quantity equal to or greater than the reportable quantity of 500 lbs. specified in 40 C.F.R. Part 355, Appendix A.

32. The release was one for which notice was required under Section 304 (a) of EPCRA, 42 U.S.C. § 11004(a).

33. As of the date of this Complaint, the Respondent has not notify the SERC about the release.

34. Respondent violated the notification requirements of Section 304(b) of EPCRA, 42 U.S.C. § 11004(a), and is therefore subject to the assessment of penalties under Section 325 of EPCRA, 42 U.S.C. § 11045.

COUNT II

35. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

36. Section 304(a) of EPCRA, 42 U.S.C. § 11004(a), also

requires the owner or operator of a facility at which hazardous chemicals are produced, used, or stored, to immediately notify the emergency coordinator for the LEPC when there has been a release of a hazardous substance or extremely hazardous substance in an amount equal to or greater than the reportable quantity.

37. On August 7, 1995, when Respondent was the owner or operator of the Facility, there was a release from the Facility of an estimated 2,100 lbs. of sulfur dioxide, a quantity equal to or greater than the reportable quantity of 500 lbs. specified in 40 C.F.R. Part 355, Appendix A.

38. The release was one for which notice was required under Section 304 (a) of EPCRA, 42 U.S.C. § 11004(a).

39. As of the date of this Complaint, the Respondent has not notified the LEPC about the release of sulfur dioxide.

40. Respondent violated the notification requirements of Section 304(a) of EPCRA, 42 U.S.C. § 11004(a), and is therefore subject to the assessment of penalties under Section 325 of EPCRA, 42 U.S.C. § 11045.

COUNT III

41. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

42. Section 304(c) of EPCRA, 42 U.S.C. § 11004(c), requires the owner or operator of a facility to provide a written follow-up notice to the SERC as soon as practicable after a release occurs that is required to be reported under Section

304(b)of EPCRA, 42 U.S.C. § 11004(b).

43. On August 7, 1995, when Respondent was the owner or operator of the Facility, there was a release from the Facility of an estimated 2,100 lbs. of sulfur dioxide, a quantity equal to or greater than the reportable quantity of 500 lbs. specified in 40 C.F.R. Part 355, Appendix A.

44. The release was one for which notice was required under Section 304 (a) of EPCRA, 42 U.S.C. § 11004(a).

45. As of the date of this Complaint, the Respondent has not provided the written follow-up notice to the SERC as required by Section 304(c) of EPCRA, 42 U.S.C. § 11004(c).

46. Respondent violated the notification requirements of Section 304(c) of EPCRA, 42 U.S.C. § 11004(c), and is therefore subject to the assessment of penalties under Section 325 of EPCRA, 42 U.S.C. § 11045.

COUNT IV

47. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

48. Section 304(c) of EPCRA, 42 U.S.C. § 11004(c), also requires the owner or operator of a facility to provide a written follow-up notice to the LEPC as soon as practicable after a release occurs that is required to be reported under Section 304(b) of EPCRA, 42 U.S.C. § 11004(b).

49. On August 7, 1995, when Respondent was the owner or operator of the Facility, there was a release from the Facility

of an estimated 2,100 lbs. of sulfur dioxide, a quantity equal to or greater than the reportable quantity of 500 lbs. specified in 40 C.F.R. Part 355, Appendix A.

50. The release was one for which notice was required under Section 304 (a) of EPCRA, 42 U.S.C. § 11004(a).

51. As of the date of this Complaint, the Respondent has not provided the follow-up written notice to the LEPC as required by Section 304(c) of EPCRA, 42 U.S.C. § 11004(c).

52. Respondent violated the notification requirements of Section 304(c) of EPCRA, 42 U.S.C. § 11004(c), and is therefore subject to the assessment of penalties under Section 325 of EPCRA, 42 U.S.C. § 11045.

COUNT V

53. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

54. Pursuant to 35 IAC 722.134(c)(A) [40 CFR §262.34(c)(1)(i)], a generator may accumulate hazardous waste in containers at or near the point of generation provided he complies with 35 IAC 725.273(a) [40 CFR 265.173(a)], which states that a container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

55. Based on the information collected during the July 1996, multi-media inspection, Respondent accumulates hazardous waste PPE in at least two containers in the cadmium oxide

production building.

56. At the time of the July 1996, multi-media inspection, U.S. EPA inspectors discovered two containers containing hazardous waste PPE open during storage in the cadmium oxide production building, in violation of 35 IAC 725.273(a) [40 CFR §265.273(a)(1)(ii)].

57. Respondent is therefore in violation of 35 IAC 722.134(c)(A) [40 CFR §262.34(c)(1)(i)], and is therefore subject to penalties under Section 3008(a)(1) of RCRA, 42 U.S.C. §6928(a)(1).

COUNT VI

58. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

59. Pursuant to 40 CFR §268.7(d), generators or treaters who first treat hazardous debris using the technology provided in 40 CFR §268.45, Table 1 must submit a one-time notification to the EPA Regional hazardous waste management division director or State authorized to implement Part 268 requirements which includes the name and address of the Subtitle D facility receiving the treated debris, a description of the hazardous debris as initially generated, including the applicable EPA Hazardous Waste Number(s), and the technology from Table 1 of §268.45 used to treat the debris.

60. Based on the information collected during the July 1996, multi-media inspection, Respondent has not submitted a one-

time notification with the required information to the EPA Regional hazardous waste management division director or State authorized to implement Part 268 requirements in violation of 40 CFR §268.7(d)(1), and is therefore subject to penalties under Section 3008(a)(1) of RCRA, 42 U.S.C. §6928(a)(1).

COUNT VII

61. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

62. Pursuant to 40 CFR §268.7(d)(3)(i) and (ii), treaters who first treat hazardous debris using the technology provided in Table 1 of §268.45 must keep records of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards, and any data or information that identifies key operating parameters of the treatment unit used to treat the hazardous debris. Pursuant to 40 CFR §268.7(d)(3)(iii), for each shipment of treated debris, a certification of compliance with the treatment standards must be signed by an authorized representative and placed in the Facility's files.

63. Based on the information collected during the July 1996, multi-media inspection, Respondent has not kept records of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards, or any data or information that identifies key operating parameters of the treatment unit used to treat the hazardous debris since at

least January 1, 1993, in violation of 40 CFR §268.7(d)(3)(i) and (ii).

64. During the July, 1996, multi-media inspection, Respondent's hazardous waste shipment files did not include a signed certification of compliance with the treatment standards in the Facility's files for each shipment of treated debris since at least January 1, 1993, in violation of 40 CFR §268.7(d)(3)(iii), and is therefore subject to penalties under Section 3008(a)(1) of RCRA, 42 U.S.C. §6928(a)(1).

COUNT VIII

65. The allegations contained in paragraphs 1 through 28 are incorporated herein by reference.

66. Pursuant to 35 IAC 722.134(a)(4) [40 CFR §262.34(a)(4)], a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status provided that the generator complies with the requirements of 35 IAC 725 Subparts C and D and with 725.116 [Subparts C and D in 40 CFR Part 265, §265.16, and 40 CFR §268.7(a)(4)].

67. Respondent filed Hazardous Waste Reports with the Illinois Environmental Protection Agency (IEPA) in 1993, 1994, 1995, and 1996 which indicated the Facility generated greater than 1000 kilograms of hazardous waste during a calendar month each year.

68. Based on IEPA and EPA files, Respondent accumulated this hazardous waste on-site for 90 days or less without having a

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:
C-14J

VIA FEDERAL EXPRESS

December 10, 1997

Kenneth Mensing
Chris Cahnovsky
Illinois Environmental Protection Agency
2009 Mall Street
Collinsville, Illinois 62234

Re: Big River Zinc Complaint and Notice of Opportunity for Hearing
Docket No. 5-MM-98-001

Dear Mr. Mensing and Mr. Cahnovsky:

Enclosed please find a copy of the Big River Zinc Complaint that was filed on December 3, 1997. Additionally, I am in the process of forwarding the May 1997 Final Inspection Report to you. Thank you for your patience in this matter. If you have any questions regarding the Complaint or the Final Inspection Report, please do not hesitate to contact me at (312) 886-7166.

Sincerely,

Leslie A. Kirby

Leslie A. Kirby
Assistant Regional Counsel

Enclosures

cc: Michael Cunningham, DRE-9J (w/o enclosures)
Debra Klassman, C-14J (w/o enclosures)

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

NOV 21 1997

REPLY TO THE ATTENTION OF:
R-19J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Lonny L. Ludwig, Registered Agent
Big River Zinc Corporation
Route 3 and Monsanto Avenue
Sauget, Illinois 62201

Re: Complaint and Notice of Opportunity for Hearing
Big River Zinc Corporation

5-EPCRA-98-0001
MM

Dear Mr. Ludwig:

US ENVIRONMENTAL PROTECTION AGENCY REGION V
'97 DEC -3 A11:21
REGIONAL HEARING CLERK

Enclosed please find a Complaint, Compliance Order, and Notice of Opportunity for Hearing, which sets forth the Agency's determination for certain violations of Section 304 of Title III of the Superfund Amendments and Reauthorization Act, 42 U.S.C. §§ 11001 et seq. (also known as the Emergency Planning and Community Right-to-Know Act of 1986) (EPCRA); Section 3008(a)(1) of the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. Section 6928(a)(a) (RCRA); and the Illinois Administrative Code, 35 Ill. Adm. Code Part 720 et seq. These violations were discovered by the United States Environmental Protection Agency inspectors at the Big River Zinc Corporation facility at Route 3 & Monsanto Avenue, Sauget, Illinois 62201.

I recommend that you carefully read and analyze the enclosed Complaint and Rules of Practice, 40 C.F.R. Part 22, to determine the alternatives available in responding to the alleged violations, proposed penalties and opportunity for a hearing. Please note that each day the violations cited herein continue constitutes a new violation, for which additional penalties may be imposed. Complainant derived the penalty proposed in the Complaint according to the "Final Penalty Policy for Sections 302, 303, 304, 311, and 312 of the Emergency Planning and Community Right-to-Know Act; Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act" (dated June 13, 1990); and the "1990 RCRA Civil Penalty Policy" (October, 1990), copies of which are also attached to the Complaint. Those policies are the current Agency guidance for assessing a penalty for violations such as those alleged in the enclosed Complaint.

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If Big River Zinc Corp. (BRZ) chooses to request a hearing to contest the facts alleged in the Complaint, BRZ must request the hearing in its Answer, which it must file with the Regional hearing Clerk within twenty (20) days following its receipt of this Complaint. BRZ should send a copy of its Answer and Request for Hearing to Leslie A. Kirby, Assistant Regional Counsel, Office of Regional Counsel (C-29A), U.S. EPA, Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604. Her telephone number is (312) 886-7166.

Failure to respond to this Complaint and Notice of Opportunity for Hearing by specific answer, within twenty (20) days of your receipt of this Complaint, constitutes your admission of the allegations made in the Complaint. Such failure may also result in the issuance of a Default Order imposing the full proposed penalty in the Complaint.

Whether or not you request a hearing, you may confer informally with Ms. Kirby to discuss the facts of this case, the amount of the proposed penalty, the possibility of settlement, or the possible mitigation of the proposed penalty in accordance with Agency guidance on pollution prevention and supplemental environmental projects. An informal settlement conference does not affect your obligation to file a written Answer to the Complaint.

Sincerely yours,

David A. Ullrich

David A. Ullrich
Acting Regional Administrator

Enclosures

cc: William Child (w/enclosures)
Illinois Environmental Protection Agency

Dean Schlee (w/enclosures)
State Emergency Response Commission

George M. Obeldobel (w/enclosures)
Big River Zinc Corp.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 18 1997

REPLY TO THE ATTENTION OF:
C-29A

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Lonny L. Ludwig, Registered Agent
Big River Zinc Corporation
Route 3 and Monsanto Avenue
Sauget, Illinois 62201

Re: Pre-Filing Notice Letter
Big River Zinc Corporation
ILD 062 444 435

Dear Mr. Ludwig:

This letter is to notify you that the United States Environmental Protection Agency (U.S. EPA) is prepared to bring a civil administrative enforcement proceeding against Big River Zinc Corporation (BRZ) for violations of the Resource Conservation and Recovery Act of 1976, as amended (RCRA) and for violations of the Emergency Planning and Community Right-To-Know Act of 1986 ("EPCRA"). The Complaint will allege BRZ has violated Section 3002 of RCRA, 40 CFR §§262.34 and 268.7, as well as, 35 Illinois Administrative Code 722.123, in that BRZ failed to notify and keep proper records for treatment of hazardous debris. Additionally, the Complaint will allege BRZ has violated Section 304 of EPCRA, and 40 CFR 355, in that BRZ failed to notify the State Emergency Response Commission and Local Emergency Planning Committee of two releases of extremely hazardous substances. Those releases occurred on October 16, 1994, and August 7, 1995, where 778 lbs. of sulfur trioxide and 2,100 lbs. of sulfur dioxide were released respectively. The Complaint will seek civil penalties for these violations.

Before filing the Complaint, however, we are extending to you the opportunity to advise U.S. EPA of any factors you believe that the U.S. EPA should consider before issuing the Civil Complaint. Relevant factors might include any evidence of reliance upon on-site compliance assistance provided by U.S. EPA or State agencies exercising delegated authority, misidentification of the proper

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party, or financial factors bearing on your ability to pay a civil penalty. If you believe that there are financial factors which bear on your ability to pay a civil penalty, please submit financial statements, including balance sheets and income statements for the past three years.

Please note that U.S. EPA may consider and use information provided by you in a civil or criminal proceeding related to this matter.

It is our intention to file the Civil Administrative Complaint ten days from your receipt of this letter. Please submit your response to this office within seven (7) business days of receipt of this letter. You should direct your response to Leslie A. Kirby, U.S. EPA, C-29A, 77 West Jackson Boulevard, Chicago, Illinois 60604. Thank you for your prompt attention to this matter.

Sincerely,

Joseph M. Boyle

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division
U.S. Environmental Protection Agency
Region 5

Mark Horwitz

Mark Horwitz, Chief
Office of Chemical Emergency
Preparedness and Prevention
Superfund Division
U.S. EPA Region 5

SEP 04 1997

DRE-8J

William Child, Chief
Division of Land Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62702

Re: Big River Zinc Corporation
Route 3 & Monsanto Avenue
Sauget, Illinois
EPA ID No.: ILD 062 444 435

Dear Mr. Child:

Pursuant to Section 3008(a)(2) of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6928(a)(2), I am providing notice to the Illinois Environmental Protection Agency that the United States Environmental Protection Agency is preparing to issue an Order under Section 3008(a)(1) to the Big River Zinc Corporation. The Order addresses violations of the generator and land disposal restriction regulations at 40 C.F.R. Parts 262 and 268, respectively.

If you have any questions regarding this Order, please contact Michael Cunningham of my staff at (312) 886-4464.

Sincerely yours,

ORIGINAL SIGNED BY
JOSEPH M. BOYLE

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division

bcc: Kelley Moore, DR-7J
Lorna Jereza, DRE-8J
Branch file, DRE-8J

DRE-8J/MCunningham/BE/6-4464/NOTCELET.BRZ/9-2-97

ENFORCEMENT AND COMPLIANCE ASSURANCE BRANCH

SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY
				AP 9-3-97	
AUTHOR/ TYPIST	MINN/OHIO SECTION CHIEF	MICHIGAN/ WISCONSIN SECTION CHIEF	ILLINOIS/ INDIANA SECTION CHIEF	ECAB BRANCH CHIEF	WPTD DIVISION DIRECTOR
MC 9-2-97			9/2/97	JMB 9/3/97	

1997

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

IN RE:	)	
	)	DOCKET NO. 98-006
BIG RIVER ZINC CORPORATION	)	
ROUTE 3 & MONSANTO AVENUE	)	
SAUGET, ILLINOIS 62201	)	
	)	
U.S. EPA I.D. NO.: ILD 062 444 435	)	
	)	
RESPONDENT	)	

ANSWER OF BIG RIVER ZINC CORPORATION TO COMPLAINT

Comes Now, Big River Zinc Corporation, by and through its attorneys Pellegrini and Emmerich, P.C. and responds to the Complaint as follows:

1. Respondent is without sufficient information either to admit or deny the allegations in Paragraph 1 and, therefore, denies the allegations.

2. Respondent admits the allegations in Paragraph 2 of the Complaint.

3. Respondent denies the allegations in Paragraph 3 of the Complaint on the basis that the statute speaks for itself.

4. Respondent admits the allegations in Paragraph 4 of the Complaint.

5. Respondent denies the allegations in Paragraph 5 of the Complaint on the basis that the statute speaks for itself.

6. Respondent admits the allegations in Paragraph 6 of the Complaint.

7. Respondent admits the allegations in Paragraph 7 of the Complaint.

8. With respect to Paragraph 8, Respondent admits that on January 31, 1986, the State of Illinois was granted Final Authorization by the Administrator of the U. S. EPA, pursuant to Section 3006(b) of RCRA, 42 U.S.C. §6926(b), to administer a hazardous waste program in lieu of the Federal program and that as a result, facilities in Illinois qualifying for interim status under Section 3005(e) of RCRA are regulated under the Illinois provisions found at 35 IAC Part 720 et. seq., rather than the Federal regulations set forth in CFR Part 260 et. seq. Respondent is without sufficient information to know what the Complaint refers to by "applicable requirements pursuant to the provisions of the hazardous and solid waste amendments of 1984" because those requirements are not identified in the Complaint. Respondent, therefore, denies that allegation. Respondent admits that Section 3008(a) of RCRA provides EPA with authority to enforce State regulations in those States authorized to administer a hazardous waste program. Respondent does not know the date on which notice to the State was provided regarding this action and, therefore, denies that notice was provided to the State on September 4, 1997.

9. With respect to Paragraph 9, Respondent admits that it is currently the Big River Zinc Corporation, but denies that it is and at all times relevant to this Complaint, was a corporation incorporated under the laws of the State of Delaware with a place of business at Route 3 and Monsanto Avenue, Sauget, Illinois, and denies that at all times relevant to this matter Big River Zinc Corporation's corporate status and structure has remained unchanged.

10. Respondent admits the allegations in Paragraph 10 of the Complaint.

11. Respondent admits the allegations in Paragraph 11 of the Complaint.

12. Respondent denies the allegations in Paragraph 12 of the Complaint.

13. Respondent admits the allegations in Paragraph 13 of the Complaint.

14. With respect to Paragraph 14, Respondent is unable either to admit or deny the allegations because the term "release" is not defined and because Respondent denies that any alleged release was "reportable." Respondent, therefore, denies all allegations in Paragraph 14. Respondent also denies that it was in charge of the facility at that time.

15. Respondent admits the allegations in Paragraph 15 of the Complaint.

16. Respondent admits the allegations in Paragraph 16 of the Complaint.

17. Respondent admits the allegations in Paragraph 17 of the Complaint, but does not admit that all of the regulations referred to in that paragraph apply to Respondent under the circumstances alleged in the Complaint.

18. With respect to Paragraph 18, Respondent is unable to either admit or deny the allegations on the basis that the allegations are vague and the terms are not adequately defined, and Respondent, therefore, denies the allegations.

19. Respondent denies the allegations in Paragraph 19 of the Complaint.

20. Respondent denies the allegations in Paragraph 20 of the Complaint.

21. Respondent denies the allegations in Paragraph 21 of the Complaint on the basis that the regulation speaks for itself.

22. Respondent denies the allegations in Paragraph 22 of the Complaint on the basis that the regulation speaks for itself.

23. Respondent denies the allegations in Paragraph 23 of the Complaint.

24. With respect to Paragraph 24 of the Complaint, Respondent denies that, pursuant to 40 C.F.R. §268.45, hazardous debris must be treated prior to land disposal unless the debris is treated to the waste-specific treatment standard found in Subpart D of Part 268 for the waste

contaminating the debris. Respondent admits that hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table 1 of this section and that does not exhibit a characteristic of a hazardous waste identified under subpart C, Part 261, after treatment is not a hazardous waste.

25. With respect to Paragraph 25, Respondent is unable either to admit or deny the allegations on the basis that term "waste PPE" is not defined and, therefore, denies the allegations.

26. Respondent denies the allegations in Paragraph 26 of the Complaint.

27. Respondent admits the allegation in Paragraph 27 but denies that all water washing constitutes treatment under all circumstances.

28. Respondent denies the allegations in Paragraph 28 of the Complaint.

COUNT I

29. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

30. With respect to Paragraph 30, Respondent admits the allegations, but further states that there are exceptions to the general reporting requirement.

31. Respondent denies the allegations in Paragraph 31 of the Complaint.

32. Respondent denies the allegations in Paragraph 32 of the Complaint.

33. Respondent denies the allegations in Paragraph 33 of the Complaint.

34. Respondent denies the allegations in Paragraph 34 of the Complaint.

COUNT II

35. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

36. Respondent admits the allegations in Paragraph 36 of the Complaint but further states that there are exceptions to the reporting requirement.

37. Respondent denies the allegations in Paragraph 37 of the Complaint.

38. Respondent denies the allegations in Paragraph 38 of the Complaint.

39. Respondent denies the allegations in Paragraph 39 of the Complaint.

40. Respondent denies the allegations in Paragraph 40 of the Complaint.

COUNT III

41. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

42. Respondent admits the allegations in Paragraph 42 of the Complaint but further states that there are exception to the reporting requirement.

43. Respondent denies the allegations in Paragraph 43 of the Complaint.

44. Respondent denies the allegations in Paragraph 44 of the Complaint.

45. Respondent denies the allegations in Paragraph 45 of the Complaint.

46. Respondent denies the allegations in Paragraph 46 of the Complaint.

COUNT IV

47. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

48. Respondent admits the allegations in Paragraph 47 of the Complaint but further states that that there are exceptions to the reporting requirement.

49. Respondent denies the allegations in Paragraph 49 of the Complaint.

50. Respondent denies the allegations in Paragraph 50 of the Complaint.

51. Respondent denies the allegations in Paragraph 51 of the Complaint.

52. Respondent denies the allegations in Paragraph 52 of the Complaint.

COUNT V

53. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

54. Respondent admits the allegations in Paragraph 54 of the Complaint.

55. With respect to Paragraph 55, Respondent denies the allegations because the phrase "accumulates hazardous waste PPE" is not defined.

56. With respect to Paragraph 56, Respondent admits that USEPA inspectors observed containers in the Cadmium Oxide Production Building, but denies the remaining allegations, including the allegation that the containers were in violation of 35 IAC 725.273(a).

57. Respondent denies the allegations in Paragraph 57 of the Complaint.

COUNT VI

58. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

59. Respondent denies the allegations in Paragraph 59 of the Complaint on the basis that the regulation speaks for itself.

60. Respondent denies the allegations in Paragraph 60 of the Complaint.

COUNT VII

61. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

62. Respondent denies the allegations in Paragraph 62 of the Complaint on the basis that the regulation speaks for itself.

63. Respondent denies the allegations in Paragraph 63 of the Complaint.

64. Respondent denies the allegations in Paragraph 64 of the Complaint.

COUNT VIII

65. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

66. Respondent denies the allegations in Paragraph 66 of the Complaint on the basis that the regulation speaks for itself.

67. With respect to Paragraph 67, Respondent admits that it filed certain reports with the Illinois Environmental Protection Agency in 1993, 1994, 1995 and 1996, but denies the remaining allegations, including the allegation that the facility generated greater than 1,000 kilograms of hazardous waste during a calendar month each year.

68. Respondent denies the allegations in Paragraph 68 of the Complaint.

69. Respondent denies the allegations in Paragraph 69 of the Complaint.

70. Respondent denies the allegations in Paragraph 70 of the Complaint.

71. Respondent denies the allegations in Paragraph 71 of the Complaint.

COUNT IX

72. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

73. Respondent denies the allegations in Paragraph 73 of the Complaint on the basis that the regulation speaks for itself.

74. Respondent denies the allegations in Paragraph 74 of the Complaint.

COUNT X

75. Respondent incorporates by reference its response to the allegations in Paragraphs 1 through 28 of the Complaint as if fully set forth herein.

76. Respondent denies the allegations in Paragraph 76 of the Complaint.

77. Respondent denies the allegations in Paragraph 77 of the Complaint.

COMPLIANCE ORDER

With respect to the Compliance Order, Respondent denies that it is required to take any of the actions requested, including the payment of penalties.

All other allegations which are not specifically admitted in the Complaint are hereby denied.

AFFIRMATIVE DEFENSES

1. The Complaint fails to state a claim upon which relief may be granted.

2. With respect to Counts I, II, III and IV, Respondent orally notified the Illinois Environmental Protection Agency (IEPA) immediately and followed up with a written report following the alleged releases. Said notification fully complied with Respondent's Operating

Permit issued by IEPA. The permit required no additional notification and Respondent reasonably believed it had fulfilled any reporting requirements, assuming *arguendo* the alleged releases were reportable. IEPA personnel did not inform Respondent of any additional reporting requirements.

3. With respect to Counts I, II, III and IV, the alleged releases were not required to be reported to any agency, because SARA Title III exempts from reporting "any release which results in exposure to persons solely within the site or sites on which a facility is located." 42 U.S.C. §11004(a)(4). There is no evidence that any alleged release reached beyond the facility.

4. With respect to Count V, the containers at issue were in the process of having materials added or removed, and the materials were not being "stored." Therefore, the lids were not required to be on the containers at issue. Moreover, there was no exposure to any employee, because the room had limited access and had a dedicated fugitive ventilation system. The materials collected were metal oxides and non-volative.

5. With respect to Count VI and VII, Respondent was not treating hazardous debris as that term is defined in the cited regulations. Respondent was not treating a solid or hazardous waste, because the materials Respondent washed were part of a closed loop system pursuant to 40 C.F.R. §261.4(a)(8). Therefore, the requirements of 40 C.F.R. §268.7 do not apply.

6. With respect to Count VIII, Respondent did not foresee that it would generate in excess of 1000 kilograms per month during any calendar month. The isolated occurrences on which such volumes were generated were created by demolition projects at the facility.

FACTS IN ISSUE

All allegations which have not been admitted are in issue.

REQUEST FOR HEARING

Respondent requests a hearing and an informal settlement conference.

PELLEGRINI AND EMMERICH, A PROFESSIONAL CORPORATION

_____

JULIE A. EMMERICH
701 MARKET STREET
SUITE 390
ST. LOUIS, MISSOURI 63101
(314) 241-7445
ATTORNEY FOR RESPONDENT

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Answer was served upon Complainant by mailing a copy by first-class mail to Leslie Kirby, Office of Regional Counsel (C-29A), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604, this ____ day of _____, 1997.

_____

BIG RIVER ZINC CORPORATION
ROUTE 3 & MONSANTO AVENUE
SAUGET, ILLINOIS 62201

TEL: 618-274-5000
FAX: 618-274-4444

July 19, 1996

Chris Cahnovsky
Illinois Environmental Protection Agency
2009 Mall Street
Collinsville, Illinois 62234

RE: Request for Information

Dear Mr. Cahnovsky

Enclosed you will find photo copies of Manifests as per your request.

If you have any questions, please contact me.

Sincerely,

Ted Winchester
Environmental and Health Manager

RECEIVED
IEPA
JUL 23 1996
COLLINSVILLE

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: I. L. D. 0. 6. 2. 4. 4. 4. 4. 3. 5
Manifest Document No.: 0 1
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but Items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
BIG RIVER ZINC
RT 3 & MONSANTO AVE
SAUGET IL 62201
4. Generator's Phone (618 274-5000

A. State Manifest Document Number: INA 1047308
B. State Generator's ID: N/A

5. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC.
6. US EPA ID Number: I L D 0 9 9 2 0 2 6 8 1
C. State Transporter's ID:
D. Transporter's Phone: (219)423-1655

7. Transporter 2 Company Name:
8. US EPA ID Number: . . . . . .
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number: I N D 0 7 8 9 1 1 1 4 6
G. State Facility's ID:
H. Facility's Phone: (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a RQ, HAZARDOUS WASTE, SOLID, N.O.S., (CONTAINS ARSENIC TRIOXIDE, CADMIUM), 9, NA3077, PG III			040	Y	D006
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BV1073 P012

K. Handling Codes for Wastes Listed Above
D01-LANDFILL
Net 36,460#

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Ted Winchester
Signature: [signature]
Date: Month 8 Day 10 Year 95

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bob Stuckey
Signature: Bob Stuckey
Date: Month 08 Day 10 Year 95

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date: Month . Day . Year .

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: SANDY HLTMACHER
Signature: Sandy Hltmacher
Date: Month 08 Day 11 Year 95

GENERATOR / TRANSPORTER / FACILITY

In case of a spill call the Indiana Office of Environmental Response at 317/241-4336 (day or night) and the National Response Center at 800/424-8802 or 202 426 2675.

INA 1047308

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

OF ILLINOIS

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved, OMB No. 2050-0039, Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ILD 062444435

Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

A. Illinois Manifest Document Number IL6794095 FEE PAID IF APPLICABLE

B. Illinois Generator's ID 1631215009

3. Generator's Name and Mailing Address
BIG RIVER ZINC
ROUTE 3 AND MONSANTO

Location If Different
SAUGET, IL 62201
800 645-8265

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

C. Illinois Transporter's ID

D. ( ) Transporter's Phone

5. Transporter 1 Company Name
Clean Harbors Env. Services, Inc.

6. US EPA ID Number MAD 039322250

E. Illinois Transporter's ID

F. ( ) Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

G. Illinois Facility's ID 0316000031

9. Designated Facility Name and Site Address
CLEAN HARBORS OF CHICAGO, INC.
11800 S. STONY ISLAND AVE.
CHICAGO, IL 60617

10. US EPA ID Number ILD 000608471

H. Facility's Phone (312) 646-6202

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. WASTE DICHLOROMETHANE, 6.1, UN1593, PG III	002	DF	0001.0	G	EPA HW Number XXU080 Authorization Number 0001
b. WASTE Paint related material, 3, UN1263, PG II (PET DIST BASED ENAMEL AND COATINGS)	008	DF	00040	G	EPA HW Number XX Authorization Number 0002
c. WASTE Corrosive liquids, n.o.s, 8, UN1760, PG II (PHOSPHORIC ACID BASED CLEANER)	001	DF	00005	G	EPA HW Number XX Authorization Number 0002
d.					EPA HW Number XX Authorization Number

J. Additional Description for Materials Listed Above
A:PLC 2X16
B:PLC 7X16, 1X55
C:PLC 1X16

K. Handling Codes for Wastes Listed Above In Item #14
G = Gallons Y = Cubic Yards

15. Special Handling Instructions and Additional Information
C71565/D727335

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Date Month Day Year 07 02 9

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name MICHAEL A BALDA | Signature | Date Month Day Year 07 02 9

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name | Signature | Date Month Day Year

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA
(RCRA AND PCB WASTES)

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039, Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ILD067444435 Manifest Document No. 94046

2. Page 1 of 2

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address / Location If Different

[illegible] Zinc
[illegible] Avenue [illegible] of Il [illegible]

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* [illegible]

A. Illinois Manifest Document Number IL6794096 FEE PAID IF APPLICABLE

B. Illinois Generator's ID 1631215009

5. Transporter 1 Company Name: Clark Bros Oil Service 6. US EPA ID Number: ILD [illegible]

C. Illinois Transporter's ID 1428

D. (617) [illegible] Transporter's Phone

7. Transporter 2 Company Name 8. US EPA ID Number

E. Illinois Transporter's ID

F. ( ) Transporter's Phone

9. Designated Facility Name and Site Address: Spring Grove Resource Recovery, 1901 Spring Grove Ave, Cincinnati Ohio 45232 10. US EPA ID Number: OHD000816629

G. Illinois Facility's ID 0316100002

H. Facility's Phone (513) 681-5738

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Kerosene, 3, UN1223, PGIII	001	DF	00016	G	EPA HW Number XXD001 Authorization Number 00028
b. Waste Kerosene, 3, UN1223, PGIII	001	DM	00050	G	EPA HW Number XXD001 Authorization Number 00028
c. Waste Acetone, 3, UN1090, PGII	002	DM	00090	G	EPA HW Number XXU002 Authorization Number 00028
d. Waste Corrosive liquids, n.o.s., 8, UN1760, PGII (Hydrochloric Acid)	001	DF	00030	G	EPA HW Number XXD002 Authorization Number 00028

J. Additional Description for Materials Listed Above

11a) 1x16 CH028532 11c) 2x55 CH028532
11b) 1x55 CH028532 11d) 1x30 CH028534

K. Handling Codes for Wastes Listed Above In Item #14

G = Gallons Y = Cubic Yards

15. Special Handling Instructions and Additional Information

671565 / 1727335

PLATE # P7770

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name [illegible] Signature [illegible] Date Month Day Year 07 07 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name MICHAEL A BAUA Signature [illegible] Date Month Day Year 07 08 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name Signature Date Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name Signature Date Month Day Year

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-95

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I-L-D-0-6-2-4-4-4-4-3-5
Manifest Document No. [illegible]
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
Big River Zinc
Rt. 3 & Monsanto Ave.
Sauget, IL 62201
4. Generator's Phone (618) 274-5000

A. State Manifest Document Number INA 1162009
B. State Generator's ID

5. Transporter 1 Company Name: Chemical Waste Management, Inc.
6. US EPA ID Number: I-L-D-0-9-9-2-0-2-6-8-1
C. State Transporter's ID
D. Transporter's Phone 219-423-1655

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Chemical Waste Management of Indiana, L.L.C.
4636 Adams Center Road
Ft. Wayne, IN 46806
10. US EPA ID Number: I-N-D-0-7-8-9-1-1-1-4-6
G. State Facility's ID
H. Facility's Phone 219-447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a RQ, Hazardous Waste, Solid, N.O.S., 9, NA3077, PGIII (D006, P012)	001	CM	0020	Y	D006
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
BV1073 P012

K. Handling Codes for Wastes Listed Above
D80

15. Special Handling Instructions and Additional Information
Emergency Response Information: CHEM TREC (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Ted Winchester
Signature
Date: Month 2 Day 27 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Chris Reichert
Signature
Date: Month 02 Day 27 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name
Signature
Date: Month Day Year

GENERATOR

In case of a spill call the Indiana Office of Environmental Response at 317/241-4500 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INA 1162009

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-95

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.L.D.0.6.2.4.4.4.4.3.5
Manifest Document No. 0002
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
Big River Zinc
Rt.3 & Monsanto Ave. Sauget,IL 62201

A. State Manifest Document Number INA 1162032
B. State Generator's ID

4. Generator's Phone (618) 274-5000

5. Transporter 1 Company Name
Chemical Waste Management,Inc.
6. US EPA ID Number I.L.D.0.9.9.2.0.2.6.8.1
C. State Transporter's ID
D. Transporter's Phone 219-423-1655

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Chemical Waste Management of Indiana,L.L.C.
4636 Adams Center Road
Ft.Wayne,IN 46806
10. US EPA ID Number I.N.D.0.7.8.9.1.1.1.4.6
G. State Facility's ID
H. Facility's Phone 219-447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a RQ,Hazardous Waste,Solid,N.O.S., 9,NA3077,PGIII (D006,P012)	001	CM	00020	Y	D006
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
BV1073 P012

K. Handling Codes for Wastes Listed Above
D80

15. Special Handling Instructions and Additional Information
Emergency Response Information: CHEM TREC (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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GENERATOR

Printed/Typed Name: Ted Winchester
Signature: Ted Winchester
Date: Month 2 Day 29 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Chris Reuchlein
Signature: Chris Reuchlein
Date: Month 02 Day 29 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name
Signature
Date: Month Day Year

In case of a spill call the Indiana Office of Environmental Response at 317/241-4536 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INA 1162032

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE *Form designed for use on elite (12-pitch typewriter.)* *Form Approved. OMB No. 2050-0039. Expires 9-30-94*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: I·L·D·0·6·2·4·4·4·4·3·5
Manifest Document No.: [illegible]
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
BIG RIVER ZINC
RT. 3 AND MONSANTO AVE.
SAUGET, IL. 62201

4. Generator's Phone (618) 274-5000

A. State Manifest Document Number: INA 0973225
B. State Generator's ID: 3365612203

5. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC.
6. US EPA ID Number: I·L·D·0·9·9·2·0·2·6·8·1
C. State Transporter's ID: 0075
D. Transporter's Phone: 800-894-9462

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address
ADAMS CENTER LANDFILL
4636 ADAMS CENTER ROAD
FORT WAYNE, INDIANA 46806

10. US EPA ID Number: I·N·D·0·7·8·9·1·1·1·4·6
G. State Facility's ID:
H. Facility's Phone: 219-447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Total Wt/Vol.	I. Waste No.
a RQ, HAZARDOUS WASTE, SOLID, N.O.S.(CADMIUM, LEAD) 9, NA3077, III RQ(D006, D008) WPS#BS1758	001	CM	00016	Y	D006 D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above: Roll off # 249167

K. Handling Codes for Wastes Listed Above: D81 Net 22320 #

15. Special Handling Instructions and Additional Information: IN EVENT OF EMERGENCYYCONTACT CWM AT 800-765-8713
CSA TECHNICAL SERVICES PROJECT#20203(STS)
In case of discrepancy Contact Doug Dishey 618 274 2204

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: X [illegible] Signature: [illegible] Date: Month [illegible] Day [illegible] Year [illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Guy [illegible] Signature: [illegible] Date: Month 09 Day 26 Year 94

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted Item 19.
Printed/Typed Name: Sandy [illegible] Signature: Sandy [illegible] Date: Month 09 Day 26 Year 94

In case of a spill call the Indiana Office of Environmental Response at 317/241-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INA 0973225

EPA Form 8700-22
Previous editions are obsolete
State Form 11265 (R/1-39)

BIG RIVER ZINC CORPORATION
ROUTE 3 & MONSANTO AVENUE
SAUGET, ILLINOIS 62201

TEL: 618-274-5000
FAX: 618-274-4444

RECEIVED
NOV 06 1995
OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA, REGION V

November 1, 1995

Joseph M. Boyle
Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides, and Toxics Division
Unites States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

RE: Response to Information Request
Generation and Exportation of Solid and/or Hazardous Wastes.

Dear Mr. Boyle,

Big River Zinc Corporation does not export solid and/or hazardous waste from our facility located at Route 3 and Monsanto Avenue, Sauget, Illinois 62201.

Since Big River Zinc Corporation does not export solid or hazardous wastes, I called your office to determine the nature of your request for information.

After speaking with Mr. Wojtas by telephone, he clarified for me that your questions dealt with "Copper Cake", so I will also describe "Copper Cake for your in this response to hopefully avoid future confusion.

Big River Zinc Corporation has and continues to export Copper Cake a by-product of Big River Zinc Corporation's solution purification process. This Copper Cake contains copper, nickel, cobalt, and other metals in concentrations high enough to allow for economical recovery of these metals. At $20.00/pound Cobalt and $1.30/pound Copper, the value of metals contained in Copper Cake exceeds $3000.00/ton.

RESPONSES TO INFORMATION REQUEST

1. Provide a list of all shipments of solid and hazardous wastes generated at Big River Zinc Corporation and exported from the United States for the period from January 1, 1994 to the date of receipt.

   No solid and/or hazardous wastes were generated at Big River Zinc Corporation and subsequently exported from the United States.

2. For each shipment listed above, provide copies of any and all shipping papers, including, but not limited to manifests or bills of lading.

   Not applicable. See number 1 above.

3. For all solid waste shipments listed above, provide copies of any and all hazardous waste determinations made pursuant to 35 Ill. Adm. Code 721.111. If a determination was made that the solid waste was specifically excluded from regulation under 35 Ill. Adm. Code 721.104, provide the basis for such determination.

   Not applicable. See number 1 above.

4. For all hazardous waste shipments listed above, provide copies of all Notices of Intent to Export, EPA Acknowledgments of Consent, and Annual Reports prepared or received in accordance with 35 Ill. Adm. Code 721 Subpart D.

   Not applicable. See number 1 above.

5. Provide the following notarized certification by a responsible company officer:

   I certify under penalty of law that I have personally examined and am familiar with the information submitted in responding to the information request for the production of this document. Based on my review of all relevant documents and inquiry of these individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

George M. Obeldobel 1 Mar 95

George M. Obeldobel
Executive V.P. and General Manager

OFFICIAL SEAL
SANDRA K ANDERSON
NOTARY PUBLIC STATE OF ILLINOIS
MY COMMISSION EXP. SEPT 28,1998

Sandra K. Anderson

If additional information or clarification is needed, please feel free to call me at any time.

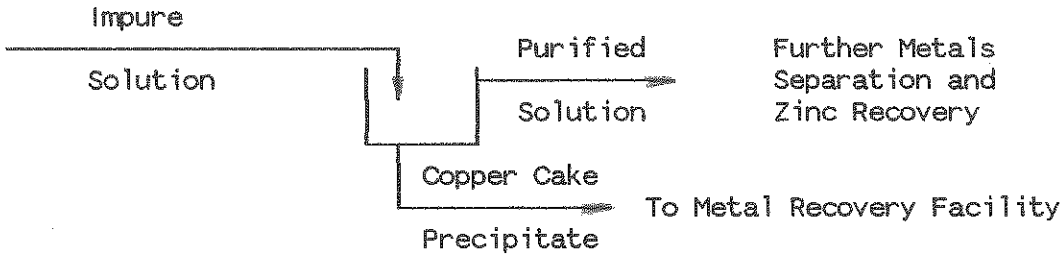
Sincerely,

Ted Winchester
Environmental Manager

Enclosures: Responses to information request, signed and noterized by Corporate Officer

Internal Memoranda - Sequence of events concerning "spill incident"

Sales contract with Outokumpu Chemical OY



A "by-product" is defined in 35 Ill. Adm. Code 721.101(c)(3) as follows:

> A "by-product" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process...

Big River Zinc Corporation sells Copper Cake to metal recovery facilities for the purpose of extracting the metal(s) content. This material is similar to the normal feed stock of the receiving facility. Copper Cake has a long history of demonstrated commercial value, and has not been disposed of as a hazardous waste.

Relative to your initial letter request, Big River Zinc Corporation contends that Copper Cake is not a solid waste because :

(1) The material is not discarded,
Excluded from RCRA regulation per 35 Ill. Adm. Code 721.102(a)(1)

(2) The material is used as a replacement for, or supplement to, feedstocks normally used by the receiving facility, and
Excluded from RCRA regulation per 35 Ill. Adm. Code 721.102(e)(1)(A)
Excluded from RCRA regulation per 35 Ill. Adm. Code 721.102(e)(1)(B)

(3) The material has a history of commercial and economic value.
Excluded from RCRA regulation per 50 FR 614-634

Since Copper Cake fails the definition of a solid waste, it therefore cannot be classified as a hazardous waste.

Big River Zinc Corporation is aware of a transportation incident involving Copper Cake sold to Outokumpu Chemical OY by Big River Zinc Corporation prior to 1993. Enclosed you will find a memorandum listing the sequence of events as explained by the owners of the material. Apparently, Outokumpu did not recover all the metal value right away and repackaged some of the material and were sending a test lot for verification testing of the metal recovery at a firm in South Africa when the icident occurred.

Also included is a copy of the sale agreement with Outokumpu Chemical OY (a.k.a. Kokkola Chemical) for Copper Cake Shipments. As you can see, the Copper Cake was sold to Outokumpu Chemical OY, a reputable metal recovery firm with experience in treating such materials for the sole purpose of recovering the contained metal values.

BIG RIVER ZINC

MEMORANDUM

TO: GMO 08/24/95

FROM: SPC

RE: Copper Cake-Kokkola Chemicals

After several phone calls and faxes,I finally talked to Antti Aaltonen,the manager of operations at Kokkola, this morning.

Kokkola treated some of BRZ's copper cake at a very slow rate after our shipments in 1991, 92, and 93. They were able to buy higher grade nickel material and decided to stockpile our material to the extent of about 2,000 tons.

After one year of negotiations with JAD Metal Concentraters, Aaltonen was able to secure all necessary permits and documents from both S.African and Finnish authorities for a 500 ton trial ``toll'' shipment to be made. The terms of the deal were not disclosed, except that Kokkola retained title to the copper cake and the zinc and copper metal recovered was sold in South Africa, while the cobalt was returned to Finland. All BRZ drums had previously been unloaded into double layered super sacks which were not marked. The BRZ drums had been destroyed.

The super sacks were loaded into containers and shipped. While awaiting trans-shipment in Rotterdam the containers were observed to be ``leaking''. Upon examination it was determined that the ``leaks'' were merely condensation, except for three liters of ``some kind of liquid'' which was recovered.

Greenpeace was somehow informed and caused the incident to be picked up by the international press.

Mr. Aaltonen told me that in spite of the fact that Kokkola has done nothing wrong, the company has decided to take the 500 tons back and will treat the stockpile of copper cake at Kokkola.

cc: Ashby,Ludwig,Schmidt,Winchester

Kokkola Chemicals

TELEFAX MESSAGE

Date	Number of pages
August 24, 1995	(this page incl.)

TO:
Mr. Sal Cicciolella
Big River Zinc
+1 618 274 4444

COPY TO:

FROM:

Kirsi Hormio

MESSAGE:

Re: our tel.con today

consignee: J.A.D Metal Concentraters (PTY) Ltd.
P.O. Box 11234 Rynfield
South Africa

Tel. + 27 11 845 1892
Fax + 27 11 845 2401

Managing Director: Mr. Doug Gossling

Best Regards,

Kirsi Hormio

KOKKOLA CHEMICALS OY

Address	Telephone	Telecopy
P.O. Box 286	Nat. (968) 8280 111	(968) 8280 373
FIN-67101 KOKKOLA	Int. +358 68 8280 111	+358 68 8280 373
Finland		

BIG RIVER ZINC CORPORATION
Contract No. 55-06-17-91

THIS AGREEMENT, made this 17th day of June 1991, by and between BIG RIVER ZINC CORPORATION, hereinafter referred to as "Seller," and OUTOKUMPU CHEMICAL OY, hereinafter referred to as "Buyer," whereby Buyer agrees to buy and receive, and Seller agrees to sell and deliver the material described in Section 3, hereinafter referred to as the "Material," on the following terms, covenants, and conditions:

1. DEFINITIONS

In this Agreement, unless otherwise specified, the term "dollar" or "$" shall mean dollar(s) of United States of America currency. The term "cent" shall mean cent(s) of United States of America currency. The term "ppm" shall mean parts per million. The term "Refinery" shall mean Seller's smelting facilities at Sauget, Illinois. The term "party" shall mean either Buyer or Seller. The term "destination" shall mean the Buyer's works in Kokkola, Finland.

Elements from the periodic table are abbreviated and spelled out interchangeably in this Agreement.

2. DURATION AND OPTION PERIOD

This Agreement covers the months of June through December 1991.

The Seller will have the option to extend this Agreement for the calendar year 1992 for the Seller's full production of Material of approximately 950 dry short tons during the calendar year 1992. It is understood that the quantity of Material for 1992 may vary depending on the raw materials processed in the Seller's refinery and the process parameters for the copper/cobalt/nickel purification process.

3. MATERIAL

Zinc refinery purification cake produced at the Seller's refinery. The Material is from the same process and same quality as that delivered to Buyer by Seller through Tradescope Limited during the calendar year 1990. The weighted average assay of the Material (on dry weight basis) shall be approximately:

Zn	7 - 8%
Pb	2 - 3%
Cd	0.8 - 1.0%
Cu	35 - 40%
Co	5 - 7%
Ni	2 - 3%
As	17 - 20%

4. QUANTITY

Approximately one thousand two hundred fifty (1,250) dry short tons of Material in stock at June 15, 1991, plus approximately five hundred (500) dry short tons of production for the period June 15 through December 31, 1991.

5. SHIPMENT, PACKAGING AND DELIVERY

The Material will be packaged in 55-gallon steel drums with heavy plastic liner to protect the drums from corrosion during shipment. The drums will be good quality, will be sealed with lids, and will be non-leaking. The drums will be banded together and onto wooden pallets for fork truck handling, and will be packed and secured in a standard sea container suitable for sea transportation.

All containers shall comply with all applicable laws and regulations for shipment of the Material and labeled in accordance with U.S. Department of Labor Occupational Safety and Health Administration Hazardous Communication Standards.

A "Material Safety Data Sheet" prepared in accordance with the U.S. Department of Labor Occupational Safety and Health Administration Hazard Communication Standard will be furnished prior to delivery or with the shipment of the Material.

Delivery of the Material from the Seller to the Buyer will occur when loaded and secured in sea containers at the Seller's Refinery dock.

The Material will be shipped during the period September through December 1991 to start arriving at the destination approximately mid-October 1991.

The Seller will cooperate with the Buyer in selecting a suitable carrier at the lowest freight rate to the Buyer's destination. The Seller will arrange for transportation, furnish documents necessary to effect shipment, and will pay the transportation bills subject to reimbursement described in Section 7, Payment.

6. PRICE

The Buyer will pay the Seller for the Material less charges as follows:

Payable Metals

Cobalt - one hundred percent (100%) of the assayed cobalt content.

Price

$0.89 (U.S. dollars) per pound of contained cobalt determined by weight and assay.

7. PAYMENT

The Buyer will pay the Seller for the Material within forty five (45) calendar days after the Material is received at the Buyer's destination.

The Buyer will reimburse the Seller for all freight charges, all documents prepared and charged by the shipping company/transfer agent, and duties charged at the Buyer's destination. The Seller will submit copies of invoices received to verify the cost incurred by the Seller. The Buyer will reimburse the Seller for the cost incurred within thirty (30) calendar days after Seller submits an invoice to the Buyer.

All payments shall be made by wire transfer of funds to:

Boatmen's Bank
St. Louis, Missouri
ABA #081000032
For credit to: Big River Minerals Corporation
Account #1205438

8. WEIGHING, SAMPLING, AND MOISTURE DETERMINATION

Weighing, sampling, and moisture determination of the Material shall be carried out at Buyer's expense at the receiving works in accordance with accepted industry practice.

The Buyer may, if it chooses, consolidate individual container shipments into lots for assay purposes. However, the lot size shall not exceed five (5) containers.

Seller shall have the right to designate a representative to be present at such operations at its own expense. The absence of Seller's representative is deemed to waive such right in each instance. Buyer's determinations of weight and moisture shall govern and shall be accepted as final. Samples shall be divided into four equal parts: one for Seller's determination, one for Buyer's determination, one for the umpire, and one for reserve. The umpire and reserve samples shall be sealed and retained by Buyer.

9. ASSAYS

Assays for the elements listed in this paragraph for payment shall be made independently by the respective assayers of Seller and Buyer and the results shall be exchanged promptly in the usual manner by cross mailing. Should the difference between Buyer's and Seller's assay be not more than:

Element	Limit
Cobalt	0.20%

The exact arithmetical mean of the two results shall be taken for settlement purposes. In the event that the difference between Buyer's and Seller's assay is more than the limit set forth above, the umpire's sample will be referred to the chemist shown in this Section for assaying. If the umpire assay is between the exchanged assays, the final assay shall be the average of the umpire and the assay nearest to it. If the umpire assay falls outside the exchanged assays, the final assay shall be the middle assay of the three. The chemist shall be:

Alfred H. Knight Laboratories Ltd.
49 Cannonball Road
P. O. Box 183
Pompton Lakes, New Jersey 07442

If the umpire's assay coincides with either Buyer's or Seller's assay, then the umpire's assay shall be used for settlement.

The cost of the umpire's assay shall be borne by the party whose result is further from that of the umpire. Should the umpire's result be the exact arithmetical mean of those of Buyer and Seller, the cost of the umpire's assay shall be borne equally by the parties.

10. FORCE MAJEURE

In the event of any contingency preventing or interrupting either parties' production, shipment, carriage, or delivery of the Material deliverable hereunder, including, but not limited to, fire, flood, breakdown, accident, war (whether declared or not or whether civil or international), governmental action, labor trouble (there being no obligation by either party to settle any labor trouble on terms not otherwise acceptable to such party), shortage of fuel, power, raw materials or supplies, restriction or shortage of transportation facilities, cessation or reduction of operations at the affected party's facilities occasioned by any act of God, or any other cause beyond the control of the affected party, whether of the nature or subject matter herein enumerated or not, the affected party shall be under no obligation during the period of such prevention or interruption to perform its obligations under the terms and conditions of this Agreement. If Buyer is the affected party, it shall be under no obligation to accept deliveries hereunder; provided, however, that notice of force majeure from Buyer shall not affect delivery of the Material already loaded or already in route prior to Buyer giving written notice which cannot be cancelled without payment of dead freight or other cancellation costs, unless Buyer assumes cost of such cancellation. The affected party shall give prompt written notice to the other party of such contingency and shall also give written notice when the contingency ceases to have effect.

Upon termination of such force majeure conditions, the undelivered balance of the tonnage hereof shall be shipped by Seller and accepted by Buyer under the terms and conditions of this Agreement; provided, however, that if the force majeure event continues for more than ninety (90) days and the Buyer is the affected party, Seller may sell the Materials not deliverable due to the force majeure event and, in the event of such sale, the quantity sold shall be deleted from this Agreement. If Seller is the affected party, Buyer may purchase replacement material during the period of such force majeure conditions from any third party and may delete the quantity of Material purchased from this Agreement.

11. INSPECTION, CLAIMS AND WARRANTIES

ANY CLAIMS FOR SHORTAGE IN QUANTITY OR DEFECT IN QUALITY OF THE MATERIAL MUST BE MADE BY WRITTEN NOTICE TO SELLER WITHIN SIXTY (60) DAYS AFTER DELIVERY TO THE BUYER; OTHERWISE, ANY SUCH CLAIMS SHALL BE DEEMED TO HAVE BEEN WAIVED. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION HEREIN, AND SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, OR FITNESS FOR PARTICULAR USE OR OTHERWISE, EXCEPT THAT THE MATERIAL SOLD HEREUNDER SHALL CONFORM TO SELLER'S APPROXIMATE ASSAYS SET FORTH HEREIN; AND BUYER ASSUMES ALL RISK WHATSOEVER AS TO THE RESULT OF THE USE OF THE MATERIAL PURCHASED, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES OR IN ANY PROCESS.

12. TITLE AND RISK OF LOSS

Title and risk of loss to the Material shall pass to Buyer when the Material is delivered to the Buyer at the Seller's Refinery.

13. NOTICES

All notices required or permitted by this Agreement shall be sent by facsimile and confirmed in writing. Notices shall be addressed to:

Buyer: OUTOKUMPU CHEMICAL OY
P. O. Box 26, SF-67101
Kokkola, Finland
Attention: Mr. Hans-Erik Andtbacka
FAX: 358-68-281307

Seller: BIG RIVER ZINC CORPORATION
Route 3 & Monsanto Avenue
Sauget, Illinois 62201
Attention: Mr. J. B. McCown
FAX: 618/274-4444

Notices shall be effective as of the next business day on which sent, in accordance with this paragraph. Either party may, by notice to the other, change its address for the receipt of notices.

14. ARBITRATION

Unless otherwise specified herein, in the event that any difference, dispute, or controversy arising out of or under this Agreement cannot be settled by mutual agreement within thirty (30) days, then either party may give notice to the other party that such difference, dispute, or controversy will be submitted to arbitration. If the parties are still unable to settle their disagreement within thirty (30) days after the initial notice, then such difference, dispute, or controversy shall be determined by three arbitrators under the Commercial Arbitration Rules of the American Arbitration Association. Arbitration hearings shall be held in St. Louis, Missouri. Both parties agree to abide by the decision of the arbitration panel designated to serve on the matter by the Association and that such final decision may be entered as a judgment in any competent court of law.

15. LAW GOVERNING

The parties agree that the laws of the State of New York shall govern the interpretation and performance of this Agreement and all rights and remedies of the parties hereto.

16. LIABILITY PERFORMANCE

In no event whatsoever shall either party in the performance of this Agreement be liable to the other party for incidental and/or consequential damages. Seller's liability shall be limited to the purchase price of the Material furnished hereunder in respect to which damages are claimed.

17. ASSIGNMENT

Neither party shall assign this Agreement, in whole or in part, without the prior written consent of the other.

18. ENTIRE AGREEMENT

This Agreement contains the entire agreement of the parties with respect to the Material. No amendment, modification, supplement, or rescission of this Agreement shall be effective unless it is done in writing and signed by both parties.

19. TITLES

Titles which precede sections of this Agreement are not part of this Agreement.

20. NO WAIVER

No waiver by either party of any of the terms or conditions of this Agreement by the other party shall be construed as a waiver of any succeeding breach of any other term or condition.

IN WITNESS WHEREOF, Seller and Buyer, respectively, have caused this Agreement to be duly executed, in duplicate, as of the day and year first above written.

THIS AGREEMENT CONTAINS A BINDING ARBITRATION PROVISION WHICH MAY BE ENFORCED BY THE PARTIES.

BIG RIVER ZINC CORPORATION

By J. B. McCann

Title Gen. Mgr.

August 21, 91

OUTOKUMPU CHEMICAL OY

By

Title PRES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

OCT 04 1995

HRE-8J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Lonny L. Ludwig, Registered Agent
Big River Zinc Corporation
Route 3 & Monsanto Avenue
Sauget, Illinois 62201

Re: Section 3007 Information Request
Big River Zinc Corporation
Sauget, Illinois

Dear Mr. Ludwig:

This is a request for information by the United States Environmental Protection Agency (U.S. EPA) pursuant to its authority under Section 3007 of the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. §6927. The information requested relates to your company's export of solid and/or hazardous waste from the United States to foreign countries.

The information requested herein must be provided to this office within thirty (30) calendar days of receipt of this letter notwithstanding its possible characterization as confidential information. You may, pursuant to 40 CFR 2.203(a), assert a business confidentiality claim covering all or part of the information in the manner described in 40 CFR 2.203(b). Information covered by such a claim will be disclosed by U.S. EPA only to the extent and by means of the procedures set forth in 40 CFR Part 2, Subpart B. Any requests for confidentiality must be made when the information is submitted, since any information not so identified may be made available to the public without further notice.

The written statements submitted pursuant to this request must be notarized and submitted under an authorized signature certifying that all statements contained therein are true and accurate to the best of the signatory's knowledge and belief. Any documents submitted to U.S. EPA Region V pursuant to this information request should be certified as true and authentic to the best of the signatory's knowledge or belief.

Should the signatory find, at any time after the submittal of the requested information, that any portion of the submitted information is false, misleading, or incomplete, the signatory should so notify Region V. If any answer certified as true should be found to be untrue or misleading, the signatory can and may be prosecuted pursuant to 18 U.S.C. §1001. U.S. EPA has the authority to use the information requested herein in an

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administrative, civil, or criminal action.

If you have any questions regarding this matter, please contact Allen T. Wojtas, Enforcement and Compliance Assurance Branch, at (312) 886-6194. Your response should be sent to U.S. EPA, Region V, Enforcement and Compliance Assurance Branch (HRE-8J), 77 West Jackson Boulevard, Chicago, Illinois 60604, Attention: Allen T. Wojtas.

Sincerely yours,

Joseph M. Boyle

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch

Enclosure

cc: William Child, IEPA

administrative, civil, or criminal action.

If you have any questions regarding this matter, please contact Allen T. Wojtas, Enforcement and Compliance Assurance Branch, at (312) 886-6194. Your response should be sent to U.S. EPA, Region V, Enforcement and Compliance Assurance Branch (HRE-8J), 77 West Jackson Boulevard, Chicago, Illinois 60604, Attention: Allen T. Wojtas.

Sincerely yours,

ORIGINAL SIGNED BY
JOSEPH M. BOYLE

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch

Enclosure

cc: William Child, IEPA

bcc: Branch File
Section File

ECAB

CONCURRENCE REQUESTED FROM ~~REB~~			
SEC/BR SECRTRY			AP 10/3/95
~~OTHER STAFF~~	REB STAFF	REB SECTION CHIEF	REB BRANCH CHIEF
	atw 9/29/95	RDS 9/29/95	JMB 10/4/95

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

BIG RIVER ZINC CORPORATION ROUTE 3 & MONSANTO AVENUE SAUGET, ILLINOIS 62201	))))))	Information Request Pursuant to Section 3007 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6927

This is a request by the United States Environmental Protection Agency (U.S. EPA) issued pursuant to Section 3007 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6927. The issuance of this request serves to require Big River Zinc Corporation to submit information relating to its generation and exportation of solid and/or hazardous wastes.

On January 30, 1986, the State of Illinois was granted final authorization by the Administrator of U.S. EPA, pursuant to Sections 3006 of RCRA, 42 U.S.C. §6926, to administer a hazardous waste program in lieu of the Federal program. See 51 Federal Register 3778 (1986). As a result, facilities in Illinois qualifying for interim status under 40 CFR 270.70 and facilities applying for a RCRA permit are regulated under the Illinois provisions found at 35 Illinois Administrative Code (IAC) 720 et seq. rather than the Federal regulations set forth at 40 CFR 260 et seq.

I. INSTRUCTIONS

This request for information pertains to any and all information you may have regarding the generation and exportation of solid and/or hazardous waste at or from your facility located at Route 3 & Monsanto Avenue, Sauget, Illinois 62201.

If any information called for herein is not available or accessible in the full detail requested, the request shall be deemed to call for the best

information available. The request also requires the production of all information called for in as detailed a manner as possible based upon such information as is available or accessible.

The information must be provided notwithstanding its possible characterization as confidential information or trade secrets. You are entitled to assert a claim of confidentiality pursuant to 40 CFR 2.203(b) for any information produced that, if disclosed to persons other than officers, employees, or duly authorized representatives of the United States, would divulge information entitled to protection as trade secrets. Any information which the Administrator of this Agency determines to constitute methods, processes or other business information entitled to protection as trade secrets will be maintained as confidential pursuant to the procedures set forth in 40 CFR Part 2. A request for confidential treatment must be made when information is provided since any information not so identified will not be accorded this protection by the Agency.

The written statements submitted pursuant to this request must be notarized and returned under an authorized signature certifying that all statements contained therein are true and accurate to the best of the signatory's knowledge and belief. Should the signatory find at any time after submittal of the requested information that any portion of this submittal certified as true is false or misleading, the signatory should so notify U.S. EPA. If any information submitted under this information request is found to be untrue or misleading, the signatory can be prosecuted under Section 101 of Title 18 of the United States Code. U.S. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action.

The information requested herein must be provided, within thirty (30) calendar days following receipt of this request, to the United States Environmental Protection Agency, Region V, Attention: Allen T. Wojtas, RCRA Enforcement Branch (HRE-8J), 77 West Jackson Boulevard, Chicago, Illinois 60604.

II. DEFINITIONS

1. "Facility" means all contiguous land and structures, other appurtenances and improvements on the land used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g. one or more landfills, surface impoundments or combinations of them) (35 IAC 720.110).

2. "International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States (35 IAC 720.110).

3. "Solid waste" means a solid waste as defined in 35 Ill. Adm. Code 721.102 (35 IAC 720.110).

4. "Hazardous waste" means a hazardous waste as defined in 35 Ill. Adm. Code 721.103 (35 IAC 720.110).

5. "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in 35 Ill. Adm. Code 721 or whose act first causes a hazardous waste to become subject to regulation (35 IAC 720.110).

6. "Transporter" means a person engaged in the offsite transportation

of hazardous waste by air, rail, highway, or water. (35 IAC 721.110).

7. "Treatment" means any method, technique or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste or so as to render such waste nonhazardous or less hazardous; safer to transport, store or dispose of; or amenable for storage or reduced in volume (35 IAC 720.110).

8. "Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated disposed of or stored elsewhere. (35 IAC 720.110).

9. "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater (35 IAC 720.110).

10. "Manifest" means the shipping document originated and signed by the generator which contains them information contained by 35 Ill. Adm. Code 722 Subpart B (35 IAC 720.110).

III. REQUEST FOR ANSWERS TO QUESTIONS AND THE PRODUCTION OF DOCUMENTS

1. Provide a list of all shipments of solid and hazardous waste generated at Big River Zinc Corporation and exported from the United States for the period of time from January 1, 1994, to the date of receipt of this request.

2. For each shipment listed above, provide copies of any and all shipping papers, including, but not limited to manifests or bills of lading.

3. For all solid waste shipments listed above, provide copies of any and all hazardous waste determinations made pursuant to 35 IAC 722.111. If a determination was made that the solid waste was specifically excluded from regulation under 35 IAC 721.104, provide the basis for such determination.

4. For all hazardous waste shipments listed above, provide copies of all Notices of Intent to Export, EPA Acknowledgements of Consent, and Annual Reports prepared or received in accordance with 35 IAC Part 722 Subpart D.

5. Provide the following notarized certification by a responsible company officer:

   I certify under penalty of law that I have personally examined and am familiar with the information submitted in responding to this information request for the production of documents. Based on my review of all relevant documents and inquiry of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Issued this 4th day of October, 1995.

Joseph M. Boyle

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides, and Toxics Division
United States Environmental Protection Agency
Region V

INFORMATION REQUEST
RCRA ENFORCEMENT BRANCH APPROVAL
(Delegation 8-8)

AUTHORITY: ☒ RCRA §3007 only ☐ RCRA §3007 and CERCLA §104

INSTALLATION NAME: BIG RIVER ZINC CORP

LOCATION ADDRESS: ROUTE 3 & MONSANTO AVE

CITY: SAUGET

STATE: IL ZIP: 62201

REGISTERED AGENT: LONNY L. LUDWIG

IS THE MATTER IN RCRA LITIGATION OR UNDER A COURT ORDER?

☒ NO

☐ YES (Concurrence by Regional Counsel is required).

A. DRAFT	INITIALS	DATE
1. REB Staff Name ALLEN WOJTAS SECTION: ☒ IL/IN ☐ MI/WI ☐ OH/MN ☐ IL/MI/WI ☐ IN/OH/MN	atw	9/29/95
2. REB Section Chief		
3. ORC Attorney Name N/A (Only if the matter is in RCRA Litigation or under court order)		

B. FINAL		
1. REB Staff	atw	9/29/95
2. REB Section Chief	RBS for lh	9/29/95
3. ORC Attorney (For Litigation Consultation only)	N/A	
4. ~~REB~~ ECAB Chief	JMB	10/4/95
5. Assoc. Director, Office of RCRA (only if CERCLA §104 authority is referenced)	N/A	
6. WMD Director (only if CERCLA §104 authority is referenced)	N/A	

ILD 062 444 435 193 12150 09

IG RIVER ZINC CORP
OUTE 3 & MONSANTO AVE
SAUGET IL
62201

ILLINOIS Environmental Protection Agency
1993 Hazardous Waste Report
Form GM -- Waste Generation and Management

1993

Instructions for this form found on pages 13 - 30.

Sec. I WASTE DESCRIPTION

A. Waste Description: Plastic Drum Liners Containing Metal Residues
B. EPA Hazardous Waste Code D004 D006 D008 (30, 34, 38, 42, 46)
C. SIC code 3339 (50)
D. Origin Code 1 (54). System type M (55)
E. Source code A59 (59) A (63) A (65)
F. Point of measurement 1 (69)
G. Waste form code B307 (70)
H. Radioactive mixed 2 (73)
I. TRI constituent 3 (74)
J. CAS numbers: 1. (75) 2. (83) 3. (91) 4. (99) 5. (107)

Sec. II QUANTITY GENERATED AND MANAGED ON-SITE

A. UOM 2 (115) Density 11.0 (116) lbs/gal *(Same unit and density must be used for all quantities on this page)*
Quantity generated in : B Previous reporting year (120) 0.0 C. Current reporting year (130) 13.0
D. Did this location do any of the following to this waste (at this location): manage in exempt or regulated treatment, recycling, or disposal process? N (140) Y= Yes (Continue to System 1) N= No (Skip to Sec. III)
On-Site System 1: System Type M (141) Quantity managed on-site this year (145)
On-Site System 2: System Type M (155) Quantity managed on-site this year (159)

Sec. III OFF-SITE SHIPMENT

A. Was any of this waste shipped off site this reporting year? Y (169) Y= Yes (Continue to Box B) N= No (Skip to Sec. IV)
Site 1: Name and address of facility: CWM OF INDIANA, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE, IN, 46806
B. U.S. EPA ID No. of facility waste was shipped to: (175) IND078911146
C. System type shipped to M111 (182) D. Off-site availability code 1 (186)
E. Total quantity shipped in this reporting year: (187) 13.0
Site 2: Name and address of facility:

B. U.S. EPA ID No. of facility waste was shipped to: (197)
C. System type shipped to M (209) D. Off-site availability code (213)
E. Total quantity shipped in this reporting year: (214)

Sec. IV NEW WASTE MINIMIZATION ACTIVITIES

A. Did new activities in this year result in minimization of this waste? N (224) Y= Yes (Cont. to Box B) N= No (Cont. to Sec. V)
B. Activity W (226) W (228) W (231) W (234) C. Other effects (Y=Yes, N=No) (237)
D. Quantity recycled in reporting year due to new activities (238)
E. Activity/production index (248) F. Reporting year Source reduction quantity (251)

Sec. V REGULATED STORAGE

A. Did this site store RCRA wastes 90 days or more and then ship it off-site (to site shown in Section III)? (Y=Yes, N=No) N (261)
B. Did this site store RCRA wastes on-site for more than 90 days but waste is in storage at year end: (Y= Yes, N= No) N (262)
Quantity stored at year end and for 90 days or more that was generated this reporting year: (263)
Quantity stored at year end that was generated prior to this reporting year: (273)

COMMENTS: Y (283) Enter Y (Yes) if you have comments regarding this page and attach extra sheet.

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ILD 062 444 435 163 12150.09

ILO BIG RIVER ZINC CORP
ROUTE 3 & MONSANTO AVE
SAUGET IL
62201

ILLINOIS Environmental Protection Agency
1995 Hazardous Waste Report
Form GM — Generation and Management

1995

Instructions for this form found on pages 13 - 28.

Sec. I WASTE DESCRIPTION

A. Waste Description: Wood/metal/concrete containing metal residues
B. EPA Hazardous Waste Code D 0 0 6 (61) P 0 1 2 (65) (39) (43) (47)
C. SIC code 3 3 3 9 (64)
D. Origin Code 1 (55) System type M (56)
E. Source Code A 5 9 (60) A (63) A (66)
F. Point of measurement 1 (69)
G. Waste form code B 3 0 7 (70)
H. Radioactive mixed (74)
I. TRI Constituent 3 (75)
J. CAS numbers: 1. N 0 2 0 (78) 2. N 0 78 (84) 3. (92)
4. (100) 5. (108)

Sec. II QUANTITY GENERATED AND MANAGED ON-SITE

A. UOM 2 (116) Density 5.0 0 (117) lbs/gal *(Same unit and density must be used for all quantities on this page)*
Quantity generated in: B. Previous reporting year 6 4.0 (121) C. Current reporting year 6 3.0 (131)
D. Did this location do any of the following to this waste (at this location): manage in exempt or regulated treatment, recycling, or disposal process? Y (127) Y = Yes (Continue to System 1) N = No (Skip to Sec. III)
On-Site System 1: System Type M (142) Status (146) Quantity managed on-site this year (147)
On-Site System 1: System Type M (157) Status (161) Quantity managed on-site this year (162)

Sec. III OFF-SITE SHIPMENT

A. Was any of this waste shipped off site this reporting year? (172) Y = Yes (Continue to Site 1) N = No (Skip to Sec. IV)
SITE 1: Name and address of facility: CMW of Indiana
4636 Adams Center Road, Fort Wayne, IN 46806
B. U.S. EPA ID No. of facility waste was shipped to: I N D 0 7 8 9 1 1 1 4 6 (173)
C. System type shipped to M 1 1 1 (185)
D. Off-site availability code 1 (186)
E. Total quantity shippped in this reporting year: 6 3.0 (190)
SITE 2: Name and address of facility:
B. U.S. EPA ID No. of facility waste was shipped to: (200)
C. System type shipped to M (212)
D. Off-site availability code (216)
E. Total quantity shippped in this reporting year: (217)

Sec. IV NEW WASTE MINIMIZATION ACTIVITIES

A. Did new activities in this year resulting minimization of this waste? N (227) Y = Yes (Cont. to Box B) N = No (Cont. to Sec. V)
B. Activity W (228) W (231) W (234) W (237)
C. Other effects (Y=Yes, N=No) (240)
D. Quantity recycled in reporting year due to new activities (241)
E. Activity/production index (251)
F. Reporting year Source reduction quantity (254)

Sec. V. REGULATED STORAGE

A. Did this site store RCRA wastes 90 days or more and then ship it off-site (to site shown in Section III)? (Y=Yes, N=No) N (264)
B. Did this site store RCRA wastes on-site for more than 90 days but waste is in storage at year end: (Y=Yes, N=No) (265) N
Quantity stored at year end and for 90 days or more that was generated this reporting year: (268)
Quantity stored at year end that was generated prior to this reporting year: (276)

COMMENTS: Y (286) Enter Y(Yes) if you have comments regarding this page and attach extra sheet.

From: henry hudson
To: R5WST.R5WASTE(HORWITZ-MARK)
Date: Friday, August 18, 1995 7:05 pm
Subject: Big River Zinc

JOHANNESBURG, Aug 17 (Reuter) - South African environmental activists said on Thursday they wanted to stop the import of 500 tonnes of toxic waste from Finland.

Peter Lukey of activist group Earthlife Africa said the group was consulting lawyers in an attempt to prevent the hazardous chemicals from being imported for recycling.

''This export must be returned to Finland at once. Earthlife Africa is exploring legal means to halt the shipment,'' Lukey told Reuters at a conference on environmental policy.

South African Environment Minister Dawie de Villiers said earlier he had ordered a probe of a permit granted by his department for the waste to be imported from Finland.

''I have requested the department to go into this and get all the facts. We are giving our full attention to it,'' he said, adding that he was not aware of the the permit at the time it had been issued. De Villiers said in October last year the government would not allow the importation of toxic waste.

Lukey said the shipment, which he said included cancer causing chemicals and at least 16 percent arsenic in copper arsenide cake, was just one of several planned by the company which had been granted the permit.

Earthlife official Chris Albertyn said the waste was being transported on the ship Saint Irene and was on its way to South Africa after stopping in Hamburg, Germany.

The hazardous waste is expected to arrive in South Africa's Indian ocean port of Durban on August 23. Albertyn said the waste had orginated in the United States, at an Illinois-based mining company, Big River Zinc.

Reut08:12 08-17-95

Illinois Environmental Protection Agency · 2009 Mall Street, Collinsville, Illinois 62234

Collinsville Regional Office
Telephone: (618) 346-5120
Fax: (618) 346-5155

DATE: 7/8/96

TO: Mike Cunningham

FROM: Chris Calnowsky

MESSAGE: Mike I don't have your address and mail code. Could you call me with it.

NUMBER OF PAGES: 4
(Including this cover page)

To Recipient: If all pages are not received, please contact (618) 346-5120.

TEP:cas/5

Thad Slaughter 5HR-12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:

5HR-JCK-13

MAY 13 1991

Ms. Dorothy Gunn
Illinois Pollution Control Board
Suite 11-500
100 W. Randolph Street
Chicago, Illinois 60601

Dear Ms. Gunn:

The United States Environmental Protection Agency (U.S. EPA) Region V has reviewed the proposed emergency rule: Certain Hazardous Wastes from Primary Zinc Smelting and Refining, in docket R91-11, received by telefax on May 7, 1991.

U.S. EPA Region V takes the position that the proposed emergency rule is acceptable. The reasons for this position are detailed below.

U.S. EPA understands that the emergency rule is intended primarily to benefit Big River Zinc Corporation, who seeks relief from the July 1, 1991 termination of the exclusion of K066 wastes. This exclusion was terminated by a rulemaking that appeared in the Federal Register on September 1, 1989 (54 FR 36592). This rulemaking was adopted by the Illinois Pollution Control Board, effectively becoming State law on August 22, 1990.

Big River supports its position by citing a remand of the Federal rule in the court case American Mining Congress v. EPA, 907 F. 2d 1179 (DC 1990). Big River also asserts that economic hardship will occur because no other State has adopted this regulation.

In the court case, the American Mining Congress offered three bases for the challenges:

1. The relisting was beyond the agency's statutory authority;
2. U.S. EPA failed to offer an adequate reasoned explanation for its decision; and
3. U.S. EPA's decision to list the materials was promulgated without adequate opportunity for notice and comment.

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The court rejected the first and third challenges. However, for purposes of the second challenge the court remanded the case back to U.S. EPA requiring us to substantiate our decision to relist the wastes.

In the short time provided, U.S. EPA Region V, has not had the opportunity to determine the status of the Court's remand. However, it appears at this time that the Federal regulation has not been successfully challenged; therefore U.S. EPA is only required to supply additional support for its decision to relist these six wastes.

U.S. EPA Region V notes that Big River has apparently represented to the Board that the appellate court left the impression the regulation is likely to be overturned. In fact, upon reviewing the court's opinion, it appears the Federal appellate court in the relevant case went to great pains to show deference to the Agency's judgement, but noted that the Agency had, unfortunately, relied upon conclusory statements without supplying the supporting documentation necessary.

The court made it a point to say that it did not conclude that the Agency is "incapable of adducing sufficient evidence reasonably to support its decision to list the materials at issue." In fact, the court noted that evidence may already be part of the data to which the agency alluded but failed to submit. Thus, this decision did not result in a court rejection of the regulation. Because of this, U.S. EPA Region V assumes the regulation has not been stayed.

If the Federal regulation is not stayed, the language of the emergency State rule, as constructed, would terminate the exclusion on July 1, 1991. This is because the language requires the exclusion only to extend to the time the State regulation fails to be equivalent to the Federal program and/or becomes less stringent than the existing Federal rules. Therefore, in order for the State program to be equivalent to the Federal program, the State effective date will also have to be, according to the emergency rule, July 1, 1991. Obviously, this language will then not offer any relief to Big River and is a useless gesture on the part of the Board.

If the Federal regulation is stayed, then the language, as constructed, would delay the termination of the exclusion until the stay was lifted or the regulation was withdrawn. If the rule was eventually withdrawn, the language allows the extension of the exclusion to continue. This would not conflict with the Federal program nor offer a less stringent standard then the Federal rules provide.

Although it is not clear whether or not the Federal regulation has been stayed, U.S. EPA Region V agrees that, in either event, the language of the emergency rule would not be in conflict with, or in contravention of, the Federal RCRA program.

Big River's second argument, that no State other than Illinois has adopted the September 1, 1989 rule will soon become moot. In Region V, Minnesota is adopting the rule on May 21, 1991, Indiana has preliminarily adopted the rule on January 24, 1991, and submitted it for comments. Ohio has also submitted a draft version of the rule for comments.

In conclusion, U.S. EPA Region V finds that the emergency rule will not conflict with the Federal program and that it will not provide for less stringent standards than the Federal rules.

Please contact Mr. Gary Westefer of my staff, at (312) 886-7450, if you have any questions.

Sincerely yours,

for William E. Muno
Associate Director for RCRA
Waste Management Division

cc: Morton Dorothy, IPCB
Tom Cavanagh, IEPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

MAY 09 1991

DATE:

SUBJECT: Big River Zinc Corporation - Emergency Rule Making

FROM: Joseph M. Boyle, Chief
Technical Enforcement Section IL/IN, REB

TO: Gary Westefer
Regulatory Development Section, PMB

As you requested in your May 7, 1991, memorandum, a review was completed of the Illinois Pollution Control Board's (IPCB) draft emergency rule. The emergency rule will grant relief to Big River Zinc Corporation (BRZ).

The comments are based on the assumptions that the wastes discussed in the emergency ruling (a) are solid wastes, as defined by §1004(27) of the Resource Conservation and Recovery Act (RCRA), (b) are not solid wastes included in the scope of the Bevill exemption, effective date July, 1991, (40 CFR 261.4(b)(7)(i-xx)), and (c) are a hazardous listed waste, K066, sludge from treatment of process waste water and/or acid plant blowdown from primary zinc production (40 CFR 261.32).

Based on the review, we do not feel that granting an emergency ruling by IPCB is an appropriate solution to the relief that BRZ seeks. The waste that BRZ seeks relief for is a listed hazardous waste, K066. If BRZ believes that the waste is not hazardous, then a delisting petition addressing appropriate regulatory and scientific issues should be filed.

As outlined in 53 **Federal Register** 35412 (1988), U.S. EPA reinstated the hazardous waste listing for sludge produced from treatment of process waste water and/or acid plant blowdown associated with zinc smelting operations. K066 wastes are subject to RCRA Subtitle C requirements because the wastes contain significant concentrations of lead and cadmium, lead and cadmium are toxic and are included in the list of hazardous constituents at Appendix VIII of 40 CFR 261, and cadmium and lead have been shown to leach from waste samples using a distilled extraction procedure. The Listing Background Document for Primary Zinc smelting and refining contains additional information explaining why K066 waste was subject to RCRA Subtitle C requirements.

In addition, U.S. EPA amended the definition of the mining waste exclusion found at 261.4(b)(7) to further clarify that

this waste did not meet the definition of "processing of ores and minerals". A further amended definition of the waste included in the Bevill exemption was defined in the September 29, 1989, 54 **Federal Register** 39298. The hazardous waste listing for sludge produced from treatment of process waste water and/or acid plant blowdown associated with zinc smelting operations, K066, was not included in the Bevill exemption.

If you should have any questions regarding this matter, please contact Thad Slaughter of my staff at 6-4460.

OFFICIAL FILE COPY

5HR-12:TS:ts:5/09/91/Filename:BRZ.er

SIGNATURE/INITIAL CONCURRENCE REQUESTED - RCRA ENFORCEMENT BRANCH (REB)									
TYP.	AUTH	IL/IN TES CHIEF	MI/WI TES CHIEF	MN/OH TES CHIEF	IL/MI/WI EPS CHIEF	IN/MN/OH EPS CHIEF	REB BRANCH CHIEF	RCRA ASSOC. DIR.	WMD DIVISION DIRECTOR
	T.S. 5/9/91	JPC for JMB 5/9/91							

ILLINOIS POLLUTION CONTROL BOARD
May 6, 1991

IN THE MATTER OF:	)	
	)	
CERTAIN HAZARDOUS WASTES FROM PRIMARY ZINC SMELTING AND REFINING, 35 Ill. Adm. Code 721.104(b)(7)(U)	)	R91-11 (Emergency rulemaking) (see also PCB 91-61)

INTERIM ORDER OF THE BOARD (by J. Anderson):

On this day, May 6, 1991, the Board authorized the circulation of, and request for comment on, the attached draft emergency rule. The emergency rule might potentially grant relief to Big River Zinc Corp. (Big River Zinc). The Board's intent in taking the unusual step of circulating a draft order prior to formal action is to seek guidance in an unusual situation. We request comment both as to the usefulness and appropriateness of adopting such a rule. We specifically request comment from Big River, the Illinois Environmental Protection Agency and the United States Environmental Protection Agency.

The decision to circulate this draft emergency rule flows directly from a Board Interim Order in PCB 91-61, adopted this same day, which responded to a variance petition accompanied by a motion for stay filed by Big River on April 8, 1991. An understanding of our decision to circulate this draft emergency rule can best be found by reading the PCB 91-61 Interim Order, which is also enclosed herewith. Among other holdings in the PCB 91-61 Interim Order, the Board denied Big River's motion for stay, primarily due to procedural constraints.

The only procedural avenue that we are able to suggest that might give Big River the relief it seeks, certainly given its time constraints, is pursuant to the attached emergency rule. In so saying, we emphasize that the draft Order is not to be construed as pre-committing the Board to taking formal action on it.

The Board perceives that, if action is to be taken on the emergency rule, it must be done quickly if it is to give relief to Big River Zinc, if indeed any relief is possible at all. Therefore, it is especially important that comments be timely filed under the following schedule.

The Board will delay until Tuesday, May 14, 1991, its consideration as to whether to adopt this emergency rule, to allow interested parties to comment on this matter in light of the discussion in PCB 91-61. Comments must be recieved by 12:00 noon on May 13, 1991 to receive consideration. The Board authorizes the filing of comments by telefax, provided that any

telefax filing is followed by the filing of a typescript original and 9 copies.

The Board is particularly interested in any comment by USEPA. In the event that filing of this rule would in any way jeopardize the State's RCRA program authorization, or the rule would fail to give the petitioner effective relief, the Board would intend not to adopt this draft Order.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Interim Order was adopted on the 6th day of May, 1991, by a vote of 6-0.

Dorothy M. Gunn/AB

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

DRAFT

ILLINOIS POLLUTION CONTROL BOARD
May 6, 1991

IN THE MATTER OF:	)	
	)	
CERTAIN HAZARDOUS WASTES FROM PRIMARY ZINC SMELTING AND REFINING, 35 Ill. Adm. Code 721.104(b)(7)(U)	))))	R 91-11 (emergency rulemaking)

ADOPTED EMERGENCY RULE. FINAL ORDER.

DRAFT OPINION AND ORDER OF THE BOARD (J. Anderson):

On April 8, 1991, Big River Zinc Corp. filed a Petition for Variance and Motion for Stay of the July 1, 1991 termination of 35 Ill. Adm. Code 721.104(b)(7)(U). The Board docketed that proceeding as PCB 91-61. The background of this proceeding is set forth in detail in the Board's May 6, 1991 Order in PCB 91-61, which is incorporated by reference herein as if fully set forth.

In summary, the Board finds that this situation "reasonably constitutes a threat to the public interest, safety or welfare" within the meaing of Section 27(c) of the Environmental Protection Act (Ill. Rev. State 1989 ch. 111-1/2, par. 1027(c). Section 5.02 of the Administrative Procedure Act (Ill. Rev. Stat. 1989 ch. 127, par. 1005.02). The threat to the public interest in this case is that, absent emergency relief, Big River Zinc will be required to immediately commence expending $1.9 million in capital improvements to comply with an "identical in substance" RCRA regulation in a situation where:

1. The underlying federal regulation is presently being challenged in federal court;

2. Big River Zinc has made good faith efforts to obtain relief at the federal level since 1990 without success;

3. Based on information currently available, relief from the state RCRA rule can be granted consistent with federal law, and

4. Because of the Board's quick adoption of RCRA rules pursuant to Section 7.2, Big River Zinc is uniquely placed at a competitive disadvantage, because no other state has as yet adopted the USEPA K066 waste rules at issue here.

The Board intends this rule to be effective upon filing.

The Board hereby amends the termination provision of 721.104(b)(7)(U) as follows:

ORDER

Section 721.104 Exclusions

. . .

b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:

. . .

7) Solid waste from the extraction, beneficiation and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore. For purposes of this subsection, beneficiation of ores and minerals is restricted to the following activities: crushing, grinding, washing, dissolution, crystallization, filtration, sorting, sizing, drying, sintering, pelletizing, briquetting, calcining to remove water or carbon dioxide, roasting, autoclaving or chlorination in preparation for leaching (except where the roasting or autoclaving or chlorination)/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing), gravity concentration, magnetic separation, electrostatic separation, floatation, ion exchange, solvent extraction, electrowinning, precipitation, amalgamation, and heap, dump, vat tank and in situ leaching. For the purposes of this subsection, solid waste from the processing of ores and minerals will include only the following wastes:

. . .

U) Until ~~June 30, 1991~~the first date upon which this exclusion renders the Board RCRA program "not equivalent to the Federal program," within the meaning of Section 3006(b) of the Resource Conservation and Recovery Act, 42 U.S.C. § 6926(b), and Section 7.2

> of the Act, Ill. Rev. Stat. 1989 ch. 111 1/2, par. 1007.2, or it renders the Board RCRA rules "less stringent" than the USEPA rules, as this phrase is used in Section 3009, 42 U.S.C. § 6929, process wastewater, acid plant blowdown and wastewater treatment plant solids from primary zinc smelting and refining, except for wastewater treatment plant solids which are hazardous by characteristic and which are not processed.
>
> . . .

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, do hereby certify that the above Draft Opinion and Order was adopted on the _____ day of _____, 1991, by a vote of _____.

_____
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

ILLINOIS POLLUTION CONTROL BOARD
May 6, 1991

BIG RIVER ZINC CORP., Petitioner,	)	PCB 91-61 (Variance)
v.	)	
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent.	)	

INTERIM ORDER OF THE BOARD (J. Anderson):

This matter comes before the Board on the April 8, 1991 Petition for Variance and Motion for Stay of Big River Zinc Corp. The Agency filed its response to Big River Zinc's Motion for Stay on April 17, 1991. Big River Zinc filed a supplement to its petition for variance on April 23, 1991, as well as a motion for leave to file a reply to the Agency's response. Also on April 23rd, the Agency moved for leave to file a reply to Big River's April 23rd filing. The Agency filed a motion for extension of time to file its recommendation on May 1, 1991, and Big River Zinc filed its response on May 2, 1991.

The nature of this proceeding raises four areas for Board determination: the motions for leave to file supplemental briefs, the appropriateness of a stay of the effectiveness of the relevant Board rule, the filing of the supplement to the variance petition and Agency motion for extension of time to file its recommendation, and the adequacy and propriety of the Petition for Variance. Due to the complexity of the issues raised by the Petition for Variance and the Motion for Stay, the Board divides consideration of the issues raised.

As an initial matter, the Board notes that both Big River Zinc and the Agency cite "35 Ill. Adm. Code 721.104(b)(7)(A)(vi)" as the operative exclusion that Big River Zinc wishes to extend. This became 35 Ill. Adm. Code 721.104(b)(7)(U) in R90-10, at 14 Ill. Reg. 16472, effective September 25, 1990. The Board refers only to Section 721.104(b)(7)(U) throughout the course of this Order, and the Board reads all incorrect citations as referring to this provision.

Motions for Leave to File Supplemental Briefs

35 Ill. Adm. Code 101.Subpart H governs motions practice before the Board. Section 101.241 permits a motion and a response as a matter of right; however, it only allows the filing of reply and supplemental response briefs on leave of the Board. The April 23, 1991 motions for leave to file of Big River Zinc

and the Agency essentially seek to file a reply brief and a supplemental response brief, respectively.

All moving and responding parties are given a single opportunity as of right to plead their relative positions on the relief sought from the Board. Since we expect the parties to brief the Board on the relevant facts and law in the initial motion and response, the Board discourages prolonging the pleadings with an ongoing succession of motions, responses, replies, supplemental replies and responses, etc. Nevertheless, where particular, unusual facts or circumstances so warrant, especially where new facts or law have become apparent subsequent to the initial pleadings or where a responsive pleading interposes new issues, the Board has allowed or ordered such supplemental filings.

As described later in detail, this case involves questions concerning the inter-relationship of the state and federal RCRA programs which have been the subject of ongoing discussions between the parties and employees of USEPA, Region V. These conversations are contained in the parties supplemental filings, as well as discussion of the Board's ability to grant the requested stay and the sufficiency of Big River Zinc's petition.

As this case raises some matters of first impression, the Board hereby grants both Big River Zinc's motion for leave to file a reply and the Agency's motion leave to file a supplemental response (called a "reply to a reply" by the Agency).

Big River Zinc's Motion for Stay

In its motion for stay, Big River Zinc requests that the Board stay the delayed effective date of July 1, 1990 for K066 wastes recited at 35 Ill. Adm. Code 721.104(b)(7)(U), promulgated in R90-2, effective August 22, 1990. The July 1, 1991 effective date actually takes the form of the termination of an exemption for certain K066 wastes from regulation as listed wastes which runs by it terms until June 30, 1991. The Board added this delayed date upon request by Big River, after adoption of the Final Order in that matter but before the Board had filed the rules with the Secretary of State. The effect of that date was to delay the time when certain of Big River's operations come under RCRA facility standards. The essence of Big River's request is that the Board grant a further delay of the effectiveness of the K066 listing until the Board can determine Big River's petition for variance on its merits. 261.4

Big River states that, subsequent to Board adoption of R90-2, it learned that imposition of an July 1, 1991 effective date would impose an arbitrary and unreasonable hardship on it. Big River states that a federal court has remanded the corresponding federal regulations back to USEPA for further consideration. Big

River asserts that there is a significant likelihood that the federal appeal will result in the reversal of the corresponding federal rule that terminated the exemption. If this were to happen, Big River asserts that it would have needlessly spent several thousands of dollars on compliance. Big River further states that its three primary domestic competitors in sister states would not similarly be required to comply by that date because the three states involved have not yet adopted the now "unexempted" K066 listing, thus placing Big River at a competitive disadvantage. Petition for Variance at 28-29; Motion for Stay at 8-9.

Big River Zinc argues that the Board can grant the requested stay consistent with federal law. It argues that the K066 listing does not become state, or federal, law until approved by USEPA, and USEPA has not approved this amendment. Big River maintains that until federal approval occurs, the Board is free to grant a stay without affecting the state's federal RCRA authorization. Petition for Variance at 29; Motion for Stay at 9.

Finally, Big River Zinc argues that if it would apply for a variance within 20 days of the June 30, 1991 delayed compliance date earlier granted by the Board, it would be entitled to an automatic stay as a matter of right, under Section 38(b) of the Act, Ill. Rev. Stat. 1989 ch. 111½, par. 1038(b). In so arguing, Big River implies that the K066 rule is not even a "RCRA" rule, as RCRA is used and defined under Illinois law.

Automatic Stay

Section 38(b) of the Act expressly states that an automatic stay arises whenever a person files a petition for variance within 20 days of the effective date of a rule. However, by its terms, this provision does not apply as to any regulation that implements the Illinois RCRA program. Ill. Rev. Stat. 1989 ch. 111½, par. 1038(b). The Board does not believe that this provision applies to the listing of hazardous waste number K066 (Section 721.132) nor to the termination of the exclusion for certain K066 wastes (Section 721.104(b)(7)(U)).

Far more than 20 days have transpired since the effective dates of both of the above-cited relevant provisions. The 35 Ill. Adm. Code 721.132 K066 hazardous waste listing, which gave rise to RCRA regulation of Big River Zinc's units, became effective in Illinois on November 13, 1989. See 13 Ill. Reg. 18300 (Nov. 27, 1989). Following a September 1, 1989 USEPA action, the Board amended Section 721.104(b)(7)(U) to include a temporary exclusion of certain K066 wastes until June 30, 1991. July 1, 1991 represented the latest date by which federal regulations required the Board to modify its RCRA program to incorporate the September 1, 1989 USEPA amendments. See 40 CFR

271.21(e)(2)(ii) (1989); 54 Fed. Reg. 36,633 (Sept. 1, 1989). The Section 721.104 amendments that granted the temporary exclusion to K066 wastes became effective August 22, 1990. See 14 Ill. Reg. 14401 (Sept. 17, 1990).

Big River Zinc, however, argues that the termination of an exclusion is the functional equivalent of the effective date of the underlying rule from which the exclusion existed. Big River Zinc cites the Citizens Utilities Co. of Illinois v. Pollution Control Board, 134 Ill. App. 3d 111, 479 N.E.2d 1213 (3d Dist. 1985) appeal involving a site-specific rule for this proposition. In that case, the Board had denied a site-specific rule without having made certain statutory findings as to the prospective costs and benefits of the proposed site-specific rule. The Board had faulted the economic impact study submitted in that matter and determined that the record did not allow it to make any determination as to the economic reasonableness of maintaining the general standards for the area in question. The Board had denied the site-specific relief, so it felt that it had not adopted a "new regulation" for the purposes of Section 27(b) of the Act. See Ill. Rev. Stat. 1989 ch. 111½, par. 1027(b). Therefore, the Board felt that it did not need to make an economic determination. The court remanded the case for further Board consideration, stating that the Board could not avoid the necessary economic determinations simply because it was denying, rather than granting, the requested site-specific relief. 479 N.E. 2d at 1216.

At first blush, the issue of whether the Board must make economic determinations under Section 27(b) in denying site-specific relief is inapposite to the issue of whether the automatic expiration of a regulatory exclusion triggers the 20-day clock for an automatic stay under Section 38(b). However, Big River Zinc argues that the Citizens Utilities court held that a denial of site-specific relief is the "functional equivalent" of reimposition of the rule of general applicability. In fact, Big River Zinc expands this further to assert that the courts in analogous situations have upheld the proposition that "the termination of an exclusion is the functional equivalent of the effective date of the general rule." Reply brief at 1-2. However, careful examination of the Citizens Utilities case does not allow the Board to go so far.

The Citizens Utilities court held only that the Board must make a Section 27(b) economic determination in denying site-specific relief where the deficiency in the economic record is through no fault of the party seeking relief. Nowhere in its discussion of this issue does the court actually hold that the denial of a site-specific rule is the functional equivalent of reimposing the general rule that applies. Rather, the closest the court comes to such an assertion is dicta:

> The intent [of the general assembly, in imposing the economic impact determination requirement of Section 27(b),] is to inject into the Board's decision-making equation a cost/benefit factor. Where, as here, the rejection of substitute regulations is in effect the adoption of a previously existing regulatory framework, the same economic accountability should be brought to bear. . . . The Board cannot avoid the statutorily required economic determination . . ..
>
> See Citizens Utilities, 134 Ill. App. 3d at 116, 479 N.E.2d at 1217 (emphasis added).

The Citizens Utilities court sought only to effectuate the intent of the General Assembly in all Board regulatory determinations, including in denials of regulatory relief on their merits. The court did not hold that the automatic termination of an exclusion from regulation is the functional equivalent of the reimposition (or effective date) of the general rule. Further, the Board has not denied Big River Zinc any form of regulatory relief on the merits, as it did in the Citizens Utilities case. The Board cannot accept Big River Zinc's "functional equivalent" of the effective date argument.

Even if for the sake of argument the Board were to assume, by whatever means, that the effective date of these regulations is July 1, 1991, the date upon which the temporary exclusion ends, Big River Zinc is not entitled to a Section 38(b) automatic stay. The relevant regulations, Sections 721.104 and 721.132, are RCRA regulations for the purposes of Section 38(b). This is despite Big River Zinc's somewhat disingenuous argument that it would be entitled to an automatic stay if it were to file a petition for variance within 20 days of July 1, 1991. Big River Zinc argues that because USEPA has not yet approved these rules, they are not state RCRA rules. See Reply brief at 2; Motion for Stay at 9-10. Big River Zinc cites the USEPA in support of this proposition:

> States are not authorized to carry out any regulations providing coverage similar to today's proposed [sic] rule as RCRA requirements until such regulations (or modifications to regulations) are submitted to [U.S.] EPA and approved.
>
> Reply Brief at 2 (citing 54 Fed. Reg. 36633 (Sept. 1, 1989) (emphasis added in brief).

This argument has major inherent flaws. Primary are (1) that Illinois RCRA program regulations would be ineffective for an extended period of time because USEPA has never approved a Board rule intended to implement the state RCRA program within 20 days of Board adoption; rather, USEPA approval can follow Board

adoption by more than two years,[1] and (2) that the plain words of Section 38(b) do not require "USEPA-approved RCRA regulations," but rules or regulations adopted pursuant to Section 22.4(a) to implement the state's RCRA program. Further, Big River Zinc's argument ignores the context of federal law (versus state law) in which USEPA made its assertions.

More fully cited, the USEPA Federal Register discussion accompanying the adoption of the termination of the exclusion makes it clear that Illinois, as an authorized state, must adopt the termination by July 1, 1991. USEPA actually stated as follows in this passage:

> This final rule is not effective in authorized States, because its requirements are not being imposed pursuant to the Hazardous and Solid Waste Amendments of 1984 [(HSWA)]. . . . In authorized states, the reinterpretation of the regulation of non-excluded process wastes will not be applicable until the State revises its program to adopt equivalent requirements under state law and receives authorization for these new requirements. (Of course the requirements will be applicable as a State law if the State law is effective prior to authorization).
>
> States that have final authorization are required (40 CFR 271.21(e)) to revise their programs to adopt equivalent standards regulating non-Bevill mineral processing wastes that exhibit hazardous characteristics as hazardous by July 1, 1991 . . . . Once [US]EPA approves the revision, the State requirements become RCRA subtitle C requirements in that State. States are not authorized to carry out any regulations

---

[1] The usual procedure in identical in substance regulatory proceedings is for the Board to withhold filing of its rules with the Secretary of State (and thereby adopting them in the sense of the Administrative Procedure Act, Ill. Rev. Stat. 1989 ch. 127, par. 1001 et seq.) for up to 30 days after final adoption for post-adoption comment. The rules become effective upon filing with the Secretary of State. See Ill. Rev. Stat. 1989 ch. 127, par. 1005.01(c). The Agency later submits a package containing the rules to USEPA for approval. See Ill. Rev. Stat. 1989 ch. 111½, par. 104(1). USEPA approval necessarily follows USEPA review of that package. The most recent USEPA approval of Board RCRA rules occurred on June 3, 1991, which includes Board amendments effective in Illinois on November 30, 1987 and January 29, 1988 (corresponding to USEPA amendments of 1986 and 1987). See 56 Fed. Reg. 13595 (Apr. 3, 1991). The next-preceding USEPA approval of April 30, 1990 primarily included Board rulemakings effective in Illinois in 1986. See 55 Fed. Reg. 7320 (March 1, 1990).

> providing coverage similar to today's proposed [sic] rule as RCRA requirements until such regulations or modifications to regulations) are submitted to [US]EPA and approved. Of course, <u>States with existing standards may continue to administer and enforce them as a matter of law.</u>
>
> <u>[O]nce authorized, a State must revise its program to include an equivalent provision according to the requirements and deadlines provided at 40 CFR 271.21(e).</u>
>
> 54 Fed. Reg. 36633 (Sept. 1, 1989) (emphasis added).

Examination of the applicable federal statutes and rules clarifies USEPA's intent in this passage. First, the Board must look at the meaning and import of USEPA authorization of a state RCRA program. Then, the Board must examine the status of state hazardous waste rules at the various stages of their development.

Section 3006 of RCRA provides for federal authorization of state programs of hazardous waste management in lieu of the USEPA standards:

> Any state which seeks to administer and enforce a hazardous waste program pursuant to this subtitle may develop and . . . submit to [USEPA] an application . . . for authorization of such program. . . . [After authorization, [s]uch State is authorized to carry out such program in lieu of the Federal program under this subtitle in such State and to issue and enforce permits for the storage, treatment, or disposal of hazardous waste . . .. In authorizing a State program, [USEPA] may base [its] findings on the Federal program in effect one year prior to submission of a State's application . . ..
>
> RCRA Section 3006(b) (42 U.S.C. § 6926(b)).

Having federal authorization means, first, that the state administers its own RCRA program in lieu of USEPA administering the federal program in the state. Second, it means that, once approved by USEPA, the regulations of an authorized state have the same force and effect under federal law within that state as do the federal regulations in unauthorized states--i.e., they become federally enforceable law. Similarly, as a matter of federal law, state administrative actions have the same force and effect within an authorized state as USEPA actions have in unauthorized states. Third, the federal regulations do not apply within authorized states.

This answers questions as to the status of federal RCRA regulations in authorized and unauthorized states. It also answers the status of state regulations as federal law once the state is authorized and the rules approved by USEPA. However, it does not answer the question as to what is the status of state regulations prior to federal approval. The RCRA preemption provision provides that answer.

RCRA clearly does not preempt any but less stringent state regulations, and the RCRA preemption provision, together with the state authorization provisions of Section 3006, strongly encourages the states to acquire and maintain USEPA-authorized programs at least as stringent as the federal rules. The RCRA federal preemption provision clearly states this as follows:

> Upon the effective date of regulations under this subtitle no State or political subdivision may impose any requirements less stringent than those authorized under this subtitle respecting the same matter as governed by such regulations . . . . Nothing in this title shall be construed to prohibit any State or political subdivision thereof from imposing any requirements . . . which are more stringent than those imposed by such regulations. . . .
>
> RCRA Section 3009 (42 U.S.C. § 3009).

Thus, federal law can preempt only those state law provisions that are <u>less</u> stringent than the corresponding federal provisions, and the state is free to impose its own more stringent requirements. Therefore, after adoption by the Board, Illinois RCRA rules become effective as <u>Illinois</u> law upon filing with the Secretary of State, Ill. Rev. Stat. 1989 ch. 127, par. 1005.01(c), although they are not enforceable as <u>federal</u> law until approved by USEPA. Once USEPA approves an Illinois program revision, the approved Illinois RCRA rule becomes enforceable under federal law as <u>federal</u> law. <u>See</u> RCRA Section 3006(b) (42 U.S.C. § 6926(b)). The rule retains its prior status as effective <u>Illinois</u> law.

In this scheme, a new <u>federal</u> non-HSWA RCRA provision is a nonentity as to both federal and Illinois law prior to state action--even after its USEPA-recited effective date. First, it does not yet exist in Illinois law until adopted by the Board. Further, it does not apply in Illinois, as long as Illinois is an authorized state, because the Illinois RCRA program applies in Illinois in lieu of the federal regulations. <u>See</u> RCRA Section 3006(b) (42 U.S.C. § 6926(b)). Thus, until the Board adopts an identical in substance provision to correspond with the new federal rule, that rule is not enforceable in Illinois. However, the existence of the new federal rule places Illinois under the

burden of a deadline for adoption of such an identical in substance rule.

Other federal RCRA statutory and regulatory provisions indicate that authorized states bear a certain burden in order to maintain their authorized status. There are principal conditions to initial authorization and subsequent federal approvals of state RCRA programs:

(1) the state program must be equivalent to the federal program;

(2) the state program must be consistent with the federal program and the programs of other states;

(3) the state program must provide adequate enforcement of compliance of the requirements of RCRA; and

(4) the state program provisions relating to any specific matter must be no less stringent than the federal requirements;

(5) the state must update its program within certain time-frames in response to revisions in the federal rules; and

(6) the state must seek federal authorization of its periodic updates within certain time-frames or it could lose federal authorization for its entire program.

RCRA Sections 3006 & 3009 (42 U.S.C. §§ 6926 & 3009); 40 CFR 271.21.

Thus, Illinois is required under federal law to timely update its RCRA program on a periodic basis with provisions no less stringent than those adopted by USEPA in order to maintain federal authorization.

This means that the Board must adopt its Illinois RCRA updates prior to certain deadlines included in the federal rules. The deadline for any single rule is generally on July 1st of each year for the 12 month period concluded the previous June 30th. 40 CFR 271.21(e)(2)(ii) (1989); <u>but see</u> Ill. Rev. Stat. 1989 ch. 111½, par. 1007.2(b) and 1022.4(a) (requiring the Board to adopt rules identical in substance to the federal RCRA rules within one year of USEPA promulgation; that is September 1, 1990 for a federal promulgation occurring September 1, 1989.) The Agency must then submit the modifications to USEPA for approval of the changes within 60 days of the deadline for adoption. 40 CFR 271.21(e)(4)(ii); Ill. Rev. Stat. 1989 ch. 111½, par. 1004(1). If Illinois does not update its program by this deadline, USEPA may initiate withdrawal of state program authorization. 40 CFR 271.21(g)(2). This makes it important that Illinois promptly

comply with RCRA and adopt the corresponding provision to each new federal RCRA rule.

In this regulatory scheme, the meaning of the USEPA Federal Register assertion cited by Big River Zinc becomes clear, and that meaning does not support Big River's argument that the 35 Ill. Adm. Code 721.104(b)(7)(U) exclusion is not a rule that falls under the automatic stay exclusion of Section 38(b). All the USEPA assertion means is that Illinois is not allowed to carry out the termination of the exclusion as federal RCRA law until approved by USEPA. It does not mean that Illinois cannot enforce this provision as a matter of Illinois law; it does not mean that Illinois need not have adopted the termination prior to July 1, 1991; and, finally, it does not mean that this is not a rule that implements the Illinois RCRA program, as intended by Section 38(b) of the Act.

As to the identity of what are the RCRA regulations under Illinois law for the purposes of Section 38(b), the Board can only conclude that this applies to the rules contained in 35 Ill. Adm. Code 702, 703, 720, 721, 722, 723, 724, 725, 726, and 728, to the extent they are identical in substance to USEPA RCRA regulations. The Act does not directly define "RCRA regulation," but the Board has defined this phrase in its RCRA rules using the above approach. The Board rules define RCRA rules as follows:

> Board rules which are intended to be identical in substance to those USEPA rules adopted pursuant to the Resource Conservation and Recovery Act (42 USC 6901 et seq.). This includes Parts 720, 721, 722, 723, and 725.
>
> 35 Ill. Adm. Code 700.260 (1987).

They also define them more specifically and fully by the relevant Part numbers:

> 35 Ill. Adm. Code 702, 703, 720, 721, 722, 723, 724, 725, 726, and 728.
>
> 35 Ill. Adm. Code 102.101 (as amended at 14 Ill. Reg. 9210 (June 8, 1990), effective May 24, 1990) (procedural rule); See 35 Ill. Adm. Code 104.120(a).

Thus, the Board has clearly understood and enunciated what is a "RCRA regulation," and one of the Board's segments of the "state RCRA program" is the body of those rules. However, the statutory authority under which the Board has adopted its RCRA rules is more persuasive that the body of rules falling within the Board's definition of "RCRA regulation" are those rules that "implement" the "state RCRA program" for the purposes of Section 38(b).

The Board adopts its RCRA rules pursuant to Section 22.4(a) of the Act:

> [T]he Board shall adopt regulations which are identical in substance to federal regulations or amendments thereto promulgated by the Administrator of the United States Environmental Protection Agency to implement Sections 3001, 3002, 3003, 3004, and 3005, of the Resource Conservation and Recovery Act of 1976 (P.L. 94-580), as amended.
>
> Ill. Rev. Stat. 1989 ch. 111½, par. 1022.4(a).

To the extent the Board adopts regulations pursuant to this statutory provision, which essentially authorizes the Board to do nothing more than implement Subtitle C of RCRA, those regulations implement the state RCRA program within the meaning of Section 38(b). If the Board adopts hazardous waste regulations that go beyond implementing the state RCRA program, it must look to other statutory authority in Title VII of the Act, which is referenced in Section 22.4(b).

Sections 721.104 and 721.132 are both regulations that the Board adopted pursuant to Section 22.4(a) of the Act. See 35 Ill. Adm. Code 721 Authority Note; 13 Ill. Reg. 18300 (Nov. 27, 1989) (statutory authority citation); 14 Ill. Reg. 14401 (Sept. 17, 1990) (statutory authority citation). Thus, both sections are "RCRA regulations," for the purposes of Big River Zinc's argument, and they are both each a "rule or regulation adopted by the Board which implements, in whole or in part, a State RCRA . . . program [which] shall not be stayed" for the purposes of Section 38(b) of the Act. See Ill. Rev. Stat. 1989 ch. 111½, par. 1038(b).

For these reasons, Big River Zinc cannot obtain and could never have obtained an automatic stay of the effect of Sections 721.104 or 721.132 pursuant to Section 38(b) of the Act. The Board must now consider whether it can grant Big River Zinc a discretionary stay.

Discretionary Stay

In order for the Board to grant a discretionary stay, it must have some authority for doing so. No such authority is apparent to the Board, so the Board must deny a stay. See LaClede Steel Co. V. IEPA, PCB 89-202 (Dec. 20, 1989); GSF Energy, Inc. v. IEPA, PCB 90-219 (Dec. 4, 1990).

Four points support this conclusion. Initially, as has been discussed, Section 38(b) does not mandate a stay. Second, the Board cannot find authority for such a stay in federal RCRA, which seems to go further to prohibit any delay in the

termination of the K066 exemption. Third, neither Section 38(b) nor any other provision of the Act or the Illinois Administrative Procedure Act, Ill. Rev. Stat. 1989 ch. 127, par. 1001 et seq. authorizes a Board stay of the effectiveness of a rule. (That is, to either stay the effectiveness of either the Section 721.104(b)(7)(U) termination date or the Section 721.132 K066 hazardous waste listing.) Finally, the Illinois APA would seem to preclude a stay of a filed and effective rule.

Section 3009 of RCRA provides that a state may delay adopting a RCRA provision where a federal court has delayed or enjoined its effectiveness:

> [I]f application of a regulation with respect to any matter under this subtitle is postponed or enjoined by the action of any court, no State or political subdivision shall be prohibited from acting with respect to the same aspect of such matter until such time as such regulation takes effect. . . .
>
> 42 U.S.C. § 6929.

Thus, if a federal court were to postpone or enjoin the applicable rule, the Board could engage in some form of action, not necessarily by issuing an order of stay, that would have the effect of delaying the termination of the exclusion. However, nowhere do the briefs or any court opinion indicate that any court has taken any of the above-noted actions.

In its briefs, Big River Zinc asserts only that the court in American Mining Congress v. EPA, 907 F.2d 1179 (D.D.C. 1990), remanded the matter of K066 wastes to USEPA; that the American Mining Congress is presently pursuing another appeal of the USEPA withdrawal of the K066 exemption, in Solite Corp. V. EPA, No. 89-1629 (D.D.C); and that Big River Zinc anticipates "a significant possibility" that the court will strike down the withdrawal. Examination of the American Mining Congress opinion as to K066 wastes reveals that the court remanded the proceeding to USEPA "for a fuller explanation of its decision to list K066" because "there is no adequate explanation in the 1988 rule for the listing of K066." American Mining Congress v. EPA, 907 F.2d at 1188-89. Nothing in the court's opinion purports to affect the effectiveness of the K066 listing. In fact, the court showed great deference for USEPA's judgement:

> In reaching this decision we do not attempt to substitute our judgment for the expert judgment of [USEPA]. We do not conclude that [USEPA] is incapable of adducing sufficient evidence reasonably to support its decision to list the materials at issue. . . .

> [USEPA] did not exceed its statutory authority in treating the wastes as . . . subject to RCRA Subtitle C regulation. Nor did it run afoul of the APA notice and comment requirement. However, [US]EPA failed in the 1988 Rule to articulate a rational connection between the data on which it purportedly relied and its decision to reject the petitioners' admittedly significant challenges. . . .
>
> American Mining Congress v. EPA, 907 F.2d at 1191 & 1192.

The court's decision does not appear in any way to undermine the Federal Register discussion and the relevant federal regulations cited above that appear to require that the Board have an effective termination on July 1, 1991 if the Illinois RCRA program is to comply with federal law.

In examining the Act and the APA for authority for a stay, the Board found nothing relevant. The Illinois Administrative Procedure Act provides for an automatic stay of sorts as to licensing (i.e., permitting), but that provision only maintains the effectiveness of a prior permit until disposition of a timely subsequent application for renewal. See Ill. Rev. Stat. 1989 ch. 127, par. 1016(b). The Board has certain inherent authority to grant a stay under certain circumstances, but none of those circumstances apply here. As discussed earlier, the Board can delay the filing of rules it has formally adopted by vote because those do not become effective as Illinois law until filed with the Secretary of State. See Ill. Rev. Stat. 1989 ch. 127, par. 1005.01. In contested cases, the Board may stay or alter the effectiveness of its own orders. The Board can grant a type of stay of the effectiveness of some RCRA rules (for example hazardous waste storage rules under certain circumstances if one interprets a provisional variance as a type of stay), but such a grant occurs as provided by the RCRA rules themselves. See 35 Ill. Adm. Code 722.134(b). No provision of RCRA authorizes any other form of immediate, summary delay in the effect of a rule without full consideration of the merits of the petition for relief after a public hearing, such as occurs in a rulemaking, a variance, or an adjusted standard proceeding.

The general tenor of the Illinois APA and the Environmental Protection Act would seem to preclude a summary stay of an adopted rule. In order to delay the termination date of the exclusion, the Board would have to issue "a statement of general applicability that implements, applies, interprets, or prescribes law or policy" as meant under the Illinois APA. Such is defined as a "rule" under that statute. Ill. Rev. Stat. 1989 ch. 127, par. 103.09. For such an action, the Illinois APA would require a formal rulemaking and filing with the Secretary of State. See Ill. Rev. Stat. 1989 ch. 111½, par. 1007.2, 1022.4 & 1027

(Environmental Protection Act); Ill. Rev. Stat. 1989 ch. 127, par. 1005 & 1005.01 (Illinois APA). Otherwise, the Board would have to engage in a full variance or adjusted standard proceeding.

In conclusion, state law and federal law operate as barriers to the Board granting a stay of the termination of the Section 721.104(b)(7)(U) exclusion in the way sought by Big River Zinc. Further, both the Act and federal RCRA regulations require that the Board retain the termination date. Sections 7.2(b) and 22.4(a) mandated that the Board adopt rules identical in substance to the federal rules within one year of the federal promulgation. See Ill. Rev. Stat. 1989 ch. 111½, par. 1007.2(b) and 1022.4(a). 40 CFR 271.21(e) requires that the Board adopt the termination date of the exclusion by July 1, 1991. See 42 U.S.C. §§ 6926 & 6929; 40 CFR 271.21(e). To remain identical in substance under the state mandate, the termination date must comply with this federal law. In the absence of a reversal, a federal stay, an injunction, or some other federal court action, or without some USEPA action that has the effect of delaying the effectiveness of the expiration of the temporary exclusion, the Board has no authority under the Act or under federal RCRA to grant a discretionary stay of the federally and State mandated RCRA-implementing expiration of 35 Ill. Adm. Code 721.104(b)(7)(U).

For the foregoing reasons, the Board hereby denies Big River Zinc's motion for stay. However, the Board will open an alternative route for relief to the extent both state and federal law allow.

Alternative Form of Relief

The Board is not unmindful of Big River Zinc's arguments that it could be forced to spend considerable sums on compliance with the RCRA T/S/D facility standards, only to have USEPA or a federal court later withdraw or otherwise terminate the effectiveness of those rules. In its petition for variance, Big River Zinc asserts that it will be forced to spend $ 2,000,000 per year for increased disposal costs, $ 1,900,000 for capital improvements, and $ 120,000 per day in the event of any production shutdown, in order to comply with the applicable RCRA requirements within nine months of when they begin planning improvements. Big River also asserts that a nine-month variance would save it a total of about $ 463,000. Petition for Variance at 16-22.

Again, as earlier stated, USEPA promulgated the K066 hazardous waste listing on September 13, 1988 with an exclusion for certain K066 wastes, 53 Fed. Reg. 35420 (Sept. 13, 1988); and it terminated that exclusion on September 1, 1989. 54 Fed. Reg. 36641 (Sept. 1, 1989). The Board adopted the K066 listing and

exclusion on September 13, 1989 (R89-1), 13 Ill. Reg. 18300 (Nov. 27, 1989) (effective Nov. 13, 1989), lifted the exclusion on July 3, 1990, then reconsidered and placed a future termination date on the exclusion on August 9, 1990. 14 Ill. Reg. 14401 (Sept. 17, 1990) (effective Sept. 17, 1990 (R90-2)). During this time, the United States Court of Appeals for the District of Columbia Circuit remanded the K066 listing to USEPA on July 10, 1990, without staying either the listing or the termination of the exclusion. See American Mining Congress v. EPA, 907 F.2d 1179 (D.C. Cir. 1990).

Big River Zinc states that it has been negotiating the listing with USEPA during this time. Motion for Stay at 5. Although Big River Zinc does not sufficiently explain its need to wait until only 90 days before the termination date to file for immediate, unusual emergency relief, Big River Zinc asserts that it spent considerable sums of money to comply with the listing and termination by July 1, 1990, only to find that on July 10, 1990 the termination date shifted until July 1, 1991. See Motion for Stay at 5. It further asserts that, if necessary, it is ready to begin expenditures in May, 1991 in order to comply with the July, 1991 deadline.

The Board notes that the Agency's filings do not challenge Big River's assertions that it has made good faith efforts to achieve compliance in a difficult situation, and do not challenge the specifics of its cost calculations. The Agency also does not challenge Big River Zinc's assertion that it alone of its three main competitors will be subject to the expenses flowing from the K066 waste listing, since Illinois is the only state which has adopted regulations equivalent to the challenged USEPA rule. In essence, Big River Zinc has asked the Board to maintain the status quo during the period in which the Board is processing its variance request. The Board believes that Big River has presented sufficient justification for a "stay" of the rule pending resolution of its variance petition.

One possible form of temporary emergency relief is available upon sufficient justification. That form of temporary relief is an emergency rulemaking.

Section 5.02 of the Administrative Procedure Act defines an "emergency" as "the existence of any situation which the agency finds reasonably constitutes a threat to the public interest, safety or welfare." Ill. Rev. Stat. 1989 ch. 127, par. 1005.02. The same language is repeated in Section 27(c) of the Act. Under this provision, if the Board were to find that an emergency exists that required a summary rulemaking, and if the Board could assemble "a statement of the specific reasons" for the emergency, the Board could adopt a rule which is immediately effective upon filing with the Secretary of State.

Through an emergency rule, the Board could possibly alter the effect of the July 1, 1991 termination date, but the maximum period of effectiveness for an emergency rule is 150 days, and the maximum delay in the effective date of an emergency rule is 10 days after filing. Therefore, it may be desireable or necessary to orchestrate the timing of such a rule to some extrinsic events as yet unknown to the Board.

An additional factor in granting any form of relief from the July 1, 1991 termination date is the timing imposed on the Board by RCRA and USEPA rules. As discussed above, July 1, 1991 represents the last date upon which the termination of the K066 exclusion could become operational under Section 3006 of RCRA, 42 U.S.C. § 6926, and 40 CFR 271.21(e), if the Board is to maintain the consistency of the state's RCRA program with the provisions for state authorization. The Board will not knowingly jeopardize the federal authorization of the Illinois RCRA program to effect any form of relief. The Board can only delay the effectiveness of the termination until such delay renders the Illinois RCRA program "not equivalent to the Federal program," within the meaning of Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), or it renders the Board RCRA rules "less stringent" than the USEPA rules, as this phrase is used in Section 3009, 42 U.S.C. § 6929 and Section 7.2 of the Act, Ill. Rev. Stat. 1989 par. 1007.2.

Therefore, in the interest of giving Big River Zinc some relief, the Board will by separate Interim Order in R91-11 suggest a draft emergency rule.

Section 721.104 Exclusions

. . .

b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:

. . .

7) Solid waste from the extraction, beneficiation and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore. For purposes of this subsection, beneficiation of ores and minerals is restricted to the following activities: crushing, grinding, washing, dissolution, crystallization, filtration, sorting, sizing, drying, sintering, pelletizing, briquetting, calcining to remove water or carbon dioxide, roasting, autoclaving

or chlorination in preparation for leaching (except where the roasting or autoclaving or chlorination)/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing), gravity concentration, magnetic separation, electrostatic separation, floatation, ion exchange, solvent extraction, electrowinning, precipitation, amalgamation, and heap, dump, vat tank and in situ leaching. For the purposes of this subsection, solid waste from the processing of ores and minerals will include only the following wastes:

. . .

U) Until ~~June 30, 1991~~the first date upon which this exclusion renders the Board RCRA program "not equivalent to the Federal program," within the meaning of Section 3006(b) of the Resource Conservation and Recovery Act, 42 U.S.C. § 6926(b), or it renders the Board RCRA rules "less stringent" than the USEPA rules, as this phrase is used in Section 3009, 42 U.S.C. § 6929 and Section 7.2 of the Act, Ill.Rev. Stat. 1989 ch. 111 1/2 par. 1007.2, process wastewater, acid plant blowdown and wastewater treatment plant solids from primary zinc smelting and refining, except for wastewater treatment plant solids which are hazardous by characteristic and which are not processed.

. . .

As noted in the Board's separate Order today in R91-11, the Board will delay consideration of this draft emergency rule until May 14, 1991, to allow interested parties to comment on this matter. The Board is particularly interested in any comment by USEPA. In the event that filing of this rule would in any way jeopardize the State's RCRA program authorization, or the rule would fail to give the petitioner effective relief, the Board would intend not to pursue action on the emergency rule.

Supplement to Petition for Variance
and Extension of Time to File Recommendation

The April 23, 1991 Big River Zinc supplement to its petition for variance reiterates Big River Zinc's assertion that the petition for variance is not a petition for a RCRA variance. It states that Big River Zinc is waiving a hearing, and it includes an affadavit pursuant to 35 Ill. Adm. Code 104.124. In the supplement, Big River Zinc notes that it did not comply with 35 Ill. Adm. Code 104.126, applicable to RCRA variance petitions, because it does not believe that the petition is for a RCRA variance.

The Board holds that this supplement does not constitute an amended petition for the purposes of 35 Ill. Adm. Code 101.109, 101.144, 104.160, 104.180, 104.181, 104.200, and 104.220 and Ill. Rev. Stat. 1989 ch. 111½, par. 1038(c), although the Board has not yet found the original petition sufficient for the purposes of 35 Ill. Adm. Code 104.125 and 35 Ill. Adm. Code 104 generally or accepted this matter for hearing pursuant to 35 Ill. Adm. Code 104.160(b)(3) or (b)(4).

As to the May 1, 1991 Agency motion for extension of time to file its recommendation, and the May 2, 1991 Big River Zinc response, the Agency basically asserts that it cannot file its recommendation until the Board has determined whether the petition is one for a RCRA variance. The Agency requests that the recommendation be due 30 days after the Board has made such a determination.

Big River Zinc responds with the assertion that time is of the essence in this matter and requests an expedited decision. Big River raises the possibility of an amended petition in the future based on extrinsic events. It states that it would have no objection to the Board requiring the Agency recommendation 30 days after and amended petition if the Board determines that this is a proceeding for a RCRA variance.

Because the Board determines that the petition is one for a RCRA variance, the Board hereby grants the Agency thirty days from the filing of an amended petition by Big River Zinc to file its recommendation pursuant to 35 Ill. Adm. Code 104.180(a).

Sufficiency of the Petition for Variance

As the foregoing discussions have made clear, the Board adopted Sections 721.104 and 721.132 pursuant to Section 22.4(a) of the Act, so these are RCRA regulations for the purposes of Section 38(b) of the Act. Big River Zinc's arguments notwithstanding, the Board has found that these rules are also RCRA rules, as defined at 35 Ill. Adm. Code 102.101. Even without such a determination, the Board must conclude that the Big River

Zinc's Petition for Variance is a "petition for a RCRA variance," as such is defined in the Board's procedural rules:

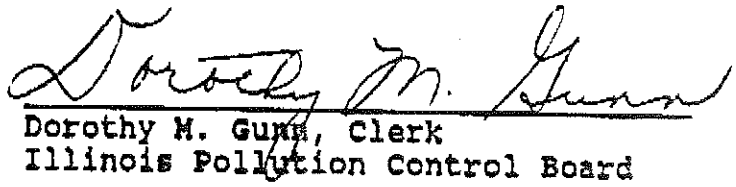
> It requests a variance from 35 Ill. Adm. Code 703, 720, 721, 722, 723, 724 or 725 . . ..
>
> 35 Ill. Adm. Code 104.120(a)(1).

The Board's procedural rules include specific provisions for a petition for RCRA variance. See 35 Ill. Adm. Code 104.104(b), 104.126, 104.142, 104.182, 104.183 & 104.221. After examination of Big River Zinc's petition in light of the relevant rules, including the April 23, 1991 supplement, the Board concludes that the petition is generally deficient.

The Board will not spell out the deficiencies, but instead refers Big River Zinc to the above-cited Part 104 rules, and to the Agency's April 17 filing. If an amended petition satisfying the requirements of the RCRA variance rules is not received within 45 days of the date of this Order, this petition will be subject to dismissal. The filing of an amended petition will restart the Board's timeclock for decision in this matter, although the Board will expedite processing of this petition consistent with its resources and workload.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, do hereby certify that the above Interim Order was adopted on the 22 day of May, 1990, by a vote of 6-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

05. 07. 91 11:36AM P01

P-V C 7450 HR

STATE OF ILLINOIS

POLLUTION CONTROL BOARD

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C 7450

Attention: GARY WESTEFER

Agency/Division: USEPA / SOLID WASTE

Location: 5HR-JCK-13

Date: 7 MAY 91

From: M. McCAMBRIDGE 814-6924

Number of Pages: 25
(including this page)

Comments: DELIVER ASAP

IF THERE ARE ANY PROBLEMS WITH THIS TRANSMISSION, PLEASE CALL POLLUTION CONTROL BOARD AT 312/917-3620

FacilityName:	USEPA ID #:
Inspection Date.	IEPA ID #:

WASTE DISPOSITION FORM

Waste Name	Generating Process	Date of Last Analysis	USEPA HW #	On Notification? (8700-12)	On Part A Appl? (3510-3)	On Annual Report for Years: 1993 1994 1995	Amount On-Site	Rate of Generation	Last Manifested Shipment	Disposition of Waste
Spent Sandblasting media	Removal of paint + from limiting WWTP Tank	5/25/96	D008		NA	/ /	40 yd³	cleaning	7/16/96	CMW Ft. Wayne, Ind.
Used oil	plant wide					/ /				Gateway Petroleum Est. St. Louis
Spent solvent Filter	Maintenence parts washer					/ /				
WWTP Sludge	sludge from WWTP					/ /				Milan Landfill Est. St. Louis
wood/concrete containing metal Residue	Tank ~~Recovery~~ Dismantling	D006 D008	8/8/95			/ /			8/10/95	Adams Center Ft Wayne Ind.
Press cloth	presses some paper					/ /				CMW Fort Wayne
Plastic Drum liners residue contain metal		D004 D006 D008				/ /				CMW
Process tank debris	TANK decomissioning	D004 D006				/ /				CMW
Ping-pong balls		waiting for analysis				/ /				
PPE, gloves sample bottles						/ /				
Mercury						/ /	0	one time	1/29/96	HES Indiana Ind.
Demolition debris	Concrete cells					/ /				
Supersacks	1yd³ bag from skimmings					/ /				
Plastic sheets & liners	Roll-off liners from cooling tower & roaster conveyer					/ /				
spent sand dusting from bead blaster	maintenence cleaned with water					/ /				
						/ /				

NO analysis

Mary A. Gade, Director

2009 Mall Street, Collinsville, IL 62234

WASTE DETERMINATION:

Big River Zinc failed to make a hazardous waste determination of the following waste streams:

1) tyvek coveralls from the cadmium oxide building*;
2) cloth and leather gloves from the cadmium oxide building*;
3) sample bottles from the cadmium oxide building*;
4) baghouse bags, especially those from the cadmium oxide building**;
5) plastic liners from roll-off boxes used to transport cooling tower sludge**;
6) plastic from the roaster conveyer**;
7) used respirator cartridges;
8) waste super sacks**; and
9) sludge from the two dissolve tanks in the Leach Purification Department.

* = Treated by washing with Spic N' Span in a washing machine in the cadmium oxide building.
** = Treated in the dissolve tank in the Leach Purification Department.

This is an apparent violation of 35 Ill. Adm. Code 722.111. If these waste are hazardous, then there would be an apparent violation of 728.107(a).

MANIFEST:

Copies of manifests IL6794095 and IL6794096 were not sent to the State of Illinois. This is an apparent violation of 35 Ill. Adm. Code 722.123(a).

Copies of the Land Disposal Restriction Notification Forms for manifests INA1162009, INA1162032, INA1047308 and INA0973225 were not retained on-site. This is an apparent violation of 728.107(a)(7).

CONTINGENCY PLAN AND EMERGENCY PROCEDURES:

Big River Zinc does not have a contingency plan to satisfy the RCRA requirements. This is an apparent violation of 35 Il. Adm. Code 725.151(a).

PERSONNEL TRAINING:

Big River Zinc does not have a hazardous waste training program. This is an apparent violation of 35 Il. Adm. Code 725.116(a).

Big River Zinc filed Hazardous Waste Reports (Forms IC, GM and TI) with the IEPA in 1993, 1994 and 1995. Prior to 1996, Big River Zinc only periodically generated large quantities of hazardous waste. In May 1996, Big River Zinc started generating waste filter cloth from a filter press. A contingency plan and training were required the first time they generated a large quantity of hazardous waste.

SATELLITE ACCUMULATION:

Several drums in the Cadmium Oxide Building containing used tyvek coveralls, gloves and other material were not closed or labeled with the words hazardous waste. This is an apparent violation of 35 Ill. Adm. Code 722.134(c). This is assuming that the waste fails TCLP. Mr. Winchester was certain it did.

TREATMENT ISSUES:

According to the March 24, 1986 Federal Register (Vol. 51, page 10168) and 703.123(a)[270.1(a)], a generator may treat waste on-site without obtaining a RCRA permit provided that the generator complies with 722.134 (262.34). The generator must also comply with 725 (265) Subparts I and J.

Since Big River Zinc is treating tyvek coveralls, cloth and leather gloves in a wash machine in the cadmium oxide building to meet the Land Disposal Restriction Standards, they must have a waste analysis plan. Big River Zinc does not have a plan to verify that the treated waste meets the LDR standards. This is an apparent violation of 728.107(a)(4).

Big River Zinc is treating baghouse bags (especially those from the cadmium oxide building) and plastic liners from roll-off boxes used to transport cooling tower sludge in a dissolving tank at the Leach Purification Department. Plastic from the roaster conveyer, waste super sacks and other waste is also being treated in the dissolving tank. The baghouse bags from the cadmium oxide building are probably a hazardous waste. Big River Zinc may also need a WAP for this treatment operation.

If the analysis of the waste going into this tank shows the waste is nonhazardous, then a WAP would not be necessary. Also if this tank is used to treat hazardous waste to meet the LDR standards then the tank would need to meet the Subpart J standards. I spoke with Ted Winchester about the tank operations. I suggested that it would be in Big River Zinc's best interest to use this tank to treat only nonhazardous waste. I suggested that he not treat any hazardous waste in the dissolve tank and only treat hazardous (i.e., baghouse bags) waste in the wash machine. He said he might look into getting a bigger wash machine. I took a second look at the dissolve tank. In this tanks present condition, there is no way this tank would meet the Subpart J standards.

A

FEED SELECTION PROCESS AT BIG RIVER ZINC CORPORATION

A. BRZ typically purchases zinc sulfide concentrates from about 13 different mines (8 different suppliers) located in the U.S. , Mexico , Australia , Peru , and Ireland .

- Each concentrate varies significantly in composition .
- BRZ has specifications for about 25 different elements which impact the process and / or economics .
- BRZ uses a macroeconomic model of the refinery to predict the economic return from various concentrates under various assumptions of purchasing terms and metal prices .
- The trick is then to purchase the most economic blend of concentrates which meets the overall specifications for the blend .

B. Mined zinc oxide concentrates are not typically economic for BRZ because of their high calcium , magnesium , and silica levels . The suppliers are also typically unreliable .

C. Some secondary zinc oxides are desirable feeds for the zinc refinery . The process for selecting them is slightly more complicated than for zinc sulfide concentrates . In addition to the steps above for zinc sulfide concentrates :

- BRZ must take more care re the source of the secondary zinc oxide . Often , BRZ and the supplier visit each others' facilities .
- Transport and ability for proper handling are always a large issue .
- BRZ also uses a linear programming model to select those oxide feeds which will allow BRZ to maximize its profit within the constraints imposed within the allowable blend specifications .

Concentrate Feed 1 and 2
1998 Year to date composite

MONTH	SPL #	% Zn	% Fe	% Pb	% Cd	% Cu	% Co	% Ni	% Mn	% Ca	% Mg	% TOTAL S	OZ/TON AG
JAN	54	58.5	1.82	1.50	0.31	0.27	0.019	0.017	0.058	1.08	0.19	30.97	6.9
FEB	127	57.0	1.60	1.20	0.46	0.20	0.027	0.020	0.014	0.99	0.16	30.80	7.2
MAR	212	60.5	1.50	1.03	0.52	0.21	0.025	0.017	0.027	0.95	0.14	31.13	7.7
APR	293	59.5	1.34	0.96	0.58	0.18	0.021	0.015	0.034	0.93	0.17	30.05	6.7
MAY	367	60.5	1.41	0.89	0.53	0.26	0.021	0.015	0.062	0.95	0.15	27.97	5.3
JUN	459	58.5	1.44	1.19	0.54	0.32	0.021	0.013	0.122	0.79	0.10	31.22	7.1
JUL	538	57.0	1.27	1.11	0.58	0.39	0.021	0.012	0.194	1.00	0.09	26.31	7.1
AUG	608	59.0	1.43	1.30	0.61	0.34	0.021	0.013	0.170	0.96	0.10	28.47	7.0
SEP	690	58.7	1.33	1.28	0.55	0.34	0.018	0.010	0.170	0.93	0.09	29.20	6.5
OCT	776	60.0	1.01	1.56	0.60	0.23	0.020	0.012	0.036	0.84	0.09	28.40	8.3
NOV	842	59.9	1.33	1.31	0.57	0.23	0.031	0.024	0.095	1.05	0.13	30.08	7.7
DEC	890	60.1	1.67	1.51	0.55	0.29	0.031	0.025	0.230	1.21	0.09	29.71	6.0
AVERAGE		59.1	1.43	1.24	0.53	0.27	0.023	0.016	0.101	0.97	0.12	29.53	7.0
MAXIMUM		60.5	1.82	1.56	0.61	0.39	0.031	0.025	0.230	1.21	0.19	31.22	8.3
MINIMUM		57.0	1.01	0.89	0.31	0.18	0.018	0.010	0.014	0.79	0.09	26.31	5.3

MONTH	SPL #	% Na	% K	% As	% Ge	% Sb	% Se	% Te	% Sn	% Al	% SiO2	% W/S S	% Tl
JAN	54	0.02	0.08	0.0165	0.0057	0.0022	<0.0001	0.0001	0.0032	0.097	0.79	0.60	0.0010
FEB	127	0.01	0.07	0.0147	0.0042	0.0007	<0.0001	<0.0001	0.0017	0.074	0.75	0.77	0.0009
MAR	212	0.02	0.08	0.0156	0.0034	0.0003	<0.0001	<0.0001	0.0055	0.081	1.07	0.97	0.0006
APR	293	0.02	0.07	0.0156	0.0035	0.0003	0.0003	0.0001	0.0059	0.071	0.74	0.95	0.0007
MAY	367	0.01	0.07	0.0194	0.0024	0.0009	<0.0001	0.0003	0.0034	0.087	0.86	1.01	0.0011
JUN	459	0.01	0.06	0.0106	0.0024	0.0018	0.0008	0.0004	0.0030	0.062	0.79	0.70	0.0004
JUL	538	0.02	0.07	0.0338	0.0025	0.0013	0.0006	0.0004	0.0038	0.057	1.04	0.92	0.0001
AUG	608	0.02	0.07	0.0106	0.0025	0.0010	0.0009	0.0003	0.0025	0.057	0.89	0.88	0.0001
SEP	690	0.01	0.06	0.0095	0.0023	0.0014	<0.0001	0.0002	0.0016	0.063	0.81	0.78	0.0001
OCT	776	0.02	0.07	0.0112	0.0039	0.0010	<0.0001	0.0003	0.0029	0.065	0.70	0.73	0.0004
NOV	842	0.02	0.07	0.0109	0.0039	0.0012	<0.0001	0.0001	0.0025	0.062	0.74	0.87	0.0003
DEC	890	0.02	0.08	0.0092	0.0039	0.0022		0.0003	0.0016	0.069	0.00	0.79	0.0004
AVERAGE		0.02	0.07	0.0148	0.0034	0.0012	0.0007	0.0003	0.0031	0.070	0.77	0.83	0.0005
MAXIMUM		0.02	0.08	0.0338	0.0057	0.0022	0.0009	0.0004	0.0059	0.097	1.07	1.01	0.0011
MINIMUM		0.01	0.06	0.0092	0.0023	0.0003	0.0003	0.0001	0.0016	0.057	0.00	0.60	0.0001

General Categories of Zinc Oxide Secondary Materials

Type of Material	Producers	Approximate Quantities (tons per year)	Processing Considerations for BRZ						Other Considerations
			Lead	Copper	Chloride	Fluoride	Tin	Ammonia	
Galvanizer Ash	Processed by 3rd Parties via Ball Mill	say 50,000	med	nil	med	nil	nil	med	Currently prohibitively expensive due to EPA regulations re fertilizer
ZnO Recovered from Steel Industry									
1. EAF Processing									
a. HRD		N/A							Essentially all oxides are used for zinc recovery at ZCA in Monaca , Pa
b. Zinc Nacionale		N/A							Also convert oxides to additional
c. ZTT		0							
d. Richmond Molded Brick		0							Evaluating technology.
c. Steel Companies at their site.	AmeriSteel in rotary	8400	med / hi	lo	high	med	nil	nil	
d. Third parties on steel mill sites	Allmet in rotary hearth in Blytheville , Arkansas .	8400	med / hi	lo	high	med	nil	nil	Allmet operating rotary hearth at Nucor and HRD operating cyclone at North Star . Alternatives- Metalox & Phoenix . MRT shut down.
2. Integrated Steel Companies	Rouge Steel to start rotary hearth in June	9600	med	lo	med	lo	nil	nil	USX , LTV , and possibly National evaluating
Brass & Bronze Industries									
1. Brass Mills		2000	lo	high	lo	lo	high	nil	
2. Brass & Bronze Ingot Manufacturers		10000	med	high	med	high	med	nil	
Diecasters		significant	lo	lo	lo	nil	nil	lo	4% aluminum limits use at BRZ to 2000 - 4000 tpy
Miscellaneous Zinc Oxides									
1. Recovered from tires			lo	lo	lo	lo	lo	lo	Prohibitively high iron and silica for economic recovery at BRZ
2. Secondary Copper smelters			very high	high	med	med	med / high	nil	Without better segregation at copper smelter , copper and lead contents are typically too high for roasting at BRZ.
3. Plethora of other materials		low quantities							Vary too much to generically describe.

Table C.1.5 Types and Compostions of Zinc Oxide Secondaries

	Max. STPY	Zn	Cu	Pb	Fe	Cd	Na	K	Cl-	F-	Sn	Mg	Ca	Bi	Al	NH_3	SiO2	Ni
		ELEMENTAL ANALYSES — %																
PHASE 1																		
C.1.2 Zinc oxides from EAF Dust or Other Steel Scraps																		
Laclede Steel	100	67.9	0.04	8.25	0.80	1.10	0.45	0.03	0.04	0.12	0.06	0.08	0.32		0.20	<.01		0.001
Ameristeel Steel	6000	57.5	0.03	6.75	0.37	0.15	3.40	2.30	8.20	0.28	0.04	0.04	0.23		0.07	<.01		0.001
Rouge Steel	9500	68.3	0.01	1.16	1.09	0.02	1.50	2.10	2.72	0.10	0.04	0.03	0.30	0.01	0.02			0.010
	15600																	
C.1.3 Zinc Ash from Galvanizer Skimmings																		
	15000	68.2	0.01	1.36	0.70	0.01	0.09	0.05	3.20	0.00	0.01	0.15	0.20	0.003	0.22	0.36	1.10	0.003
PHASE 2																		
C.1.4a Zinc Oxides from Brass/Bronze Ingot Manufacturers																		
	150	60.8	1.30	8.80	0.10	0.10	2.80	0.27	1.52	0.65	0.56	0.00	0.07	0.010	0.56	0.01		0.002
	100	56.7	0.62	6.25	0.04	0.15	2.26		2.41	0.63	0.41	0.00		0.006	0.06	0.08		0.002
	60	66.2	1.18	4.15	0.35	0.12	0.85	0.11	0.62	0.09	0.55	0.03	0.09	0.010	0.25			0.140
	350	57.4	1.94	6.20	0.11	0.13	2.78	0.19	1.97	0.38	1.01	0.03	0.13	0.08	0.24			0.010
	200	67.2	1.50	4.86	0.06	0.12	0.80	0.12	0.84	0.38	0.41	0.00	0.14		0.18	0.01	1.09	0.016
	2500	67.6	0.77	5.38	0.15	0.06	0.97	0.13	0.87	0.82	0.42	0.02	0.17	0.13	0.16	0.02	0.82	0.004
	100	63.0	1.23	10.02	0.05	0.19	0.41	0.19	1.52	0.39	0.51	0.00	9.00	0.01	0.16	0.01		0.003
	100	61.7	2.28	8.55	0.25	0.17	1.02	0.33	2.02	0.36	0.42	0.01	0.19	0.008	0.14	0.01	0.38	0.004
	1000	62.1	0.77	9.67	0.12	0.21	1.44	0.37	3.03	0.29	0.36	0.02	0.16	0.014	0.16	0.01		0.003
	100	64.7	1.01	6.10	0.07	0.15	1.23		2.33	0.20	0.51	0.02	0.02					
	4660																	
C.1.4b Zinc Oxides from Brass Mills																		
	200	68.5	1.75	0.08	0.05	0.05	0.38	0.33	1.21	0.35	0.06	0.03	0.33		0.16	0.15	0.61	0.004
	90	39.2	16.20	0.21	0.61	0.00	0.70	0.01	0.09	0.01	0.01	0.98	0.28		0.22	0.15	0.95	0.350
	400	80.0	1.83	0.05	0.06	0.01	1.08		2.46	0.03	0.05	0.02	0.01	0.02	0.18	0.04		0.006
	700	65.3	3.95	1.10	0.11	0.15	0.36	0.12	2.48	0.23	0.03	0.09	0.13	0.005	0.42			0.003
	60	28.6	8.85	2.93	0.08	0.03	0.44	0.03	0.04	0.01	0.15	0.00	0.08		0.60	0.02	9.35	0.041
	40	76.0	0.61	0.01	0.24	0.01			0.48	0.07	0.00	0.03		0.09	0.01			0.001
	100	73.8	0.77	0.61	0.04	0.02	0.98		0.08	0.05	0.07	0.01			0.07			0.030
	1590																	
Zinc Oxides from Foundries																		
	20	62.8	1.30	5.90	0.51	0.16	0.36	0.09	0.13	0.04	0.24	0.06	0.38		0.46		5.23	0.008
	20	65.1	0.65	6.51	0.22	0.07	1.25	0.26	0.08	2.00	0.09	0.06	0.15	0.02	1.10	<.01		0.002
	40																	
Other Sources of Zinc Oxides																		
	350	68.6	3.05	1.35	0.39	0.06	0.48		0.50	0.04	0.02	0.14	0.05	0.004				0.012
	50	41.3	3.11	3.61	0.18	0.15	0.44	0.11	1.24	0.34	0.20	0.02	0.10		0.15			0.050
	60	72.0	0.74	5.95	0.03	0.16	2.19	0.53	1.74	0.39	0.60	0.00	0.12		0.13			0.002
	60	66.3	0.06	1.60	0.53	0.83	0.22	0.02	1.52	0.01	0.05	0.02	0.13		0.70			0.007
	60	52.4	0.05	0.15	0.05	0.01	1.30	0.30	1.04	0.28	0.02	0.08	0.37		0.30		2.90	0.001
	50	75.0	0.42	0.01	0.12	0.01			0.55	0.002	0.002	0.00		0.001	0.17			0.000
	60	60.0	0.85	8.90	0.04	0.16			3.71	0.44	0.43	0.00			0.05			0.003
TIRES →	200	37.0	0.08	0.13	9.10	0.00			0.29	0.004	0.01	0.40			0.60		14.10	0.001
SECONDARY COPPER →	4300	43.0	3.80	18.50	1.52	0.12	0.37	0.27	3.08	0.16	2.07	0.09	0.27	0.26	0.20		2.73	0.090
	5190																	

B

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2009 Mall Street, Collinsville, IL 62234

MEMORANDUM

DATE: October 31, 1997

TO: Bureau of Land - Division Files

FROM: Chris Cahnovsky - Collinsville FOS CNC

SUBJECT: 1631215009 -- St. Clair County
Big River Zinc Corporation
ILD062444435
FOS

On September 15, 1997, Chris Perzan, Division of Legal Counsel, called the Collinsville Regional Office to inform me of a potential problem at Big River Zinc (BRZ) in Sauget, Illinois. According to Mr. Perzan, representatives from BRZ called Mark Schollenberger of the Agency's BOL-Permit Section and told him that BRZ is using secondary material, which exhibits hazardous characteristics for lead and cadmium, to make zinc sulfate - monohydrate. This zinc sulfate - monohydrate is then sold to Cozinco Sales as a fertilizer for land application. The Cozinco Sales product that the zinc sulfate - monohydrate is going into is called COZINCO 31.0%. On the same day I contacted Ted Winchester, Environmental Manager for BRZ and I scheduled a site inspection for September 17, 1997.

I conducted a site visit at BRZ on September 17, 1997. Present during this site visit were Steve French, Director Safety/Health/Environment; Ted Winchester, Environmental Manager and George Obeldobel, President of BRZ. Mr. Obeldobel obtained a copy of a letter from Timothy Fields, Jr., Acting Assistant Administrator for the USEPA to Mr. J. Thomas Wolfe, Institute of Scrap Recycling Industries, Inc. (See Attachment A). This letter dealt with a USEPA's interpretation that metal-bearing characteristic byproducts and sludge that are reclaimed, but whose waste or reclaimed materials are then used or reused in a product (such as fertilizer) that is to be placed on the land (ie., used in a manner constituting disposal) are solid wastes subject to the applicable Subtitle C regulatory requirements.

According to Mr. Obeldobel, 2 - 4% of BRZ's feedstock is metal-bearing byproducts such as baghouse dust and scrubber solids. These materials are referred to as zinc oxides. The other 96 - 98% of BRZ's feedstock is zinc sulfide concentrate from mines and mills. BRZ intends to increase the use of metal-bearing byproducts to 12% of its feedstock. This would include zinc bearing material from galvanizing operations, die cast operations, brass manufacturing and the brass and bronze industry. Also, BRZ intends to purchase zinc oxide derived from electric arc furnace dust (EAFD). This EAFD material would contain 65-70 % zinc oxide. Per Mr. Obeldobel, BRZ accepts about 4000 tons of EAFD and 1000 tons zinc oxide baghouse dust per year. BRZ wants to increase the amount of metal-bearing byproducts they accept to 20,000-30,000 tons per year.

The zinc oxide secondary materials and pre-leached zinc sulfide concentrate blends are fed directly into the roasters to produce an impure zinc oxide (calcine). The calcine is then sent through a leaching and thickener process. Through these processes, lead, iron, silver, copper, nickel, cobalt and cadmium are removed leaving a pure zinc sulfate solution (See Attachment B). Ninety-eight percent of the pure zinc sulfate solution is sent to the Electrowinning Operation to produce 99.99% pure zinc metal. The remaining 2% of the pure zinc sulfate solution is sent to the zinc sulfate-monohydrate (ZSM) process. To produce ZSM, the pure zinc sulfate solution is sent to an atomized dryer to form pellets or a granular white powder. Once the ZSM pellets or granular powder is produced, it is placed in hoppers for sale. BRZ produces about 6000 tons per year of ZSM. About 5000 tons per year of the pelletized ZSM is sold to Lange-Stegmann in St. Louis, Missouri. Lange-Stegmann bags the ZSM to be sold as a fertilizer. This fertilizer is COZINCO 31.0%. About 1000 tons per year of the ZSM is sold as bulk to blenders as animal feed and other fertilizer blends.

BRZ's feedstock is made up of about 2% to 3% metal-bearing byproducts. These metal-bearing byproducts include zinc oxide baghouse dust, which might be characteristically hazardous and zinc oxide as EAFD (K061). According to BRZ, about 2% of the pure zinc sulfate is sold as zinc sulfate-monohydrate (i.e., fertilizer) to be placed on land, used in a manner constituting disposal. Pursuant to 35 Illinois Administrative Code (IAC) 726.120(b) products produced for the general public's use that are used in a manner that constitutes disposal and that contains recyclable materials are not presently subject to regulation under this Subpart if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in 35 IAC Code 728.Subpart D (or applicable prohibition levels in 35 IAC 728.132 or 728.139, where no treatment standards have been established) for each recyclable material (i.e., hazardous waste) that they contain. Commercial fertilizers that are produced for the general public's use that contains recyclable materials also are not presently subject to regulation, provided they meet the same treatment standards or prohibition levels for each recyclable material they contain.

On October 9, 1997, Mr. Winchester sent me a copy of TCLP results for the ZSM (See Attachment C). The result show that the ZSM did not exceed the regulator level for any of the eight RCRA metals. The results showed that the levels of metals in this sample were below the land disposal treatment standards listed in 35 IAC 728, Table T. Therefore, it appears that the fertilizer product produced by BRZ met the Land Disposal Restriction treatment standards and can be used for land application.

The remaining issue is whether the secondary metal-bearing byproducts (i.e., baghouse dust and sludge) received by BRZ to make the ZSM are a solid waste. The baghouse dust and sludge shipped to BRZ from generating facilities that are characteristically hazardous byproducts and sludge used to produce products applied to land may meet the definition of a solid waste under 35 IAC 721.102(c) and, subsequently may be a hazardous waste. BRZ may want to consider addressing this issue to the Illinois Pollution Control Board. The product produced from these byproducts, ZSM, is not a solid waste, but the byproducts used to produce the ZSM may be a solid waste and subsequently a hazardous waste.

CNC

cc: BOL - Collinsville
cc: Chris Perzan - DLC
cc: Mark Schollenberger - BOL Permits Section

ENVIRONMETRICS, INC.
11401 Moog Drive
St. Louis, MO 63146
(314) 432-0550

September 18, 1997

Big River Zinc
Rt. 3 & Monsanto Ave.
Sauget, IL. 62201

Attn: TED WINCHESTER

Enclosed you will find analytical reports for the samples described below:

Date Received: 09/15/97
Chain of Custody Number: 012812
Environmetrics Laboratory Number: 9709/156

I have reviewed the data generated by the laboratory and have found the data to conform to the applicable methods and QC criteria. If you have any questions, please feel free to call me at (314) 432-0550.

Sincerely,

Karen Coons

Karen Coons
Project Manager

Enclosure: Invoice Number 42009

Big River Zinc
Rt. 3 & Monsanto Ave.
Sauget, IL. 62201

ATTN: TED WINCHESTER

INVOICE: 42009 -
PO: ---
PROJECT NO: ---

ENVIRONMETRICS, INC.
11401 Moog Drive
St. Louis, MO 63146
(314) 432-0550

ANALYSIS RESULTS

SAMPLE ID: BIG RIVER ZINC - PLAIN BOTTLE
LAB ID: 9709000156-001
DATE COLLECTED:
DATE RECEIVED: 09/15/97

TEST PERFORMED	METHOD OF ANALYSIS	RESULTS		ANALYST
TCLP ARSENIC	SW-846 1311/6010A	<0.200	mg/L	09/16/97 K.E
TCLP BARIUM	SW-846 1311/6010A	<0.040	mg/L	
TCLP CADMIUM	SW-846 1311/6010A	0.016	mg/L	
TCLP CHROMIUM	SW-846 1311/6010A	<0.005	mg/L	
TCLP LEAD	SW-846 1311/6010A	<0.100	mg/L	
TCLP MERCURY	SW-846 1311/7470	<0.0002	mg/L	
TCLP SELENIUM	SW-846 1311/6010A	<0.200	mg/L	
TCLP SILVER	SW-846 1311/6010A	<0.040	mg/L	

D - Reported value is greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).

PERCENT RECOVERY = [illegible] / SPIKE LEVEL

C

ILLINOIS POLLUTION CONTROL BOARD
April 15, 1999

RECEIVED
Division of Legal Counsel
APR 21 1999
Environmental Protection Agency

IN THE MATTER OF:	)	
	)	
PETITION OF BIG RIVER ZINC	)	As amended
CORPORATION FOR AN ADJUSTED	)	(Adjusted Standard - RCRA)
STANDARD UNDER 35 ILL. ADM. CODE	)	
720.131(c)	)	

LEE R. CUNNINGHAM AND RICHARD M. SAINES OF GARDNER, CARTON & DOUGLAS APPEARED ON BEHALF OF PETITIONER; and

CHRISTOPHER P. PERZAN APPEARED ON BEHALF OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.

OPINION AND ORDER OF THE BOARD (by K.M. Hennessey):

Petitioner Big River Zinc Corporation (BRZ) operates an electrolytic zinc refinery in Sauget, St. Clair County, Illinois. BRZ uses various zinc-containing materials as feedstock for its refinery. One of the zinc-containing materials that BRZ would like to use is recovered from dust emitted from electric arc furnaces used to produce steel. This secondary zinc oxide material would ordinarily be considered a "solid waste" and a "hazardous waste" under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 *et seq.*, and corresponding Illinois hazardous waste laws and regulations. BRZ would like to use this secondary zinc oxide material without becoming subject to Illinois' hazardous waste requirements.

To that end, BRZ has filed a petition for an adjusted standard under 35 Ill. Adm. Code 720.131(c). Section 720.131(c) allows the Board to determine that certain materials are not solid wastes, and therefore not hazardous wastes, if they meet certain criteria. BRZ asserts that zinc oxide material recovered from electric arc furnace dust (EAF dust) by a high temperature metals recovery process meets these criteria. BRZ also proposes several conditions on the adjusted standard. The Illinois Environmental Protection Agency (IEPA) recommends that the Board grant the adjusted standard, subject to certain conditions.

The Board finds that BRZ has established that zinc oxide material recovered from EAF dust by a high temperature metals recovery process is not a solid waste. The Board therefore grants BRZ's petition for an adjusted standard, subject to the conditions set forth in the order that follows this opinion.

PROCEDURAL HISTORY

On September 24, 1998, BRZ filed a petition for an adjusted standard, subject to conditions. On October 15, 1998, the Board accepted this matter for hearing and on

The Board will determine that those materials that have been reclaimed but must be reclaimed further before recovery is completed are not solid wastes if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following criteria:

1) The degree of processing the material has undergone and the degree of further processing that is required;

2) The value of the material after it has been reclaimed;

3) The degree to which the reclaimed material is like an analogous raw material;

4) The extent to which an end market for the reclaimed material is guaranteed;

5) The extent to which the reclaimed material is handled to minimize loss; and

6) Other relevant factors. 35 Ill. Adm. Code 720.131(c).

FINDINGS OF FACT

In this section of the opinion, the Board sets forth its findings of fact regarding (1) zinc, (2) BRZ's current operations, (3) EAF dust, (4) EAF zinc oxide, and (5) BRZ's proposed operations.

Zinc

In 1997, the total world production and consumption of zinc was approximately 8.5 million tons. Zinc can be used to galvanize products; to produce brass; to create alloys used to produce such items as door handles and carburetor parts; to create chemicals such as zinc powder for alkaline batteries and zinc oxide; to coat steel; and for various other uses. Exh. 3 at 3, Att. B at 5. The average annual growth in consumption of zinc in the western world was 2.4% from 1988 to 1997. Exh. 3, Att. B at 1. The price of zinc is established by supply and demand on the London Metals Exchange (LME). Exh. 3 at 3.

BRZ's Current Operations

BRZ's Products

BRZ operates an electrolytic zinc refinery in Sauget, St. Clair County, Illinois. Exh. 3 at 1, 7. BRZ currently produces approximately 105,000 tons of zinc per year. Exh. 3, Att. J at 2.

EAF Dust

EAF dust is a source of secondary zinc oxide material. EAF dust is generated in electric arc furnaces, which produce steel by heating steel scrap. These furnaces emit gases that contain EAF dust. Air pollution control equipment in these furnaces removes EAF dust from the gases. These furnaces generated approximately 900,000 tons of EAF dust in the United States in 1997. Exh. 3 at 5, 13-14.

EAF dust is composed of approximately 20% to 30% iron and 15% to 30% zinc. It also includes other constituents such as lead, cadmium, chloride, fluoride, aluminum, calcium, potassium, magnesium, manganese, sodium, and silica. Because of its high iron content and other impurities, zinc cannot be recovered directly from EAF dust in most, if not all, zinc smelting and refining operations. Exh. 3 at 5, 13-14.

In 1996, nearly 40% of the EAF dust generated in the United States was disposed of in landfills. Exh. 3 at 6. It costs approximately $80 per ton to dispose of EAF dust. Exh. 3 at 16.

EAF Zinc Oxide

High Temperature Metals Recovery

While zinc cannot be recovered directly from EAF dust in most zinc smelters and refineries, zinc oxide material recovered from EAF dust can be processed in zinc smelters and refineries. Zinc oxide material can be recovered from EAF dust when the dust is put through a high temperature metals recovery (HTMR) process. HTMR units include rotary kilns, rotary hearth furnaces, plasma furnaces, and electric furnaces. Exh. 3 at 6-7, 10, Att. F, H.

HTMR processing increases the levels of zinc, lead, and cadmium in EAF dust. These changes are desirable in the zinc refining process. HTMR processing also lowers the levels of constituents that are considered contaminants in the zinc refining process (*e.g.*, iron, calcium, magnesium, alumina), except for sodium, chloride, fluoride, and potassium. Exh. 3 at 10, 18, Att. H.

In 1994, approximately 1.2 million tons of EAF dust per year was processed worldwide, mostly to produce zinc oxide material. Exh. 3 at 18, Att. L. EAF dust processing is done in a variety of HTMR units and the resulting zinc oxide material is sold primarily to produce zinc, but also to produce zinc chemicals. Exh. 3 at 18, Att. L. Several facilities in the United States produce or are capable of producing EAF zinc oxide. Exh. 3 at 6, 18, Att. L, M. Markets for EAF zinc oxide exist in North America, Asia, and Europe. Exh. 3 at 19. Once EAF dust has been through the HTMR process, the value of the resulting zinc oxide material approaches the value of mined zinc sulfide concentrates (currently $250 to $300 per ton). Exh. 3 at 8, 16-17, 21.

AmeriSteel's EAF Zinc Oxide

AmeriSteel's HTMR process increases the zinc content of EAF dust from 20-25% to 59.5%, increases the lead content from 3% to 7.5%, increases the cadmium content from 0.05% to 0.1%,.and decreases the iron content from 19-24% to 0.1%. AmeriSteel's HTMR process lowers the levels of constituents that are considered contaminants in BRZ's refining process, except for sodium, chloride, fluoride, and potassium. Exh. 3 at 10, 18, Att. H, K.

BRZ has determined that, except for the chloride level of the material, AmeriSteel's EAF zinc oxide is an ideal feed for its zinc refinery. Exh. 3 at 8. Ameristeel's EAF zinc oxide is chemically similar to mined zinc oxide and zinc sulfide concentrates:

Constituent	Mined Concentrates		AmeriSteel's EAF Zinc Oxide
	Zinc Oxide	Zinc Sulfide	
% zinc	54	59.1	59.5
% lead	4.9	1.2	7.5
% cadmium	0.38	0.5	0.1
% iron	2.5	1.5	0.1
% copper	0.02	0.3	0.1
% sulfur	<1	31	<1
% arsenic	.7	<0.02	<0.01
% calcium	2.4	1	0.05
% silica	14.8	0.8	0.02
% magnesium	0.6	0.4	0.01
% alumina	2.7	0.1	0.02
% sodium	N/A	<0.02	3
% chloride	0.07	<0.1	8
% fluoride	0.03	0.05	0.15

Exh. 3 at 14, 17, Att. D, H, K. With the exception of chloride and fluoride, AmeriSteel's EAF zinc oxide also meets typical zinc refiner specifications for zinc sulfide concentrate blends and falls within the range of secondary feed specifications that zinc refiners have established. Exh. 3, Att. F, H, K.

EAF zinc oxide produced by AmeriSteel and others has levels of zinc comparable to that of mined concentrates. Exh. 3 at 17, Att. D, H, K. If used in BRZ's refining process, EAF zinc oxide would have chemical advantages and disadvantages compared to mined concentrates. The primary advantages of EAF zinc oxide are that it is higher in lead than mined concentrates and lower in sulfur than mined zinc sulfide concentrates. AmeriSteel's EAF zinc oxide has the additional advantage of being lower in iron than mined concentrates. Exh. 3 at 14, 17-18, Att. D, H, J at 3, K.

ILLINOIS POLLUTION CONTROL BOARD
April 15, 1999

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Division of Legal Counsel
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Environmental Protection Agency

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To that end, BRZ has filed a petition for an adjusted standard under 35 Ill. Adm. Code 720.131(c). Section 720.131(c) allows the Board to determine that certain materials are not solid wastes, and therefore not hazardous wastes, if they meet certain criteria. BRZ asserts that zinc oxide material recovered from electric arc furnace dust (EAF dust) by a high temperature metals recovery process meets these criteria. BRZ also proposes several conditions on the adjusted standard. The Illinois Environmental Protection Agency (IEPA) recommends that the Board grant the adjusted standard, subject to certain conditions.

The Board finds that BRZ has established that zinc oxide material recovered from EAF dust by a high temperature metals recovery process is not a solid waste. The Board therefore grants BRZ's petition for an adjusted standard, subject to the conditions set forth in the order that follows this opinion.

PROCEDURAL HISTORY

On September 24, 1998, BRZ filed a petition for an adjusted standard, subject to conditions. On October 15, 1998, the Board accepted this matter for hearing and on

October 16, 1998, IEPA filed a response to the petition. In that response, IEPA recommended that the Board grant BRZ's request for an adjusted standard with conditions, subject to certain additional conditions. On October 27, 1998, BRZ filed a reply in which it proposed new and modified conditions on the adjusted standard, including the conditions that IEPA requested.[1]

Hearing Officer John Knittle held a hearing on the adjusted standard petition on December 17, 1998. BRZ presented one witness, whom the hearing officer found to be credible. BRZ also introduced four exhibits, each of which the hearing officer admitted.[2] At hearing, BRZ proposed to amend one of the conditions it had proposed for the adjusted standard. Tr. at 5-6; Exh. 4. Counsel for IEPA stated at hearing that IEPA agreed to all of the conditions that BRZ had proposed both before and at hearing. Tr. at 24. IEPA offered no testimony or exhibits. The parties chose not to file posthearing briefs.

LEGAL FRAMEWORK

The status of materials as "solid wastes" is significant because under the laws and regulations that Congress and the United States Environmental Protection Agency (USEPA) have established, only those materials that are "solid wastes" can be regulated as "hazardous wastes" under RCRA and corresponding Illinois hazardous waste laws and regulations. Accordingly, materials that are not solid wastes are not subject to Illinois' hazardous waste regulations, which impose various requirements on persons who generate, treat, store, dispose, recycle, or transport hazardous waste. See 35 Ill. Adm. Code 722-726, 728.

Generally, a solid waste is any discarded material. See 35 Ill. Adm. Code 721.102. A solid waste is a hazardous waste if it exhibits a "characteristic" of hazardous waste (*i.e.*, it is toxic, corrosive, ignitable, or reactive) or if it is "listed" as hazardous waste (*e.g.*, it comes from a specific type of process, such as electroplating). See 35 Ill. Adm. Code 721.103, 721, Subparts C and D.

BRZ would like to reclaim zinc from zinc oxide material that has been recovered from EAF dust without becoming subject to Illinois' hazardous waste regulations. Exh. 3 at 2, 21. BRZ asks the Board to determine that zinc oxide material recovered from EAF dust with a high temperature metals recovery process, which the Board will refer to as "EAF zinc oxide," is not a solid waste. BRZ seeks this determination under 35 Ill. Adm. Code 720.131(c). That provision establishes standards and criteria for the Board to use in determining whether certain materials are not solid wastes. See 35 Ill. Adm. Code 720.130(c). Section 720.131(c) reads as follows:

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[1] BRZ's petition, which was entered into evidence at hearing as an exhibit, is cited as "Exh. 3 at _." The parties treat BRZ's reply as part of the petition and the Board will consider it as if it was entered into evidence at hearing with the petition. However, for clarity, the Board cites BRZ's reply as "Reply at _." IEPA's response is cited as "Resp. at _."

[2] The transcript of the hearing is cited as "Tr. at _." Hearing exhibits are cited as "Exh. _."

The Board will determine that those materials that have been reclaimed but must be reclaimed further before recovery is completed are not solid wastes if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following criteria:

1) The degree of processing the material has undergone and the degree of further processing that is required;

2) The value of the material after it has been reclaimed;

3) The degree to which the reclaimed material is like an analogous raw material;

4) The extent to which an end market for the reclaimed material is guaranteed;

5) The extent to which the reclaimed material is handled to minimize loss; and

6) Other relevant factors. 35 Ill. Adm. Code 720.131(c).

FINDINGS OF FACT

In this section of the opinion, the Board sets forth its findings of fact regarding (1) zinc, (2) BRZ's current operations, (3) EAF dust, (4) EAF zinc oxide, and (5) BRZ's proposed operations.

Zinc

In 1997, the total world production and consumption of zinc was approximately 8.5 million tons. Zinc can be used to galvanize products; to produce brass; to create alloys used to produce such items as door handles and carburetor parts; to create chemicals such as zinc powder for alkaline batteries and zinc oxide; to coat steel; and for various other uses. Exh. 3 at 3, Att. B at 5. The average annual growth in consumption of zinc in the western world was 2.4% from 1988 to 1997. Exh. 3, Att. B at 1. The price of zinc is established by supply and demand on the London Metals Exchange (LME). Exh. 3 at 3.

BRZ's Current Operations

BRZ's Products

BRZ operates an electrolytic zinc refinery in Sauget, St. Clair County, Illinois. Exh. 3 at 1, 7. BRZ currently produces approximately 105,000 tons of zinc per year. Exh. 3, Att. J at 2.

BRZ produces zinc that can be used to galvanize steel, produce brass, produce die cast parts, and produce zinc oxide (*e.g.*, for rubber tires and cosmetics). Exh. 3, Att. J at 2. BRZ sells zinc in many shapes and alloys, ranging from zinc powder for alkaline batteries to 4,800 pound logs for large galvanizing lines. BRZ produces special high grade quality zinc (99.995% zinc), which is the most widely recognized standard for zinc.[3] Depending on customer specifications, BRZ also debases its special high grade zinc to produce alloys that contain aluminum, lead, magnesium, and copper. Exh. 3 at 19. BRZ has long-term end markets for all of its products. Exh. 3 at 20, Att. N.

BRZ's Process

BRZ recovers zinc from two types of materials, the first of which is zinc sulfide concentrates that are mined. BRZ also recovers zinc from secondary zinc oxide material. Secondary zinc oxide material is a by-product of other industries that use zinc, including steel mills, brass mills, brass and bronze ingot factories, and galvanizers. The mined zinc sulfide concentrates arrive as wet filter cake; the secondary zinc oxide material arrives as wet filter cake or as dry material in "supersacks." Exh. 3 at 2, 4, 10-11, 14, 17, 20, Att. J at 2.

In the first step of BRZ's process, BRZ may use an acid solution to remove magnesium from the zinc sulfide concentrates to prepare them for further processing. Exh. 3 at 10-11. Secondary zinc oxide material does not require this initial step. Exh. 3 at 10-11, 17-18, Att. H, J at 2-3.

BRZ then processes zinc sulfide concentrates and secondary zinc oxide material in a fluid bed roaster. The roasting step removes sulfur from the feed material. Exh. 3 at 12, 19, Att. J at 2. BRZ then leaches the roasted material to separate zinc and various other metals. From the slurry that results, BRZ filters the solids, and puts the remaining solution through four purification stages. The purification process yields a purified zinc sulfate solution from which zinc is recovered through an electrolytic process. The electrolytic process yields zinc cathodes that are of special high grade quality (99.995% pure zinc). BRZ then melts the cathodes into one of six shapes for delivery to customers. Exh. 3 at 12-13, 19.

BRZ's refining process produces a number of by-products, including sulfuric acid, lead-silver concentrate, copper cement, copper-cobalt concentrate, cadmium oxide, and zinc sulfate monohydrate. BRZ has long-term end markets for these by-products. Exh. 3 at 12-13, 19-20.

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[3] In this opinion, when the Board refers to a percentage of a constituent in a material, it does so by weight.

EAF Dust

EAF dust is a source of secondary zinc oxide material. EAF dust is generated in electric arc furnaces, which produce steel by heating steel scrap. These furnaces emit gases that contain EAF dust. Air pollution control equipment in these furnaces removes EAF dust from the gases. These furnaces generated approximately 900,000 tons of EAF dust in the United States in 1997. Exh. 3 at 5, 13-14.

EAF dust is composed of approximately 20% to 30% iron and 15% to 30% zinc. It also includes other constituents such as lead, cadmium, chloride, fluoride, aluminum, calcium, potassium, magnesium, manganese, sodium, and silica. Because of its high iron content and other impurities, zinc cannot be recovered directly from EAF dust in most, if not all, zinc smelting and refining operations. Exh. 3 at 5, 13-14.

In 1996, nearly 40% of the EAF dust generated in the United States was disposed of in landfills. Exh. 3 at 6. It costs approximately $80 per ton to dispose of EAF dust. Exh. 3 at 16.

EAF Zinc Oxide

High Temperature Metals Recovery

While zinc cannot be recovered directly from EAF dust in most zinc smelters and refineries, zinc oxide material recovered from EAF dust can be processed in zinc smelters and refineries. Zinc oxide material can be recovered from EAF dust when the dust is put through a high temperature metals recovery (HTMR) process. HTMR units include rotary kilns, rotary hearth furnaces, plasma furnaces, and electric furnaces. Exh. 3 at 6-7, 10, Att. F, H.

HTMR processing increases the levels of zinc, lead, and cadmium in EAF dust. These changes are desirable in the zinc refining process. HTMR processing also lowers the levels of constituents that are considered contaminants in the zinc refining process (*e.g.*, iron, calcium, magnesium, alumina), except for sodium, chloride, fluoride, and potassium. Exh. 3 at 10, 18, Att. H.

In 1994, approximately 1.2 million tons of EAF dust per year was processed worldwide, mostly to produce zinc oxide material. Exh. 3 at 18, Att. L. EAF dust processing is done in a variety of HTMR units and the resulting zinc oxide material is sold primarily to produce zinc, but also to produce zinc chemicals. Exh. 3 at 18, Att. L. Several facilities in the United States produce or are capable of producing EAF zinc oxide. Exh. 3 at 6, 18, Att. L, M. Markets for EAF zinc oxide exist in North America, Asia, and Europe. Exh. 3 at 19. Once EAF dust has been through the HTMR process, the value of the resulting zinc oxide material approaches the value of mined zinc sulfide concentrates (currently $250 to $300 per ton). Exh. 3 at 8, 16-17, 21.

BRZ would like to purchase EAF zinc oxide. Tr. at 13; Exh. 3 at 1-2, 6. BRZ intends to use the material as feedstock for its zinc refinery. Exh. 3 at 1, 8. EAF zinc oxide can substitute for and supplement mined zinc sulfide concentrates. Exh. 3 at 2, 14. After washing EAF zinc oxide (described below), BRZ plans to use the material in the same manner it uses the mined zinc sulfate concentrates. The products and by-products from EAF zinc oxide would be essentially indistinguishable from those of the mined materials. Exh. 3 at 16, 19, 21.

Not all zinc oxide material recovered from the HTMR processing of EAF dust would be suitable feed for BRZ's refinery. Exh 3. at 7. To be economical for BRZ, EAF zinc oxide must meet the following specifications (on average):

>50% zinc;

<20% lead;

<5% iron;

<4% total gangue materials (silica plus calcium plus magnesium); and

<2% chloride or capable of being water washed to achieve <2% chloride.
Exh. 3 at 7.

For BRZ to be able to wash EAF zinc oxide to <2% chloride, the feed should arrive at BRZ's facility with <13% chloride. Reply at 5-6, Att. O. In addition, BRZ could accept EAF zinc oxide produced during the three-month start-up period of an HTMR unit with up to 7% iron. Tr. at 5-6; Exh. 4.

AmeriSteel, Inc.'s HTMR Process

One of the companies that processes EAF dust with an HTMR unit is AmeriSteel, Inc. (AmeriSteel). AmeriSteel is a steel manufacturer located in Jackson, Tennessee. AmeriSteel's HTMR unit is a rotary hearth furnace. Exh. 3 at 8-9.

To process EAF dust, AmeriSteel first mixes the dust with a source of carbon (commercial grade coal or coke purchased on the open market) to form briquettes. The carbon acts as a reducing agent. AmeriSteel places the briquettes in the rotary hearth furnace to recover both zinc oxide material and an iron material. Materials that volatilize at lower temperatures vaporize and leave the furnace in a gas stream. These materials then oxidize, form a solid, and are collected in an air pollution control device called a baghouse. This material collected in the baghouse is EAF zinc oxide. Tr. at 18-19; Exh. 3 at 9-10; Reply at 3, Att. P. Once AmeriSteel achieves full capacity, it is expected to produce approximately 9,600 tons per year of EAF zinc oxide from the 24,000 tons of EAF dust that Ameristeel generates annually. Exh. 3 at 10.

AmeriSteel's EAF Zinc Oxide

AmeriSteel's HTMR process increases the zinc content of EAF dust from 20-25% to 59.5%, increases the lead content from 3% to 7.5%, increases the cadmium content from 0.05% to 0.1%, and decreases the iron content from 19-24% to 0.1%. AmeriSteel's HTMR process lowers the levels of constituents that are considered contaminants in BRZ's refining process, except for sodium, chloride, fluoride, and potassium. Exh. 3 at 10, 18, Att. H, K.

BRZ has determined that, except for the chloride level of the material, AmeriSteel's EAF zinc oxide is an ideal feed for its zinc refinery. Exh. 3 at 8. Ameristeel's EAF zinc oxide is chemically similar to mined zinc oxide and zinc sulfide concentrates:

Constituent	Mined Concentrates		AmeriSteel's EAF Zinc Oxide
	Zinc Oxide	Zinc Sulfide	
% zinc	54	59.1	59.5
% lead	4.9	1.2	7.5
% cadmium	0.38	0.5	0.1
% iron	2.5	1.5	0.1
% copper	0.02	0.3	0.1
% sulfur	<1	31	<1
% arsenic	.7	<0.02	<0.01
% calcium	2.4	1	0.05
% silica	14.8	0.8	0.02
% magnesium	0.6	0.4	0.01
% alumina	2.7	0.1	0.02
% sodium	N/A	<0.02	3
% chloride	0.07	<0.1	8
% fluoride	0.03	0.05	0.15

Exh. 3 at 14, 17, Att. D, H, K. With the exception of chloride and fluoride, AmeriSteel's EAF zinc oxide also meets typical zinc refiner specifications for zinc sulfide concentrate blends and falls within the range of secondary feed specifications that zinc refiners have established. Exh. 3, Att. F, H, K.

EAF zinc oxide produced by AmeriSteel and others has levels of zinc comparable to that of mined concentrates. Exh. 3 at 17, Att. D, H, K. If used in BRZ's refining process, EAF zinc oxide would have chemical advantages and disadvantages compared to mined concentrates. The primary advantages of EAF zinc oxide are that it is higher in lead than mined concentrates and lower in sulfur than mined zinc sulfide concentrates. AmeriSteel's EAF zinc oxide has the additional advantage of being lower in iron than mined concentrates. Exh. 3 at 14, 17-18, Att. D, H, J at 3, K.

EAF zinc oxide has two primary disadvantages when compared to mined concentrates. First, EAF zinc oxide has higher levels of sodium, chloride, fluoride, and potassium, which are present as inorganic salts. While EAF zinc oxide can be introduced directly to BRZ's roaster, inorganic salts in the material could corrode BRZ's refining equipment if their levels are not first reduced. However, as discussed below, BRZ plans to wash EAF zinc oxide to reduce its levels of inorganic salts. Tr. at 13-17; Exh. 3 at 11, 14, 17-18, Att. D, H, J at 3, K.

The second primary disadvantage of EAF zinc oxide is that it may be in the form of dry dust rather than wet filter cake. Exh. 3 at 14. The dry dust is more difficult to handle. Exh. 3 at 14, Att. J at 3. As discussed below, however, BRZ's washing process will turn this dry dust into wet filter cake that BRZ can then put through its refinery equipment.

BRZ's Proposed Operations

EAF zinc oxide is expected to arrive at BRZ's Sauget facility in the form of dry dust. BRZ plans to keep the dry EAF zinc oxide totally enclosed from unloading until washing. BRZ has designed a material handling/wash system to handle that material. Exh. 3 at 14, 20, Att. J at 3-4. On September 22, 1998, IEPA granted BRZ an air pollution control permit to construct the system. The construction permit limits emissions of particulate matter from the handling/wash facility to 1.68 tons per year. Exh. 2; Exh. 3, Att. J.

Dry secondary zinc oxide material is expected to arrive at BRZ's Sauget facility in bulk or in supersacks. Approximately 90% of this material is expected to arrive by rail. BRZ plans to unload railcars of the bulk material through ventilated air slides to silos equipped with High-Efficiency Particulate Air (HEPA) filters. Ultimately, BRZ plans to add four silos, each with a capacity of 1.5 railcars. BRZ proposes to locate the silos on concrete or asphalt pads that BRZ could wash into a sump. BRZ plans to pump the sump contents into the washing process. Exh. 3 at 15, Att. J at 4.

Supersacks of the material are expected to arrive by boxcar or truck. BRZ plans to leave supersacks in boxcars for intermediate storage. The boxcars would be unloaded at a covered loading dock that is to be attached to the washing plant. Supersacks that arrive by truck would be stored inside the washing plant. BRZ would be able to store approximately 150 tons of that material inside the washing plant. Exh. 3 at 15, Att. J at 4.

BRZ plans to use a truck to move the supersacks to a supersack discharge station to empty them. BRZ proposes to maintain the discharge station under negative pressure to avoid fugitive emissions. BRZ would vent the discharge station through a baghouse to collect any secondary zinc oxide material. Exh. 3 at 15, Att. J at 5.

BRZ proposes to convey the secondary zinc oxide material (from the silos and the supersack discharge station) in an enclosed, ventilated conveyor (or by pneumatic conveyor) to a tank where BRZ would mix the material with water. BRZ proposes to pump the resulting slurry into a washing tank. BRZ plans to add soda ash to the washing tank to raise the pH to a

level that would not dissolve zinc and other heavy metals but would dissolve the inorganic salts that could corrode BRZ's refining equipment. Exh. 3 at 11, 15-16, Att. J at 5.

After washing, BRZ proposes to create wet filter cake by removing water from the slurry with a pressure filter. BRZ plans to transport the filter cake by enclosed conveyor belts to the concentrate storage building. In the concentrate storage building, BRZ would blend the washed secondary zinc oxide material with zinc sulfide concentrates to create feed for the roaster, after which the material would go through the refining process outlined on page four of this opinion. Exh. 3 at 15-16, Att. J at 5.

Some producers of EAF zinc oxide may wash the material before delivering it to BRZ. In that case, the material would arrive at BRZ's Sauget facility as wet filter cake, which BRZ can handle in the same manner that it currently handles filter cake feed material. Tr. at 14-15; Exh. 3 at 14, 20. Typically, the largest suppliers of secondary zinc oxide material either wash the material at their facilities to produce wet filter cake or ship the material as dry dust in pneumatic trailers. Smaller suppliers typically package the secondary zinc oxide material in supersacks. Exh. 3, Att. J at 4.

BRZ's Proposed Contract With AmeriSteel

BRZ and AmeriSteel have reached agreement on contract terms under which BRZ plans to buy AmeriSteel's full production of EAF zinc oxide. Tr. at 17-18; Exh. 3 at 8, Att. G at 1. AmeriSteel's full monthly production is estimated to be approximately 800 tons. Exh. 3, Att. G. Under the contract, the price of EAF zinc oxide is based on a percentage of its zinc content and the LME price for zinc. Exh. 3, Att. G at 2. Because EAF zinc oxide can substitute for and supplement BRZ's mined zinc sulfide concentrates, BRZ would pay AmeriSteel a high percentage of what it would normally pay for mined zinc sulfide concentrates. Exh. 3 at 8, 17. BRZ is willing to pay a price for EAF zinc oxide that far exceeds its cost of freight. Tr. at 13; Exh. 3 at 17.

The AmeriSteel contract would be effective upon execution and continue until December 31 of the year following the year in which BRZ begins commercial operation of its washing plant. Thereafter, the contract would continue from year to year "with annual negotiation of the terms to reflect current market conditions." Exh. 3, Att. G at 1-2. As proposed, either party could cancel the contract by giving the other party 180 days notice of cancellation. Exh 3, Att. G at 2. AmeriSteel has indicated that it will not execute the contract "until all regulatory issues have been resolved, including this adjusted standard proceeding." Tr. at 17-18; Exh. 3 at 9.

DISCUSSION

In this section, the Board first discusses whether EAF zinc oxide is a solid waste. The Board then discusses whether the provision under which BRZ seeks this determination is available in this case. Next, the Board evaluates each of the factors upon which this

determination is based. Lastly, the Board discusses the conditions that apply to this determination.

Status of EAF Zinc Oxide

Section 720.131(c) allows the Board to determine that certain materials that would otherwise be solid wastes are not solid wastes if certain conditions are met. Therefore, the Board initially must determine that EAF zinc oxide is a solid waste; if it is not, BRZ has no need for an adjusted standard.

A "solid waste" is any discarded material not otherwise excluded in the regulations. See 35 Ill. Adm. Code 721.102(a)(1). One of the several ways that a material may be considered "discarded" is by being "recycled" in a manner specified in Section 721.102(c) of the regulations. See 35 Ill. Adm. Code 721.102(a)(2). Section 721.102(c)(3) specifies, in part, that if a "listed sludge" is recycled by being "reclaimed," it is a solid waste. See 35 Ill. Adm. Code 721.102(c)(3) and 721.Appendix Z.[4]

The Board finds that EAF zinc oxide fits within this category. First, EAF zinc oxide is considered a "listed sludge." A "sludge" includes a "solid . . . waste generated from [an] . . . air pollution control facility . . . ." 35 Ill. Adm. Code 721.101(c)(2); 35 Ill. Adm. Code 720.110. EAF dust, from which EAF zinc oxide is recovered, is generated from an air pollution control facility and is therefore a sludge. Furthermore, EAF dust is "listed" because it is listed as a hazardous waste from a specific source under 35 Ill. Adm. Code 721.132 (listing emission control dust/sludge from the primary production of steel in electric furnaces as hazardous waste K061).

While this listing applies to EAF dust rather than EAF zinc oxide, Sections 721.103(c)(2)(A) and (d)(2) further provide that a material derived from the treatment of a listed hazardous waste is itself the listed hazardous waste. See 35 Ill. Adm. Code 721.103(c)(2)(A) and (d)(2). USEPA, which promulgated the federal regulations upon which these regulations are based, explains that "all of the residues from treating the original listed wastes are likewise considered to be the listed waste . . . ." 54 Fed. Reg. 1056, 1063 (Jan. 11, 1989). Therefore, EAF zinc oxide is also considered a listed sludge.[5]

Second, the Board finds that EAF dust and the resulting EAF zinc oxide are being recycled by reclamation. A material is "reclaimed" if it is:

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[4] For a detailed discussion of how materials become solid wastes, please refer to Petition of Chemetco, Inc. for Adjusted Standard From 35 Ill. Adm. Code 720.131(a) and (c) (March 19, 1998), AS 97-2, slip op. at 11-12.

[5] Compare Petition of Recycle Technologies, Inc. for an Adjusted Standard Under 35 Ill. Adm. Code 720.131(c) (September 3, 1998), AS 97-9, slip op. at 7-8 (if used antifreeze (spent material that is not a listed hazardous waste) is a characteristic hazardous waste, the initially but yet to be completely reclaimed material derived from that used antifreeze is a hazardous waste only if it exhibits a characteristic of hazardous waste).

> processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents. 35 Ill. Adm. Code 721.101(c)(4).

When USEPA promulgated the federal regulation upon which this regulation is based, it explained that materials are reclaimed if "material values . . . are recovered as an end-product of a process (as in metal recovery from secondary materials)" or if they are "processed to remove contaminants in a way that restores them to their usable original condition." 50 Fed. Reg. 614, 633 (Jan. 4, 1985). The Board finds that EAF dust that is processed by HTMR into zinc oxide material is being "reclaimed." The Board also finds that EAF zinc oxide that is washed to remove contaminants (inorganic salts) is being "reclaimed." See 35 Ill. Adm. Code 721.101(c)(4). Because EAF zinc oxide is a listed sludge that is recycled by being reclaimed, it is a solid waste.

Availability of Section 720.131(c)

Generally, a waste being reclaimed remains a waste until reclamation is completed. See 50 Fed. Reg. 614, 620, 633-634, 655 (Jan. 4, 1985). Section 720.131(c) provides an exception to this principle for material that is initially reclaimed, but that requires further reclaiming before recovery is completed.

In discussing the federal counterpart to Section 720.131(c), USEPA explains that the provision is designed to address those situations in which "the initial reclamation step is so substantial that the resulting material is more commodity-like than waste-like even though no end-product has been recovered." 50 Fed. Reg. 614, 655 (Jan. 4, 1985).

The Board finds that EAF dust that has been processed in an HTMR unit has been initially but not fully reclaimed. HTMR processing increases the eventual recovery of zinc, lead, and cadmium values from EAF dust. HTMR processing also decreases the levels of materials that are considered contaminants in BRZ's refining process, such as iron, calcium, magnesium, and alumina. However, EAF zinc oxide requires further processing to recover end products. First, BRZ must wash the EAF zinc oxide to remove inorganic salts before it can be roasted in BRZ's roaster. BRZ then must put the washed material through its refining process, during which BRZ would roast, leach, purify, and further recover the material. The refining process recovers various metals, including a special high grade quality zinc.

The Board finds that Section 720.131(c) is available in this case because once EAF dust has been processed in an HTMR unit to create EAF zinc oxide, it has been initially but not completely reclaimed.

Section 720.131(c) Factors

The Board must determine whether EAF zinc oxide is commodity-like based on the Section 720.131(c) factors set forth on page three of this opinion. The Board finds that EAF

zinc oxide is commodity-like based on these factors. The Board addresses these factors in turn.

The Degree of Processing the Material has Undergone and the Degree of Further Processing That is Required

When explaining the federal counterpart to Section 720.131(c), USEPA stated, "the more substantial the initial processing, the more likely the resulting material is to be commodity-like." 50 Fed. Reg. 614, 655 (Jan. 4, 1985). Here, the initial processing is HTMR. HTMR is a physical and chemical process that is performed in certain equipment, such as a rotary kiln, rotary hearth furnace, plasma furnace, or electric furnace.

HTMR processing of EAF dust can more than double the levels of zinc in EAF dust, and it can substantially increase its levels of lead and cadmium. The increased concentrations of these metals are desirable for BRZ's refining process. HTMR processing also reduces the levels of numerous undesirable constituents in EAF dust. Without HTMR processing, EAF dust is not suitable to directly produce zinc in most, if not all, zinc smelting and refining operations. HTMR processing increases the value of EAF dust from a negative $80 per ton (its cost of disposal) to a value that approaches the value of mined zinc sulfide concentrates (currently $250 to $300 per ton).

After undergoing HTMR processing, EAF dust can be refined directly. However, BRZ proposes to wash EAF zinc oxide to reduce the inorganic salts that could corrode BRZ's refining equipment. After washing the material, BRZ plans to roast, leach, purify, and further process the material. This refining process recovers various metals, including a special high grade quality zinc.

BRZ and IEPA maintain that EAF zinc oxide will be fully reclaimed after the wash, *i.e.*, that the wash alone constitutes all of the "further processing that is required." BRZ and IEPA view the washed EAF zinc oxide as a product, not a waste, and thus do not view the subsequent refining as relevant to this factor. Exh. 3 at 13-16; Resp. at 3-4. In support of its position, BRZ introduced a letter from the State of Tennessee Department of Environment and Conservation that indicates that secondary zinc oxide material recovered by HTMR processing is fully reclaimed without any washing. See Exh. 3, Att. A. The Board notes, however, that USEPA guidance indicates that putting secondary zinc oxide material derived from K061 through an electrolytic zinc refining process constitutes further reclamation under RCRA. See RCRA Permit Policy Compendium, 9444.1994 (09) (December 19, 1994 letter to Paul R. DiBella from David Bussard, Director, Characterization and Assessment Division, Office of Solid Waste and Emergency Response, USEPA). This USEPA guidance suggests that the subsequent refining is relevant to this factor.

The Board finds that even if the subsequent refining is relevant, the HTMR processing is substantial, both in terms of the process itself and its effect on EAF dust. The Board therefore finds that this factor supports BRZ's claim that EAF zinc oxide is commodity-like.

The Value of the Material After It Has Been Reclaimed

USEPA states that "the more valuable a material is after initial processing, the more likely it is to be commodity-like." 50 Fed. Reg. 614, 655 (Jan. 4, 1985). As noted above, once EAF dust has been through the HTMR process, the value of the resulting secondary zinc oxide material approaches the value of mined zinc sulfide concentrates. BRZ and AmeriSteel have reached agreement on contract terms and the price of EAF zinc oxide is to be based on a certain percentage of the zinc content of the material and the LME price for zinc. BRZ would pay AmeriSteel a high percentage of what BRZ would normally pay for mined zinc sulfide concentrates. BRZ is prepared to pay a price for EAF zinc oxide that far exceeds its cost of freight.

The Board finds that EAF zinc oxide has significant value.

The Degree To Which the Reclaimed Material is Like an Analogous Raw Material

According to USEPA, "[i]f the initially-reclaimed material can substitute for a virgin material, for instance as a feedstock to a primary process, it is more likely to be commodity-like." 50 Fed. Reg. 614, 655 (Jan. 4, 1985). EAF zinc oxide can substitute for zinc sulfide concentrates from mines. While not identical, the two materials are chemically similar. Both materials typically would require some form of contaminant removal before BRZ would introduce them to its roaster (*i.e.*, BRZ processes mined concentrates with an acid solution to remove magnesium; BRZ proposes to wash EAF zinc oxide with a mixture of water and soda ash to reduce levels of inorganic salts). After the wash, BRZ plans to use EAF zinc oxide filter cake in the same manner it uses the filter cake of mined concentrates. The products and by-products from EAF zinc oxide would be nearly identical to those of the mined materials. Aside from its chloride and fluoride levels, AmeriSteel's EAF zinc oxide meets the specifications of a typical zinc refiner for zinc sulfide concentrate blends.

The Board finds that EAF zinc oxide is very similar to mined zinc sulfide concentrates and can be substituted for the mined concentrates.

The Extent To Which an End Market for the Reclaimed Material is Guaranteed

In discussing this factor, USEPA states:

> If the [petitioner] can show that there is an existing and guaranteed end market for the initially-reclaimed material (for instance, value, traditional usage or contractual arrangements), the material is more likely to be commodity-like. 50 Fed. Reg. 614, 655 (Jan. 4, 1985).

In this case, the evidence established that EAF zinc oxide is sold primarily to produce zinc, but also to produce zinc chemicals. Several facilities in the United States produce or are

capable of producing EAF zinc oxide. There are markets for EAF zinc oxide in North America, Asia, and Europe.

BRZ's contract with AmeriSteel would provide another end market for the EAF zinc oxide that AmeriSteel produces. AmeriSteel's EAF zinc oxide meets specifications necessary for BRZ to economically process the material. With the exception of chloride and fluoride, AmeriSteel's EAF zinc oxide also meets typical zinc refiner specifications for zinc sulfide concentrate blends and falls within the range of secondary feed specifications that zinc refiners have established. BRZ also established that there are end markets for its products and by-products. These factors corroborate that a market for feed material exists.

The Board finds that there is an end market for EAF zinc oxide.

The Extent To Which the Reclaimed Material is Handled to Minimize Loss

USEPA states that the "more carefully a material is handled, the more it is commodity-like." 50 Fed. Reg. 614, 655 (Jan. 4, 1985). Typically, the largest suppliers of secondary zinc oxide material either wash it themselves and deliver it as wet filter cake (which BRZ can handle as it currently handles filter cake feed material) or ship the material as dry dust in pneumatic railcars. Smaller suppliers typically package the secondary zinc oxide material in supersacks.

BRZ proposes to handle dry secondary zinc oxide material, which is expected to arrive in bulk or in supersacks, in a totally enclosed facility. Railcars of the bulk material are to be unloaded through ventilated air slides to silos with HEPA filters. The silos are to be on concrete or asphalt pads with sumps to transfer any spillage to the washing process. Supersacks of the material are to be stored in enclosed areas and emptied under negative pressure in a discharge station with air filters. IEPA issued an air pollution control construction permit that limits emissions of particulate matter from the handling/wash facility to 1.68 tons per year.

The Board also notes that producers of EAF zinc oxide and BRZ have financial incentives not to lose the material: if producers lose the material, they have less to sell to BRZ; if BRZ loses the material, it has less feedstock for its refinery.

The Board finds that EAF zinc oxide will be handled to minimize loss.

Other Relevant Factors

The Board will not consider any additional factors based on this record. When discussing Section 720.131(c)(6), BRZ states that the grant of an adjusted standard will encourage the recycling of EAF dust and decrease the amount of the material that is landfilled. Exh. 3 at 21; Reply at 3. While the Board encourages recycling, the Board may consider "other relevant factors" only to the extent that they are relevant to whether EAF zinc oxide is

commodity-like. BRZ has not established that an increase in EAF dust recycling is relevant to that question.

Board Determination

The Board finds that BRZ has established that EAF zinc oxide is commodity-like. Accordingly, the Board determines that EAF zinc oxide is not a solid waste.

Conditions on the Adjusted Standard

The Board will first set forth the conditions that BRZ proposes on the adjusted standard, and then set forth the Board's findings on those conditions.

BRZ's Proposed Conditions

BRZ proposes the following conditions on the adjusted standard, which it amended to reflect the conditions that IEPA requested:

a. The material accepted shall consist of zinc oxide reclaimed from EAF dust (K061) using an HTMR process;

b. The material accepted shall meet the following specifications as monthly averages[:]

(1) >50% zinc;

(2) <20% lead;

(3) <5% iron;

(4) <4% total gangue materials (silica plus calcium plus magnesium); and

(5) <13% chloride; provided, however, that the material accepted may contain up to 7% iron for a period of up to three months during the start-up of the process producing the materials;

c. BRZ shall maintain records which document the sources of the reclaimed zinc oxide and which are adequate to demonstrate that the materials accepted meet the specifications set forth in Condition b, above; and

d. BRZ shall maintain the records required under Condition c, above, for a period of three years and shall make such records available for inspection and copying at any reasonable time during normal business hours upon request by Illinois EPA.

Tr. at 5-6; Exh. 4; Reply at 6.

BRZ proposes to "take representative samples from the shipments of reclaimed zinc oxide . . . and composite them on a monthly basis." Reply at 5. BRZ would analyze the monthly composites for zinc, lead, iron, chloride, silica, calcium, and magnesium to determine compliance with its proposed specifications. *Id.* BRZ maintains that it should be able to "accept the infrequent individual shipment which exceeds these specifications if the normal production of the supplier meets specifications and those shipments can be blended with other shipments such that the blended materials meet the specifications." *Id.* at 4. IEPA has agreed to all of these proposed conditions. Tr. at 24.

Board Findings

BRZ's proposed conditions (b) and (c), and the manner in which BRZ proposes to comply with these conditions, raise a number of questions. Initially, it is unclear how BRZ would composite samples. For example, it is unclear whether a composite of samples from each shipment would be tested individually or whether samples from multiple shipments would be composited for testing. It is also unclear whether samples of shipments from different producers would be composited or whether separate composites would be tested for each producer.

In addition, it does not appear that BRZ would keep shipments of EAF zinc oxide segregated and unprocessed while it awaits test results. Accordingly, if a composite sample exceeds the proposed specifications, it is unclear how BRZ could identify the shipment in order to blend it "such that the blended materials meet the specifications." In addition, by the time BRZ receives test results on a composite sample, BRZ may already have blended the material with other feed material and, in fact, may already have refined the material.

It is also unclear how BRZ ever could violate these conditions of the adjusted standard as BRZ interprets them. If a test shows that material greatly exceeds the specifications, BRZ could comply by simply mixing portions of that material in piecemeal fashion with compliant materials until all of the noncompliant material is used. It is also unclear whether BRZ would have to test the blend to confirm compliance.

These proposed conditions also raise environmental and regulatory concerns. First, if an adjusted standard is granted, RCRA regulations would not apply to the materials during their shipment to BRZ, and during their storage and processing at BRZ. If BRZ could blend noncompliant material (*e.g.*, material that exceeds the lead limit) until the blend met the specifications, transporters would be able to transport in Illinois (and BRZ would be able to handle and store) material that exceeds the specifications without being subject to Illinois' hazardous waste regulations. Likewise, an Illinois producer of EAF zinc oxide with material intended to be shipped to BRZ that exceeds the specifications could handle and store that material without being subject to Illinois' hazardous waste regulations.

Second, the specifications on the contents of EAF zinc oxide relate directly to BRZ's ability to economically use the material. The failure of the material to meet the specifications calls into question the degree of processing that the HTMR unit provided, the value of the material, the degree to which the material is like mined zinc sulfide concentrates, and the extent to which there is an end market for the material. Thus, to the extent that material fails to meet these specifications, the Board would be less likely to find that the material is commodity-like under Section 720.131(c).

In order to protect the environment and to ensure the commodity-like character of EAF zinc oxide that BRZ accepts for processing, the Board will limit the applicability of this adjusted standard to EAF zinc oxide that meets the specifications. Representative samples of each shipment of EAF zinc oxide must be collected, composited, and tested in accordance with generally accepted practices, such as those specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (Third Edition).

In addition, the Board's determination applies only to EAF zinc oxide to be processed through BRZ's electrolytic zinc refinery in Sauget, Illinois. BRZ cannot accept the material under the adjusted standard for a different use or for processing at a different facility.

Of course, the Board is not determining the status of EAF zinc oxide intended for BRZ when that material is outside of Illinois. The Board's determination applies only to EAF zinc oxide when it is in Illinois. If EAF zinc oxide is produced outside of Illinois, the composite sampling of each shipment must meet the specifications before the shipment to BRZ enters Illinois.

In addition, the Board's determination applies only to EAF zinc oxide that has arrived at BRZ's Sauget facility or that is under a legally binding contract for sale to BRZ. Without this requirement, an unscrupulous generator of EAF zinc oxide could accumulate the material at its facility and seek to evade Illinois' hazardous waste regulations by claiming that it plans to sell the material to BRZ.

BRZ has several options if it objects to the conditions that the Board has placed on this adjusted standard. First, under the Board's procedural rules, BRZ may move the Board to reconsider the conditions that the Board has placed on this adjusted standard. Second, BRZ may appeal the Board's adjusted standard to the Illinois Appellate Court. Third, BRZ may choose to consider EAF zinc oxide a solid waste in lieu of accepting the material under the conditions of the adjusted standard.

CONCLUSION

The Board finds that BRZ has established that zinc oxide material produced by subjecting EAF dust to an HTMR process is commodity-like. Accordingly, the Board finds that EAF zinc oxide is not a solid waste and grants BRZ's petition under Section 720.131(c) for an adjusted standard, subject to the conditions set forth in this order.

The Board emphasizes that this determination applies only to EAF zinc oxide to be processed through BRZ's electrolytic zinc refinery in Sauget, St. Clair County. That EAF zinc oxide also must meet certain specifications. In addition, this determination applies only to EAF zinc oxide when it is in Illinois and either at the Sauget facility or under a legally binding contract for sale to BRZ.

This opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

1. The Board finds that zinc oxide material produced by subjecting electric arc furnace (EAF) dust from the primary production of steel (K061 under 35 Ill. Adm. Code 721.132) to a high temperature metals recovery (HTMR) process is not a solid waste and grants Big River Zinc Corporation (BRZ) an adjusted standard under 35 Ill. Adm. Code 720.131(c).

2. The adjusted standard is subject to the following conditions:

   a. The determination described in paragraph one of this order applies only to zinc oxide material:

      (1) that is to be processed through BRZ's electrolytic zinc refinery in Sauget, St. Clair County, Illinois;

      (2) that is in Illinois;

      (3) that has arrived at BRZ's Sauget, St. Clair County, Illinois facility or that is under a legally binding contract for sale to BRZ; and

      (4) that meets the following specifications by weight:

         (a) >50% zinc;

         (b) <20% lead;

         (c) <5% iron (or <7% iron in material produced by an HTMR unit during the first three months that the HTMR unit produces zinc oxide material from EAF dust from the primary production of steel (K061 under 35 Ill. Adm. Code 721.132));

(d) <4% total gangue materials (silica plus calcium plus magnesium); and

(e) <13% chloride;

b. BRZ must maintain records that document the sources of all zinc oxide material that BRZ accepts under this adjusted standard;

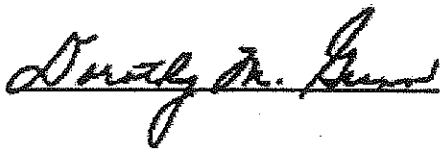
c. BRZ must maintain records that demonstrate that each shipment of zinc oxide material that BRZ accepts under this adjusted standard meets the specifications set forth in paragraph 2(a)(4) of this order; for this demonstration, representative samples of each shipment of zinc oxide material must be collected, composited, and tested in accordance with generally accepted practices, such as those specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (Third Edition); and

d. BRZ must maintain the records required under paragraphs 2(b) and 2(c) of this order for a period of three years and must make such records available for inspection and copying at any reasonable time during normal business hours upon the Illinois Environmental Protection Agency's request.

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1996)) provides for the appeal of final Board orders to the Illinois Appellate Court within 35 days of service of this order. Illinois Supreme Court Rule 335 establishes such filing requirements. See 172 Ill. 2d R. 335; see also 35 Ill. Adm. Code 101.246, Motions for Reconsideration.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 15th day of April 1999 by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

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ILLINOIS POLLUTION CONTROL BOARD
May 6, 1999

RECEIVED
Division of Legal Counsel
MAY 12 1999
Environmental Protection Agency

IN THE MATTER OF:	)	
	)	
PETITION OF BIG RIVER ZINC	)	AS 99-3
CORPORATION FOR AN ADJUSTED	)	(Adjusted Standard - RCRA)
STANDARD UNDER 35 ILL. ADM. CODE	)	
720.131(c)	)	

ORDER OF THE BOARD (by K.M. Hennessey):

On April 15, 1999, the Board granted petitioner Big River Zinc Corporation (BRZ) an adjusted standard, subject to certain conditions. On April 28, 1999, BRZ moved the Board to reconsider its decision. BRZ also moved the Board to decide the motion to reconsider at the Board's May 6, 1999 meeting. On May 5, 1999, the Illinois Environmental Protection Agency (IEPA) filed a response to the motion to reconsider.

The Board grants BRZ's motion to decide this matter today. The Board also grants BRZ's motion to reconsider and sets forth in this order the modified terms of BRZ's adjusted standard.

BACKGROUND

The Board's findings of fact and conclusions of law are set forth in its opinion of April 15, 1999 and are incorporated here by reference. Below, the Board highlights the facts and proceedings relevant to BRZ's motions.

BRZ operates an electrolytic zinc refinery in Sauget, St. Clair County, Illinois. BRZ uses various zinc-containing materials as feedstock for its refinery. BRZ sought an adjusted standard because it wants to use a zinc-containing material recovered from dust emitted from electric arc furnaces used to produce steel. This secondary zinc oxide material would ordinarily be considered a "solid waste" and a "hazardous waste" under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 *et seq.*, and corresponding Illinois laws and regulations. BRZ wants to use this secondary zinc oxide material without becoming subject to Illinois' hazardous waste requirements.

To that end, BRZ filed a petition for an adjusted standard under 35 Ill. Adm. Code 720.131(c). Section 720.131(c) allows the Board to determine that certain materials are not solid wastes if they meet certain criteria. The status of materials as "solid wastes" is significant because under the laws and regulations that Congress and the United States Environmental Protection Agency have established, only those materials that are "solid wastes" can be regulated as "hazardous wastes" under RCRA and corresponding Illinois laws and regulations. Those laws and regulations impose various requirements on persons who generate, treat, store, dispose, recycle, or transport hazardous waste. See 35 Ill. Adm. Code

722-726, 728. Materials that are not solid wastes are not subject to Illinois' hazardous waste regulations.

The secondary zinc oxide material for which BRZ sought an adjusted standard is recovered from electric arc furnace dust (EAF dust) by a high temperature metals recovery (HTMR) process. The Board refers to this material as "EAF zinc oxide." BRZ also proposed several conditions on the adjusted standard. IEPA recommended that the Board grant the adjusted standard, subject to the conditions that BRZ proposed.

In its April 15, 1999 opinion, the Board found that BRZ established that EAF zinc oxide is not a solid waste. The Board therefore granted BRZ's petition for an adjusted standard, but modified the conditions that BRZ had proposed.

MOTION TO EXPEDITE

BRZ moves the Board to decide the motion to reconsider at the Board's May 6, 1999 meeting. Motion to Expedite (Mot. Exp.) at 4. BRZ attached the sworn affidavit of George Obeldobel, President of BRZ (Affidavit), to both the motion to reconsider and the motion to expedite. BRZ is scheduled to begin receiving shipments of EAF zinc oxide on May 11, 1999. Affidavit at 4. BRZ states that its business relationships with its suppliers will be threatened if the Board does not modify the adjusted standard before that date. Mot. Exp. at 3.

The Board's resources permit it to address BRZ's motion to reconsider at the Board's May 6, 1999 meeting. Accordingly, the Board grants the motion to expedite and below rules on BRZ's motion to reconsider.

MOTION TO RECONSIDER

BRZ moves the Board to reconsider its April 15, 1999 decision in this matter. Motion to Reconsider (Mot. Rec.) at 1. Specifically, BRZ asks the Board to modify a condition of the adjusted standard that the Board granted to BRZ. *Id.* at 15. The adjusted standard reads as follows:

1. The Board finds that zinc oxide material produced by subjecting electric arc furnace (EAF) dust from the primary production of steel (K061 under 35 Ill. Adm. Code 721.132) to a high temperature metals recovery (HTMR) process is not a solid waste and grants Big River Zinc Corporation (BRZ) an adjusted standard under 35 Ill. Adm. Code 720.131(c).

2. The adjusted standard is subject to the following conditions:

    a. The determination described in paragraph one of this order applies only to zinc oxide material:

(1) that is to be processed through BRZ's electrolytic zinc refinery in Sauget, St. Clair County, Illinois;

(2) that is in Illinois;

(3) that has arrived at BRZ's Sauget, St. Clair County, Illinois facility or that is under a legally binding contract for sale to BRZ; and

(4) that meets the following specifications by weight:

(a) >50% zinc;

(b) <20% lead;

(c) <5% iron (or <7% iron in material produced by an HTMR unit during the first three months that the HTMR unit produces zinc oxide material from EAF dust from the primary production of steel (K061 under 35 Ill. Adm. Code 721.132));

(d) <4% total gangue materials (silica plus calcium plus magnesium); and

(e) <13% chloride;

b. BRZ must maintain records that document the sources of all zinc oxide material that BRZ accepts under this adjusted standard;

c. BRZ must maintain records that demonstrate that each shipment of zinc oxide material that BRZ accepts under this adjusted standard meets the specifications set forth in paragraph 2(a)(4) of this order; for this demonstration, representative samples of each shipment of zinc oxide material must be collected, composited, and tested in accordance with generally accepted practices, such as those specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (Third Edition); and

d. BRZ must maintain the records required under paragraphs 2(b) and 2(c) of this order for a period of three years and must make such records available for inspection and copying at any reasonable time during normal business hours upon the Illinois Environmental Protection Agency's request.

In Re Petition of Big River Zinc Corporation (April 15, 1999), AS 99-3, slip op. at 18-19.

BRZ takes exception to the sampling requirements of paragraph 2(c) of the adjusted standard. In particular, BRZ asks the Board to amend this provision so that each shipment of EAF zinc oxide need not meet the specifications of paragraph 2(a)(4). Rather, BRZ proposes to determine compliance with the specifications based on a monthly composite of shipment samples. Mot. Rec. at 4, 15.

The Board notes that BRZ previously proposed sampling based on monthly averages. See Big River Zinc, AS 99-3, slip op. at 15. However, as the Board noted in its April 15, 1999 opinion, BRZ failed to adequately explain how its proposal would work. Specifically, BRZ failed to explain how it would composite samples and whether samples from different producers would be composited together or separately. In addition, BRZ proposed blending shipments that exceeded the specifications with other materials "such that the blended materials meet the specifications," but failed to explain how it would determine whether the blended materials meet the specifications. *Id.* at 16.

BRZ now explains that it proposes to sample each truckload, barge, railcar, or supersack of EAF zinc oxide that arrives at its facility. Mot. Rec. at 2, 5-7; Affidavit at 2-3. BRZ states that it would test a supplier-specific composite on a monthly basis for each supplier to determine compliance with the specifications. *Id.* BRZ states that it uses this sampling and testing approach for its mined zinc sulfide concentrates. Mot. Rec. at 2, 6-7; Affidavit at 2.

BRZ asserts that the requirement that each shipment of EAF zinc oxide meet the specifications is cost-prohibitive. Mot. Rec. at 8; Affidavit at 3. BRZ states that AmeriSteel, Inc. (AmeriSteel), which is expected to be a primary supplier to BRZ, and others like it would have to send samples off-site for testing. According to BRZ, these suppliers would have to hold the shipments for several days to await test results, resulting in demurrage fees. BRZ states that the off-site testing fees and demurrage fees would represent a significant portion (20-40%) of the value of the EAF zinc oxide. Mot. Rec. at 9-10; Affidavit at 3. For these reasons, BRZ concludes that the requirement that each shipment meet the specifications will prevent BRZ from purchasing EAF zinc oxide from its prospective suppliers. Mot. Rec. at 2-3, 5, 8; Affidavit at 3.

BRZ states that it can process an occasional shipment of inferior product and that it will ensure that all EAF zinc oxide received is processed. Affidavit at 3. BRZ states that if a supplier continues to provide inferior product, "BRZ will terminate its contract with its supplier and process whatever product remains." *Id.*

In its response, IEPA notes that while the Board's conditions were more strict than those that BRZ proposed, and IEPA agreed to, the Board's conditions were not without basis. IEPA Response (Resp.) at 3. IEPA believes, however, that if "process and [supplier] QA/QC

[Quality Assurance/Quality Control] standards are met and consistently followed, that should ensure a consistent product and less frequent sampling of actual content would be acceptable." *Id.* at 4. IEPA also suggests that the Board define shipment as a production cycle, or on a rolling average, rather than an individual truck or railcar. *Id.* IEPA also proposes that the Board permit BRZ to blend only within the same shipment. *Id.* IEPA further suggests that the Board allow "a reduction in the sampling frequency based on the generator's ability to use QA/QC procedures to produce consistently on-specification material." *Id.* at 5. It is not clear whether IEPA believes the material should be tested before or after it is shipped.

The Board notes that BRZ proposed the specifications as a condition of the adjusted standard. However, as noted above, the Board found that BRZ's proposed conditions, as interpreted by BRZ, were potentially unenforceable. Accordingly, the Board crafted enforceable conditions to address specifications and sampling. While BRZ now has clarified its proposal, BRZ's interpretation of its proposed conditions remains problematic.

These problems arise because BRZ continues to propose that the specifications be a condition of the adjusted standard. But BRZ will not know, until the end of the testing period, whether the material it has already received meets the required specifications on an average basis. If the material fails to meet the specifications, the adjusted standard would not apply to the material and the material would be considered a hazardous waste. In that situation, BRZ would have violated Illinois hazardous waste laws and regulations. For these reasons, BRZ's proposed condition is not workable.

Accordingly, the Board will take a different and more workable approach. The Board already has found that AmeriSteel's EAF zinc oxide meets specifications necessary for BRZ to process the material economically. See Big River Zinc, AS 99-3, slip op. at 14. Other HTMR processes are capable of producing a similar quality material. Hearing Exhibit 3 at 10, Attachment H. The Board further finds that BRZ plans to process all EAF zinc oxide that it receives and that if a supplier consistently provides an inferior product, BRZ would terminate its contract with that supplier. Affidavit at 3. Limiting the scope of the adjusted standard to EAF dust that has been processed by HTMR and that is to be processed through BRZ's electrolytic zinc refinery, as the Board did in its April 15, 1999 order, is an adequate proxy for the monthly average specifications. Accordingly, the Board will delete the condition regarding specifications from the adjusted standard. The Board also will modify the adjusted standard to clarify that it applies only to EAF zinc oxide that will undergo BRZ's electrolytic zinc refining process. The Board also will make other minor changes to the terms of the adjusted standard for clarification.

The Board took a similar approach in *In re* Petition of Recycle Technologies, Inc. (September 3, 1998), AS 97-9. In that case, the Board granted an adjusted standard under Section 720.131(c) to a petitioner that processed used automotive antifreeze. The Board did not impose a condition regarding specifications, but did limit the scope of the adjusted standard to used automotive antifreeze that the petitioner had processed in a specific manner and would further process in a specific manner. See Recycle Technologies, AS 97-9, slip op. at 12.

However, the Board does believe it necessary, as IEPA suggests, that BRZ sample and test the materials it receives. BRZ has already proposed that the adjusted standard require it to do so, and this information would allow IEPA to assess whether BRZ is indeed processing material that is EAF dust that has undergone HTMR processing. Accordingly, the Board will require BRZ each month to take representative samples of the material it receives from each supplier and composite the samples on a supplier-specific basis. BRZ must test each composite sample on a monthly basis, and maintain records of sampling and test results for three years and make those records available for IEPA to inspect.

The Board grants BRZ's motion to reconsider and grants BRZ the following amended adjusted standard:

1. The Board finds that zinc oxide material produced by subjecting electric arc furnace (EAF) dust from the primary production of steel (K061 under 35 Ill. Adm. Code 721.132) to a high temperature metals recovery (HTMR) process is not a solid waste and grants Big River Zinc Corporation (BRZ) an adjusted standard under 35 Ill. Adm. Code 720.131(c).

2. The adjusted standard is subject to the following conditions:

   a. The determination described in paragraph one of this order applies only to zinc oxide material:

      (1) that will undergo BRZ's electrolytic zinc refining process at its facility in Sauget, St. Clair County, Illinois;

      (2) that is in Illinois; and

      (3) that has arrived at BRZ's Sauget, St. Clair County, Illinois facility or that is under a legally binding contract for sale to BRZ;

   b. BRZ must maintain records identifying the suppliers of all zinc oxide material that BRZ accepts under this adjusted standard;

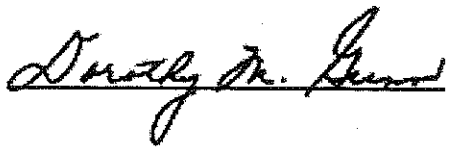
   c. Each month, BRZ must take representative samples of the zinc oxide material that it accepts from each supplier and composite the samples on a supplier-specific basis. BRZ must test each composite sample on a monthly basis to determine the percentage by weight of zinc, lead, iron, total gangue materials (silica plus calcium plus magnesium), and chloride in the sample. Each sample must be collected and tested in accordance with generally accepted practices, such as those specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (Third Edition); and

d. BRZ must maintain records of the information required in paragraphs 2(b) and 2(c) of this order for a period of three years and must make them available for the Illinois Environmental Protection Agency (IEPA) to inspect and copy at any reasonable time during normal business hours upon IEPA's request.

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1996)) provides for the appeal of final Board orders to the Illinois Appellate Court within 35 days of service of this order. Illinois Supreme Court Rule 335 establishes such filing requirements. See 172 Ill. 2d R. 335; see also 35 Ill. Adm. Code 101.246, Motions for Reconsideration.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above order was adopted on the 6th day of May 1999 by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

E

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2009 Mall Street, Collinsville, IL 62234

618/346-5120
FAX: 618/346-5155

March 11, 1998

CERTIFIED MAIL #P 290 080 200
RETURN RECEIPT REQUESTED

Big River Zinc Corp.
Attn: George M. Obeldobel, President
Rt. 3 and Monsanto Avenue
Sauget, Illinois 62201

Re: **Violation Notice, L-1998-01094**
#1631215009 -- St. Clair County
Big River Zinc Corp.
ILD062444435
Compliance File

Dear Mr. Obeldobel:

This constitutes a Violation Notice pursuant to Section 31(a)(1) of the Illinois Environmental Protection Act, 415 ILCS 5/31(a)(1), and is based upon a record view completed on March 11, 1998 by a representative of the Illinois Environmental Protection Agency ("Illinois EPA").

The Illinois EPA hereby provides notice of violations of environmental statutes, regulations, or permits as set forth in ATTACHMENT A to this letter. ATTACHMENT A includes an explanation of the activities that the Illinois EPA believes may resolve the specified violations, including an estimate of a reasonable time period to complete the necessary activities. Due to the nature and seriousness of the violations cited, please be advised that resolution of the violations may require the involvement of a prosecutorial authority for purposes that may include, among others, the imposition of statutory penalties.

A written response, which may include a request for a meeting with representatives of the Illinois EPA, must be submitted via certified mail to the Illinois EPA within 45 days of receipt of this letter. The response must address each violation specified in ATTACHMENT A and include for each an explanation of the activities that will be implemented and the time schedule for the completion of that activity. The written response will constitute a proposed Compliance Commitment Agreement ("CCA") pursuant to Section 31 of the Act. The Illinois EPA will review the proposed CCA and will accept or reject it within 30 days of receipt.

If a timely written response to this Violation Notice is not provided, it shall be considered to be a waiver of the opportunity to respond and to meet and the Illinois EPA may proceed with a referral to the prosecutorial authority.

Written communications should be directed to:

Illinois EPA
Attn: Kenneth Mensing
2009 Mall Street
Collinsville, Illinois 62234

All communications must include reference to this **VIOLATION NOTICE NUMBER, L-1998-01094.**

Questions regarding this matter should be directed to **CHRIS CAHNOVSKY** at **618/346-5120.**

Sincerely,

Kenneth G. Mensing

Kenneth G. Mensing
Regional Manager
Bureau of Land

KGM:CNC:cas
Enclosure

bcc: BOL - Records Unit
bcc: BOL - Compliance
bcc: BOL/Permits - Ted Dragovich
bcc: DLC - Chris Perzan
bcc: BOL - Collinsville

1631215009 -- St. Clair County
Big River Zinc Corporation
ILD062444435

ATTACHMENT A

1. Pursuant to Section 21(f) of the [Illinois] Environmental Protection Act (415 ILCS 5/21(f)), no person shall conduct any hazardous waste-storage, hazardous waste-treatment or hazardous waste-disposal operation:

    1. Without a RCRA permit for the site issued by the Agency under subsection (d) of Section 39 of this Act, or in violation of any condition imposed by such permit, including periodic reports and full access to adequate records and the inspection of facilities, as may be necessary to assure compliance with this Act and with regulations and standards adopted thereunder; or
    2. In violation of any regulations or standards adopted by the Board under this Act; or
    3. In violation of any RCRA permit filing requirement established under standards adopted by the Board under this Act;
    4. In violation of any order adopted by the Board under this Act.

    A violation of Section 21(f) of the [Illinois] Environmental Protection Act (415 ILCS 5/21(f)) is alleged for the following reason: Big River Zinc accepted metal-bearing by-product which were characteristically hazardous pursuant to 35 Ill. Adm. Code Section 721 Subpart C without a permit issued by the Agency. These metal-bearing by-products were accepted from off-site generators without a Uniform Hazardous Waste Manifest. Metal-bearing characteristically hazardous by-products are used in a manner constituting disposal thus making them a solid waste pursuant to 721.102(c)(1).

2. Pursuant to Section 21(h) of the [Illinois] Environmental Protection Act (415 ILCS 5/21(h)), No person shall conduct any hazardous waste-recycling or hazardous waste-reclamation or hazardous waste-reuse operation in violation of any regulations, standards, or permit requirements adopted by the Board under this Act.

    A violation of Section 21(h) of the [Illinois] Environmental Protection Act (415 ILCS 5/21(h)) is alleged for the following reason: Big River Zinc accepted metal-bearing by-product which were characteristically hazardous pursuant to 35 Ill. Adm. Code Section 721 Subpart C without a permit issued by the Agency. These metal-bearing by-products were accepted from off-site generators without a Uniform Hazardous Waste Manifest. Metal-bearing characteristically hazardous by-products are used in a manner constituting disposal thus making them a solid waste pursuant to 721.102(c)(1).

3. Pursuant to 35 Ill. Adm. Code 703.121(a), no person shall conduct any hazardous waste storage, hazardous waste treatment or hazardous waste disposal operation:

   1) Without a RCRA permit for the HWM (hazardous waste management) facility; or

   2) In violation of any condition imposed by a RCRA permit.

   A violation of 35 Ill. Adm. Code 703.121(a) is alleged for the following reason: Big River Zinc accepted metal-bearing by-product which were characteristically hazardous pursuant to 35 Ill. Adm. Code Section 721 Subpart C without a permit issued by the Agency. These metal-bearing by-products were accepted from off-site generators without a Uniform Hazardous Waste Manifest. Metal-bearing characteristically hazardous by-products are used in a manner constituting disposal thus making them a solid waste pursuant to 721.102(c)(1).

4. Pursuant to 35 Ill. Adm. Code 725.175, the owner and operator shall prepare and submit a single copy of an annual report to the Agency by March 1 of each year. The report form and instructions supplied by the Agency must be used for this report. The annual report must cover facility activities during the previous calendar year and must include the following information:

   a) The USEPA identification number (Section 725.111), name and address of the facility;

   b) The calendar year covered by the report;

   c) For off-site facilities, the USEPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator;

   d) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities this information must be listed by USEPA identification number of each generator;

   e) The method of treatment, storage or disposal for each hazardous waste;

   f) Monitoring data under Section 725.194(a)(2)(B) and (C) and (b)(2) where required;

   g) The most recent closure cost estimate under Section 725.242 and for disposal

facilities the most recent post-closure cost estimate under Section 725.244;

h) For generators which treat, store or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of the waste generated;

I) For generators which treat, store or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years, to the extent such information is available for years prior to 1984; and

j) The certification signed by the owner or operator of the facility or the owner or operator's authorized representative.

A violation of 35 Ill. Adm. Code 725.175 is alleged for the following reason: Big River Zinc failed to submit the required annual report by March 1, 1998.

SUGGESTED RESOLUTIONS

1. **Within 45 days of the receipt of this letter Big River Zinc must submit a Compliance Commitment Agreement outlining what steps Big River Zinc will take to comply with the alleged violations.**

The written response to this Violation Notice must include information in rebuttal, explanation, or justification of each alleged violation. The written response must also include a proposed Compliance Commitment Agreement that commits to specific remedial actions, includes specified times for achieving each commitment, and may include a statement that compliance has been achieved.

AREA CODE 618
TELEPHONE 274-5000

AMAX Zinc Company, Inc.
P. O. BOX 2347 EAST ST. LOUIS, ILLINOIS 62202
SUBSIDIARY OF AMAX, INC.

February 9, 1981

Mr. Karl J. Klepitsch, Jr.
Chief. Waste Management Branch
U.S. EPA
Region V
230 South Dearborn St.
Chicago, IL 60604

Dear Mr. Klepitsch:

By letter dated November 26, 1980, we informed U.S. EPA Region V that the waste streams from the AMAX Zinc Company, Inc. refinery in Sauget, Illinois were temporarily exempted from the requirements of EPA's hazardous waste management regulations by the Solid Waste Disposal Act Amendments of 1980. In your undated letter received on February 5, 1981, you acknowledged our November letter and implied that the statutory exemption may not apply to wastewater treatment sludges and air pollution control facility residues other than those listed at K066 in the hazardous waste regulations.

The U.S. EPA has made a broad interpretation of what constitutes solid waste from mineral processing. EPA indicates quite explicitly that the "wastewater treatment and air emission control sludges generated by the mining and mineral processing industry" are exempt. 45 FR 76619 (November 19, 1980). That this includes all wastewater treatment sludges and air pollution control facility residues resulting from mineral processing has been clear from numerous communications by AMAX, the American Mining Congress, and our counsel, with EPA's Office of General Counsel and Office of Solid Waste located in Washington, D.C.

Prior to stating our position in November, 1980, we assessed all of our residuals and determined that we did not have any "non-indigenous" wastes which might be subject to EPA's hazardous waste regulations. No new circumstances exist which would cause us to change our determination that there are no wastes generated by our Sauget, Illinois facility which would be subject to the permit requirements of the hazardous waste regulations.

If you have any further questions, please contact me.

Sincerely,

RO Wigger

Ralph O. Wigger
Plant Manager

RECEIVED
FEB 1981
WASTE MANAGEMENT BRANCH
U.S. EPA, REGION V

EIL005 0129

SUBSIDIARY OF AMAX, INC.

November 26, 1980

John McGuire
Director, Region V
USEPA
230 South Dearborn Street
Chicago, IL 60604

Dear Mr. McGuire:

AMAX Zinc Company, Inc. notified EPA Region V in August, 1980 that its primary electrolytic zinc refinery located in Sauget, Illinois was a hazardous waste management facility as defined by 40 CFR Part 261. As you are aware, Section 7 of the Solid Waste Disposal Act Amendments of 1980, PL96-482 signed into law on October 21, 1980, deferred regulation of certain wastes from the requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA) until at least six months after the submission by EPA of certain required studies to Congress.

Among the wastes exempted were "solid wastes from the extraction, beneficiation, and processing of ores and minerals, including phosphate rock and overburden from the mining of uranium ore." EPA at 45 FR 76618 (November 19, 1980) has amended 40 CFR Part 261 to reflect this exemption. In the preamble to these amendments, EPA indicates that this exemption is being interpreted quite broadly both as to type of activity (e.g., waste from exploration, mining, milling, smelting, and refining) and by type of waste (e.g., waste water treatment sludges and air pollution control facility residues). The activities at AMAX Zinc Company clearly fall within this exemption.

EPA indicated, however, that one narrow category of waste was not exempt from requirements of Subtitle C of RCRA. These wastes, characterized as "non-indigenous" waste, were said to be wastes such as spent solvents, pesticides, and disgarded chemicals not uniquely associated with mining and minerals processing activities. AMAX Zinc Company has surveyed its residuals and had identified no "non-indigenous" wastes which would be subject to regulation under Subtitle C of RCRA.

This letter is being provided as a follow-up to the notification submitted in August, 1980 which erroneously indicated that a RCRA permit is required. Because AMAX Zinc Company residuals are exempt from RCRA regulations, no Part A Application will be submitted. AMAX Zinc Company will continue to manage its residuals in an environmentally sound manner.

If you have further questions, please contact John DeSelm at (618) 274-5000.

Sincerely yours,

Ralph O. Wigger

Ralph O. Wigger
Plant Manager

ROW:cal

SA&HMD

Mr. Ralph O. Wigger
AMAX Zinc Company, Inc.
P.O. Box 2347
East St. Louis, Illinois 62202

Dear Mr. Wigger:

Thank you for your letter of November 26, 1980, to John McGuire.

You have interpreted amendment 261.4(b)(6) to exclude waste water treatment sludges and air pollution control facility residues. This amendment excluded solid waste from the extraction, beneficiation, and processing of ores and minerals so that K066 would no longer be regulated by the RCRA. The exclusion of K066, sludges from treatment of process waste water and/or acid plant blowdown from primary zinc production, does not exclude all waste water treatment sludges and air pollution control facility residues.

The notification of hazardous waste activity form that you submitted on August 18, 1980, indicated that the AMAX Zinc Company also generates corrosive and toxic hazardous wastes. If these designations refer to wastes other than K066, your company may be treating, storing, or disposing of hazardous waste that is not subject to exclusion, and, therefore, you should submit a part A as soon as possible. I am enclosing a copy of the Federal Register of November 19, 1980, which addresses late filings of permit applications.

I trust this letter provides you with the necessary information required to assist you in making the proper determination of your situation.

Sincerely yours,

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

SA&HMD:WMB:G. Weber:N. Foley:1/22/81

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2009 Mall Street, Collinsville, IL 62234

Important information for us to have would be waste analysis for everything being treated in the dissolve tank and everything being treated in the washing machine, both before and after treatment. If the dissolve is found to have treated hazardous waste, then the tank may have to go through RCRA closure.