BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
PETITION OF WESTWOOD LANDS INC. for an ADJUSTED STANDARD from portions of 35 Ill.Adm.Code 807.104 and 35 Ill.Adm.Code 810.103, or in the alternative, A FINDING OF INAPPLICABILITY.	)	AS 09-03 (Adjusted Standard – Land)

NOTICE OF FILING

To: (See attached Service List.)

PLEASE TAKE NOTICE that on this 2nd day of April 2010, the following was filed with the Illinois Pollution Control Board: **Petitioner Westwood Lands, Inc.'s Motion for Reconsideration**, which is attached and herewith served upon you.

WESTWOOD LANDS INC.

By: _____
One of its attorneys

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CERTIFICATE OF SERVICE

I, the undersigned non-attorney, state that I served a copy of the above-described document to counsel of record via U.S. Mail at 330 North Wabash Avenue, Chicago, IL 60611, at or before 5:00 p.m. on April 2, 2010.

Jeanette M. Podlin

[x] Under penalties as provided by law pursuant to 735 ILCS 5/1-109, I certify that the statements set forth herein are true and correct.

4376-001

SERVICE LIST

Westwood Lands, Inc. v. Illinois Environmental Protection Agency
AS 09-03
(Adjusted Standard – Land)

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4376-001

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WESTWOOD LANDS' MOTION FOR RECONSIDERATION

Petitioner, WESTWOOD LANDS, INC. ("Westwood"), by its attorneys Swanson Martin & Bell LLP, moves the Board to reconsider its January 7, 2010 opinion and order. This motion is filed pursuant to Sections 101.520 and 101.902 of the Board's procedural rules (35 Ill.Adm.Code 101.520 and 101.902), as well as pursuant to the Board's March 4, 2010 order allowing Westwood to April 2, 2010 to file its motion for reconsideration.

INTRODUCTION

In March 2009, Westwood filed its petition for adjusted standard, or, in the alternative, a finding of inapplicability. Westwood sought a determination that the raw material used in its production process is not a "waste," and that therefore Westwood does not need waste permits pursuant to the Board's regulations. In the alternative, if the Board disagreed that the material used is not a "waste", Westwood sought an adjusted standard from portions of the Board's waste regulations. Westwood owns a facility in Madison, Illinois, that will process steelmaking slag fines to extract the metallic content (metallic iron and iron oxides) from the fines. The metallic material is formed into briquettes and nuggets, and will be sold to steel manufacturers for use in the

making of steel in electric arc furnaces. The briquettes and nuggets are not fuel for the furnaces; they are "raw material" and are made into steel.

On January 7, 2010, the Board denied Westwood's petition. The threshold reason for the Board's denial was its belief that the Board lacked sufficient information to determine that the steelmaking slag fines are not a hazardous waste. (*See In Re: Petition of Westwood Lands, Inc.*, AS 90-03, January 7, 2010.)[1] Because the Board could not make a determination on whether the fines are hazardous, it could not proceed to determine whether the fines are "waste" or if an adjusted standard is warranted. Thus, the Board denied the petition. Op. at 39.

Westwood seeks reconsideration of the Board's decision. The steelmaking slag fines are not hazardous. Because the fines are not hazardous, Westwood asks the Board to proceed to make a determination on Westwood's petition for a finding of inapplicability or in the alternative, for an adjusted standard. Westwood will also address several other concerns raised by the Board in its opinion.

ARGUMENT

As the Board noted in its opinion, "whether or not the steelmaking slag fines are a hazardous waste is a threshold issue that determines whether the petition is appropriately filed under the Board's nonhazardous waste provisions". (Op. at 25.) Westwood continues to believe that the steel slag fines are excluded, by federal law, as a hazardous waste. (Westwood's response to IEPA recommendation, p. 9.)[2] However,

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[1] The Board's January 7, 2010 opinion and order will be cited as "Op.".

[2] Recognizing that this is a motion for reconsideration, Westwood will not rehash arguments made, and evidence contained, in its prior filings with the Board. Westwood filed its petition on March 31, 2009, an amended petition on June 22, 2009, and its response to IEPA's recommendation on August 21, 2009. Westwood will specifically refer to information contained in those filings only to support its motion for reconsideration. However, the information in those prior filings remains relevant to a determination on Westwood's petition.

the Board found it could not determine if the slag to be used by Westwood qualified for that federal exclusion. The Board further questioned whether the steelmaking slag fines are hazardous by characteristic, finding that the testing results submitted by Westwood were not performed under the proper testing protocol. To conclusively demonstrate that the slag fines are not hazardous, Westwood had additional testing performed on the steelmaking slag fines. Those results confirm Westwood's position that the fines are not hazardous. As discussed below, Westwood seeks reconsideration of the Board's finding that it cannot determine that the fines are not hazardous.[3]

The steelmaking slag fines are not hazardous by characteristic

In order to conclusively demonstrate that the fines are not hazardous by characteristics, and to address the Board's concerns, Westwood arranged for further testing of the fines. Westwood asked its consultant, Civil & Environmental Consultants, Inc. ("CEC") to test the slag fines owned by Westwood.[4] Additionally, Westwood coordinated with U.S. Steel to obtain additional testing of the steelmaking slag fines owned by U.S. Steel and located at the U.S. Steel Granite City facility. Because Westwood plans further purchases of slag fines from the Granite City facility, Westwood believes it was important to test both the slag fines owned by Westwood and the slag fines at the U.S. Steel Granite City facility.[5]

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[3] The Board's procedural rules allow for the Board to reconsider new evidence in ruling upon a motion for reconsideration. 35 Ill.Adm.Code 101.902. Westwood continues to believe that its petition and related filings demonstrated that the fines are not hazardous, but submit this additional evidence to address the Board's concerns.

[4] Pursuant to the contract between Westwood and U.S. Steel, included as Exhibit A to Westwood's petition, Westwood has the right to purchase slag fines from U.S. Steel's Granite City facility. Westwood currently owns slag fines purchased from that Granite City facility.

[5] For ease of reference, Westwood will refer to the slag fines owned by Westwood (but purchased from U.S. Steel's Granite City facility) as "Westwood slag", and the slag fines owned by U.S. Steel as the "U.S. Steel slag". Both categories of fines were generated at the U.S. Steel Granite City facility.

CEC collected nine representative samples of the slag owned by Westwood. CEC coordinated with U.S. Steel personnel to collect six samples of the slag owned by U.S. Steel, at the Granite City facility. All samples were submitted to the same laboratory for chemical analysis, using TCLP method 1311 (USEPA publication number EPA-530/SW-846). See CEC Report, dated March 31, 2010, attached as Exhibit 1[6].

The testing results for the Westwood slag demonstrate that those slag fines are not hazardous by characteristic. Only barium and chromium were even detected in the slag TCLP extract solution. The detected levels of barium and chromium were very low-- more than 100 times lower than the hazardous waste criteria of federal regulations (40 CFR 261.24) and the equivalent Illinois regulations (35 Ill.Adm.Code 721.124(b). (Ex. 1, p. 4 and Table 1A.)

The testing results for the U.S. Steel slag also demonstrate that those fines are not hazardous. Again, only barium and chromium were detected in the slag TCLP extract solution. The detected levels of barium and chromium were again more than 100 times less than the hazardous waste criteria of federal regulations (40 CFR 261.24) and the equivalent Illinois regulations (35 Ill.Adm.Code 721.124(b). (Ex. 1, p. 4 and Table 2A.)

Based on the testing of the Westwood and U.S. Steel slag, CEC concludes:

> Results from the chemical analyses of the slag, conducted using the appropriate TCLP Test Method 1311, demonstrate that the slag samples collected from the Westwood and Granite City Facilities are not characteristic hazardous wastes under 40 CFR Part 261.24 or Illinois Title 35 Section 721.124(b).
>
> Ex. 1, p. 5.

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[6] The laboratory report and documentation for the Westwood sampling is 152 pages. Because the results are summarized in CEC's report (Ex.1), and in an effort to reduce the amount of paper used, Westwood has not attached that 152-page laboratory package. However, Westwood will provide that laboratory package upon the Board's (or Board staff's) request to Westwood's counsel.

Thus, it is clear that the steelmaking slag fines are not hazardous.[7]

Request for the Board to determine inapplicability

Westwood demonstrated, in its prior filings, that the steelmaking slag fines used in Westwood's process are not a "waste". This conclusion is supported by the Illinois Supreme Court's decision in *Alternate Fuels, Inc. v. Director of the Illinois Environmental Protection Agency*, 215 Ill.2d 219, 830 N.E.2d 444, 294 Ill.Dec. 32 (2005), and by the Board's decision in *Petition of Jo'Lyn Corporation and Falcon Waste and Recycling, Inc. for an Adjusted Standard*, AS 04-2, (April 7, 2005). (See Westwood's arguments in its petition (pp 2-6), and in its response to IEPA's recommendation (pp. 3-8), incorporated as if set forth here.) The Board did not reach a decision on that legal argument, finding it could not proceed because it was not clear that the raw material is not a hazardous waste. (Op., p. 26.) Westwood has presented conclusive evidence, based upon the updated testing (Ex. 1), that the raw material is not hazardous. Therefore, Westwood asks the Board to proceed to make the finding of inapplicability requested by Westwood. Westwood has demonstrated that the steelmaking slag fines are not a "waste", and that therefore Westwood does not need to

[7] Without further explanation, the Board noted that it could not find that the calcium magnesium silicate material remaining at the end of Westwood's production process is not hazardous. Op., p. 30. However, the issue for this case is whether the raw material used by Westwood---the steelmaking slag fines---are hazardous. Nonetheless, Westwood previously presented testing results for a representative sample of silicate material (Ex. H, attached to amended petition). Because Westwood's production facility, which will use the slag fines from U.S. Steel, cannot be built and operate until it obtains relief from the Board, it is impossible to provide TCLP test results for the silicate material which will be produced by the Westwood facility at issue here. Westwood believes that the silicate material---produced from the process that uses only the non-hazardous steelmaking slag fines—is not hazardous. Westwood notes that it would, of course, be required to properly handle all materials resulting from its process, including the silicate material.

obtain local siting approval or waste permits in order to construct and operate its proposed facility.

Adjusted standard request

In the alternative, Westwood reiterates its request for an adjusted standard. Westwood addresses the concerns raised by the Board in its January 7, 2010 opinion and order.

Regarding whether the steelmaking slag fines are special waste, Westwood has argued that the fines are eligible for a non-special waste certification. Based upon its finding that it could not determine whether the slag fines are hazardous, the Board declined to find that the fines can be certified as non-special waste. Westwood has now conclusively demonstrated that the fines are not hazardous. Thus, Westwood asks the Board to determine that the fines can be certified as non-special waste.[8]

The Board expressed concern about Westwood's quality control procedures for the steelmaking slag fines. Westwood had provided for concerns about the quality of the fines by including a specific provision—subsection (4)---in the proposed adjusted standard language that requires Westwood to comply with all provisions of the Environmental Protection Act. Westwood had proposed that broad language in order to cover any and all activities that might violate the Act, so as to be as inclusive as possible. However, as noted in Westwood's amended petition, Westwood does not object to including more specific language regarding the quality control of the slag fines.

[8] The Board mentioned that the record does not contain an actual non-special waste certification from U.S. Steel or other suppliers. (Op., p. 31.) Westwood believes that, like all other requirements of the Act, the requirement that Westwood obtain such a certification from its slag suppliers is included within the requirements of subsection (4) of the proposed adjusted standard language. Subsection (4) requires that Westwood operate the facility in compliance with all other provisions of the Environmental Protection Act. Of course, Westwood would not object to language specifically enumerating provisions with which the Board is particularly concerned. Westwood emphasizes that it is committed to operating its facility in compliance with all statues and regulations.

Westwood has already addressed the concern that the fines are hazardous (see above).[9] Additionally, Westwood has previously committed to testing loads on a weekly basis for metallic content, and has stated it would not object to including that requirement in the language of the adjusted standard .[10] In order to address the Board's concerns, Westwood proposes the following additional language to the proposed adjusted standard, as subsection (5):

> Westwood does not use fines which are hazardous by characteristic, or contain asbestos, PCBs, or a listed hazardous waste. Westwood must maintain a quality control program that includes:
>
> a. Weekly testing of a representative load for its metallic content;
> b. Visual inspection of each load to ensure that no trash or other "non-fine" material is contained in that load;
> c. Before receiving any slag fines from a new supplier, testing, pursuant to TCLP Method 1311, of a representative sample of each source of slag fines from that new supplier;
> d. Interim testing of a representative sample of each source of slag fines, pursuant to TCLP Method 1311, from each existing supplier. Such interim testing will be performed at least every six months, or upon significant changes in operating conditions.

As Westwood has previously noted, it is in Westwood's best interests to ensure a clean, consistent supply of steelmaking slag fines for its operation. Only a clean supply of fines, without hazardous characteristics, asbestos, PCBs, trash or other non-fine material, will allow Westwood to operate its facility efficiently and economically.

Regarding loads that might be rejected by Westwood: the Board stated that Westwood had not been definitive about the disposition of rejected loads—whether rejected loads would be returned to the supplier, disposed of at a landfill, or otherwise

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[9] Westwood notes that the samples tested of the U.S. Steel slag included sampling of slag generated by different operations, including C fines, desulfurization slag fines, and ladle metallurgy facility (LMF) slag. (Ex. 1, Table 2A.) This addresses the Board's concerns about representative sampling of the U.S. Steel slag. (Op., p. 33.)

[10] As previously explained, Westwood would object to including any specific percentage of metallic content, because that would limit Westwood's ability to respond to market conditions, without providing any environmental benefit. (Amended pet., pp.5-7, 12-13.)

handled. However, in its amended petition, Westwood clearly committed to returning any rejected fines to the supplier. (Amended Pet., p. 14.) Westwood reiterates that it would return any rejected fines to the supplier.

CONCLUSION

Westwood's process will take a material that might otherwise be discarded and creates a useful product. Finding that the slag fines are not a waste "serves the interests of encouraging recycling and returning a material difficult to recycle into the economic mainstream in an environmentally friendly way." *Jo'Lyn*, AS 04-02, p. 14.

Westwood has demonstrated that the steelmaking slag fines are not hazardous waste. Thus, Westwood's petition properly seeks relief from the Board's nonhazardous waste provisions of Subchapter i. Westwood moves the Board to reconsider its finding that it could not determine if the steelmaking slag fines used in Westwood's process are hazardous waste. Westwood moves the Board for a finding that testing demonstrates that the steelmaking slag fines are, indeed, not hazardous. Because Westwood has demonstrated that the fines are not hazardous, Westwood asks the Board to proceed to determine that the fines are not "waste", and that Westwood is therefore not subject to the waste provisions of the Illinois regulations. Finally, in the alternative, if the Board disagrees with Westwood's request for a finding of inapplicability, Westwood moves the Board to grant an adjusted standard from the specified definitions of 35 Ill.Adm.Code 807.104 and 810.103, and for such other relief as the Board deems appropriate.

Respectfully submitted,

WESTWOOD LANDS, INC.

By: _____
One of its attorneys

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March 31, 2010

Privileged and Confidential
Prepared at Request of Counsel

Elizabeth S. Harvey, Esquire
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Dear Ms. Harvey:

Subject: Report on Slag Sampling and Analysis
Westwood Lands Facility, Madison County, Illinois and
US Steel Granite City Facility, Illinois
CEC Project 100-406

Civil & Environmental Consultants, Inc. (CEC) is pleased to present this report summarizing the results of the sampling and laboratory analyses of slag samples collected from the Westwood Lands Facility and US Steel Granite City Facility. CEC performed and/or coordinated the slag sampling and analyses for Swanson, Martin & Bell, LLP (SMB) in support of a petition for Westwood Lands, Inc. (Westwood) regarding the plans of Westwood to process the slag. This report was submitted in general accordance with our February 25, 2010 proposal and addresses concerns about whether the slag is a hazardous waste.

1.0 PROJECT UNDERSTANDING

CEC understands that Westwood owns a facility at 4 Caine Drive, in Madison, Illinois that will be used to process the slag fines produced at the US Steel Granite City Facility. Westwood's process extracts metallic content from the slag in the form of metallic iron and iron oxides to produce two products for sale to steel manufacturers: (1) a coarse metallic fraction sold in bulk form; and, (2) a fine fraction that can be sold in bulk or processed into briquettes. The process also produces a third product that consists of the processed slag material that has had most of the metallic content removed. That product is referred to as "silicate material."

CEC understands that Westwood seeks a determination that the steelmaking fines used as raw materials in its process do not constitute "waste" under the Environmental Protection Act and that its facility does not require permits under the Illinois Pollution Control Board's solid waste regulations. In the alternative, if the Board does not agree that the slag fines are not a waste, Westwood seeks an adjusted standard from specified definitions contained in the Board's regulations. In the January 7, 2010 Opinion and Order of the Board, the Board denied both

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EXHIBIT
tabbies
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Westwood's petition for an adjusted standard and its alternative request for a finding of inapplicability.

In response to Westwood's petition, a number of issues were raised by the Illinois Environmental Protection Agency and presented in the Board's Opinion and Order. Two issues identified in the Board's Opinion and Order were:

- Information provided by Westwood did not demonstrate that the hazardous waste exclusions apply to steelmaking fines.

- Information submitted by Westwood to demonstrate the waste is not characteristically hazardous waste indicated the sample was not prepared using Toxicity Characteristic Leaching Procedure (TCLP) Test Method 1311 (as described in Test Methods for Evaluating Solid Waste, Physical Chemical Methods, EPA-530/SW-846). The results were inconclusive for demonstrating the steelmaking slag fines are not hazardous waste. An insufficient number of samples of the slag samples were obtained for evaluation and the slag fines should be tested for the entire suite of parameters listed in 35 Illinois Administrative Code 721.124(b).

Our review of the Board's Opinion and Order suggested that conclusively demonstrating that the steelmaking slag fines are not a hazardous waste is an important component for advancing the project. Analytical testing of the slag using TCLP Method 1311 was recommended to address the Agency's concerns on this subject. This letter presents the results of those TCLP test results.

2.0 SCOPE OF SERVICES PERFORMED

CEC conducted the following scope of services to address the question of whether the slag fines are a characteristically hazardous waste.

2.1 Sampling of Westwood Slag

CEC personnel sampled Westwood slag, which is located in two large slag stockpiles. CEC understands that the two large slag stockpiles contain a combination of the various slags produced at the US Steel Granite City Facility. Westwood purchased the slag in the stockpiles from US Steel. CEC personnel collected nine representative samples of the slag, with six samples collected from the larger pile and three samples collected from the smaller pile. Three

of the Westwood slag samples were analyzed for both organic and inorganic TCLP parameters, while the remaining six slag samples were analyzed for TCLP RCRA metals only. The slag samples were collected on March 12, 2010 by Mr. Monte Peake of CEC, and the samples were submitted to TestAmerica Laboratories Inc. (TestAmerica) for chemical analysis.

CEC notes that the analysis program for the Westwood slag samples also included various chemical and physical tests that will be used in evaluating and developing potential alternative uses for the silicate material; however, this letter report specifically addresses only the TCLP results to answer the question regarding whether the slag is a hazardous waste.

2.2 Slag Sampling at US Steel Facility

CEC coordinated with US Steel Granite City personnel to provide recommendations for the collection and analysis of slag samples. The US Steel slag samples were collected on March 11 and 12, 2010 by Mr. Carl Cannon of the US Steel Granite City Facility, and the samples were submitted to TestAmerica for chemical analysis. Two samples were collected from each of the three sources of slag generated: (1) Steel slag fines "C-Fines"; (2) Desulfurization Slag Fines; and (3) Ladle Metallurgy Facility (LMF) slag. Consequently, a total of six total samples were collected and analyzed for TCLP organic and inorganic parameters.

CEC notes that the analysis program for the slag samples collected at the Granite City Facility also included various chemical and physical tests that will be used in evaluating and developing alternative uses for the processed slag fines (silicate material); however, this letter report specifically addresses only the TCLP results to answer the question regarding whether the slag is a hazardous waste.

2.3 Laboratory Data Evaluation and Letter Report Summarizing Results

CEC compiled the analytical data collected under the two preceding subtasks and evaluated the analytical results against applicable standards and criteria (e.g. TCLP hazardous waste limits). CEC prepared this letter report to summarize the analytical results and to present conclusions regarding whether the slag is characteristically hazardous.

3.0 DISCUSSION OF ANALYTICAL RESULTS FROM SLAG SAMPLES

The results of the TCLP analyses of the slag samples are described in the following subsections and are summarized on Tables 1A, 1B, 2A and 2B of this letter. The complete laboratory analysis package, including chain of custody and laboratory reports, is available upon request.

3.1 Results for Westwood Slag

The TCLP results from the samples of Westwood slag are presented on Tables 1A and 1B. Table 1A presents the analytical results where positive chemical detections were identified in at least one of the slag samples, while Table 1B presents the slag results including all parameters where "non-detect" results were obtained.

As shown on Table 1A, only barium and chromium were detected in the slag TCLP extract solution, and the levels detected were more than 100 times less than the hazardous waste criteria defined in 40 CFR 261.24 and the equivalent criteria in Illinois Title 35 Section 721.124(b). The barium and chromium concentrations detected in the TCLP extract were also below the National Primary Drinking Water Standard Maximum Contaminant Levels (MCLs) set in 40 CFR Part 141.62(b).

3.2 Results from US Steel Facility Slag

The TCLP results from the slag samples collected from the US Steel Granite City Facility are presented on Tables 2A and 2B. Table 2A presents the analytical results where positive chemical detections were identified in at least one of the slag samples, while Table 2B presents the slag results including all parameters where "non-detect" results were obtained.

As shown on Table 2A, only barium and chromium were detected in the slag TCLP extract solution, which is also consistent with the results from samples of Westwood slag slag. The barium and chromium levels that were detected were more than 100 times less than the hazardous waste criteria defined in 40 CFR 261.24 and the equivalent criteria in Illinois Title 35 Section 721.124(b). The barium and chromium concentrations detected in the TCLP extract were also less than the MCLs.

4.0 CONCLUSIONS

Results from the chemical analyses of the slag, conducted using the appropriate TCLP Test Method 1311, demonstrate that the slag samples collected from the Westwood and Granite City Facilities are not characteristic hazardous wastes under 40 CFR Part 261.24 or Illinois Title 35 Section 721.124(b). Nine slag samples were tested for the entire suite of parameters listed in 35 Illinois Administrative Code 721.124(b), while six slag samples were analyzed only for TCLP RCRA metals. CEC did not anticipate the detection of any organic compounds in the slag samples due to the very high temperatures involved in the steelmaking process. As expected, no organic compounds were identified from the TCLP testing of the nine slag samples analyzed for the entire suite of TCLP parameters. Positive detections of some metals (barium and chromium) were identified, but at levels more than 100 times below the levels that would be required to categorize the slag as hazardous waste.

5.0 CLOSING

CEC appreciated the opportunity to assist you on this slag evaluation project. Please feel free to contact us with any questions or comments.

Very truly yours,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Paul W. Tomiczek III, R.E.M., P.E.
Vice President

Kenneth R. Miller, P.E.
President

Attachments

Table 1A
Summary of TCLP Parameters for the Westwood Lands Slag Samples
Showing Only the Chemical Parameters Having One or More Positive Detections

Constituents	Units	Analytical Method	Hazardous Waste Criterion (1)	Drinking Water MCL (2)	Sample Information								
					WL-01	WL-02	WL-03	WL-04	WL-05	WL-06	WL-07	WL-08	WL-09
					3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
TCLP - Detected Parameters Only													
Metals													
Barium	mg/l	SW846 6010B	100	2	0.14 B	0.21 B	0.31 B	0.17 B	0.21 B	0.16 B	0.23 B	0.14 B	0.23 B
Chromium	mg/l	SW846 6010B	5	0.1	0.0097 U	0.0097 U	0.011 J	0.0097 U	0.022 J	0.0097 U	0.01 J	0.0097 U	0.0097 U
Volatile Organic Compounds													
None Detected - samples analyzed were WL-01, WL-06 and WL-09													
Semivolatile Organic Compounds													
None Detected - samples analyzed were WL-01, WL-06 and WL-09													
Pesticides/Herbicides													
None Detected - samples analyzed were WL-01, WL-06 and WL-09													

Notes and Comments:

Data Qualifiers: B = parameter also detected in blank QA sample, J = Estimated value (parameter greater than MDL but less than RL), U - Parameter not detected.

(1) Maximum Concentration of Contaminants for Toxicity Characteristic from 40 CFR 261.24 and Illinois Title 35 Part 721.124 (3/26/2010)

(2) National Primary Drinking Water Standard - Maximum Contaminant Levels (MCL) (3/26/2010)

Table 1B
Summary of TCLP Parameters for the Westwood Lands Slag Samples
Showing All Chemical Parameters Including Non-Detect Results

Constituents	Units	Analytical Method	Hazardous Waste Criterion (1)	Drinking Water MCL (2)	Sample Information																	
					WL-01		WL-02		WL-03		WL-04		WL-05		WL-06		WL-07		WL-08		WL-09	
					3/12/2010		3/12/2010		3/12/2010		3/12/2010		3/12/2010		3/12/2010		3/12/2010		3/12/2010		3/12/2010	
TCLP																						
Metals																						
Arsenic	mg/l	SW846 6010B	5	0.01	0.061	U	0.061	U	0.061	U	0.061	U	0.061	U	0.061	U	0.061	U	0.061	U	0.061	U
Barium	mg/l	SW846 6010B	100	2	0.14	B	0.21	B	0.31	B	0.17	B	0.21	B	0.16	B	0.23	B	0.14	B	0.23	B
Cadmium	mg/l	SW846 6010B	1	0.005	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U
Chromium	mg/l	SW846 6010B	5	0.1	0.0097	U	0.0097	U	0.011	J	0.0097	U	0.022	J	0.0097	U	0.01	J	0.0097	U	0.0097	U
Lead	mg/l	SW846 6010B	5	0.015	0.064	U	0.064	U	0.064	U	0.064	U	0.064	U	0.064	U	0.064	U	0.064	U	0.064	U
Mercury	mg/l	SW846 7470A	0.2	0.002	0.000057	U	0.000057	U	0.000057	U	0.000057	U	0.000057	U	0.000057	U	0.000057	U	0.000057	U	0.000057	U
Selenium	mg/l	SW846 6010B	1	0.05	0.072	U	0.072	U	0.072	U	0.072	U	0.072	U	0.072	U	0.072	U	0.072	U	0.072	U
Silver	mg/l	SW846 6010B	5		0.038	U	0.038	U	0.038	U	0.038	U	0.038	U	0.038	U	0.038	U	0.038	U	0.038	U
Volatile Organic Compounds																						
1,1-Dichloroethylene	ug/l	SW846 8260B	700	7	7.8	U									7.8	U					7.8	U
1,2-Dichloroethane	ug/l	SW846 8260B	500	5	5	U									5	U					5	U
2-Butanone	ug/l	SW846 8260B	200000		23	U									23	U					23	U
3 & 4 Methylphenol	ug/l	SW846 8270C	200000		6.7	U									6.7	U					6.7	U
Benzene	ug/l	SW846 8260B	500	5	2.3	U									2.3	U					2.3	U
Carbon tetrachloride	ug/l	SW846 8260B	500	5	5	U									5	U					5	U
Chlorobenzene	ug/l	SW846 8260B	100000	100	5	U									5	U					5	U
Chloroform	ug/l	SW846 8260B	6000	80	5.4	U									5.4	U					5.4	U
Tetrachloroethylene	ug/l	SW846 8260B	700	5	2.4	U									2.4	U					2.4	U
Trichloroethylene	ug/l	SW846 8260B	500	5	5	U									5	U					5	U
Vinyl chloride	ug/l	SW846 8260B	200	2	5	U									5	U					5	U
Semivolatile Organic Compounds																						
1,4-Dichlorobenzene	ug/l	SW846 8270C	7500	75	19	U									19	U					19	U
2,4,5-Trichlorophenol	ug/l	SW846 8270C	400000		8.6	U									8.6	U					8.6	U
2,4,6-Trichlorophenol	ug/l	SW846 8270C	2000		9	U									9	U					9	U
2,4-Dinitrotoluene	ug/l	SW846 8270C	130		7.3	U									7.3	U					7.3	U
Hexachlorobenzene	ug/l	SW846 8270C	130	1	9.6	U									9.6	U					9.6	U
Hexachlorobutadiene	ug/l	SW846 8270C	500		24	U									24	U					24	U
Hexachloroethane	ug/l	SW846 8270C	3000		20	U									20	U					20	U
Nitrobenzene	ug/l	SW846 8270C	2000		8	U									8	U					8	U
o-Cresol	ug/l	SW846 8270C	200000		8.4	U									8.4	U					8.4	U
Pentachlorophenol	ug/l	SW846 8270C	100000	1	6.1	U									6.1	U					6.1	U
Pyridine	ug/l	SW846 8270C	5000		7	U									7	U					7	U
Pesticides/Herbicides																						
2,4-D	ug/l	SW846 8151A	10000	70	50	U									50	U					50	U
Chlordane	ug/l	SW846 8081A	30	2	5	U									5	U					5	U
Endrin	ug/l	SW846 8081A	20	2	2.5	U									2.5	U					2.5	U
gamma-BHC	ug/l	SW846 8081A	400	0.2	2.5	U									2.5	U					2.5	U
Heptachlor	ug/l	SW846 8081A	8	0.4	2.5	U									2.5	U					2.5	U
Heptachlor epoxide	ug/l	SW846 8081A	8	0.2	2.5	U									2.5	U					2.5	U
Methoxychlor	ug/l	SW846 8081A	10000	40	5	U									5	U					5	U
Silvex	ug/l	SW846 8151A	1000	50	25	U									25	U					25	U
Toxaphene	ug/l	SW846 8081A	500	3	25	U									25	U					25	U

Notes and Comments:

Data Qualifiers: B = parameter also detected in blank QA sample, J = Estimated value (parameter greater than MDL but less than RL), U - Parameter not detected.

(1) Maximum Concentration of Contaminants for Toxicity Characteristic from 40 CFR 261.24 and Illinois Title 35 Part 721.124 (3/26/2010)

(2) National Primary Drinking Water Standard - Maximum Contaminant Levels (MCL) (3/26/2010)

Table 2A
Summary of TCLP Parameters for the US Steel Granite City Slag Samples
Showing Only the Chemical Parameters Having One or More Positive Detections

Constituents	Units	Analytical Method	Hazardous Waste Criterion (1)	Drinking Water MCL (2)	Sample Information											
					C Fines #1		C Fines #2		Desulf Slag #1		Desulf Slag #2		LMF Slag #1		LMF Slag #2	
					3/11/2010		3/11/2010		3/11/2010		3/11/2010		3/11/2010		3/12/2010	
TCLP - Detected Parameters Only																
Metals																
Barium	mg/l	SW846 60108	100	2	0.3	B	0.38	B	0.13	B	0.21	B	0.11	B	0.2	B
Chromium	mg/l	SW846 60108	5	0.1	0.021	J	0.024	J	0.0097	U	0.019	J	0.034	J B	0.022	J B
Volatile Organic Compounds																
No parameters detected in any of the six slag samples.																
Semivolatile Organic Compounds																
No parameters detected in any of the six slag samples.																
Pesticides/Herbicides																
No parameters detected in any of the six slag samples.																

Notes and Comments:

Data Qualifiers: B = parameter also detected in blank QA sample, J = Estimated value (parameter greater than MDL but less than RL), U - Parameter not detected.

(1) Maximum Concentration of Contaminants for Toxicity Characteristic from 40 CFR 261.24 and Illinois Title 35 Part 721.124 (3/26/2010)

(2) National Primary Drinking Water Standard - Maximum Contaminant Levels (MCL) (3/26/2010)

Table 2B
Summary of TCLP Parameters for the US Steel Granite City Slag Samples
Showing All Chemical Parameters Including Non-Detect Results

Constituents	Units	Analytical Method	Hazardous Waste Criterion (1)	Drinking Water MCL (2)	Sample Information					
					C Fines #1	C Fines #2	Desulf Slag #1	Desulf Slag #2	LMF Slag #1	LMF Slag #2
					3/11/2010	3/11/2010	3/11/2010	3/11/2010	3/11/2010	3/12/2010
TCLP										
Metals										
Arsenic	mg/l	SW846 6010B	5	0.01	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
Barium	mg/l	SW846 6010B	100	2	0.3 B	0.38 B	0.13 B	0.21 B	0.11 B	0.2 B
Cadmium	mg/l	SW846 6010B	1	0.005	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
Chromium	mg/l	SW846 6010B	5	0.1	0.021 J	0.024 J	0.0097 U	0.019 J	0.034 J B	0.022 J B
Lead	mg/l	SW846 6010B	5	0.015	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Mercury	mg/l	SW846 7470A	0.2	0.002	0.000057 U	0.000057 U	0.000057 U	0.000057 U	0.000057 U	0.000057 U
Selenium	mg/l	SW846 6010B	1	0.05	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Silver	mg/l	SW846 6010B	5		0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Pesticides/Herbicides										
2,4-D	ug/l	SW846 8151A	10000	70	50 U	50 U	50 U	50 U	50 U	50 U
Chlordane	ug/l	SW846 8081A	30	2	5 U	5 U	5 U	5 U	5 U	5 U
Endrin	ug/l	SW846 8081A	20	2	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
gamma-BHC	ug/l	SW846 8081A	400	0.2	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Heptachlor	ug/l	SW846 8081A	8	0.4	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Heptachlor epoxide	ug/l	SW846 8081A	8	0.2	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methoxychlor	ug/l	SW846 8081A	10000	40	5 U	5 U	5 U	5 U	5 U	5 U
Silvex	ug/l	SW846 8151A	1000	50	25 U	25 U	25 U	25 U	25 U	25 U
Toxaphene	ug/l	SW846 8081A	500	3	25 U	25 U	25 U	25 U	25 U	25 U
Semivolatile Organic Compounds										
1,4-Dichlorobenzene	ug/l	SW846 8270C	7500	75	19 U	19 U	19 U	19 U	19 U	19 U
2,4,5-Trichlorophenol	ug/l	SW846 8270C	400000		8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U
2,4,6-Trichlorophenol	ug/l	SW846 8270C	2000		9 U	9 U	9 U	9 U	9 U	9 U
2,4-Dinitrotoluene	ug/l	SW846 8270C	130		7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U
Hexachlorobenzene	ug/l	SW846 8270C	130	1	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U
Hexachlorobutadiene	ug/l	SW846 8270C	500		24 U	24 U	24 U	24 U	24 U	24 U
Hexachloroethane	ug/l	SW846 8270C	3000		20 U	20 U	20 U	20 U	20 U	20 U
Nitrobenzene	ug/l	SW846 8270C	2000		8 U	8 U	8 U	8 U	8 U	8 U
o-Cresol	ug/l	SW846 8270C	200000		8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
Pentachlorophenol	ug/l	SW846 8270C	100000	1	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U
Pyridine	ug/l	SW846 8270C	5000		7 U	7 U	7 U	7 U	7 U	7 U
Volatile Organic Compounds										
1,1-Dichloroethylene	ug/l	SW846 8260B	700	7	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U
1,2-Dichloroethane	ug/l	SW846 8260B	500	5	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	ug/l	SW846 8260B	200000		23 U	23 U	23 U	23 U	23 U	23 U
3 & 4 Methylphenol	ug/l	SW846 8270C	200000		6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U
Benzene	ug/l	SW846 8260B	500	5	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Carbon tetrachloride	ug/l	SW846 8260B	500	5	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/l	SW846 8260B	100000	100	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	ug/l	SW846 8260B	6000	80	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
Tetrachloroethylene	ug/l	SW846 8260B	700	5	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Trichloroethylene	ug/l	SW846 8260B	500	5	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/l	SW846 8260B	200	2	5 U	5 U	5 U	5 U	5 U	5 U

Notes and Comments:

Data Qualifiers: B = parameter also detected in blank QA sample, J = Estimated value (parameter greater than MDL but less than RL), U - Parameter not detected.

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