# ILLINOIS POLLUTION CONTROL BOARD June 6, 1991

IN THE MATTER OF:	)
	) R91-12
PETITION OF USX	) (Identical in Substance
CORPORATION FOR HAZARDOUS	) pulemaking)
WASTE DELISTING	)

PROPOSAL FOR PUBLIC COMMENT

PROPOSED OPINION AND ORDER OF THE BOARD (by J. Anderson):

By Order attached hereto, pursuant to Section 7.2 and 22.4(a) of the Environmental Protection Act (Act), the Board is proposing to amend the Illinois RCRA hazardous waste regulations. This proposed amendment for an exclusion for treated waste is intended to be identical-in-substance to an exclusion adopted by USEPA on April 29, 1991. The federal RCRA regulations are found at 40 CFR 260 through 270. The history of the corresponding Illinois RCRA regulations, together with more stringent State regulations particularly applicable to hazardous waste, can be found in the March 28, 1991 Proposed Opinion of the Board in docket R91-1.

Section 22.4(a) provides for quick adoption of regulations establishing the RCRA program in Illinois when those regulations are "identical in substance" to federal regulations. Identical-in-substance rulemakings are not subject to Title VII of the Act or Section 5 of the Administrative Procedure Act and, therefore, are not subject to first or second notice review by the Joint Committee on Administrative Rules (JCAR). (Ill. Rev. Stat. 1989, ch. 111 1/2, par. 1022.4(a).) Instead, the Board will receive public comment for 45 days after the date of publication of this proposed rule in the Illinois Register.

### **HISTORY**

On March 1, 1990, USEPA delegated authority to Illinois to administer several additional components of the RCRA program. (55 Fed. Reg. 7320.) This included Board authority to delist hazardous waste in lieu of USEPA and pursuant to 35 Ill. Adm. Code 720.122. As a result of the USEPA delegation of delisting authority, the Board's identical-in-substance regulations required modification. On July 19, 1990, the Board opened R90-17 to modify the identical-in-substance regulations by replacing incorporations by reference with the verbatim text tailored to fit Illinois procedures, and by adopting the use of the adjusted standards procedures in lieu of the site specific procedures. R90-17, which amended 35 Ill. Adm. Code 720.120, 720.122, 721.110 and 721.111, was adopted by the Board on February 28, 1991, and

became effective on May 9, 1991. (Several modifications to R90-17 were made in a Board Order of April 11, 1991.)

On July 5, 1990, the Board received a letter from the USEPA concerning the transfer of the USX Steel delisting petition and file. A docket was reserved on July 19, 1990 and the USEPA file was transferred on August 27, 1990. On November 9, 1990, USX notified the Board that USEPA had agreed to reopen its file and make a final determination on the delisting petition. The reason for USEPA's action was stated in Section III of the final rule as:

[B]ecause EPA was close to issuing the final exclusion for USX, the Agency believes it is proper and appropriate to follow through with its decision. While a Federal delisting will not have any immediate effect within an authorized State, such action may expedite the implementation of the final exclusion by allowing Illinois the option of adopting the Federal rule directly, and thereby avoiding the need for the State to complete its own time-consuming administrative process for delisting.

(56 Fed. Reg. 19586).

The Board granted USX a six month extension on November 29, 1990 to await final action by USEPA.

On April 29, 1991, USEPA published its final decision granting an exclusion from hazardous waste lists for specific wastes generated by USX. On May 9, 1991, USX requested the Board to "accept without further review the delisting" of the specified hazardous waste. The Board, in the interests of expeditiously finishing this proceeding and on its own motion, reserved docket R91-12 for an identical-in-substance rulemaking in this matter. The original docket, R90-18, will be dismissed by separate Order. Since the transfer of this proceeding from R90-18 to R91-12 is made on the Board's own motion, and in accordance with an October 11, 1991 Board Order in R90-18, the filing fee is hereby waived.

### PROPOSED AMENDMENT

The proposed RCRA amendment in this rulemaking affects 35 Ill. Adm. Code 721.Appendix I. The purpose of Part 721 is to:

identif[y] those solid wastes which are subject to regulation as hazardous wastes and which are subject to the notice requirements of Section 3010 of the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.). 35 Ill. Adm. Code 721.101.

Subpart D of Part 721 contains lists of hazardous wastes classified according to the Hazard Codes (35 Ill. Adm. Code

721.130). A hazardous waste may be excluded from the Subpart D lists, or "delisted," in an identical-in-substance proceeding pursuant to 35 Ill. Adm. Code 720.120(a). Delisted wastes are listed in Part 721, Appendix I. Appendix I was adopted and amended in the following actions:

- R81-22 43 PCB 427, Adopted; 5 Ill. Reg. 9781, effective May 17, 1982.
- R85-2 69 PCB 314, April 24, 1986; 10 Ill. Reg. 8112, effective May 2, 1986.
- R87-30 90 PCB 665, June 30, 1988; 12 Ill. Reg. 12070, effective July 12, 1988.

The Board has made two changes to the text of the USEPA delisting and has a number of questions about procedural and implementation aspects of the delisting. The first change is in condition 1 of the proposed exclusion where the Board has added a statement that the SW-846 methodolgies are incorporated by reference in 35 Ill. Adm. Code 720.111. In condition 3, the Board has also altered the phrase "conditions (1)(A) or (1)(B)" to read "conditions (1)(A) or (B)" to conform to Illinois drafting practice.

The Board requests that USEPA, the Illinois Environmental Protection Agency (IEPA) and USX submit comments on at least the following questions. With reference to questions 2 through 4, the Board would appreciate comments on how the delegation of delisting authority affects these questions.

- 1) Are the testing requirements of condition 1 (A) and (B) correctly analyzed pursuant to <u>EP</u> methodologies, as opposed to <u>TCLP</u> methodologies?
- 2) Should USX send the data submittals required by condition 3 to the IEPA in addition to USEPA?
- Pursuant to condition 3, who has the authority ("discretion") to revoke the exclusion - USEPA, IEPA, or both?
- 4) If USEPA decides to modify or withdraw the exclusion, should USEPA notify IEPA, the Board, or both?
- 5) Is there an equivalent state statute to 18 U.S.C. §6928, as cited in condition 3, which needs to be included?

In addition to the amendments to Appendix I, the Board proposes to correct several typographical errors in Section 721 at this time. First, in Table A and Table B of Appendix I of

Part 721, the word crystallization is misspelled. This will be corrected. In the table of contents for Part 721 the word subpart is misspelled at Subpart B. This also will be corrected.

#### **ORDER**

The following proposed amendments to 35 Ill. Adm. Code 721. Appendix I are submitted for publication in the <u>Illinois</u> Register and for public comment:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

# PART 721 IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

#### SUBPART A: GENERAL PROVISIONS Section 721.101 Purpose of Scope Definition of Solid Waste 721.102 Definition of Hazardous Waste 721.103 721.104 Exclusions 721.105 Special Requirements for Hazardous Waste Generated by Small Quantity Generators 721.106 Requirements for Recyclable Materials 721.107 Residues of Hazardous Waste in Empty Containers 721.108 PCB Wastes Regulated under TSCA SUPBART SUBPART B: CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE AND FOR LISTING HAZARDOUS WASTES Section 721.110 Criteria for Identifying the Characteristics of Hazardous Waste 721.111 Criteria for Listing Hazardous Waste SUBPART C: CHARACTERISTICS OF HAZARDOUS WASTE Section 721.120 General 721.121 Characteristic of Ignitability 721.122 Characteristic of Corrosivity Characteristic of Reactivity 721.123 721.124 Toxicity Characteristic

General

Section 721.130

721.131

SUBPART D: LISTS OF HAZARDOUS WASTE

Hazardous Wastes From Nonspecific Sources

721.132 721.133	Hazardous Waste from Specific Sources Discarded Commercial Chemical Products, Off- Specification Species, Container Residues and Spill Residues Thereof
Appendix A	Representative Sampling Methods
Appendix B	Method 1311 Toxicity Characteristic Leaching Procedure (TCLP)
Appendix C	Chemical Analysis Test Methods
Table A	Analytical Characteristics of Organic Chemicals (Repealed)
Table B	Analytical Characteristics of Inorganic Species (Repealed)
Table C	Sample Preparation/Sample Introduction Techniques (Repealed)
Appendix G	Basis for Listing Hazardous Wastes
Appendix H	Hazardous Constituents
Appendix I	Wastes Excluded under Section 720.120 and 720.122
Table A	Wastes Excluded from Non-Specific Sources
Table B	Wastes Excluded from Specific Sources
Table C	Wastes Excluded From Commercial Chemical Products,
	Off-Specification Species, Container Residues, and
	Soil Residues Thereof
Appendix J	Method of Analysis for Chlorinated Dibenzo-p- Dioxins and Dibenzofurans
Appendix Z	Table to Section 721.102

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective as noted in 35 Ill. Adm. Code 700.106; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective as noted in 35 Ill. Adm. Code 700.106; amended in R82-18, 51 PCB 31, at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19, 53 PCB 131, at 7 Ill. Reg. 13999, effective October 12, 1983; amended in R84-34, 61 PCB 247, at 8 Ill. Reg. 24562, effective December 11, 1984; amended in R84-9, at 9 Ill. Reg. 11834, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 998, effective January 2, 1986; amended in R85-2 at 10 Ill. Reg. 8112, effective May 2, 1986; amended in R86-1 at 10 Ill. Reg. 14002, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20647, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6035, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13466, effective August 4, 1987; amended in R87-32 at 11 Ill. Reg. 16698, effective September 30, 1987; amended in R87-5 at 11 Ill. Reg. 19303, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2456, effective January 15, 1988; in R87-30 at 12 Ill. Reg. 12070, effective July 12, 1988; amended in R87-39 at 12 Ill. Reg. 13006, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 382, effective December 27,

1988; amended in R89-1 at 13 Ill. Reg. 18300, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14401, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16472, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7950, effective May 9, 1991; amended in R90-11 at \_\_\_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_\_.

Section 721.Appendix I

Wastes Excluded under Section 720.120 and 720.122

Table A Sources

Wastes Excluded From Non-Specific

Facility Address

Waste Description

Envirite Corp. Harvey, Illinois

Dewatered wastewater sludges (EPA Hazardous Waste NO. F006) generated from electroplating operations; spent cyanide plating solutions (EPA Hazardous Waste No. F007) generated from electroplating operations; plating bath residues from the bottom of plating baths (EPA Hazardous Waste No. F008) generated from electroplating operations where cyanides are used in the process; spent stripping and cleaning bath solutions (EPA Hazardous Waste No. F009) generated from electroplating operations where cyanides are used in the process; spent cyanide solutions from salt bath pot cleaning (EPA Hazardous Waste No. F011) generated from metal heat treating operations; quenching wastewater treatment sludges (EPA Hazardous Waste No. F012) generated from metal heat treating where cyanides are used in the process; wastewater treatment sludges (EPA Hazardous Waste No. F019) generated from the chemical conversion coating of aluminum after November 14, 1986. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern, the facility must implement a contingency testing program for the petitioned wastes. This testing program must meet the following conditions for the exclusions to be valid:

- 1) Each batch of treatment residue must be representatively sampled and tested using the EP Toxicity test for arsenic, barium, cadmium, chromium, lead, selenium, silver, mercury, and nickel. If the extract concentrations for chromium, lead, arsenic, and silver exceed 0.315 ppm; barium levels exceed 6.3 ppm; cadmium and selenium exceed 0.063 ppm; mercury exceeds 0.0126 ppm; or nickel levels exceed 2.205 ppm, the waste must be re-treated or managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.
- 2) Each batch of treatment residue must be tested for reactive and leachable cyanide. If the reactive cyanide levels exceed 250 ppm or leachable cyanide levels (using the EP Toxicity test without acetic acid adjustment) exceed 1.26 ppm, the waste must be retreated or managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.
- 3) Each batch of waste must be tested for the total content of specific organic toxicants. If the total content of anthracene exceeds 76.8 ppm, 1,2-diphenyl hydrazine exceeds 0.001 ppm, methylene chloride exceeds 8.18 ppm, methyl ethyl ketone exceeds 326 ppm, nnitrosodiphenylamine exceeds 11.9 ppm, phenol exceeds 1,566 ppm, tetrachloroethylene exceeds 0.188 ppm, or trichloroethylene exceeds 0.592 ppm, the waste must be managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.

- 4) A grab sample must be collected from each batch to form one monthly composite sample which must be tested using gas chromatography, mass spectrometry analysis for the compounds listed in No.3 above as well as the remaining organics on the Priority Pollutant List (incorporated by reference, see 40 CFR 423 App. A (1983) (as adopted at 47 Fed. Reg. 52,309 (Nov. 19, 1982)), not including later amendments).
- The data from conditions 1-4 must 5) be kept on file at the facility for inspection purposes and must be compiled, summarized, and submitted to the Administrator of USEPA by certified mail semi-annually. USEPA will review this information and if needed will propose to modify or withdraw the exclusion. Should USEPA propose to modify or withdraw the exclusion, Envirite shall promptly provide notice thereof to the Board. The decision to conditionally exclude the treatment residue generated from the wastewater treatment systems at Envirite's Harvey, Illinois facility applies only to the wastewater and solids treatment systems as they presently exist as described in the delisting petition submitted to the USEPA. The exclusion does not apply to the proposed process additions described in the petition submitted to USEPA as recovery including <del>crystalization</del> <u>crystallization</u>, electrolytic metals recovery, evaporative recovery, and ion exchange.

(Source: Amended at 12 Ill. Reg. 12070, effective July 12, 1988)

# Facility Address

## Waste Description

Amoco Oil Company Wood River, Illinois 150 million gallons of DAF float from petroleum refining contained in four surge ponds after treatment with the Chemfix stabilization process. exclusion applies to the 150 million gallons of waste after chemical stabilization as long as the mixing ratios of the reagent with the waste are monitored continuously and do not vary outside of the limits presented in the demonstration samples; one grab sample is taken each hour from each treatment unit, composited, and EP toxicity tests performed on each sample. If the levels of lead or total chromium exceed 0.5 ppm in the EP extract, then the waste that was processed during the compositing period is considered hazardous; the treatment residue shall be pumped into bermed cells to ensure that the waste is identifiable in the event that removal is necessary.

Envirite Corp. Harvey, Illinois

Spent pickle liquor (EPA Hazardous Waste No. K062) generated from steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332); wastewater treatment sludge (EPA Hazardous Waste No. K002) generated from the production of chrome yellow and orange pigments; wastewater treatment sludge (EPA Hazardous Waste No. K003) generated from the production of molybdate orange pigments; wastewater treatment sludge (EPA Hazardous Waste No. K004) generated from the production of zinc yellow pigments; wastewater treatment sludge (EPA Hazardous Waste No. K005) generated from the production of chrome green pigments; wastewater treatment sludge (EPA Hazardous Waste No. K006) generated from the production of chrome oxide green pigments (anhydrous and hydrated); wastewater treatment sludge (EPA Hazardous Waste

No. K007) generated from the production of iron blue pigments; oven residues (EPA Hazardous Waste No. K008) generated from the production of chrome oxide green pigments after November 14, 1986. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern, the facility must implement a contingency testing program for the petitioned wastes. This testing program must meet the following conditions for the exclusions to be valid:

- Each batch of treatment residue 1) must be representatively sampled and tested using the EP Toxicity test for arsenic, barium, cadmium, chromium, lead, selenium, silver, mercury, and nickel. If the extract concentrations for chromium, lead, arsenic, and silver exceed 0.315 ppm; barium levels exceed 6.3 ppm; cadmium and selenium exceed 0.063 ppm; mercury exceeds 0.0126 ppm; or nickel levels exceed 2.205 ppm, the waste must be re-treated or managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.
- 2) Each batch of treatment residue must be tested for reactive and leachable cyanide. If the reactive cyanide levels exceed 250 ppm; or leachable cyanide levels (using the EP Toxicity test without acetic acid adjustment) exceed 1.26 ppm, the waste must be re-treated or managed and disposed as hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.
- 3) Each batch of waste must be tested for the total content of specific organic toxicants. If the total content of anthracene exceeds 76.8 ppm, 1,2-diphenyl hydrazine exceeds

0.001 ppm, methylene chloride exceeds 8.18 ppm, methyl ethyl ketone exceeds 326 ppm, n-nitrosodiphenylamine exceeds 11.9 ppm, phenol exceeds 1,566 ppm, tetrachloroethylene exceeds 0.188 ppm, or trichloroethylene exceeds 0.592 ppm, the waste must be managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.

- 4) A grab sample must be collected from each batch to form one monthly composite sample which must be tested using gas chromatography, mass spectrometry analysis for the compounds listed in No. 3 above as well as the remaining organics on the Priority Pollutant List (incorporated by reference, see 40 CFR 423 App. A (1983) (as adopted at 47 Fed. Reg. 52,309 (Nov. 19, 1982)), not including later amendments).
- The data from conditions 1-4 must 5) be kept on file at the facility for inspection purposes and must be compiled, summarized, and submitted to the USEPA Administrator by certified mail semi-annually. USEPA will review this information and if needed will propose to modify or withdraw the exclusion. Should USEPA propose to modify or withdraw the exclusion, Envirite shall promptly provide notice thereof to the Board. The decision to conditionally exclude the treatment residue generated from the wastewater treatment systems at Envirite's Harvey, Illinois facility applies only to the wastewater and solids treatment systems as they presently exist as described in the delisting petition submitted to the USEPA. The exclusion does not apply to the proposed process additions describ-

ed in the petition submitted to USEPA as recovery, including erystalization crystallization, electrolytic metals recovery, evaporative recovery, and ion exchange.

### <u>USX Steel Corporation</u>, Chicago, Illinois

Fully-cured chemically stabilized electric arc furnace dust/sludge (CSEAFD) treatment residue (EPA <u>Hazardous Waste No. K061) generated from</u> the primary production of steel after April 29, 1991. This exclusion (for 35,000 tons of CSEAFD per year) is conditioned upon the data obtained from USX's full-scale CSEAFD treatment facility. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern once the full-scale treatment facility is in operation, USX must implement a testing program for the petitioned waste. This testing program must meet the following conditions for the exclusion to be valid:

- 1. Testing: Sample collection and analyses (including quality control (QC) procedures) must be performed according to SW-846 methodologies.

  The SW-846 methodologies are incorporated by reference in 35 Ill. Adm. Code 720.111.
  - Initial Testing: During the Α. first four weeks of operation of the full scale treatment system, USX must collect representative grab samples of each treated batch of the CSEAFD and composite the grab samples daily. The daily composites, prior to disposal, must be analyzed for the EP leachate concentrations of all the EP toxic metals, nickel, and cyanide (using distilled water in the cyanide extractions), and the total concentrations of reactive sulfide and reactive cyanide. USX must report the analytical

- test data, including quality control information, obtained during this initial period no later than 90 days after the treatment of the first full-scale batch.
- Subsequent Testing: USX must В. collect representative grab samples from every treated batch of CSEAFD generated daily and composite all of the grab samples to produce a weekly composite sample. USX then must analyze each weekly composite sample for all of the EP toxic metals, and nickel. The analytical data, including quality control information, must be compiled and maintained on site for a minimum of three years. These data must be furnished upon request and made available for inspection by any employee or representative of EPA or the State of Illinois.
- Delisting levels: If the EP 2. extract concentrations for chromium, lead, arsenic, or silver exceed 0.315 mg/l; for barium exceeds 6.3 mg/l; for cadmium or selenium exceed 0.063 mg/l; for mercury exceeds 0.0126 mg/l; for nickel exceeds 3.15 mg/l; or for cyanide exceeds 4.42 mg/l, total reactive cyanide or total reactive sulfide levels exceed 250 mg/kg and 500 mg/kg, respectively, the waste must either be re-treated until it meets these levels or managed and disposed of in accordance with Subtitle C of RCRA.
- 3. Data submittals: Within one week of system start-up USX must notify the Section Chief, Delisting Section (see address below) when their full-scale stabilization system is on-line and waste treatment has begun. The data

obtained through condition (1)(A) must be submitted to the Section Chief, Delisting Section, CAD/OSW (OS-333), U.S. EPA, 401 M Street, S.W., Washington, DC 20460 within the time period specified. At the Section Chief's request, USX must submit any other analytical data obtained through conditions (1)(A) or (B) within the time period specified by the Section Chief. Failure to submit the required data obtained from conditions (1)(A) or (B) within the specified time period or maintain the required records for the specified time will be considered by the Agency, at its decision, sufficient basis to revoke USX's exclusion to the extent directed by EPA. All data must be accompanied by the following certification statement: "Under civil and criminal penalty <u>of law for the making or submission</u> of false or fraudulent statements or representations (pursuant to the applicable provisions of the Federal Code which include, but may not be limited to, 18 U.S.C. §6928), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the (those) identified section(s) of this document for which I cannot personally verify its (their) truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the vertification that this information is true, accurate and complete. the event that any of this information is determined by EPA in its sole discretion to be false, inaccurate or incomplete, and upon conveyance of this fact to the company, I recognize and agree that this exclusion of wastes will be void as if it never had effect or to the extent directed by EPA and

that the company will be liable for any actions taken in contravention of the company's RCRA and CERCLA obligations premised upon the company's reliance on the void exclusion."

(Source: Amended at Ill. Req. , effective

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the \_\_\_\_\_\_\_\_, 1991, by a vote of

Illinois Pollution Control Board