

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

September 8, 2005

Henry R. Stonerook, P.E., DEE
 President
 Stone Environmental
 6460 Busch Blvd., Suite 105
 Columbus, OH 43229

re: Recycled Zinc Chloride Solution

Dear Mr. Stonerook:

This letter is in response to your letter dated August 1, 2005, to Ernest Waterman, Chief of the Hazardous Waste Unit at EPA, Region 1. In that letter, you request a regulatory interpretation regarding a practice by your client, V&S Taunton, who recycles stripper solution from a galvanizing process. In particular, you would like a determination from EPA that the process described is in fact raw material recycling and not the handling of hazardous waste. You also mention that the Massachusetts Department of Environmental Protection (MADEP) has indicated that a recycling permit would be required for the process. Again, you feel that your client is handling a raw material which is not subject to hazardous waste regulations and, therefore, no state recycling permit should be required.

As background to this topic, we understand that V&S Taunton is a "hot dip galvanizing" facility. The "hot dip" process involves cleaning, pickling and fluxing of steel prior to immersion in a kettle of molten zinc. The zinc coated steel parts are then quick-cooled by air-cooling and/or immersion in a water quench. Over time there is a build-up of zinc and iron chloride in the pickle tanks requiring that these tanks be recharged. In the past, the spent materials removed from the tanks were manifested off-site as a hazardous waste. V&S Taunton has modified the "hot dip" process by adding additional tanks to separate the pickling process from the stripping process, the "stripper" tanks remove zinc from fixtures and previously galvanized fabrications. The resulting material (stripper solution) is collected from the stripper tank and shipped to Zaclon, Inc., a zinc chloride manufacturer in Ohio. Zaclon uses this material as an ingredient in the manufacturing of zinc ammonium chloride galvanizing fluxes. Prior to use, the stripper solution is treated by Zaclon to remove heavy metals and iron from the zinc chloride solution. The resulting heavy metal sludges are disposed of as hazardous waste and the resulting iron hydroxides are disposed of as non-hazardous wastes.

Following a review of the information you provided and after discussions within the Region, with MA DEP, and with EPA, Region 5, we have come to the conclusion that the stripper solution removed from the stripper tanks is a solid waste. The basis for our solid waste determination is that we consider the stripper solution to fall into the category of a spent material being reclaimed (see 40 CFR Part 261.2). The definition of "spent material" includes any

CONCURRENCES

BY	SURNAME	DATE						
	CHW	9/8/05	ORC	9/8/05	CHW	9-8-05	SEB	9-8-05
	Waterman		Waterman		Waterman		Waterman	

Henry Stonerook
September 8, 2005
Page 2

material that has been used and as a result of contamination can no longer serve the purpose for which it was originally produced without processing. A material is reclaimed if it is processed to recover a useable product. As is noted above, Zaclon treats the material prior to use. Note that the EPA has broadly interpreted spent materials to include materials which need to be reprocessed due to any impurity, factor or circumstance which causes the material to be taken out of service. See Memorandum, Shapiro to Hazardous Waste Division Directors, March 24, 1994. In addition, the EPA regulations require persons generating solid wastes to determine whether the solid waste is hazardous. 40 CFR 262.11 sets forth the generator's responsibilities to determine whether its waste is hazardous. Given the acknowledgement in your letter that the stripper solution is a hazardous material it appears likely it is also a hazardous waste.

Finally, please note that the Commonwealth of Massachusetts, in accordance with Section 3006 of the Resource Conservation and Recovery Act (RCRA), is authorized to administer and enforce the base RCRA program in lieu of the federal program. Therefore, we suggest that you continue your discussions with the MADEP regarding applicable state regulations which may go beyond the minimum federal requirements.

If you have any questions regarding this response, please do not hesitate to contact Sharon Leitch, in the Hazardous Waste Unit, at (617)918-1647.

Sincerely,

Marvin Rosenstein, Chief
Chemicals Management Branch

enclosure

cc: E. Waterman, Chief, Hazardous Waste Unit, EPA
K. Rota, Chief RCRA Enforcement Unit, EPA
J. Fowley, Atty., ORC-EPA
J. Miller, Chief, Waste Branch, MADEP
J. Duclos, Supervisor, Hazardous Waste Compliance Section, NHDES
R. Isner, Director, WEED, CTDEP
L. Grandchamp, Chief, Waste Management, RIDEM
S. Ladner, Supervisor, Licensing Unit, MEDEP
P. Marshall, Chief, Hazardous Materials Management Division, VTDEC
G. Hunt, Section Chief, Compliance & Enforcement, MA DEP SERO
M. Cunningham, Enforcement and Compliance Assurance Branch, EPA, Region 5

March 24, 1994.

MEMORANDUM

SUBJECT: Definition of Spent Material

FROM: Michael Shapiro, Director
Office of Solid Waste

TO: Hazardous Waste Management Division Directors
Regions I-X

The purpose of this memorandum is to clarify when a secondary material meets the definition of "spent material". A spent material is "any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without further processing." 40 CFR §261.1(c)(1). A number of EPA Regions have requested assistance from EPA Headquarters on making regulatory determinations for secondary materials that may meet the regulatory definition of spent material. For many secondary materials this determination is important because spent materials being reclaimed are solid wastes. 40 CFR §261.2(c)(3). However, sludges and byproducts that exhibit a characteristic of a hazardous waste and commercial chemical products (whether listed or characteristic) are not solid wastes when reclaimed. 40 CFR §261.2(c).

In particular, EPA Headquarters has been asked whether in order to meet the definition of spent material, a material must: 1) be spent as a result of contamination, and 2) be nonfunctional in the sense that it could not continue to be used for its original purpose. We have consistently interpreted this definition as applying to "materials that have been used and are no longer fit for use without being regenerated." 50 FR at 618 (January 4, 1985); 48 FR at 14476 (April 4, 1983). We thus consider "contamination", as used in the definition of spent material, to be any impurity, factor or circumstance which causes the material to be taken out of service for reprocessing. (See also 50 FR at 624, indicating that the reference to contamination was added to clarify that a material such as a solvent may continue to be used for its original, though not identical, purpose and not yet be classified as a solid waste.)

Similarly, we consider the part of the definition stating that a spent material "can no longer serve the purpose for which it was produced" as being satisfied when the material is no longer serving its original purpose and is being reprocessed instead. EPA has consistently maintained this interpretation since it promulgated the definition of spent material.<1>

This is the only interpretation that makes environmental sense, since once used materials are taken out of service and sent for reclamation they pose the same potential risks and are handled in the same manner regardless of the reason they are taken out of service. Put in terms of a specific example, lead acid batteries that are taken out of service and sent to a lead reclaimer pose the same risks and are handled the same way no matter how many or how few physical and chemical impurities they contain, and no matter how much or how little the presence of impurities contributed to the decision to stop using the battery in the first place. See United States v. Ilco Inc., 996 F. 2d 1126 (11th Cir. 1993), where the court held that all batteries sent to a secondary lead smelter for recovery were "spent materials" without regard for the reason the batteries were taken out of service.

As another example, when a generator removes mercury-bearing thermostats from buildings as part of an upgrade to the building's heating system, the thermostats could continue to be used for the remaining portion of their useful lives. However, assuming the generator intends to ship these thermostats to a reclamation facility for mercury recovery, these thermostats would be considered to be spent materials irrespective of the reason for their removal and the fact that the thermostats were potentially capable of being used as thermostats in another building.

Background/Analysis

Under RCRA Subtitle C regulations, a spent material is "any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing." 40 CFR §261.1(c)(1). This definition was promulgated in the 1985 final rule amending the definition of solid waste. 50 FR 614, January 4, 1985.

The preamble to the final rule makes it clear that the "as a result of contamination" language was added to avoid classifying as waste a used material that was actually being put to further direct use. 50 FR at 624. The preamble gives the example of a solvent that is not clean enough to clean circuit boards but still clean enough for use as a metal degreaser.

The reason the "as a result of contamination" language was chosen is because many spent materials such as solvents and spent activated carbon typically become spent because of impurities. The Agency did not intend to restrict the definition of spent materials to only those materials which became spent as a result of this type of contamination. On the contrary, in the same rule that the Agency defined spent material, EPA promulgated regulatory requirements under Subtitle C for spent lead-acid batteries being reclaimed. The Agency explicitly classified spent lead-acid batteries as spent materials in the final rule. 50 FR at 625. These batteries become "spent" for a variety of reasons (e.g., overcharging, frozen electrolyte, leakage) all of which EPA regards as being "contamination" for purposes of the definition.

Regarding whether a material must be nonfunctional to meet the definition of spent material, the fact that a material can continue to be used for its original purpose is not relevant to the issue of whether or not it is a spent material when it is clear from the facts that the material will not be used but instead will be treated by reclamation. The mere potential for continued original use does not preclude a material from being defined as spent. As stated above, the fact that it is actually removed from service establishes, as to this generator, that it can no longer serve its original purpose.

If all that were required to avoid RCRA Subtitle C regulation would be a showing that a secondary material could continue to be used, then generators would be able to circumvent RCRA simply through changing their operating practices to remove secondary materials just prior to that material being unfit for its original use. Thus, spent solvents that are heavily contaminated but might still be fit for metal degreasing (even though they were being sent to be regenerated into new solvents), spent lead-acid batteries that still had a charge (or were capable of holding a charge), and mercury-bearing thermostats removed from buildings sent for reclamation would not be subject to RCRA regulation in spite of the fact that the generator was no longer using the material but instead was sending it to be treated by reclamation.

Clearly, this result is not consistent with the cradle-to-grave purpose of RCRA Subtitle C regulation. Used materials taken out of service and sent for reclamation also pose the same risks and are handled in the same manner regardless of the reason they are taken out of service. For this reason, EPA has consistently interpreted spent materials as including materials which could continue to be used for their original purpose but are, in fact, being taken out of service for reclamation, showing that for this generator they can no longer serve the purpose for which they were produced.<2>

Conclusion

Because spent materials being reclaimed (or to be reclaimed) are within the definition of solid waste, it is important to be able to distinguish among spent materials, other categories of solid wastes such as sludges, and products which are still in use that have not been discarded. Spent materials are distinguished from products and other categories of solid wastes in that they have been used previously and have been taken out of service and are going to be treated by reclamation. Examples of spent materials include spent lead-acid batteries, used mercury switches, spent solvents, spent catalysts and spent etchants.

This memorandum states the Agency's consistent interpretation of the existing regulations. However, EPA recognizes the issues regarding the regulatory definition of spent material and we may consider revising the regulatory definition in the future. If you have further questions on this issue, please call Mike Petruska of my staff at (202) 260-8551.

cc: Susan Bromm
Susan O'Keefe
NEIC, Frank Covington

1 See 50 FR at 650 (January 4, 1985), indicating that spent batteries, spent mercury, spent acids and

caustics remain subject to regulation when reclaimed regardless of the reason these wastes are removed from service, November 6, 1986 letter from Matt Straus to H. Bzura stating that copper etchants sent for reclamation were defined as "spent materials (i.e., materials that have been used [sic] are no longer fit for use without being regenerated, reclaimed, or otherwise reprocessed)." See also April 14, 1989 letter from Stephen Cochran to Robert Oleszko indicating that ignitron tubes containing mercury sent for reclamation were spent materials irrespective of the reason that the tube was taken out of service.

2 See May 20, 1987 letter from Matthew Straus to Peter Russell indicating that spent pickle liquor becomes a spent material/solid waste when it is removed from pickling line baths regardless if it can continue to be used. See also July 15, 1990 letter from Sylvia Lowrance to Ralph Eschborn indicating that photographic fixer bath sent for reclamation is a spent material even though the solution could continue to be used as a fixer.

August 1, 2005

Mr. Ernest Waterman, Chief
Hazardous Waste Unit, Office of Ecosystem Protection
U.S. Environmental Protection Agency – New England Office
One Congress Street
Suite 1100, Mail Code: CHW
Boston, MA 02114

RECEIVED
AUG - 2 2005
HAZARDOUS WASTE PROGRAM UNIT

**Request for Determination
Recycled Zinc Chloride Solution**

Dear Mr. Waterman:

Stone Environmental Engineering & Science, Inc. (Stone Environmental) represents V&S Taunton Galvanizing, LLC, (V&S Taunton) a hot-dip galvanizing facility that has a new, state-of-the-art operation in Taunton, MA. The facility opened for business in late 2003. V&S Taunton is part of Voigt & Schweitzer, Inc. which operates hot-dip galvanizing plants in several eastern states including Ohio, Michigan, Pennsylvania (two facilities), West Virginia, Virginia, and New Jersey.

The purpose of this letter is to formally request a determination from U.S. EPA that the zinc chloride generated from the V&S Taunton operations is a recycled material and is not subject to regulation as a RCRA hazardous waste. We are providing the following information to you to aid in your determination:

- Description of the galvanizing operations at V&S Taunton; and,
- Confidential information from Zaclon, the company which purchases the zinc chloride from V&S Taunton.

Please note that V& S Taunton received a notice of violation from Massachusetts DEP (MADEP) for not having a recycle permit for this material. We have since filed an application with MADEP for this permit, but we believe that if the material in question is indeed a raw material for Zaclon's operation, then no state permit is required. As the notice of violation and a pending consent decree are currently being considered, we would appreciate a quick response from you concerning your evaluation of this situation. Please contact me if you have any questions.

Sincerely,
Stone Environmental

Henry R. Stonerook

Henry R. Stonerook, P.E., DEE
President

Enclosures

DESCRIPTION OF GALVANIZING OPERATIONS V&S TAUNTON GALVANIZING, LLC

V&S Taunton Galvanizing is a "hot dip galvanizing" operation that coats steel fabrications made by various customers with zinc metal to provide enhanced corrosion protection. The hot dip galvanizing operation is comprised of cleaning, pickling, and fluxing the steel prior to immersion in a kettle of molten zinc. The zinc coated steel parts are then quenched (quick cooled) either by air-cooling and/or by immersion in a water quench. A flow chart of the hot dip galvanizing process is presented in Figure 1.

The plant galvanizes large and small structural steel fabrications as well as small parts. The steel is chained, wired or otherwise packed in fixtures which are used as well during the dipping in the hot molten zinc. The chains, wires, and fixtures are reused as part of the operation. In traditional hot dip galvanizing, these devices would be coupled to the next batch of fabrications and then passed through the regular pickle tanks as shown in the flow chart. Over time, this resulted in a build up of zinc chloride and iron chloride in the pickle tanks. When the pickle tank needed to be recharged, the liquids were manifested off-site as hazardous waste material.

By themselves, both zinc chloride and iron chloride are good raw materials. Zinc chloride is a common product used in the film industry and to make fluxes. Iron chloride is a common product for use as a water treatment chemical. When combined, the mixture is not usable, and separating the zinc chloride from the iron chloride is complicated and costly.

Recognizing an opportunity, Voigt & Schweitzer has invested in additional tanks to separate the pickling process from the stripping process. At all of its North American operations, including V&S Taunton, Voigt & Schweitzer uses a separate tank (stripper) to remove the zinc from the fixtures as well as from fabrications that have previously been galvanized. The resulting material can be used directly by zinc chloride manufacturers like Zaclon, Inc. The alternative is for them to dissolve zinc substrates in hydrochloric acid as a pre-stage process.

In addition to the zinc chloride solution, the iron chloride solution from the other pickling tanks is a usable feed material for producers of iron chloride such as Dupont.

Transportation

The zinc chloride is transferred by tanker truck as a hazardous material to Zaclon's facility in Cleveland, Ohio. The trucks collect the zinc chloride directly from the stripper tank at the V&S Taunton facility.

Zaclon Process Description

Attached is a detailed description of Zaclon's processing of zinc chloride at its operations in Cleveland. Zaclon requests that this information be kept confidential.

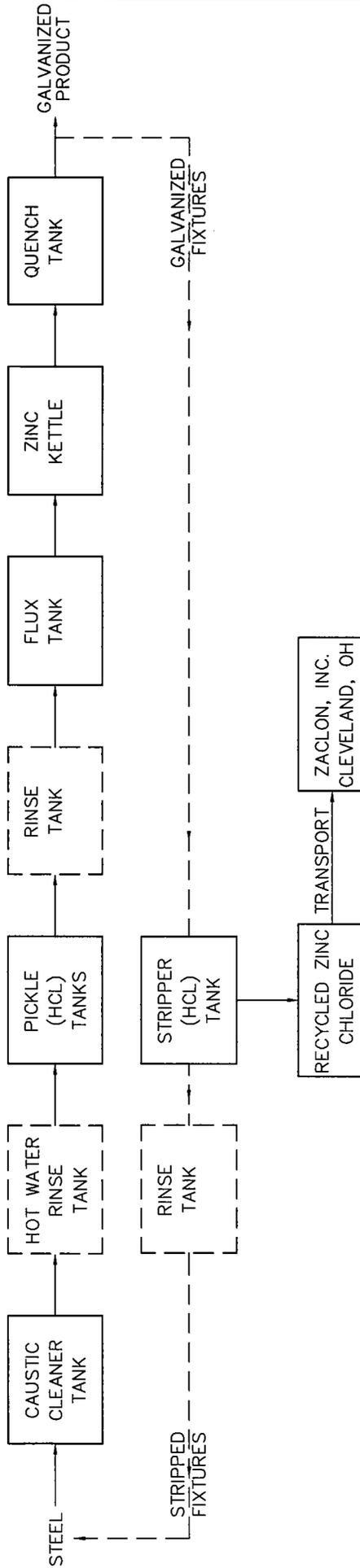


FIGURE 1

PROCESS FLOW DIAGRAM
 HOT DIP GALVANIZING PROCESS
 V&S TAUNTON GALVANIZING
 TAUNTON, MASSACHUSETTS

DATE: AUGUST, 2005

Sto. Environmental
 Engineering & Science, Inc.
 6460 Busch Blvd., Suite 105
 Columbus, Ohio 43229
 614-888-8041 Fax 614-888-8043

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June 16, 2005

Werner Niehaus
President
Voigt & Schweitzer USA
1000 Buckeye Park Road
Columbus, Ohio 43207

Dear Werner,

This letter and related attachments is provided to describe Zaclon's use of your stripping acid (also referred to as "Zinc Chloride Solution - Crude Grade, Galvanizer's Strip Acid" in Zaclon Raw Material Specification # 027692) as a raw material in our manufacture of galvanizing fluxes. In chemical manufacturing, the term "raw material" is commonly used to mean an ingredient suitable for use to produce a finished product. In this case, the finished product is Zinc Ammonium Chloride galvanizing fluxes. The information being provided is proprietary and confidential. You may, however, share this information with those who have a need to know it within your own organization as well as with your environmental consultants and regulatory agencies. Please do not share it with others.

Zaclon's manufacturing process to produce galvanizing fluxes is complex. Zaclon uses both primary and secondary sources of zinc and zinc chloride to produce galvanizing fluxes. Some of these sources are solid materials, and some are liquids. Stripping acid is one of the liquid secondary raw materials used. A simplified block diagram flow sheet of the overall process is attached. This diagram is labeled "ZINC PRODUCTS FLOW SHEET - OVERALL ZINC PRODUCTS.

→ Stripping acid is received and unloaded into intermediate storage tanks. In these storage tanks, the stripping acid is often mixed with other zinc chloride solutions that have been produced by Zaclon by reacting zinc containing solid secondary materials with hydrochloric acid. These zinc chloride solutions are then transferred to two treating steps prior to concentration to remove water. The two treating steps involve basicity adjustment and reaction with oxidizers and sequestering agents to remove heavy metals and iron from the zinc chloride solution. These treating processes are proprietary and are labeled TRACE METAL RECOVERY and IRON RECOVERY on the block diagram. The term "recovery" is misleading since Zaclon recovers neither the heavy metals nor the iron, but rather disposes of the heavy metal sludges as hazardous waste and the iron hydroxides as non-hazardous wastes. Following the treating steps, the zinc chloride solution is concentrated (cooked) to remove water and then fed into the SOLID ZAFLON PROCESS to manufacture fluxes.

A second simplified flow sheet labeled ZINC PRODUCTS DEPT. FLOW SHEET - ZINC AMMONIUM CHLORIDE PROCESS is attached. In the Zinc Ammonium Chloride manufacturing process, Zinc Chloride solution is combined with Ammonium Chloride (produced by reacting Anhydrous Ammonia with Hydrochloric Acid) in a neutralizer. The

Confidential



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June 16, 2005

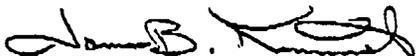
Zinc Ammonium Chloride solution is then filtered and crystallized to form the solid fluxes that are sold to galvanizers.

Zaclon's use of stripping acid as a raw material in the manufacture of Zinc Ammonium Chloride galvanizing fluxes was extensively reviewed by the Ohio Environmental Protection Agency (OEPA) in 1994. The OEPA's conclusion is that the stripping acid is not a waste since it is employed as an ingredient in an industrial process to make a product. A copy of a letter from the OEPA dated December 23, 1994 is attached. A more recent review of Zaclon's use of secondary materials by the United States Environmental Protection Agency (USEPA) has resulted in no issues related Zaclon's use of stripping acid as a raw material nor to its' RCRA exemption under federal law. Zaclon procures stripping acid as a raw material and manages it as such on our facility. A copy of Zaclon's Raw Material Specification # 027692 is attached.

One question which was raised by the Massachusetts Department of Environmental Protection in a phone conversation earlier this year relates to the notation in Zaclon's raw material specification which states that "MATERIAL NOT MEETING SPECIFICATION IS ACCEPTABLE". This is not an uncommon provision of a raw material specification and does not change the conclusions reached by Zaclon and the OEPA that stripping acid, as used by Zaclon in the manufacture of galvanizing fluxes, is not a waste. Nevertheless, Zaclon is considering revising our specification to eliminate this notation.

Werner, I hope that this information will be helpful to you. Should you require additional information, please feel free to call me.

Sincerely,

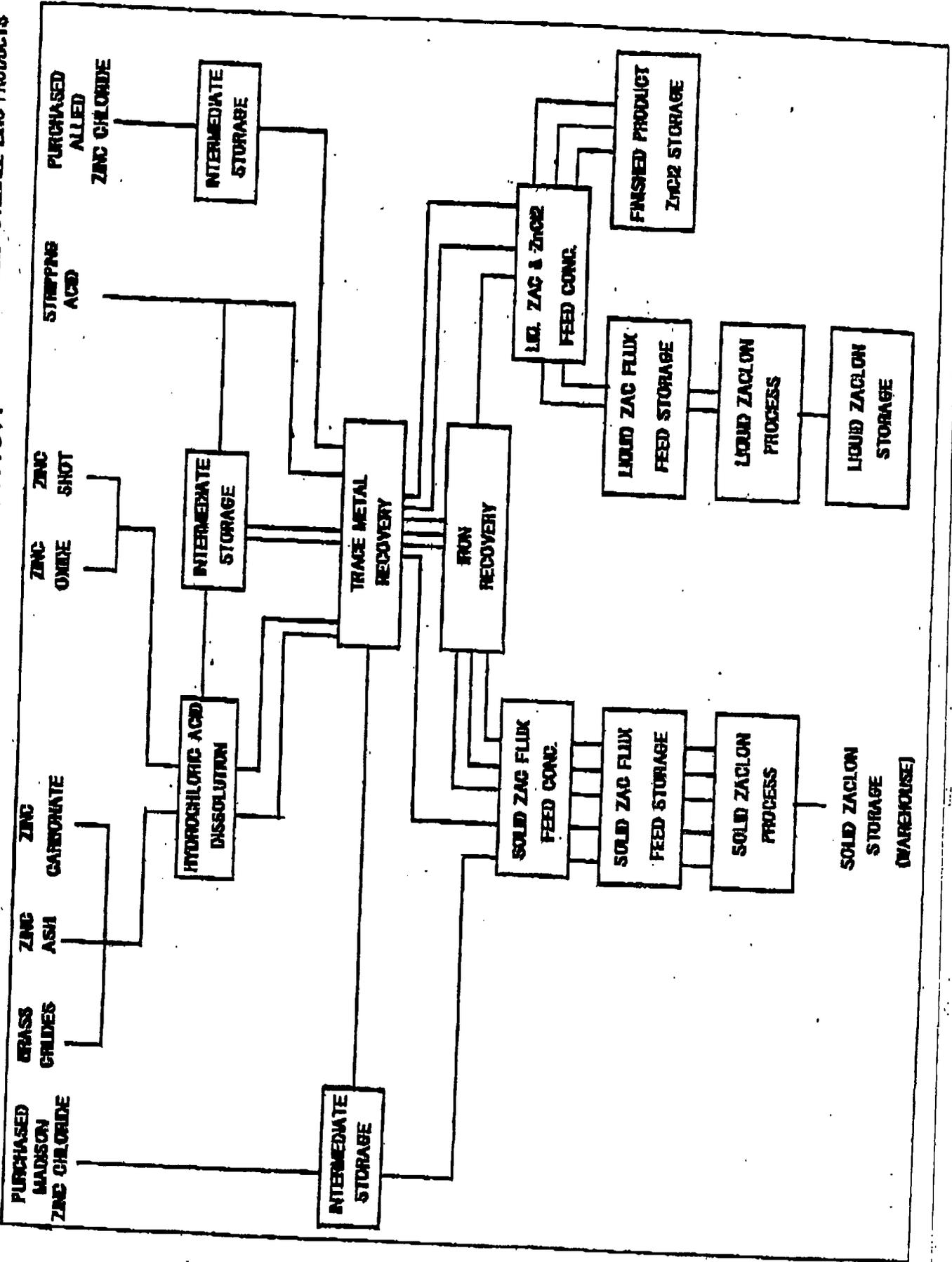


James B. Kimmel
President
Zaclon, LLC
cc: JTT - Zaclon
BMW - Zaclon

Confidential



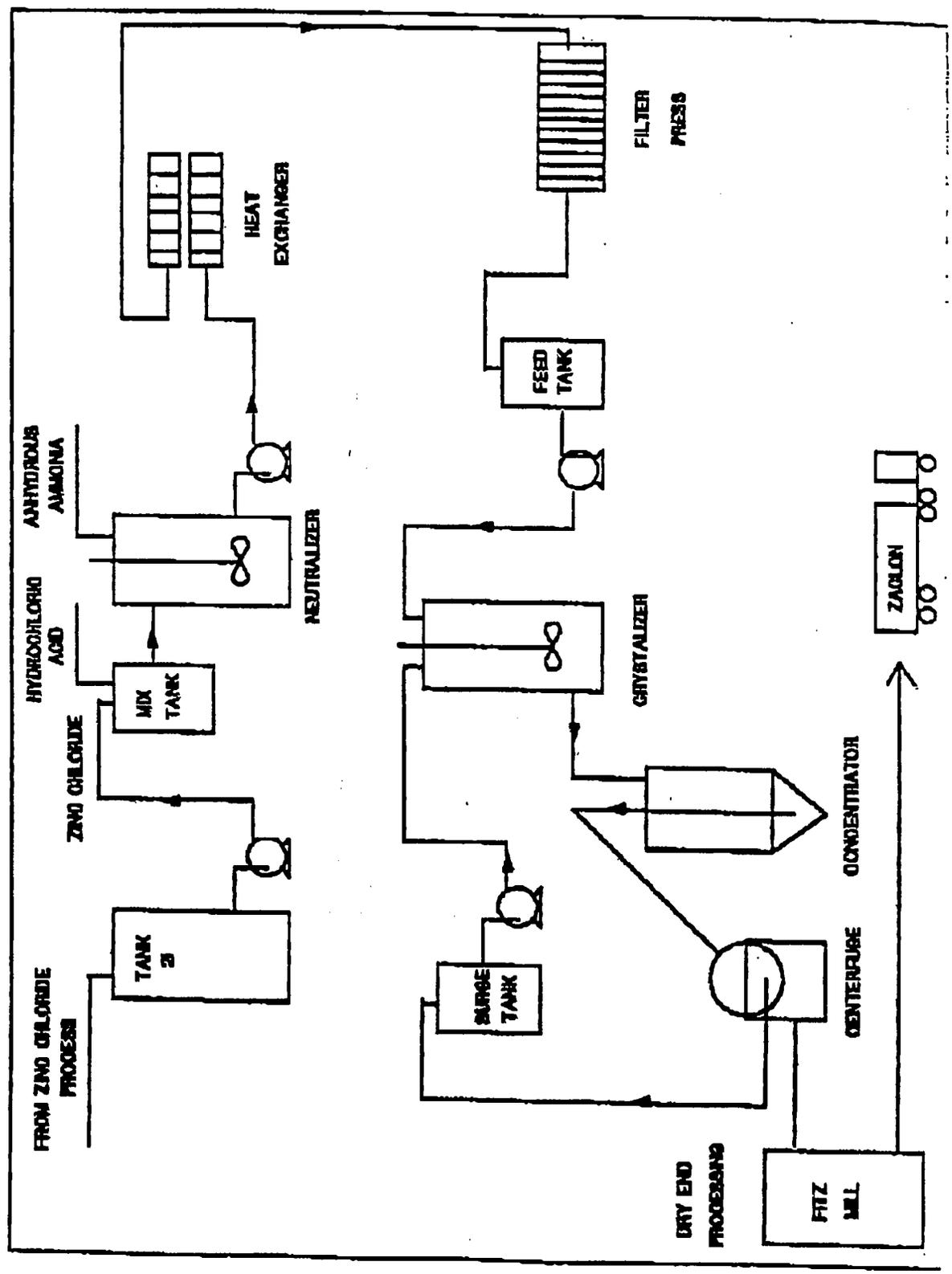
"CONFIDENTIAL INFORMATION"



ZINC PRODUCTS DEPT.
FLOW SHEET - ZINC AMMONIUM
CHLORIDE PROCESS

ZINC PRODUCTS DEPT.
FLOW SHEET - ZINC AMMONIUM
CHLORIDE PROCESS

"CONFIDENTIAL INFORMATION"







State of Ohio Environmental Protection Agency

Northeast District Office

2110 E. Aurora Road
Twinsburg, Ohio 44087-1969
(216) 425-9171
FAX (216) 487-0769

George V. Voinovich
Governor

December 23, 1994

RE: ZACLON, INC.
OHD 004 184 768

CERTIFIED MAIL

Mr. James Krimmel, President
Zaclon, Inc.
2981 Independence Road
Cleveland, Ohio 44115

Dear Mr. Krimmel:

On January 5, 1994, I conducted a hazardous waste inspection of your facility at 2981 Independence Road in Cleveland, Ohio. The purpose of this inspection was to assess compliance with Ohio regulations applicable to a generator of hazardous waste. Kristen Switzer and I conducted the inspection for the Ohio EPA with Zaclon represented by Joe Busovicki and yourself. A copy of the RCRA Inspection Report is enclosed for your information.

Zaclon is a large quantity generator of a hazardous waste sludge (D006 and D008). This sludge is generated by the facility's zinc ammonium chloride process and then accumulated in a 20 yard roll-off container located in a <90 day storage area. No violation of Ohio's hazardous waste regulations were discovered during this inspection.

Following this inspection, you were sent a letter dated January 14, 1994, requesting information about your zinc chloride process. This information was requested to aid this agency in determining whether or not the spent stripping acid being accepted by Zaclon was a hazardous waste.

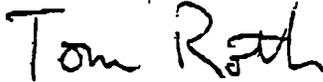
The information (and other materials received from Zaclon since this initial submittal) indicates that Zaclon considers the stripping acid a product and that it is managed as such at the facility. This includes stipulating supplier specifications the stripping acid must meet before Zaclon will accept it. Materials are not wastes when they are reused in accordance with Ohio Administrative Code (OAC) 3745-51-02(E)(1)(a). A material is reused if it is employed as an ingredient, including as an intermediate in an industrial process to make a product (OAC 3745-51-01 (C)(5)(a)). As you explained, some raw materials purchased are processed similarly to the stripping acid. Therefore, the stripping acid which Zaclon accepts to use in their process to produce zinc chloride is not considered a waste and is therefore also not a hazardous waste. This determination is based on the information provided to the Ohio EPA.



Mr. James Krimmel - Zaclon, Inc.
December 23, 1994
Page Two

Failure to list specific deficiencies in this communication does not relieve you from the responsibility of complying with all applicable regulations. If you have any questions, please call me at (216) 963-1231.

Sincerely,

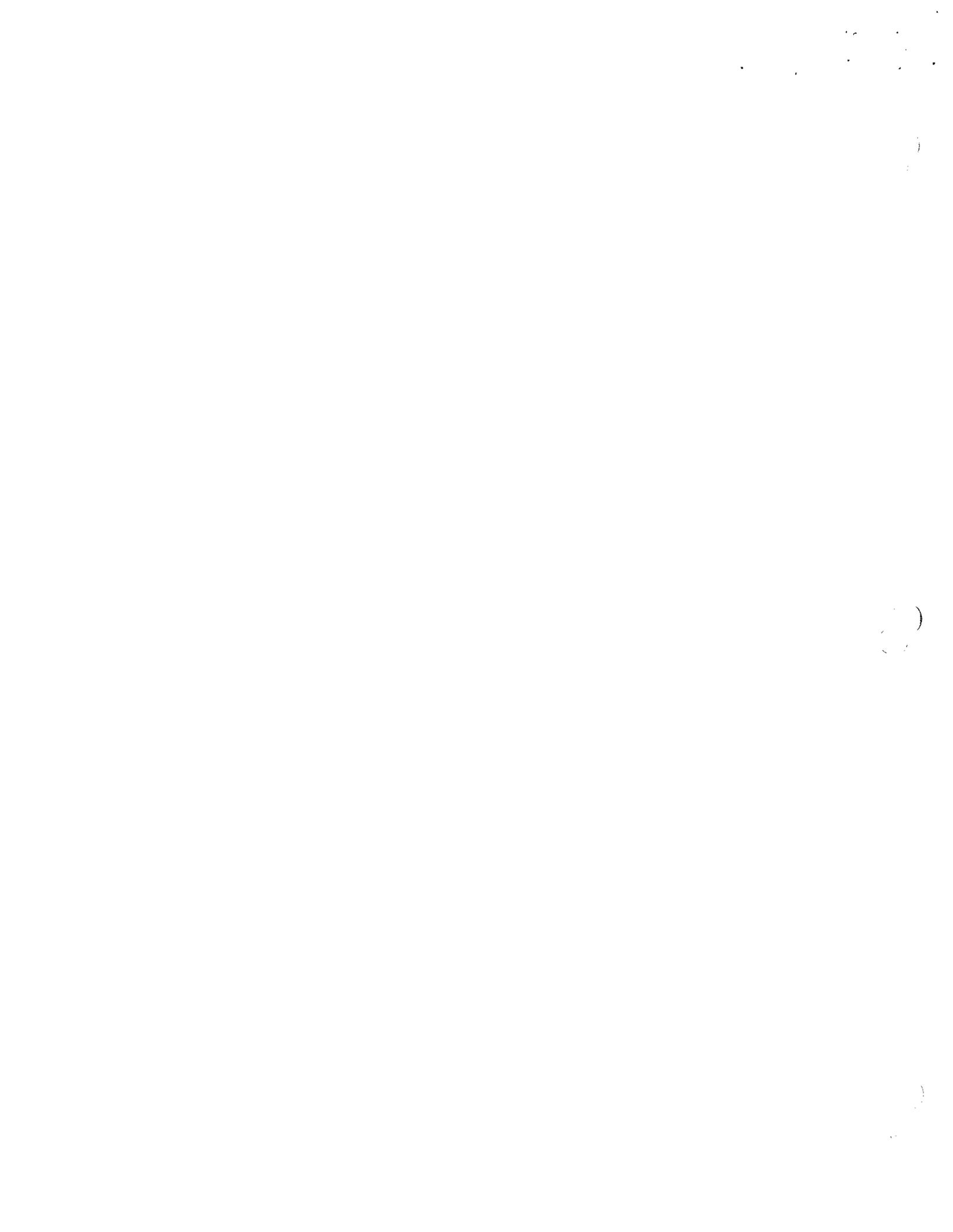


Thomas J. Roth
Environmental Scientist
Division of Hazardous Waste
Management

TJR/fwn

Enclosure

cc: Laura Roberts, Hennepin County Dept. of Env. Mgmt.
Ed Kitchen, DHWM, CO
Shannon Nabors, DHWM, CO
Paul Anderson, DHWM, NEDO
Laurie Stevenson, DHWM, CO



CONTROLLED

RAW MATERIAL SPECIFICATION

MATERIAL NAME ZINC CHLORIDE-SOLUTION

R.M. NUMBER:027692
DATE ISSUED:09/12/02
DATE REVISED:09/10/02
DATE SUPERSEDED:09/18/00

ALTERNATE NAME CRUDE GRADE, GALVANIZER'S STRIP ACID

PHYSICAL DESCRIPTION

Formula: HCl
Appearance: COLORLESS TO GREEN LIQUID
Physical Consts: VARIOUS BAUME'S
VARIOUS IRON & ZINC CONTENT

SPECIFICATIONS

<u>Property</u>	<u>Limits</u>	<u>Test Method</u>
% ZINC CHLORIDE	25 % MIN.	9775-0014
% DISSOLVED IRON	3.0% MAX.	9775-0002

MATERIAL NOT MEETING SPECIFICATION IS ACCEPTABLE. HOWEVER, A PRORATED CHARGE WILL BE ASSESSED THAT IS COMMENSURATE TO THE AMOUNT THE SPECIFICATION IS NOT MET.

PACKAGING

Containers: TANK TRUCK

Spec. Instr.: NO CERTIFICATE OF ANALYSIS IS REQUIRED. ANALYZE FOR % DISSOLVED IRON AND % ZINC CHLORIDE BEFORE UNLOADING.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:)	DOCKET No. RCRA-05-2004-0019
)	
Zaclon, Inc.;)	
Zaclon, LLC;)	
Independence Land)	
Development Company;)	Honorable Susan L. Biro
2981 Independence Road)	Chief Administrative Law Judge
Cleveland, Ohio 44115)	
EPA ID No. OHD 004 184 768)	
)	
<u>Respondents</u>)	

COMPLAINT AND COMPLIANCE ORDER

I. SECOND AMENDED COMPLAINT

Preliminary Statement and Jurisdiction

1. This is a civil administrative action instituted under Section 3008(a) of the Solid Waste Disposal Act, as amended, also known as the Resource Conservation and Recovery Act of 1976, as amended (RCRA), 42 U.S.C. § 6928(a). RCRA was amended in 1984 by the Hazardous and Solid Waste Amendments of 1984 (HSWA). This action is also instituted pursuant to Sections 22.01(a)(4), 22.13 and 22.37 of the “Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, Issuance or Compliance or Corrective Action Orders, and the Revocation, Termination or Suspension of Permits” (“Consolidated Rules”), 40 CFR Part 22.
2. Jurisdiction for this action is conferred upon U.S. EPA by Sections 2002(a)(1), 3006(b), and 3008 of RCRA; 42 U.S.C. §§ 6912(a)(1), 6926(b), and 6928.

3. The Complainant is, by lawful delegation, the Chief, Enforcement & Compliance Assurance Branch, Waste, Pesticides & Toxics Division, Region 5, United States Environmental Protection Agency (U.S. EPA).
4. U.S. EPA has promulgated regulations, codified at 40 CFR 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 the 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 Ohio final authorization to administer a state hazardous waste program in lieu of the federal government's RCRA program effective June 30, 1989. 54 Fed. Reg. 27170 (June 28, 1989). The U.S. EPA granted Ohio final authorization to administer certain HSWA and additional RCRA requirements effective June 7, 1991, 56 Fed. Reg. 14203 (April 8, 1991) (corrected effective August 19, 1991 (56 Fed. Reg. 28088 (June 19, 1991)); September 25, 1995, 60 Fed. Reg. 38502 (July 27, 1995); and December 23, 1996,

61 Fed. Reg. 54950 (October 23, 1996). The U.S. EPA-authorized Ohio regulations are codified at Ohio Administrative Code (OAC) Chapters 3745-49 through 69. See also 40 C.F.R. § 272.1800 *et seq.*

7. Pursuant to Section 3006(g) of RCRA, 42 U.S.C. §6926(g), U.S. EPA must carry out the new requirements promulgated pursuant to the HSWA, Pub. L. 98-616, until such time as the State is authorized to carry out such program. Under the terms of Section 3006(g), the requirements established by HSWA are effective in all States regardless of their authorization status and are implemented by U.S. EPA until the State is granted final authorization with respect to those requirements.
8. Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), provides U.S. EPA with the authority to enforce State regulations in those States authorized to administer a hazardous waste program.
9. U.S. EPA has provided notice of commencement of this action to the State of Ohio pursuant to Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2).

General Allegations

10. Respondents are Zaclon, Inc., Zaclon LLC, and Independence Land Development Company which were and are incorporated under the laws of Ohio. Hereinafter the term Respondents is used both collectively and alternatively to refer to all or any one of the three entities named above.
11. Respondents own and operate a facility located at 2981 Independence Road, Cleveland, Ohio ("the facility").

12. Respondents are "persons" as defined by OAC 3745-50-10 and Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).
13. On April 9, 2003, Zaclon Inc. changed its name to Independence Land Development Company.
14. Tax bills for the property located at 2981 Independence Road in Cleveland, Ohio, are still mailed to Zaclon Inc. at that address.
15. Zaclon LLC uses the "Zaclon Inc." name and does business as "Zaclon Inc."
16. Independence Land Development Company owns the real property located at 2981 Independence Road in Cleveland, Ohio.
17. 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.
18. Under Sections 3005 and 3006 of RCRA, 42 U.S.C. §§ 6925-6926, 40 CFR Part 270, and OAC 3745-50-40, facilities that treat, store, or dispose of hazardous waste must have interim status or obtain a hazardous waste management permit.
19. The former owner of the facility was E.I. Dupont de Nemours and Company, Incorporated (DuPont).
20. In 1980, as required by RCRA, DuPont submitted a notification of hazardous waste activity and a Part A permit application for treatment and storage in a pile of hazardous waste from the chlorides production process and wastewater

treatment sludge, and thus qualified for interim status in accordance with RCRA § 3005(e).

21. Dupont submitted a closure plan, dated May 10, 1985, to the Ohio Environmental Protection Agency (OEPA) outlining the activities which would be conducted for the removal of all hazardous waste from the chlorides production process and wastewater treatment sludge from the waste pile storage and treatment area.
22. In a letter dated March 5, 1987, OEPA informed DuPont that all activities concerning closure of the pile had been completed, and that DuPont would maintain only the status of a generator.
23. One of the Respondents, Zaclon Inc., purchased the facility from DuPont in June of 1987.
24. Section 3005(j) and 40 CFR § 270.1(c) requires owners of hazardous waste management units that certified closure after January 26, 1983 to obtain a post-closure permit, unless they demonstrate closure by removal under § 270.1(c)(5) and (6).
25. One of the Respondents, Zaclon Inc., submitted an equivalency demonstration, dated June 2, 1992, for closure of the waste pile pursuant to 3005(i) of HSWA and 40 CFR § 270.1(c)(5) and (6).
26. U.S. EPA approved Zaclon Inc.'s June 2, 1992, equivalency demonstration by letter dated September 25, 1992.
27. Neither DuPont nor any of the Respondents have ever submitted a RCRA Part B permit application for a hazardous waste management unit at the facility.

28. Pursuant to 40 CFR § 270.73(c), the facility's interim status terminated on November 8, 1985.
29. The facility manufactures zinc-containing chemicals which include zinc ammonium chloride galvanizing fluxes, zinc orthophosphate, and zinc chloride.
30. Respondents use both primary and secondary sources of zinc in the production of zinc chloride.
31. Sash, which is produced by mixing zinc skimmings and ash from zinc metal melting kettles, is a secondary source of zinc purchased by Respondents and stored at the facility.
32. Respondents also purchased baghouse dust from an off-site source for use as a secondary source of zinc for its manufacturing process.
33. On August 22, 2001, U.S. EPA and the Ohio Environmental Protection Agency conducted a RCRA compliance evaluation inspection at the facility (the "inspection").
34. On September 19, 2002, U.S. EPA took ten samples of the sash and five samples of the baghouse dust stored at the facility at the time of the inspection.
35. U.S. EPA provided to one of the Respondents, Zaclon Inc., split samples of those taken by U.S. EPA during the September 19, 2002, sampling event.
36. In a letter dated December 17, 2002, U.S. EPA sent one of the Respondents, Zaclon Inc., a copy of the Method 1311, Toxicity Characteristic Leaching Procedure analytical results for the samples taken during the September 19, 2002, sampling event.

COUNT 1: Storage of Hazardous Waste Without a Permit or Interim Status

37. Complainant incorporates paragraphs 1 through 36 of this Complaint as though set forth in this paragraph.
38. The sash and baghouse dust was stored at the facility for at least six years prior to the September 19, 2002, sampling event.
39. The sash stored at the facility meets the definition of a by-product found at OAC 3745-51-01(C)(3) and 40 CFR 261.1(c)(3).
40. The baghouse dust stored at the facility meets the definition of a sludge found at OAC 3745-51-01(C)(2) and 40 CFR 261.1(c)(2).
41. U.S. EPA conducted a Toxicity Characteristic Leaching Procedure (TCLP) test on the ten sash and five baghouse samples collected on September 19, 2002, for cadmium, chromium, and lead using test Method 1311.
42. Nine of the ten sash samples had a lead level above the toxicity characteristic regulatory level of 5.0 milligrams per liter (mg/L). Six of the ten sash samples had a cadmium level above the toxicity characteristic regulatory level of 1.0 mg/L.
43. Three of the five baghouse samples had a lead level above the toxicity characteristic regulatory level of 5.0 milligrams per liter (mg/L). Four of the five baghouse dust samples had a cadmium level above the toxicity characteristic regulatory level of 1.0 mg/L.
44. The sash and baghouse dust stored at the facility at the time of the September 19, 2002, sampling event exhibited the toxicity characteristic for lead and cadmium.
45. Pursuant to OAC 3745-51-02(C)(4) and 40 C.F.R. § 261.2(c)(4), sludges and by-

products exhibiting a characteristic of hazardous waste are solid wastes if accumulated speculatively.

46. OAC 3745-51-01(C)(8) and 40 C.F.R. § 261.1(b)(8) states that a material is “accumulated speculatively” if it is accumulated before being recycled. A material is not accumulated speculatively if the person accumulating the material can show that the material is potentially recyclable and has a feasible means of being recycled; and that during the calendar year, commencing January 1st, the amount of material that is recycled or transferred to a different site for recycling equals at least 75% by weight or volume of the amount of that material accumulated at the beginning of the calendar year.
47. The sash and baghouse dust stored at the facility at the time of the inspection had not been recycled or transferred to a different site for recycling for at least six years prior to the September 19, 2002, sampling event.
48. The sash and baghouse dust was speculatively accumulated for at least six years prior to the September 19, 2002, sampling event.
49. Pursuant to OAC 3745-51-02(C)(1) and 40 C.F.R. § 261.2(c)(1)(a), sludges and by-products exhibiting a characteristic of hazardous waste are solid wastes if applied to or placed on the land in a manner that constitutes disposal.
50. The sash was stored outdoors in an open pile at the facility in such a manner that the material could escape into the environment, and thus in a manner constituting disposal, for at least six years prior to the September 19, 2002, sampling event.
51. The baghouse dust was stored outdoors on a ledge several feet away from the sash

pile in torn bags in such a manner that the material could escape into the environment, and thus in a manner constituting disposal, for at least six years prior to the September 19, 2002, sampling event

52. For at least six years prior to the September 19, 2002, sampling event the sash and baghouse dust stored at the facility was a hazardous waste.
53. Section 3005(a) of RCRA, 42 U.S.C. §6925(a) and the regulations at OAC 3745-50-45 [40 CFR Part 270] state that the treatment, storage, or disposal of hazardous waste by any person who has not applied for or received a permit, or interim status, is prohibited.
54. Neither U.S. EPA nor the State of Ohio have issued a permit to Respondents' facility to treat, store, or dispose of hazardous wastes.
55. As noted in paragraph 28 above, Respondents' facility did not have interim status for the treatment, storage, or disposal of hazardous wastes after November 8, 1985.
56. Respondents are therefore in violation of Section 3005(a) of RCRA, 42 U.S.C. §6925(a) and the regulations at OAC 3745-50-45 [40 CFR Part 270].

COUNT 2: Storage of Hazardous Waste Without a Permit or Interim Status

57. Complainant incorporates paragraphs 1 through 36 of this Complaint as though set forth in this paragraph.
58. An average of about 272,000 pounds per month of spent stripping acid has been, since the mid-1990s, and continues to be, accepted at the facility from at least ten

different galvanizing facilities.

59. The spent stripping acid is initially managed in the East and West tanks at the facility.
60. The spent stripping acid is sent from the East and West tanks to another tank where it is processed to remove the iron.
61. After the iron is removed, the spent stripping acid is sent to another tank where it is processed to remove other heavy metals.
62. After the iron and other heavy metals are removed from the spent stripping acid, the material is used as an ingredient in the zinc ammonium chloride manufacturing operation.
63. The spent stripping acid accepted by the facility is a spent material as that term is defined in OAC 3745-51-01(C)(1) [40 CFR §261.1(c)(1)].
64. The processes to remove the iron and other heavy metals from the spent stripping acid are reclamation as that term is defined in OAC 3745-51-01(C)(4) [40 CFR §261.1(c)(4)].
65. Section OAC 3745-51-02(C)(3) [40 CFR §261.2(c)(3)] state that a spent material is a solid waste when reclaimed.
66. The spent stripping acid accepted at the facility has a pH of less than 2.
67. The spent stripping acid is a hazardous waste which exhibits the characteristic of corrosivity as that term is defined in OAC 3745-51-22 [40 CFR §261.22].
68. Since the mid-1990s, Respondents have stored an average of about 272,000 pounds per month of hazardous waste spent stripping acid at the facility.

69. Section 3005(a) of RCRA, 42 U.S.C. §6925(a) and the regulations at OAC 3745-50-45 [40 CFR Part 270] state that the treatment, storage, or disposal of hazardous waste by any person who has not applied for or received a permit, or interim status, is prohibited.
70. Neither U.S. EPA nor the State of Ohio have issued a permit to Respondents' facility to treat, store, or dispose of hazardous wastes.
71. As noted in paragraph 28 above, Respondents' facility did not have interim status for the treatment, storage, or disposal of hazardous wastes after November 8, 1985.
72. Respondents are therefore in violation of Section 3005(a) of RCRA, 42 U.S.C. §6925(a) and the regulations at OAC 3745-50-45 [40 CFR Part 270].

II. PROPOSED CIVIL PENALTY

Complainant proposes to assess Respondents a civil penalty of \$394,143 for the violations alleged in this Complaint.

The Administrator of U.S. EPA may assess a civil penalty of up to \$25,000 per day for each violation of Subtitle C of RCRA according to Section 3008 of RCRA, 42 U.S.C. § 6928. The Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996, 31 U.S.C. § 3701, required U.S. EPA to adjust its penalties for inflation on a periodic basis. Pursuant to the Civil Monetary Penalty Inflation Adjustment Rule, published at 40 C.F.R. Part 19, U.S. EPA may assess a civil penalty of up to \$27,500 per day for each violation of Subtitle C of RCRA occurring or continuing on or after January 31, 1997.

Complainant determined the proposed civil penalty according to RCRA Section 3008, 42 U.S.C. § 6928. In assessing a civil penalty, the Administrator of U.S. EPA must consider “the seriousness of the violation and any good faith efforts to comply with applicable requirements.” Section 3008(a)(3) of RCRA, 42 U.S.C. § 6928(a)(3). Complainant has considered the facts and circumstances of this case with specific reference to U.S. EPA’s 1990 RCRA Civil Penalty Policy. A copy of the penalty policy is available upon request. This policy provides a consistent method of applying the statutory penalty factors to this case.

The Complainant proposes, subject to the receipt and evaluation of further relevant information from Respondents, that the Administrator assess a civil penalty of \$394,143 for the violations alleged in this Complaint, as further explained in Attachment A, “Penalty Summary Sheet.”

Respondents may pay this penalty by certified or cashier's check, payable to "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:

Thomas Nash
Office of Regional Counsel (C-14J)
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

and

Michael Cunningham
Waste, Pesticides & Toxics Division (DE-9J)
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

A transmittal letter identifying this Complaint shall accompany the remittance and the copy of the check.

III. COMPLIANCE ORDER

Based on the foregoing, Respondents are hereby ordered-- pursuant to authority in 3008(a) of RCRA, 42 U.S.C. § 6928(a), and § 22.37(b) of the Consolidated Rules-- to comply with the following requirements immediately upon the effective date of this Order:

1. Respondents shall not treat, store, or dispose of hazardous waste without a RCRA permit.
2. Respondents shall, within 30 days of the effective date of this Order, submit to OEPA for approval a closure plan and documentation of financial responsibility pursuant to OAC 3745-66-10 through 48 [40 CFR Part 265 Subpart G and H] for all hazardous waste storage and treatment units at the facility.
3. Respondents shall implement the closure plan as approved by OEPA.
4. Respondents shall notify U.S. EPA in writing upon achieving compliance with this Order within 15 calendar days after the date it achieves compliance. If Respondent has not taken or completed any requirement of this Order, Respondent shall notify U.S. EPA of the failure, its reasons for the failure, and the proposed date for compliance within 10 calendar days after the due date set forth in this Order.

6. Respondents shall submit all reports, submissions, and notifications required by this Order the United States Environmental Protection Agency, Region 5, Waste, Pesticides & Toxics Division, Enforcement and Compliance Assurance Branch, Attention: Michael Cunningham (DRE-9J), 77 West Jackson Boulevard, Chicago, Illinois 60604-3590.

IV. OPPORTUNITY TO REQUEST A HEARING

You have the right to request a hearing to contest any material fact in this Complaint, or to contest the amount of the proposed penalty, or both, as provided in Section 3008(b) of RCRA, 42 U.S.C. § 6928(b), and in accordance with the "Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, Issuance of Compliance or Corrective Action Orders, and the Revocation, Termination or Suspension of Permits," codified at 40 C.F.R. Part 22. A copy of these rules accompanies this Complaint. To request a hearing, Respondents must specifically make the request in a written Answer to this Complaint. Respondents must file its written Answer with the Regional Hearing Clerk within 30 days after service of the Complaint. Consolidated Rules at § 22.15(a). In counting the 30-day time period, the actual date of receipt is not included. Saturdays, Sundays, and federal legal holidays are included in the computation. If the 30-day period expires on a Saturday, Sunday or federal legal holiday, the time period is extended to include the next day which is not a Saturday, Sunday or federal legal holiday. Consolidated Rules at § 22.7(a).

The Answer must clearly and directly admit, deny or explain each of the factual allegations contained in the Complaint with respect to which Respondents have any knowledge, or clearly state that Respondents have no knowledge as to particular factual allegations in the

Complaint. The Answer shall also state:

1. The circumstances or arguments alleged to constitute the grounds of defense;
2. the facts Respondents intend to place at issue; and
3. whether Respondents request a hearing.

Where Respondents state that they have no knowledge of a particular factual allegation, the allegation is deemed denied. Respondents' failure to admit, deny, or explain any material fact in the Complaint constitutes an admission of that allegation. Consolidated Rules at § 22.15.

Respondents must file their Answer with the Regional Hearing Clerk (R-19J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604. A copy of the Answer and any subsequent documents filed in this action should be sent to Thomas Nash, Office of Regional Counsel (C-14J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604-3590. Thomas Nash may be telephoned at (312) 886-0552

If Respondents fail to file a timely written Answer to the Complaint, with or without a request for a hearing, the Regional Administrator or Presiding Officer may issue a Default Order pursuant to § 22.17 of the Consolidated Rules. For purposes of this action only, default by Respondents constitutes an admission of all facts alleged in the Complaint and a waiver of Respondents' right to a hearing on the factual allegations under Section 3008 of RCRA, 42 U.S.C. § 6928. Default will also result in the penalty proposed in the Complaint becoming due and payable by Respondents without further proceedings 30 days after issuance of a final order upon default under § 22.27(c) of the Consolidated Rules. In addition, default will preclude Respondents from obtaining adjudicative review of any of the provisions contained in the Compliance Order section of the Complaint.

A hearing upon the issues raised in the Complaint and Answer shall be held (upon the request of Respondents in the Answer) and conducted according to the Administrative Procedures Act, 5 U.S.C. §§ 551 *et seq.*. The hearing will be in a location determined pursuant to § 22.21(d) of the Consolidated Rules.

V. SETTLEMENT CONFERENCE

Whether or not you as Respondents request a hearing, you may request an informal conference to discuss the facts of this case and to arrive at a settlement. To request a settlement conference, Respondents should write to Michael Cunningham, Enforcement and Compliance Assurance Branch (DE-9J), United States Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604-3590, or telephone him at (312) 886-4464.

Your request for an informal settlement conference does not extend the 30-day period during which you must submit a written Answer and Request for Hearing. Respondents may pursue the informal conference procedure simultaneously with the adjudicatory hearing procedure.

U.S. EPA encourages all parties for whom a civil penalty is proposed to pursue the possibilities of settlement through an informal conference. U.S. EPA, however, will not reduce the penalty simply because the parties hold a conference. The parties will embody any settlement that they may reach as a result of the conference in a written Consent Agreement and Final Order (CAFO) issued by the Director, Waste, Pesticides and Toxics Division, U.S. EPA, Region 5.

The issuance of a CAFO shall constitute a waiver of Respondent's right to request a hearing on any stipulated matter in the CAFO.

Dated this 14 day of October, 2005.

S.

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

Complaint Docket No. RCRA-05-2004-0019

