

OHIO E.P.A.
SEP 15 2003
ENTERED DIRECTOR'S JOURNAL

Date Issued: SEP 15 2003

Date Effective: SEP 15 2003

**BEFORE THE
OHIO-ENVIRONMENTAL PROTECTION AGENCY**

In the Matter Of:

Elkem Metals Company - Ashtabula LP
1013 Centre Road
Wilmington, DE 19805

Director's Interim Final Findings
and Orders

and

Elkem Metals, Inc. :
Airport Office Park Building 2 :
400 Rouser Road :
Moon Township, PA 15108 :

Respondents

PREAMBLE

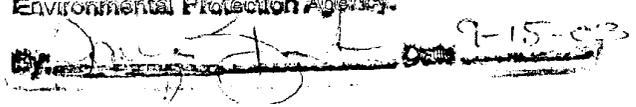
It is hereby agreed by and between the parties hereto as follows:

I. JURISDICTION

These Director's Interim Final Findings and Orders ("Orders") are hereby issued to Respondents pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under sections 3734.13 and 3745.01 of the Ohio Revised Code ("ORC").

II. PARTIES

These Orders shall apply to and be binding upon the Respondents and their successors in interest liable under Ohio law. No changes in ownership relating to Respondent Elkem Metals Company - Ashtabula, or to its calcium carbide production plant property, located at 2700 Lake Road East in Ashtabula, Ohio, will in any way alter the Respondents' responsibilities under these Orders. The Respondents' obligations under these Orders may be altered only by the written approval of the Director of Ohio EPA.

I certify this to be a true and accurate copy of the
official document as filed in the records of the Ohio
Environmental Protection Agency.
 9-15-03

11. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as used in ORC Chapter 3734. and the rules promulgated thereunder.

"Waste Material" shall mean all solid waste located on property subject to Respondents' real estate transaction with Nordic Energy, Inc.

IV. FINDINGS OF FACT

The Director has determined the following:

- 1** Respondent Elkem Metals Company - Ashtabula LP ("Respondent Elkem - Ashtabula") is a foreign limited partnership with a mailing address of 1013 Centre Road in Wilmington, Delaware, which owns and operates a calcium carbide production plant located at 2700 Lake Road East in Ashtabula, Ohio ("Ashtabula Plant").

Respondent Elkem Metals, Inc. ("Respondent Elkem, Inc.") is a general partner of Elkem Metals Company - Ashtabula LP with a mailing address of Airport Office Park, Building 2, 400 Rouser Road in Moon Township, Pennsylvania.

Respondent Elkem - Ashtabula and Respondent Elkem, Inc. may be collectively referred to within the Orders as "Respondents".

- 2.** Respondent Elkem - Ashtabula represented to the Director of Ohio EPA that it desired to engage in a real estate transaction with Nordic Energy, Inc. ("Nordic") for the sale of approximately 70 acres of Respondent Elkem - Ashtabula's Ashtabula Plant property. Respondent Elkem - Ashtabula estimated that **the 70** acre property subject to the Elkem/Nordic real estate transaction contained an estimated 100,000 cubic yards of non-homogenous waste material ("Waste Material.") which resulted from Respondent Elkem - Ashtabula's and previous owner's industrial calcium carbide production process, ferro alloy and lime production processes.
- 3.** Respondent Elkem - Ashtabula represented to Ohio EPA that it desired to remove the Waste Material located on the 70 acre property subject to the Elkem/Nordic real estate transaction and temporarily store the Waste Material on another area of Respondent Elkem - Ashtabula's Ashtabula Plant property. Furthermore, Respondent Elkem - Ashtabula represented that such Waste Material movement and subsequent temporary storage would timely facilitate the real estate transaction with Nordic.

4. Ohio EPA determined that Respondent Elkem - Ashtabula's estimated 100,000 cubic yards of Waste Material, referenced in Finding of Fact #2 above, had been disposed in a manner inconsistent with Ohio's waste disposal laws and rules.
5. In correspondence dated January 23, 2002, Ohio EPA notified Respondent **Elkern** - Ashtabula of violations of ORC Sections 3734.02(C), 3734.03, 3734.11 (A) and Ohio Administrative Code ("OAC") Rules 3745-27-05(C) and 3745-37-01(A) occurring at Respondent Elkem - Ashtabula's Ashtabula Plant which include, but are not limited to, the estimated 100,000 cubic yards of Waste Material.
6. ORC Section 3734.03 states in pertinent part that, "*No person shall dispose of solid wastes by open burning or open dumping. . . .*" and OAC Rule 3745-27-05(C) states that, "*No person shall conduct, permit, or allow open dumping.*"
7. ORC Section 3734.02(C) states, in pertinent part that, "*. . . no person shall establish a new solid waste facility or infectious waste treatment facility, or modify an existing solid waste facility. . . without submitting an application for a permit with accompanying detail plans, specifications, and information regarding the facility and method of operation and receiving a permit issued by the director. . . .*" and OAC Rule 3745-37-01 states that, "*No person shall conduct municipal solid waste landfill, industrial solid waste landfill, residual solid waste landfill, compost facility transfer facility, infectious waste treatment facility, or solid waste incineration facility operation without possessing a separate valid license for each such operation, as required by Chapter 3734. of the Revised Code and the Administrative Code rules adopted thereunder. Each license shall be obtained from the board of health in the health district in which the facility is located, or by the director, if the director has assumed the licensing function for that health district.*"
- a. ORC Section 3734.11 (A) states that, "*No person shall violate any section of this chapter, any rule adopted under it or any order issued under section 3734.13 of the Revised Code.*"
9. Respondent Elkem - Ashtabula represented that movement and temporary storage of the estimated 100,000 cubic yards of Waste Material would not endanger human health, safety or the environment.
10. On April 30, 2002, the Director issued Director's Final Findings and Orders ("Interim Orders") to Respondents allowing for the movement and temporary storage of Waste Material.
11. Pursuant to the Interim Orders, Respondents have indicated to Ohio EPA that they have moved approximately 40,000 cubic yards of Waste Material from the property subject to the Nordic real estate transaction to Pond 3 which is located on the Ashtabula Plant.
12. Respondents completed the real estate transaction with Nordic on December 27, 2002.

13. In a letter dated June 17, 2003, Respondents requested that the Interim Orders, which terminate on September 15, 2003, be extended for approximately 18 months to enable Respondents to pursue a "reclassification of waste materials" proposal regarding the ultimate disposition of the Waste Material.
14. Representatives from the Division of Solid and Infectious Waste Management ("DSIWM") met with Respondents' representatives on August 20, 2003, to discuss the extension request. During this meeting, DSIWM agreed to recommend to the Director of Ohio EPA that the Interim Orders be modified and extended until March 7, 2004, to allow time for the parties to engage in discussions regarding a comprehensive resolution of all outstanding solid waste violations at Ashtabula Plant.

V. ORDERS

The Director's Final Findings and Orders issued to Respondents on April 30, 2002, are hereby superseded by these Orders. Respondents shall comply with the following requirements:

Respondents shall conduct the following Waste Material movement and temporary storage activities for only those Waste Materials located on property subject to the Elkem/Nordic real estate transaction in accordance with the following time frames:

1. Upon the effective date of these Orders, Respondents shall be authorized to engage in Waste Material movement and temporary storage in accordance with the following provisions
 - A. To the extent Respondents desire to pursue an Interim Alternative Waste Management Proposal ("IAWMP") for the Waste Material subject to these Orders, Respondents shall perform comprehensive solid and liquid matrix chemical sampling and analysis of the Waste Material capable of determining its full chemical composition to the method detection limits established under Update III to SW-846 and its appropriate regulatory status in accordance with the following:
 - i. Respondents shall collect an adequate number of representative samples as determined by a function of the variability of the data collected and its statistical distribution. Ohio EPA recommends that the Respondents follow the statistics of *Test Methods for the Evaluation of Solid Wastes, Physical/Chemical Methods*, U.S. EPA SW-846 (SW-846), latest edition. Other references which may be helpful include *Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies*, U.S. EPA 600/R-92/128, *Site Characterization for Subsurface Remediation*, U.S. EPA 625/4-

97/026, Methods for Evaluating the Attainment of Cleanup Standards, Volume I: Soils and Solid Media, U.S. EPA 230702-891042,

- ii. Respondents shall perform a TCLP (EPA Method 1311) or SPLP (EPA Method 1312) procedure on the Waste Material samples and shall analyze the extract fluid using Update III to SW-846 EPA Methods 6010, 8260, 8270 and 9013. Analysis shall be performed to each analyte's MCL and/or method detection limit.
- B. Respondents shall establish the appropriate regulatory status of the Waste Material in accordance with OAC Rule 3745-51-03. Any material that is determined to be a characteristic or listed hazardous waste shall be managed in accordance with all applicable federal and state law. Hazardous waste is prohibited from movement and temporary storage under these Orders.
- C. Respondents are authorized to move and temporarily store Waste Material in accordance with the following:
- i. Respondents are authorized to store Waste Material at any area of Respondent Elkem - Ashtabula's Ashtabula Plant property which is not otherwise authorized to receive waste from Respondent Elkem - Ashtabula's industrial calcium carbide production process, provided this area is fitted with a suitable liner to prevent infiltration and provide a physical barrier with the ground surface prior to placement of Waste Material and the Waste Material is covered daily with a barrier to prevent infiltration, runoff and to control fugitive dust and odor emissions in accordance with OAC Chapters 3745-17 and 3745-15.

Or

- ii. Respondents are authorized to store Waste Material atop Pond 3, provided:
 - 1) Respondents perform sampling and analysis of their NPDES outfall 31N00036001 or runoff from the area of where the Waste Material is stored atop Pond 3 for all metals using methods 6010 and 9013 down to the relevant method detection limit and/or NPDES permitted limit if one exists, and the results of such sampling and analysis do not reveal a violation of Respondents' NPDES permit or detection under methods 6010 or 9013 of chemical constituents which are not otherwise permitted under Respondents' NPDES permit. Respondents shall perform the sampling required under this paragraph on a quarterly basis beginning in October, 2003, provided no additional Waste Material is placed atop Pond 3 after the effective date of these Orders. If additional Waste Material is placed atop

Pond 3 after the effective date of these Orders, Respondents shall perform the sampling required under this paragraph on a monthly basis beginning with the month during which Waste Material is placed atop Pond 3. The violation of Respondents' NPDES permit and/or detection of chemical constituents under methods 6010 or 9013 which are not otherwise permitted under Respondents' NPDES permit shall render Pond 3 unavailable for Waste Material storage unless Respondents revise their NPDES permit application and monitor outfall 31N00036001 for the newly identified constituents no less than once per month until the NPDES permit has been renewed or revised. Samples shall be collected and analyzed according to 40 CFR 136.

2) Respondents' successfully demonstrate to Ohio EPA the adequacy and effectiveness of the existing perimeter drainage system that conveys runoff collected from within Pond 3 to the NPDES treatment system. Failure to demonstrate the adequacy and effectiveness of the existing perimeter drainage system shall necessitate that Respondents cover the Waste Material with a barrier to prevent infiltration and runoff,

3) Pond 3 is fitted with a suitable liner atop the surface of Pond 3 and beneath the Waste Material prior to placement of Waste Material, and

4) the Waste Material is properly managed to control fugitive dust and odor emissions in accordance with OAC Chapters 3745-17 and 3745-15.

Or

iii. Respondents are authorized to dispose of Waste Material at a licensed and permitted solid waste disposal facility.

D. Respondents shall maintain and make available to Ohio EPA a Waste Material Tracking Log which shall document the actual quantity in cubic yards of Waste Material moved and temporarily stored pursuant to these Orders and shall identify area(s) where the Waste Material is temporarily stored and shall identify Respondents' waste management practices for Waste Material managed in any other manner. Respondents shall submit copies of all analytical results required under these Orders to Ohio EPA within 5 **days** after Respondents' receipt.

E. Respondents shall store all Waste Material in a manner that is not harmful to human health, safety and the environment and in such a manner that the temporary storage area will support the volume and weight of overburden posed by the Waste Material without causing a catastrophic failure of the

temporary storage area.

2. Within 30 days after the effective date of the Orders, Respondents shall:
 - A. Submit a revised Cost Estimate that contains an itemized written estimate, in current dollars, of the cost of conducting the work required by these Orders. The Cost Estimate shall be based upon a third party conducting excavation, removal and disposal of the Respondents' estimated 100,000 cubic yards of Waste Material to a licensed and permitted waste disposal facility. Ohio EPA may review, approve and/or require revisions to the cost estimate and/or to the Respondents' financial assurance instrument.
 - B. Execute and fund a financial assurance instrument meeting the requirements of OAC Rules 3745-27-15(A)-(J) and (L)-(P) and OAC Rule 3745-27-16(A)-(J) and (L)-(P). The amount of the financial assurance instrument shall be determined by the Cost Estimate.
 - C. Respondents shall evaluate and update the value of the financial assurance instrument based upon the actual amount of Waste Material moved as required in Order No. 1 and in consideration of the results of Respondents' Waste Material Tracking Log in Order No. 1(D) above.
3. The storage of Waste Material under these Orders is temporary and upon termination of these Orders in accordance with Order No. 8 of these Orders, Respondents shall either remove the Waste Material from the temporary storage area and dispose of it at a permitted and licensed solid waste disposal facility, which is authorized by law to receive and dispose of the Waste Material, or obtain approval from the Director for alternative disposition of the Waste Material, including but not limited to onsite closure and post closure care of the Waste Material.
4. Respondents shall not place, store or dispose of any newly generated material on any portion of Respondent Elkem - Ashtabula's Ashtabula Plant property subject to the Elkem/Nordic real estate transaction nor shall Respondents place, store or dispose of any newly generated material atop Pond 3.
5. If at anytime the Waste Material or Respondents' activities present an immediate threat to human health, safety and the environment, the Director of Ohio EPA may require Respondents to take any and all actions necessary to mitigate and abate these threats.
6. Within 60 days of the effective date of these Orders, Respondents shall provide to Ohio EPA for review and comment a description of the location, estimated quantity, nature and origin of all Waste Material, and all solid waste currently located on the Ashtabula Plant property.

7. Within 90 days of the effective date of these Orders, Respondents shall provide to Ohio EPA for review and comment a preliminary analysis of the estimated cost and length of time necessary to either:
 - A. Dispose of all Waste Material and all solid waste currently located on the Ashtabula Plant property at a permitted and licensed solid waste disposal facility, or
 - B. Place all Waste Material and all solid waste currently located on the Ashtabula Plant property into Ponds 3 and 3A, and close Ponds 3 and 3A in accordance with the requirements of OAC Chapter 3745-27, and/or
 - C. Dispose of Waste Material and solid waste currently located on the Ashtabula Plant property by methods demonstrated to the satisfaction of the Director to be capable of disposing solid waste without creating a nuisance or a health hazard, without causing water pollution, and without violating any regulation within OAC Chapter 3745-27 and any regulation adopted by the Director pursuant to Ohio Revised Code Chapter 3704.
8. These Orders will terminate on March 1, 2004, unless otherwise modified and extended by the Director of Ohio EPA in writing prior to the date of termination. The mere pendency of a request for a modification and extension of these Orders by Respondents shall not be construed to imply that a modification and extension is granted. These Orders may be modified only through written authorization of the Director of Ohio EPA.

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation. not a signatory to these Orders, for any liability arising out of or relating to the Ashtabula Plant.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable federal, state, and local laws and regulations, except that Respondents shall not be required to obtain a solid waste disposal facility permit to install or license to move and temporarily store the Waste Material pending the disposal or alternative disposition of the Waste Material in accordance with Order No. 3 of these Orders. Nothing in these Orders shall be construed as waiving or compromising in any way the applicability and enforcement of any other statutes or regulations applicable to the Ashtabula Plant, including but not limited to the requirement to obtain any air or

water permit which may be required for the movement and temporary storage of the Waste Material. These Orders are not, and shall not be construed to be, a permit or license issued pursuant to any statute or regulation. Ohio EPA reserves all rights and privileges except as specified herein.

IX. NOTICE

All documents demonstrating compliance with these Orders and all other documents required under these Orders to be submitted to Ohio EPA shall be addressed to:

Ohio Environmental Protection Agency
Northeast District Office
Division of Solid and Infectious Waste Management
Attn: Supervisor, DSIWM
2110 East Aurora Road
Twinsburg, OH 44087

or to such persons and addresses as may hereafter be otherwise specified in writing by Ohio EPA.

X. RESERVATION OF RIGHTS

Ohio EPA reserves the right to seek legal and equitable relief to enforce the terms and conditions of these Orders, including penalties against Respondents for noncompliance with these Orders.

Ohio EPA reserves the right to take any action and pursue any claim against Respondents and any other potentially liable parties, including but not limited to, any administrative, civil or criminal enforcement action or claim, pursuant to any available legal authority as a result of past, present or future violations of state or federal laws or regulations, as a result of the common law and/or as a result of events or conditions arising from or related to the Ashtabula Plant. Ohio EPA expressly and specifically reserves the right to take any action and pursue any claim pursuant to any available legal authority to address the violations of law which are the subject of these Orders and any other violations of law which are in any way associated with the Ashtabula Plant.

Respondents expressly waive any and all claims and defenses of res judicata, collateral estoppel, waiver, laches, statute of limitations, issue preclusion, claim splitting and other claims and defenses based upon any contention that the actions taken or claims raised by Ohio EPA or the State of Ohio in a subsequent proceeding were or should have been raised, brought or resolved in these Orders.

XI. INDEMNIFICATION

Respondents agree to indemnify, save, and hold harmless Ohio EPA from any and all claims or causes of action arising from, or related to, any acts or omissions of

Respondents and/or Ohio EPA, its officers, employees, agents, representatives, or assigns, in carrying out any activities pursuant to these Orders. Ohio EPA agrees to provide notice to the Respondents within thirty (30) days of receipt of any claim which may be the subject of indemnity as provided in this Section, and to cooperate with Respondents in the defense of any such claim or action against Ohio EPA. Ohio EPA shall not be considered a party to and shall not be held liable under any contract entered into by Respondents in carrying out the activities pursuant to these Orders.

XII. WAIVER

Without admission of fact, violation or liability, the Respondents agree that these Orders are lawful and reasonable, that the items and time frames provided for compliance herein are reasonable and that the Respondents agree to comply with these Orders.

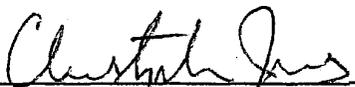
The Respondents hereby waive the right to appeal the issuance, terms and service of these Orders, and the Respondents hereby waive any and all rights they may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and the Respondents agree that in the event that these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, the Respondents retain the right to intervene and participate in such appeal. In such an event, the Respondents shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated, or modified.

XIII. SIGNATORIES

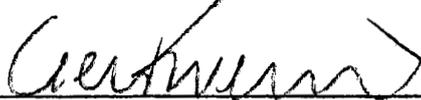
Each undersigned representative of a signatory to these Orders certifies that he or she is fully authorized to enter into the terms and conditions of these Orders and to legally bind such signatory to this document.

IT IS SO ORDERED AND AGREED:



Christopher Jones, Director
Ohio Environmental Protection Agency

Elkem Metals Company - Ashtabula LP (Respondent Elkem - Ashtabula)

By: 
GEIR KVERNMO

9/12/03
Date

Title: **PRESIDENT**

Elkem Metals, Inc. (Respondent Elkern, Inc.)

By: 
GEIR KVERNMO

9/12/03
Date

Title: ESIDENT