



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

July 25, 2018

EMC Ashtabula, Inc.
400 Rouser Road
Moon township, PA 15101

EMC Metals, Inc.
P.O. Box 266
Pittsburgh, PA 15230-0266

**Re: ELKEM Metals Company-Ashtabula
Director's Final Findings and Orders (DFFO)
DFFO
Industrial Solid Waste Landfills
Ashtabula County
ISWL018847**

Subject: Final Findings and Orders of the Director

Dear Sir or Madam:

Transmitted herewith are the Final Findings and Orders of the Director concerning the matter indicated for ELKEM Metals Company-Ashtabula.

If you have any questions, please contact Troy Harter at (614) 644-3037.

Sincerely,

Greg Nichols, Administrative Processing Unit
Division of Materials & Waste Management

Enclosure

ec: Carl Mussenden, DMWM, CO
Bruce McCoy, DMWM, CO
Lynn Sowers, DMWM, NEDO
Troy Harter, Legal
Ashtabula County Health Department

**BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY**

In the Matter Of:

EMC Ashtabula, Inc. : Director's Final Findings
400 Rouser Road, : and Orders
Moon Township, PA 15101 :

and

EMC Metals, Inc. :
P.O. Box 266 :
Pittsburg, PA 15230-0266 :

Respondents

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

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

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondents and their successors in interest liable under Ohio law. No change in ownership relating to Respondents or to the property located at 2700 Lake Road East in Ashtabula, Ohio, will in any way alter the Respondents' responsibilities under these Orders. Respondents' obligations under these Orders may be altered only by the written approval of the Director of Ohio EPA.

III. DEFINITIONS

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

IV. FINDINGS

The Director of Ohio EPA has determined the following:

1. The Director issued Final Findings and Orders to Elkem Metals Company – Ashtabula LP and Elkem Metals, Inc. on January 10, 2005 (“2005 Orders”) that required Elkem Metals Company – Ashtabula, LP, and Elkem Metals, Inc., to, among other things, complete the closure of Ponds 3 and 3A at the Ashtabula Plant by no later than December 31, 2009, except as otherwise extended by the Ohio EPA in writing.
2. The Director subsequently extended the time to complete closure of Ponds 3 and 3A on two occasions in Director’s Final Findings and Orders that were issued on December 9, 2009, and January 7, 2011. The final deadline established in the 2011 Orders was October 2, 2011. The Orders were further modified on December 18, 2012 to clearly identify the successors in interest to the original Respondents among other modifications.
3. Respondent EMC Ashtabula, Inc., formerly EMC Ashtabula LP, is a foreign corporation with a mailing address of 400 Rouser Road, Moon Township, Pennsylvania. Respondent EMC Metals, Inc. is the parent of EMC Ashtabula, Inc.

Respondent EMC Ashtabula, Inc. and EMC Metals, Inc. will be collectively referred to within the Orders as “Respondents”.

4. As of July 26, 2016, proper closure of Ponds 3 and 3A in accordance with the 2005 Orders was not completed. The Gundseal membrane installed over approximately 30% of Ponds 3 & 3A was observed during field activities as damaged. The facility identified on a drawing presented in Attachment A the areas of known damage based on the owners field notes. In addition, several areas of the Ponds 3 and 3A cap exhibited distressed vegetation or lacked vegetation.
5. On July 26, 2016, Ohio EPA and Respondents met to discuss completion of closure of Ponds 3 and 3A among other matters relating to the Facility. Following this meeting, Ohio EPA and Respondents participated in regularly-scheduled conference calls to track progress at the Ashtabula Plant and execute a strategy for achieving compliance with previous Orders and Ohio’s statutes and rules.
6. Ohio EPA and Respondents agreed in September 2017 that Respondents would repair the damaged areas of the Gundseal membrane underlying the soil cap identified in Attachment A. Respondent excavated down to the installed membrane, repaired and overlapped damaged seams, and covered the repaired area with soil. Ohio EPA was notified on October 5, 2017 that repair work had been completed.

V. ORDERS

The Director’s Final Findings and Orders issued to Respondents on January 10, 2005 and as modified in 2009, 2011, and 2012, are hereby modified as follows:

1. Paragraph 67 of Section IV. Findings shall be modified to read:

EMC Ashtabula LP and EMC Metals, Inc. are, respectively, successors in interest to Elkem Metals Company – Ashtabula LP and Elkem Metals, Inc. Furthermore, EMC Ashtabula, Inc. is the successor in interest to EMC Ashtabula LP. EMC Ashtabula Inc. and EMC Metals, Inc. shall be liable as “Respondents” under these Orders.

2. Paragraph 10. of Section V. Orders shall be modified to read:

The amount of financial assurance for post closure care and potential corrective measures for Ponds 3 and 3A may initially be adjusted downward during the post closure care period in accordance with the following:

- A. After completing two years of groundwater detection monitoring in accordance with OAC Rule 3745-27-10 and Section V. Paragraph 5 of the 2005 Orders, and upon written request of Respondents, to reduce the financial assurance instrument from \$5,000,000 to \$4,233,251, if Respondents can adequately demonstrate that there are no statistically significant increases over background of waste-derived parameters to groundwater. Groundwater detection monitoring shall commence following completion of background groundwater monitoring at the Ashtabula Plant. If Ohio EPA determines that the financial assurance should not be reduced under this paragraph, Ohio EPA shall notify Respondents in writing of this determination.

3. Paragraph 13 of Section V. Orders shall be modified to read:

Respondents shall seed and mulch all areas on Ponds 3 and 3A exhibiting distressed vegetation or lacking dense vegetation. By June 30, 2018, areas with poor vegetative growth shall be addressed by removing the top 6” of soil and replacing it with soils capable of establishing dense vegetation, followed by re-seeding and mulching. Respondent shall establish a dense vegetative cover on all areas of Ponds 3 and 3A by no later than September 1, 2018.

4. Paragraph 14 of Section V. Orders shall be modified to read:

By July 16, 2018, Respondents shall submit to Ohio EPA a written closure certification report for Ponds 3 and 3A in accordance with OAC Rule 3745-27-11. The closure certification report shall include the repair report depicting all areas where repairs were performed on the Gundseal membrane, to date.

5. Paragraph 15 of Section V. Orders shall be modified to read:

Beginning on the date of submitting the certification report specified in Order No.

14, above, Respondents shall conduct post-closure care of Ponds 3 and 3A in accordance with OAC Rule 3745-27-14.

6. All other provisions of the 2005 Orders as previously modified shall remain unchanged and in full effect.

VI. 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 party to these Orders, for any liability arising from, or related to, the operation of the Facility.

VII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations. 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 Facility. 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.

VIII. NOTICE

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

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

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

IX. RESERVATION OF RIGHTS

Ohio EPA reserves the right to seek legal and equitable relief to enforce the terms and conditions of these Orders and the 2005, 2009, 2011, and 2012 Orders, including penalties against Respondents for noncompliance with these Orders and the 2005, 2009, 2011, and 2012 Orders. Nothing herein shall restrict the right of Respondents to raise any administrative, legal or equitable claim or defense with respect to such further actions

which Ohio EPA may seek to require of Respondents.

Except for claims for civil penalties for the violations specifically cited herein, 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 against Respondents, and other potentially liable parties, with respect to any activities performed by Respondents or other potentially liable parties pursuant to these Orders, the 2005, 2009, 2011, and 2012 Orders, and/or in relation to Ponds 3 and 3A. In the event that Ohio EPA takes an administrative or judicial action or pursues any claim against Respondents regarding any of the closure activities performed by Respondents for Ponds 3 and 3A, Respondents reserve the right to appeal, defend a claim and defend against such an action by Ohio EPA in order to assert that the closure activities performed by Respondents are technically feasible and will not result in any adverse impact to public health or safety or the environment.

Ohio EPA expressly and specifically reserves the right to take any action and pursue any claim pursuant to any available legal authority to address violations of law which are not specifically cited in these Orders or the 2005, 2009, 2011, and 2012 Orders. Nothing herein shall restrict the right of Respondents to raise any administrative, legal or equitable claim or defense with respect to such further actions which Ohio EPA may seek to require of Respondents, except that 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 the 2005, 2009, 2011, and 2012 Orders.

X. TERMINATION

Respondents' obligations under these Orders shall terminate when Respondents certify in writing and demonstrate to the satisfaction of Ohio EPA that Respondents have performed all obligations under these Orders and the Chief of Ohio EPA's Division of Materials and Waste Management acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondents of the obligations that have not been performed, in which case Respondents shall have an opportunity to address any such deficiencies and seek termination as described above. The certification shall contain the following attestation: "We certify that the information contained in or accompanying this certification is true, accurate and complete."

This certification shall be submitted by Respondents to Ohio EPA and shall be

signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is a principal executive officer of at least the level of vice-president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility.

XI. MODIFICATIONS

These Orders may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, Respondents consent to the issuance of these Orders and agrees to comply with these Orders and all provisions of the 2005 Orders as modified. Compliance with these Orders and all provisions of the 2005 Orders as modified shall be full accord and satisfaction of Respondents' liability, including any and all civil penalties, for the violations specifically cited in the 2005 Orders after termination of the 2005 Orders.

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

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

XIII. EFFECTIVE DATE

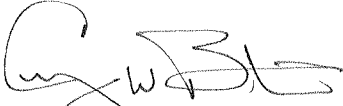
The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

XIV. SIGNATORY AUTHORITY

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

IT IS SO ORDERED AND AGREED:

Ohio Environmental Protection Agency



Craig W. Butler
Director

IT IS SO AGREED:

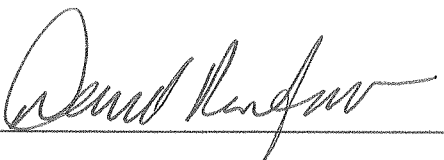
EMC Ashtabula, Inc.

By:  _____

Title: OFFICER

July 9, 2018
Date

EMC Metals, Inc.

By:  _____

Title: OFFICER

July 9, 2018
Date