April 2, 2018

Karl Industries, Inc.
ATTN: Karl Tornstrom &
Karen Tornstrom
11415 Chamberlain Road
Aurora, OH 44202

Re: Karl Industries, Inc.
Director's Final Findings and Orders (DFFO)
DFFO
RCRA C - Hazardous Waste
Portage County
OHR000037846

Subject: Final Findings and Orders

Dear Sir:

Transmitted herewith are the Final Findings and Orders of the Director concerning the matter indicated for Karl Industries, Inc.

You are hereby notified that this action of the Director of Ohio EPA (Director) is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 made payable to "Treasurer, State of Ohio." The Commission, in its discretion, may reduce the fee if by affidavit it is demonstrated that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, Ohio 43215

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

Sincerely,

[Signature]
Tonya Andrews, Administrative Professional 3

Enclosure
BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Karl Industries, Inc.
11415 Chamberlain Road
Aurora, Ohio, 44202

Karen Tornstrom
11415 Chamberlain Road
Aurora, Ohio, 44202

Respondents

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director’s Final Findings and Orders (Orders) are issued to Karl Industries, Inc. (Respondent Karl Industries), Karen Tornstrom (Respondent Karen Tornstrom) pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency (Ohio EPA) under Ohio Revised Code (ORC) §§ 3734.02(G) and 3734.13.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondents and successors in interest liable under Ohio law. No change in ownership of Respondent Karl Industries or of the Facility shall in any way alter Respondents obligations under these Orders.

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 findings:

1. Pursuant to ORC § 3734.02(G) and rule 3745-50-31 of the Ohio Administrative Code (OAC), the Director may, by order, exempt any person generating, storing,
treating, or disposing of hazardous waste in such quantities or under such
circumstances that, in the determination of the Director, it is unlikely that the
public health or safety or the environment will be adversely affected thereby, from
any requirement to obtain a permit or comply with other requirements of ORC
Chapter 3734. Any such exemption shall be consistent with and equivalent to
rules promulgated under the Resource Conservation and Recovery Act of 1976,

2. Respondents Karl Industries and Karen Tornstrom are each a “person” as
defined in ORC § 3734.01(G) and Ohio Administrative Code (OAC) rule 3745-50-
10(A).

3. Respondent Karen Tornstrom owns the real property located at 11415
Chamberlain Road, Aurora, Ohio, 44202, parcel number 23-025-00-00-036-000
(Facility). The Facility has been assigned U.S. EPA identification number
OHR000037846.

4. Respondent Karl Industries was a manufacturer of specialty batch chemicals in
small quantities and operated a synthesis laboratory and warehouse located at
11415 Chamberlain Road, Aurora, Ohio. As part of their activities, Respondent
Karl Industries generated “hazardous waste” as that term is defined by ORC §
3734.01(J) and OAC rules 3745-50-10(A) and 3745-51-03, which was
characteristically hazardous for ignitability (D001) and listed as hazardous waste
for ignitability (F003) as described in OAC rules 3745-51-21 and 3745-51-31.

5. On December 30, 2016, The Mantua Fire Department and the EPA Emergency
Response Program (ER) responded to a fire at the Facility in which a laboratory
had caught fire.

6. During the incident response, ER observed the unauthorized release of water
and liquids from the fire, and the discharge of corrosive pollutants into a tributary
of the Aurora Branch of the Chagrin River and wetland. ER determined that
Respondent inter alia, caused the unauthorized release of a pollutant into
"Waters of the State", in violation of Ohio Revised Code (ORC) § 6111.

7. The violation referenced in Finding No. 6. of these Orders was documented in a
Notice of Violation (NOV) dated December 30, 2016 and provided to the
Respondent Karl Industries in person. The NOV was provided via electronic mail

8. On February 9, 2017, Ohio EPA conducted an inspection of the Facility. Ohio
EPA observed the following: ash, fire debris, containers, drums, totes and
compressed gas cylinders in the area where the former laboratory was located; precipitation and run-off from the former laboratory area was being collected in an on-site Frac tank; and approximately 70, 55-gallon drums and numerous smaller containers were observed in the warehouse located on the property. Some of the containers in the warehouse were deteriorating and leaking onto the floor. Ohio EPA determined that Respondent inter alia, failed to properly evaluate if wastes generated were hazardous, in violation of OAC rule 3745-52-11.

9. Respondent was notified by In-field Notice of Violation (NOV) letter on February 9, 2017 of the violation referenced in Finding No. 7. of these Orders. A copy of the NOV letter was hand delivered to Respondent’s residence.

10. On the dates of February 15, February 17, February 21 and March 21, 2017, Ohio EPA conducted several inspections of the Facility. During the February 15, 2017 inspection, Ohio EPA observed 24, 55-gallon containers and five, 5-gallon containers located in a trailer east of the office building.

11. During the February 15, 2017 inspection, Respondent indicated that Respondent did not have the financial ability to conduct a clean-up of the Facility. Respondent provided a signed access agreement for the U.S. EPA clean-up assistance through an emergency removal action.

12. As a result of the inspections, Ohio EPA determined that Respondent had failed to properly evaluate if wastes generated were hazardous, in violation of OAC rule 3745-52-11, Specifically, Respondent:

a. Failed to determine if the fire damaged laboratory building, as well as its contents, were a hazardous waste;

b. Failed to determine if the water and liquids ("run-off") from the December 30, 2016, fire involving the laboratory building were a hazardous waste;

c. Failed to evaluate contents of numerous containers located in the warehouse building, including the following:

i. Approximately 75 drums, ranging in size from 30 gallons to 85 gallons;

ii. Approximately 65 containers, ranging in size from five gallons to 10 gallons;

iii. Numerous one-gallon containers; and
iv. Four compressed gas cylinders.

d. Failed to evaluate the contents of 16, 55-gallon containers located in a storage trailer on the east side of the Facility; and

e. Failed to evaluate the contents of seven, 55-gallon drums and seven, 5-gallon containers located in a lean-to shed on the west side of the Facility.

13. From February 16 through March 29, 2017, U.S. EPA conducted an emergency removal action at the Facility. As part of the emergency removal action, ash, debris and compressed gas cylinders were segregated, characterized and shipped off-site for management. In addition, leaking drums were overpacked pending off-site management. The collected run-off was characterized and shipped off-site for management. During the inspection, Respondent Karl Industries indicated that the Facility was unlikely to restart operations.

14. On March 21, 2017, the U.S. EPA was conducting hazardous waste characterization activities on containers located in the warehouse. U.S. EPA contractors were shipping liquid from the Frac tanks and the roll-off boxes of ash/debris to authorized facilities; and the compressed gas cylinders were to be removed by Airgas.

15. Respondent Karl Industries was notified of the violations in Finding No. 12. of these Orders by NOV letter dated March 31, 2017. Since the collected run-off was characterized and shipped off-site for management as part of the U.S. EPA emergency removal action, no further action was required for the violation in Finding No. 12.b. of these Orders.

16. From September 5 through December 8, 2017, U.S. EPA conducted a time critical removal action at the Facility. As part of the time critical removal action, remaining wastes were segregated, characterized and shipped off-site for management. In addition, decontamination activities were conducted in the warehouse.

17. On December 8, 2017, all remaining waste from the Facility was shipped off-site and the time critical removal action was completed. Based upon information and sampling during the removal action, it was demonstrated that the contents of at least 86 containers ranging in size from 30 gallons to 85 gallons contained hazardous waste, including D001 (ignitable), D002 (corrosive), D003 (reactive), D018 (benzene), D019 (carbon tetrachloride), D022 (chloroform), D028 (1,2-dichloroethane), D035 (methyl ethyl ketone), D039 (tetrachloroethylene), D040 (trichloroethane), U044 (chloroform), U080 (dichloromethane), U133 (hydrazine),
18. Based upon the information referenced in Finding No. 17. of these Orders, Ohio EPA determined that Respondent Karl Industries, inter alia, stored hazardous waste from at least February 2, 2017 until present at the Facility for greater than 180 days without a hazardous waste facility installation and operation permit, in violation of ORC § 3734.02 (E) and (F).

19. Respondent Karl Industries was notified of the violation reference in Finding No. 17. of these Orders and resolution of violations in Finding No. 12. a. c. d. e. of these Orders by an NOV/PROV dated December 19, 2017. The violations referenced in Finding No. 12. of these Orders were resolved as part of the U.S. EPA removal action.

20. Due to Respondent Karl Industries establishment and operation of hazardous waste storage facility as described in Finding No. 17. of these Orders, Respondent Karl Industries is required to have a hazardous waste facility installation and operation permit and are subject to all general facility standards found in OAC Chapter 3745-54 and 55, including but not limited to, closure in accordance with OAC rules 3745-55-11 through 3745-55-20, the financial assurance for closure requirements contained in OAC rules 3745-55-42 through 3745-55-51 and corrective action for waste management units in accordance with OAC rule 3745-54-101. To obtain a hazardous waste facility installation and operation permit, Respondents are required to submit “Parts A and B” of the application in accordance with OAC Chapter 3745-50.

21. The completion of closure activities for the area at the Facility where hazardous waste was stored as described in Finding No. 17. of these Orders, in lieu of the submittal of an application for a hazardous waste facility installation and operation permit is acceptable and unlikely to adversely affect the public health or safety or the environment. Therefore, the Director finds that the issuance to Respondents of an exemption from the requirement to submit an application for a hazardous waste facility installation and operation permit is unlikely to adversely affect the public health or safety or the environment within the meaning of ORC § 3734.02(G).

V. ORDERS

Respondents shall achieve compliance with Chapter 3734. of the ORC and the regulations promulgated thereunder according to the following compliance schedule:
1. To resolve the violation referenced in Finding No. 17. of these Orders, Respondents are hereby exempted from the requirement to submit an application for a hazardous waste facility installation and operation permit, provided that, Respondents comply with the following:

a. Within 30 days after the effective date of these Orders, Respondents shall submit to Ohio EPA for review and approval a Closure Plan for the hazardous waste storage area described in Finding No. 17., of these Orders. A copy of the Closure Plan shall be submitted in accordance with Section X. of these Orders and an additional copy submitted to Ohio EPA, Division of Environmental Response and Revitalization, Erik Hagen, Manager, Engineering Section, P.O. Box 1049, Columbus, Ohio 43216-1049;

b. This Closure Plan shall comply with the administrative requirements of OAC Chapters 3745-65 and 3745-66 and the substantive requirements of OAC Chapters 3745-54 and 3745-55 and OAC rule 3745-56-28 Including but not limited to, the groundwater protection program in accordance with OAC rules 3745-54-90 through 54-100;

c. The Closure Plan is subject to approval by Ohio EPA. If Ohio EPA does not approve the Closure Plan referenced in Order No. 1.a., and provides Respondents with a written statement of deficiencies, Respondents shall submit a revised Closure Plan for approval addressing the deficiencies within 30 days of receiving such written statement. If Ohio EPA modifies the Closure Plan, the modified Closure Plan becomes the approved plan;

d. Upon Ohio EPA’s written approval of the Closure Plan, Respondents shall implement the approved Closure Plan in the manner and pursuant to the time frames set forth in the approved Closure Plan and OAC rules 3745-55-13/3745-66-13;

e. Within 30 days after approval of the Closure Plan pursuant to Order No. 1.a., Respondents shall submit a closure cost estimate and documentation demonstrating that Respondents have established financial assurance and liability coverage for the areas of the Facility subject to closure, in accordance with OAC rules 3745-55-42 through 3745-55-47; and

f. Within 60 days after the effective date of closure, Respondents shall submit certification of closure to Ohio EPA in accordance with OAC rule 3745-55-15. Closure certification of the area described in Order No. 1.a.,
VI. 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 Environmental Response and Revitalization 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: “I 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 responsible officials of Respondents. For purposes of these Orders, a responsible official is a [e.g., corporate officer] who is in charge of a principal business function of Respondents.

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 local, state and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondents.

X. NOTICE

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

Ohio Environmental Protection Agency
Northeast District Office
Division of Environmental Response and Revitalization
2110 East Aurora Road
Twinsburg, Ohio 44087
Attn: DERR Manager, Hazardous Waste Program
and Ohio EPA Central Office at the following address:

For mailings, use the post office box number:

Manager, Hazardous Waste Compliance Assurance Section
Ohio Environmental Protection Agency
Division of Environmental Response and Revitalization
P.O. Box 1049
Columbus, Ohio 43216-1049

For deliveries to the building:

Manager, Hazardous Waste Compliance Assurance Section
Ohio Environmental Protection Agency
Division of Environmental Response and Revitalization
50 West Town Street
Columbus, Ohio 43215

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

**XI. RESERVATION OF RIGHTS**

Nothing contained herein shall be construed to prevent Ohio EPA from seeking legal or equitable relief to enforce the terms of these Orders or from taking other administrative, legal or equitable action as deemed appropriate and necessary, including seeking penalties against Respondents for noncompliance with these Orders and/or for the violations described herein. Nothing contained herein shall be construed to prevent Ohio EPA from exercising its lawful authority to require Respondents to perform additional activities pursuant to ORC Chapter 3734, or any other applicable law in the future. 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. Nothing in these Orders shall be construed to limit the authority of Ohio EPA to seek relief for violations not addressed in these Orders.

**XII. APPEAL RIGHTS**

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to ORC § 3745.04. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty
(30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Treasurer, State of Ohio," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, OH 43215

**XIII. EFFECTIVE DATE**

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

**IT IS SO ORDERED:**

Ohio Environmental Protection Agency

[Signature]
Craig W. Butler
Director