



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

January 14, 2016

Heraeus Precious Metals North
America Daychem, LLC
970 Industrial Park Drive
Vandalia, Ohio 45377

**Re: Heraeus Precious Metals N.A. Daychem, LLC
Director's Final Findings and Orders (DFFO)
DFFO
RCRA C - Hazardous Waste
Montgomery County
OHD 982 634 453**

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 Heraeus Precious Metals NA Daychem, LLC.

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

Sincerely,

A handwritten signature in black ink that reads "D. R. Crumiell-Hagens". The signature is written in a cursive style.

Demitria Crumiell-Hagens, Administrative Professional II
Division of Materials & Waste Management

Enclosure

cc: Tammy Heffelfinger, DMWM, CO
Elissa Miller, Legal

OHIO E.P.A.

JAN 14 2016 BEFORE THE OHIO ENVIRONMENTAL PROTECTION AGENCY

REGISTERED DIRECTOR'S JOURNAL

In the Matter of:

Heraeus Precious Metals North America
Daychem LLC
970 Industrial Park Drive
Vandalia, OH 45377-9776

Director's Final
Findings and Orders

Respondent

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders (Orders) are issued to Heraeus Precious Metals North American Daychem LLC (Respondent) pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency (Ohio EPA) under Ohio Revised Code (ORC) §§ 3734.13 and 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership of Respondent or of the Facility shall in any way alter Respondent's 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. Respondent is a "person" as defined in ORC § 3734.01(G) and Ohio Administrative Code (OAC) rule 3745-50-10(A).
2. Respondent operates an advanced chemicals manufacturing facility for the electronics, display and aerospace industries located at 970 Industrial Park Drive, Vandalia, Montgomery County, Ohio 45377 (Facility).
3. At the Facility, Respondent generates "hazardous waste" as that term is defined by ORC § 3734.01(J) and OAC rules 3745-50-10(A) and 3745-51-03. Respondent generates hazardous waste in amounts classifying it as a large quantity generator of hazardous waste and has been assigned U. S. EPA ID number OHD982634453. The hazardous wastes generated by Respondent at the Facility include spent methylene chloride and acetone (D001 – ignitability; F002 - toxicity, F003 - ignitability) as described in OAC rules 3745-51-21 and 3745-51-31 (hazardous waste from non-specific sources) respectively; methylene chloride and methanol (D001 – ignitability; F002 - toxicity, F003 – ignitability, F005 – ignitability and toxicity) as described in OAC rules 3745-51-21 and 3745-51-31 (hazardous waste from non-specific sources) respectively; and hazardous waste spent aqueous acetonitrile (D001 – ignitability) as described in OAC rule 3745-51-21. Respondent is also a "small quantity handler of universal waste" spent "universal waste lamps" as those terms are defined in OAC rule 3745-273-09 and generates "used oil" regulated under OAC Chapter 3745-279 at the Facility.
4. On March 11, 19 and 20, 2015, Ohio EPA conducted a compliance evaluation inspection at the Facility. Ohio EPA observed ten 55-gallon unlabeled tanks with ancillary piping collecting the hazardous waste methylene chloride and acetone, and hazardous waste methylene chloride and methanol waste streams. Three additional 55-gallon unlabeled tanks collected hazardous waste aqueous acetonitrile which was pumped into a 5,000 gallon tank labeled as non-hazardous aqueous waste. Additionally Ohio EPA reviewed personnel training documents, inspection logs, universal waste collection areas, and Respondent's contingency plan.
5. As a result of the inspection, Ohio EPA determined that Respondent, *inter alia*:
 - a. Failed to provide hazardous waste training to new employees since 2012, in violation of OAC rule 3745-65-16(B);
 - b. Failed to provide annual hazardous waste training to employees since 2012, in violation of OAC rule 3745-65-16(C);

- c. Failed to maintain the required written documentation for employees who manage hazardous waste, in violation of OAC rule 3745-65-16(D);
 - d. Failed to update the contingency plan with current emergency coordinator information, in violation of OAC rule 3745-65-52(D);
 - e. Failed to update the contingency plan identifying the D001 aqueous acetonitrile as a hazardous waste generated at the Facility, in violation of OAC rule 3745-65-54(A);
 - f. Failed to record weekly inspections of the container storage area, in violation of OAC rule 3745-66-74;
 - g. Failed to record daily inspections of hazardous waste tanks and ancillary equipment, in violation of OAC rule 3745-66-95(B), (E) and (G);
 - h. Failed to employ appropriate controls and practices to prevent spills and overflows from tanks or secondary containment, in violation of OAC rule 3745-66-94(B)(1), (2), and (3);
 - i. Failed to respond to releases from hazardous waste tanks within 24 hours, in violation of OAC rule 3745-66-96(B)(2);
 - j. Failed to label containers of universal waste lamps, in violation of OAC rule 3745-273-14(E); and
 - k. Failed to provide universal waste training to employees who manage universal waste, in violation of OAC rule 3745-273-16.
6. By electronic mail dated March 26, 2015, Respondent notified Ohio EPA of updates to the Facility contingency plan.
 7. By letter dated May 14, 2015, Respondent was notified of the violations referenced in Finding No. 5. of these Orders. This letter acknowledged that Respondent had already corrected the violations referenced in Findings Nos. 5.d., 5.f., 5.i., and 5.j. of these Orders. Additionally, Ohio EPA requested additional information regarding the tanks, and the D001 hazardous waste aqueous acetonitrile, including production and disposal records.
 8. By electronic mail and letter dated May 28, 2015, Respondent submitted documentation in response to the violations referenced in Finding No. 5. of these Orders. This documentation included training records, a training program, and notification that the thirteen 55-gallon tanks will be removed from service, being

complete by June 26, 2015. Furthermore, the 5,000 gallon tank used to store the D001 aqueous acetonitrile was emptied and triple rinsed on March 31, 2015. If Respondent decides to utilize this tank for storage of hazardous waste in the future, Respondent will have the tank inspected and assessed. Finally, Respondent provided Ohio EPA with installation dates for the tanks, as well as disposal records for the D001 aqueous acetonitrile. Respondent indicated the requested production records for this waste stream would be forthcoming.

9. By electronic mail dated June 23 and 25, 2015, Respondent provided Ohio EPA with photos showing the tanks were labeled and production records for the D001 aqueous acetonitrile.
10. On June 29, 2015, Ohio EPA conducted a follow-up compliance evaluation inspection at the Facility and confirmed that Respondent had removed the tanks from use, but complied with the requirement to conduct and record daily inspections of the tanks prior to their removal.
11. Based upon the removal and proper management of the thirteen 55-gallon tanks as described in Findings Nos. 4. and 8. of these Orders, and that fact that there were no signs of releases in the tank areas as described in Finding No. 10. of these Orders, the Director has determined that Respondent has met the closure performance standard requirements of OAC rules 3745-55-11(A) and (B) and 3745-55-97 for the areas referenced in Findings Nos. 4., 8. and 10. of these Orders.
12. By letter dated September 3, 2015, Ohio EPA notified Respondent that the violations referenced in Findings Nos. 5.a., 5.b., 5.c., 5.e., 5.g., 5.h., and 5.k. of these Orders were corrected. However, upon review of the production and disposal records for the D001 aqueous acetonitrile provided by Respondent, Ohio EPA determined that at least three times between November 2013 and January 26, 2015, Respondent illegally stored this hazardous waste for greater than 90 days without a hazardous waste facility installation and operation permit, in violation of ORC §3734.02(E) and (F).
13. The Director has determined that because Respondent emptied and triple-rinsed the 5,000 gallon tank used to store the D001 aqueous acetonitrile as referenced in Finding No. 8. of these Orders, and is no longer using this tank for storage of hazardous waste, there is nothing further required of Respondent at this time with regard to the violation of ORC §3734.02(E) and (F) referenced in Finding No. 12. of these Orders.

V. ORDERS

Respondent shall achieve compliance with Chapter 3734. of the ORC and the regulations promulgated thereunder according to the following compliance schedule:

1. Respondent shall pay to Ohio EPA the amount of \$9,680.00 in settlement of Ohio EPA's claims for civil penalties, which may be assessed pursuant to ORC Chapter 3734. In accordance with the following provisions:
 - a. Within 30 days after the effective date of these Orders, Respondent shall pay the amount of \$7,744.00 of the total amount which will be deposited into the hazardous waste cleanup fund established pursuant to ORC § 3734.28. Payment shall be made by an official check made payable to "Treasurer, State of Ohio" for \$7,744.00. The official check shall be submitted to Ohio EPA, Office of Fiscal Administration, Department L-2711, Columbus, Ohio 43260-2711, together with a letter identifying Respondent and the Facility. A copy of this check shall be sent to Ohio EPA Division of Materials and Waste Management, Manager, Hazardous Waste Compliance Assurance Section, P.O. Box 1049, Columbus, Ohio 43216-1049.
 - b. In lieu of paying the remaining \$1,936.00 of civil penalty identified in Order No. 1. above, Respondent shall fund a Supplemental Environmental Project (SEP) by making a contribution in the amount of \$1,936.00 to the Ohio EPA Clean Diesel School Bus Program. Respondent shall make the payment within 30 days after the effective date of these Orders by tendering an official check made payable to "Treasurer, State of Ohio" for \$1,936.00. The official check shall be submitted to Ohio EPA, Office of Fiscal Administration, Department L-2711, Columbus, Ohio 43260-2711, together with a letter identifying Respondent and the Facility. A copy of this check shall be sent to Ohio EPA Division of Materials and Waste Management, Manager, Hazardous Waste Compliance Assurance Section, P.O. Box 1049, Columbus, Ohio 43216-1049 and to Ohio EPA, Division of Air Pollution Control, Manager, Compliance and Enforcement Section, P.O. Box 1049, Columbus, Ohio 43216-1049.
 - c. Should Respondent fail to fund the SEP within the required time frame established in Order No. 1.b., Respondent shall pay to Ohio EPA, within 7 days after failing to comply with Order No. 1.b., the

amount of \$1,936.00 in accordance with the procedures in Order No. 1.a.

VI. TERMINATION

Respondent's obligations under these Orders shall terminate upon Ohio EPA's receipt of the official checks required by Section V. of these Orders.

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

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 Respondent.

IX. 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.

X. NOTICE

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

Ohio Environmental Protection Agency
Southwest District Office
Division of Materials and Waste Management
401 East 5th Street
Dayton, Ohio 45402
Attn: DMWM Manager

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
Lazarus Government Center
Division of Materials and Waste Management
P.O. Box 1049
Columbus, Ohio 43216-1049

For deliveries to the building:

Manager, Hazardous Waste Compliance Assurance Section
Ohio Environmental Protection Agency
Lazarus Government Center
Division of Materials and Waste Management
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

Ohio EPA reserves its rights to exercise its lawful authority to require Respondent to perform closure of the hazardous waste unit referenced in Finding No. 13. of these Orders as well as corrective action at the Facility at some time in the future, pursuant to ORC Chapter 3734. or any other applicable law. Respondent reserves its rights to raise any administrative, legal or equitable claim or defense with respect to any final action of the Director regarding such closure or corrective action. Ohio EPA and Respondent each reserve all other rights, privileges and causes of action, except as specifically waived in Section XII. of these Orders.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Except for the rights to seek closure of the hazardous waste unit as referenced in Finding No. 13. of these Orders and corrective action at the Facility, which rights Ohio

EPA does not waive, compliance with these Orders shall be a full accord and satisfaction for Respondent's liability for the violations specifically cited herein.

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

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

XIII. EFFECTIVE DATE

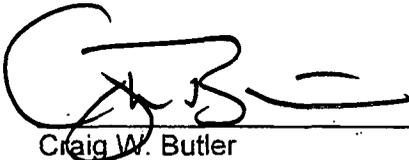
The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

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:

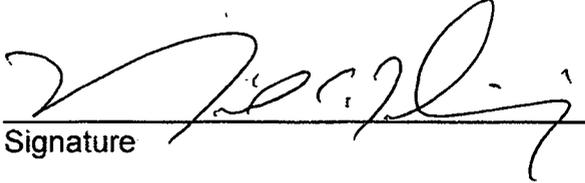
Ohio Environmental Protection Agency



Craig W. Butler
Director

IT IS SO AGREED:

Heraeus Precious Metals North America Daychem LLC


Signature

1/5/16
Date

Neil C. Thiessing
Printed or Typed Name

President / GM
Title