BEFORE THE

OHIO ENVIRONMENTAL PROTECTION AGENCY

OHIO E.P.A.
DEC 30 2004
ENTERED DIRECTOR'S JOURNAL

In the Matter of:

Brush Wellman Inc.
14710 W. Portage River South Road
Elmore, Ohio 43416

Director's Final Findings and Orders

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to Brush Wellman Inc. ("Respondent") pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Ohio Revised Code ("ORC") §§ 3704.03 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 the Respondent or of the facility as identified in Finding 1 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 3704 and the rules promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA has determined the following findings:

1. Respondent owns and operates a facility located at 14710 W. Portage River South Road, Elmore, Ohio. Respondent is a supplier of beryllium, beryllium-containing alloys and beryllia ceramic. At the facility, Respondent converts beryllium hydroxide concentrate into these products. These products are used in electrical, mechanical, electronic and aerospace applications.

2. At the Elmore facility, Respondent operates a Whiting Furnace, Recycle Facility, NNS Iron and Copper Leaching, Beryllium Fluoride Rotary Calciner, Furnace Rebuild, Reversing Hot Strip Mill, Anneal/Pickle Line, Finish Pickle Line, Alloy Induction Furnace #7, Alloy Induction Furnace #8, Cast Shop Vacuum System, Finish Building Vacuum System, Alloy Slab Mill, Alloy Hammer Mill, Copper-Beryllium Coil Strip

I certify this to be a true and accurate copy of the original document as filed in the records of the Ohio Environmental Protection Agency.
By: Date:

Pickling Line, and an Alloy RBT PCE Degreaser, all of which are, or were, air contaminant sources as defined by Ohio Administrative Code Rule ("OAC") 3745-15-01(C) and (W) and "new sources" as defined by OAC Rule 3745-31-01. This equipment is or was identified by Ohio EPA as "emissions units P010, P048, P051, P062, P075, P077, P080, P081, P082, P083, P086, P087, P088, P089, P044, and L001," respectively.

Alloy Whiting Arc Furnace (EU P010)

3. The Title V permit for Respondent's facility (Facility ID: 03-62-00-0009) effective on April 6, 2004 requires the permittee to perform daily checks, when emissions unit ("EU") P010 is in operation and when the weather conditions allow, for any visible particulate emissions ("VE") from the stack serving this emissions unit. On July 2, 2004, a VE reading was not taken. This is a violation of the Title V permit and ORC § 3704.05(C) and (J)(2).

Recycle Facility (EU P048)

4. The Title V permit for Respondent's facility (Facility ID: 03-62-00-0009) effective on April 6, 2004 requires the permittee to maintain a certain pressure drop range across each scrubber while the emissions unit is in operation. Between April 18, 2004 and October 29, 2004, a total of 43 scrubber pressure drop readings were out of the range specified in the permit. These findings constitute violations of the Title V permit and ORC § 3704.05(C) and (J)(2).

NNS Iron and Copper Leaching (EU P051)

5. The Title V permit for Respondent's facility (Facility ID: 03-62-00-0009) effective on April 6, 2004 requires the permittee to maintain a certain static pressure drop range across the scrubber and scrubber water flow rate while the emissions unit is in operation. Between April 6, 2004 and April 16, 2004, a total of 11 scrubber pressure drop readings were out of the range specified in the permit. In addition, between April 6, 2004 and August 9, 2004, a total of 197 scrubber water flow rates were out of the range specified in the permit. These findings constitute violations of the Title V permit and ORC § 3704.05(C) and (J)(2).

Beryllium Fluoride Rotary Calciner (EU P062)

6. Respondent began operation of EU P062 on February 28, 1994. Respondent was required to have conducted a stack test for EU P062, within 90 days of start-up of the unit, pursuant to PTI # 03-7421. Respondent was therefore to have tested EU P062 by no later than May 28, 1994. Due to operational problems that prevented the unit from operating at maximum capacity, the unit was not tested by May 28, 1994, in violation of ORC § 3704.05(C). The unit was tested on November 20, 1997.

7. PTI # 03-7421, which was issued for EU P062 on June 8, 1994, requires that scrubber differential pressure and water flow rate be monitored electronically and recorded. Between February 28, 1994 and September 22, 1994, Respondent monitored but failed to record the scrubber differential pressure and water flow rate. Subsequent to September 22, 1994, Respondent began to electronically monitor and record the information as required by PTI # 03-7421. However, due to computer malfunctions, there were a total of 1939 hours when Respondent monitored but failed to record the required information between September 22, 1994 and April 1996. The above omissions are violations of the terms and conditions of PTI # 03-7421 and of ORC § 3704.05(C).

8. Between February 1994 and May 1998, EU P062 was operated for a total of 1142 hours when the control equipment was not operating properly, in violation of the terms and conditions of PTI # 03-7421 and of ORC § 3704.05(C).

Furnace Rebuild (EU P075)

9. Respondent operated EU P075 under PTI # 03-10823. On August 20, 2001, the filter pressure drop reading was not recorded for one shift in violation of the terms of the permit. In addition, on July 24, 2002, the filter pressure drop reading for one shift was out of the range specified in the permit. These findings constitute violations of PTI # 03-10823 and ORC § 3704.05(C).

Reversing Hot Strip Mill (EU P077)

10. PTI # 03-9105 was issued on August 7, 1996 for EU P077. Respondent began operation of EU P077 on August 14, 1998. From August 14, 1998, until June 1999, there is no record of pressure drops being monitored and recorded for the control equipment for EU P077 as required by PTI # 03-9105. This is a violation of the terms and conditions of PTI # 03-9105 and of ORC § 3704.05(C).

11. On September 27, 1999, EU P077 was modified and began production under PTI # 03-1224, issued on May 12, 1999. Between the first quarter of 1999, and the first quarter of 2001, Respondent failed to monitor and record the pressure drops across the baghouse and filters serving EU P077 during a total of 188 shifts. In addition, between December 8, 2003 and February 10, 2004, 41 pressure drop readings were out of the range specified by the permit. These findings constitute violations of the terms and conditions of PTI # 03-9105 and PTI # 03-1224 and of ORC § 3704.05(C).

Pickle / Anneal Line (Scrubber and Stack 55-10) (EU P080)

12. Respondent began operation of EU P080 on December 14, 1998. EU P080 was operated under PTI # 03-9105 from December 1998, until approximately June 1, 1999. During that time period, Respondent failed to monitor and record any pressure drops and water flow rates for the control equipment, in violation of the terms

and conditions of PTI # 03-9105 and ORC § 3704.05(C).

13. On December 14, 1999, EU P080 was modified and began operation under PTI # 03-1224, issued on May 12, 1999. On 146 occasions between December 1999, and March 31, 2001, a total of 146 pressure drop readings across the control equipment were recorded that were out of the permitted range specified in PTI # 03-1224. Respondent also monitored but failed to record 300 pressure drops across the control equipment during the same period, and approximately 350 water flow rates through the control equipment were monitored but not recorded. In addition, the data logs for 189 separate shifts between November 15, 2000, and January 17, 2001, were lost. On June 14, 2001, an operational parameter reading was not recorded for one shift for one of two scrubbers. On July 18, 2001, the scrubber pressure drop reading was out of the range specified in the permit. Between February 12, 2004 and April 20, 2004, a total of 19 scrubber pressure drop readings were out of the range specified in the permit. In addition, between March 11, 2004 and May 6, 2004, for a total of 40 shifts the scrubber water flow rate was out of the range specified in the permit. These findings constitute violations of PTI # 03-1224 and ORC § 3704.05(C).

14. On April 6, 2004, EU P080 began to operate under the Title V permit for Respondent's facility (Facility ID: 03-62-00-009) issued on March 16, 2004. Between April 8, 2004 and April 20, 2004, the scrubber pressure drop readings for a total of 13 shifts were out of the range specified in the permit. In addition, between April 12, 2004 and May 6, 2004, the scrubber water flow rate readings for a total of 27 shifts were out of the range specified in the permit. These findings constitute violations of the Title V permit and ORC § 3704.05(C) and (J)(2).

Finish Pickle Line (Scrubber and Stack 55-12) (EU P081)

15. Respondent began operation of EU P081 on December 9, 1998. EU P081 was operated under PTI # 03-9105 from December 1998 until approximately June 1, 1999. During that time period, Respondent failed to monitor and record pressure drops and water flow rates of the venturi scrubbers serving EU P081, in violation of the terms and conditions of PTI # 03-9105 and ORC § 3704.05(C).

16. EU P081 was modified and began to operate under PTI # 03-1224 on December 28, 1999. Between December 1999, and November 26, 2003, approximately 263 pressure drop readings were out of the allowable range, and 335 pressure drops were not monitored and recorded, in violation of the terms and conditions of PTI # 03-1224 and ORC § 3704.05(C).

17. Between December 1999, and April 25, 2002, approximately 137 flow rate readings were out of range and approximately 567 water flow rates were not monitored and recorded for the venturi scrubber serving EU P081, in violation of the terms and conditions of PTI # 03-1224 and ORC § 3704.05(C).

Alloy Induction Furnace #7 (EU P082)

18. Respondent operated EU P082 under PTI # 03-10823. The PTI required the permittee to monitor the pressure drop across the particulate control devices. On August 20, 2001, an operational parameter reading was not recorded for one shift. In addition, between February 18, 2003 and August 12, 2003, the pressure drop reading was out of range for a total of 5 shifts. This is in violation of PTI # 03-10823 and ORC § 3704.05(C).

Alloy Induction Furnace #8 (EU P083)

19. Respondent operated EU P083 under PTI # 03-10823. The PTI required the permittee to monitor pressure drop across the particulate control devices. On August 20, 2001, an operational parameter reading was not recorded for one shift. In addition, between February 18, 2003 and September 23, 2003, the pressure drop readings were out of range for a total of 6 shifts. This is in violation of PTI # 03-10823 and ORC § 3704.05(C).

Cast Shop Vacuum (EU P086)

20. Respondent began operation of EU P086 on October 15, 1998 under PTI # 03-10823 issued on February 11, 1998. PTI # 03-10823 was modified on January 19, 2000 and again on June 14, 2001. Between the fourth quarter of 1998, and the first quarter of 2000, Respondent failed to monitor and record pressure drops across the control equipment during 43 shifts. In addition, between February 5, 2002 and September 8, 2003, the filter pressure drop readings were out of range for a total of 153 shifts. These findings constitute violations of PTI # 03-10823 and ORC § 3704.05(C).

Finish Area Vacuum System (EU P087)

21. Respondent began operation of EU P087 on September 27, 1999 under PTI # 03-10823, issued on February 11, 1998. Between the fourth quarter of 1999, and the first quarter of 2001, Respondent failed to monitor and record pressure drops across the control equipment during 183 shifts. In addition, between July 11, 2001 and February 27, 2002, the filter pressure drop readings were out of range for a total of 5 shifts. These findings constitute violations of the terms and conditions of PTI # 03-10823 and ORC § 3704.05(C).

Alloy Slab Mill (EU P088)

22. Respondent operated EU P088 under PTI # 03-1224 issued and effective on May 12, 1999. Between December 2, 2002 and December 5, 2002, filter pressure drop readings were out of range for a total of 4 shifts, in violation of PTI # 03-1224 and ORC § 3704.05(C).

Alloy Hammer Mill (EU P089)

23. Respondent operated EU P089 under PTI # 03-1224 issued and effective on May 12, 1999. On December 8, 2003, the filter pressure reading was out of range for one shift, in violation of PTI # 03-1224 and ORC § 3704.05(C).

Pickle Anneal Line / Finish Pickle Line (Scrubber and Stack 55-11) (EUs P080 and P081)

24. On January 31, 2000, PTI # 03-1224 was issued, and covered EUs P080 and P081. Pressure drops across the venturi scrubber were monitored but not recorded for either EU until May 18, 2000, and flow rate readings were monitored but not recorded until November 30, 2000, in violation of the terms and conditions of PTI # 03-1224 and ORC § 3704.05(C).

25. Between May 2000, and August 5, 2003, approximately 74 pressure drop readings were out of range. Between January 2000, and March 31, 2001, approximately 476 pressure drops across the venturi scrubber serving EUs P080 and P081 were not monitored and recorded. Additionally, the data logs for 93 shifts (January 6, 2001 through February 6, 2001) were lost. These findings constitute violations of ORC § 3704.05(C).

26. Between November 2000, and March 31, 2001, approximately 52 flow rate readings were out of range. Between January 2000, and March 31, 2001, approximately 573 water flow rates for the venturi scrubber serving EUs P080 and P081 were not monitored and recorded. Additionally, the data logs for 93 shifts (January 6, 2001 through February 6, 2001) were lost. These findings constitute violations of ORC § 3704.05(C).

27. EUs P080 and P081 began to operate under the Title V permit for Respondent's facility (Facility ID: 03-62-00-0009) effective on April 6, 2004. Between April 14, 2004 and April 28, 2004, scrubber pressure drop readings were out the range specified in the permit for a total of 5 shifts. This is in violation of the Title V permit and ORC § 3704.05(C) and (J)(2).

Alloy RBT PCE Degeaser (EU L001)

28. PTI # 03-1366 was issued on September 7, 1983 for EU L001. From September 16, 2001, until September 22, 2001, Respondent failed to monitor and record the freeboard air blanket temperature during a total of 7 days. This is in violation of PTI # 03-1366 and ORC § 3704.05(C).

Correspondence

29. On March 26, 2001, Ohio EPA, Northwest District Office ("NWDO") issued a Notice of Violation ("NOV") to Respondent for violations of the terms and conditions of PTI # 03-1224 (Pickle Anneal Line / Finish Pickle Line). The NOV requested submittal

of a compliance plan and schedule by no later than April 30, 2001.

30. By letter dated April 5, 2001, Respondent submitted a response to the March 26, 2001, NOV. The response included a proposed timetable by which Respondent intended to address the violations included in the NOV. Respondent submitted detailed information on corrective measures that were to be taken in correspondence dated February 27, 2001, and March 15, 2001. Included with the response was a proposed draft set of Findings and Orders from Respondent.

31. By letter dated May 1, 2001, NWDO responded to the April 5, 2001 letter. The response from NWDO identified information that was missing from the compliance plan and outlined additional information that was needed to be submitted. A response was requested by May 18, 2001. By letter dated May 18, 2001, Respondent submitted a revised compliance plan to NWDO for review.

32. By letter dated May 1, 2001, NWDO requested additional information pertaining to PTIs # 03-9105 (Reversing Hot Strip Mill), 03-1224 (Pickle Anneal Line / Finish Pickle Line), 03-10823 (Cast Shop Vacuum / Finish Area Vacuum System), and 03-7421 (Beryllium Fluoride Rotary Calciner). Specifically, the initial start-up date for each emissions unit under each applicable PTI, and the dates that each monitoring device was installed as required by the applicable PTI, were requested. The letter also asked Respondent to provide NWDO with information to identify any records required by the monitoring and record-keeping requirements of the PTIs that were not obtained and documentation of the reason why such records were not obtained. A response to this letter was requested by July 13, 2001.

33. By letter dated July 13, 2001, Respondent submitted the information requested in the May 1, 2001, letter from NWDO. The response included all the requested information with the exception of some of the information requested for EU P062, under PTI #03-7241. This additional information was submitted to NWDO by letter dated November 12, 2001.

34. On November 26, 2002, NWDO issued an NOV to Respondent, for additional violations discovered as a result of further review of files pertaining to Respondent's facility.
Review of files indicated that Respondent was issued PTI # 03-899 in 1980 for the Whiting Furnace (EU P010). PTI application # 03-899 failed to address carbon monoxide ("CO") and other potential pollutants of incomplete combustion.

35. The November 26, 2002 NOV also indicated that in March 1986, Respondent was issued PTI # 03-2405, for the installation of the Copper-Beryllium Coil Strip Pickling Line (EU P044). Respondent failed to address nitrogen oxide ("NOX") emissions in the PTI application. EU P044 has a PTE for NOX of 55 TPY. Therefore, the installation and operation of this emissions unit at a major source without applying for and obtaining a PSD PTI constitutes a violation of the PSD rules in 40 CFR 52.21.

36. Respondent was requested to submit to NWDO, by no later than December 22, 2002, a written response to the NOV, including a compliance plan and schedule to correct the violations included in the NOV. Discussions between Respondent and NWDO indicated that a PSD permit application would be necessary for the Whiting Furnace, and a synthetic minor permit and/or netting permit application with a BACT analysis would be required for the Pickling Line. Respondent submitted a written response to the NOV on January 24, 2003. The response included a time-line for addressing the violations in the NOV, which included reviewing relevant records to determine the need for new permit applications, and submittal of any permit applications as needed.

37. NWDO and Respondent met on December 19, 2003, to discuss the PTI application submitted on December 4, 2003 for EU P010, and a BACT analysis and PTI application submitted for EU P044. Both of the EUs had been determined to be subject to and in violation of the PSD rules. By letter dated January 7, 2004, NWDO requested additional information on the applications for both EUs. The letter from NWDO indicated that NOX control (i.e., an oxidation/reduction scrubber) on EU P044 was cost-effective. NWDO requested Respondent to inform NWDO if it intended to permanently shut down EU P044 and withdraw the PTI application, or have EU P044 remain active and submit additional PSD modeling.

38. By letter dated February 11, 2004, Respondent informed NWDO that it had permanently shut down EU P044, and was consequently withdrawing the PTI application for that EU. NWDO acknowledged the withdrawal in a letter dated February 18, 2004.

39. By letter dated February 27, 2004, Respondent submitted additional information required to complete the PSD PTI application for EU P010 to Ohio EPA.

40. On July 14, 2004, Respondent met with NWDO to discuss the NOV issued for EU P010. During the discussions, a question was raised as to the applicability of the PSD rules. Results of recent stack tests had shown that EU P010 did not release over 250 TPY of CO as had previously been reported.

41. By letter dated July 28, 2004, NWDO requested additional information from Respondent regarding emissions from the entire facility, to determine PSD applicability. Respondent was requested to calculate the PTE for all existing sources at the time of installation of EU P010, and submit the findings to NWDO. NWDO requested that the information be submitted by August 23, 2004.

42. By letter dated September 2, 2004, Respondent submitted all the requested information to NWDO. Review of the information confirmed that at the time of installation of EU P010, Respondent had a PTE of 297.23TPY of CO for the entire facility, and was therefore a major source for PSD.

43. The Director has given consideration to, and based his determination on,

evidence relating to the technical feasibility and economic reasonableness of complying with the following Orders and their relation to benefits to the people of the State to be derived from such compliance.

V. ORDERS

The Director hereby issues the following Orders:

1. Pursuant to ORC § 3704.06, Respondent is assessed a civil penalty in the amount of two hundred seventy-six thousand two hundred eighty-nine dollars ($276,289) in settlement of Ohio EPA's claims for civil penalties. Within thirty (30) days after the effective date of these Orders, Respondent shall pay Ohio EPA the amount of two hundred fifty-six thousand two hundred eighty-nine dollars ($256,289) of the total penalty amount. Payment shall be made by an official check made payable to "Treasurer, State of Ohio" for $256,289. The official check shall be submitted to Brenda Case, or her successor, at Ohio EPA, Office of Fiscal Administration, P.O. Box 1049, Columbus, Ohio 43216-1049, together with a letter identifying the Respondent and the facility.

A copy of the check shall be sent to James A. Orlemann, Assistant Chief, Compliance and Enforcement, at the following address:

Division of Air Pollution Control
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

In lieu of payment to Ohio EPA of the remaining twenty thousand dollars ($20,000) of the total penalty amount, the Respondent shall perform the supplemental environmentally beneficial project identified in Order 2.

2. The Respondent shall perform the supplemental environmentally beneficial project consisting of funding urban area tree-planting projects in Ohio. Specifically, within thirty (30) days after the effective date of these Orders, Respondent shall deliver an official check in the amount of twenty thousand dollars ($20,000) and made payable to the Ohio Department of Natural Resources, Division of Forestry, State Forest Fund for the purpose of funding urban area tree-planting projects in Ohio. This check shall specify that such monies are to be deposited into Fund No. 509. The check shall be sent to John Dorka, Deputy Chief, or his successor, at the following address:

Division of Forestry
Ohio Department of Natural Resources
1855 Fountain Square Court, H-1
Columbus, Ohio 43224-1327

A copy of the check shall be sent to James A. Orlemann at the above-stated

address.

VI. TERMINATION

Respondent's obligations under these Orders shall terminate when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all obligations under these Orders and the Chief of Ohio EPA's Division of Air Pollution Control 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 Respondent of the obligations that have not been performed, in which case Respondent 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 Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is the person authorized to sign in OAC Rule 3745-35-02(B)(1) for a corporation or a duly authorized representative of Respondent as that term is defined in the above-referenced rule.

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. NOTICE

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

Division of Air Pollution Control
Northwest District Office
347 North Dunbridge Road
Bowling Green, Ohio 43402

Attn: Don Waltermeyer

and to:

Ohio Environmental Protection Agency
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216-1049
Attn: Thomas Kalman

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

X. MODIFICATIONS

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

XI. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all 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, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. 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 she or he is fully authorized to enter into these Orders and to legally bind such party to this document.

IT IS SO ORDERED AND AGREED:

Ohio Environmental Protection Agency

Christopher Jones
Director

12-28-04
Date

IT IS SO AGREED:

Brush Wellman Inc.

W. Glenn Maxwell
Signature

12/21/2004

W. GLENN MAXWELL
Printed or Typed Name

PLANT MANAGER - ELMORE
Title