BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

OHIO E.P.A.
DEC 28 2007
ENTERED DIRECTOR'S JOURNAL

In the Matter of:

Pilkington North America, Inc.	:	**Director's Final Findings**
140 Dixie Highway	:	**and Orders**
Rossford, Ohio 43460	:	

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

By: _____ Date: 12/28/07

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to Pilkington North America, 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

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 (as hereinafter defined) 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 meanings as defined in ORC Chapter 3704 and the regulations promulgated thereunder.

IV. FINDINGS

The Director of the Ohio EPA has determined the following findings:

1. The City of Toledo, Division of Environmental Services ("TDOES") acts as an agent of Ohio EPA for the Division of Air Pollution Control in Lucas County.

2. Respondent operates a glass manufacturing facility ("Facility") [Ohio EPA facility #0487010012] located at 140 Dixie Highway, Rossford, Lucas County, Ohio. Specifically, Respondent operates, in addition to other emissions units, a float glass melting furnace 6F3 (emissions unit P003) that is subject to the terms and conditions of synthetic minor permit to install ("PTI") #04-01200.

3. On May 30, 2003, Respondent was issued a Title V permit by Ohio EPA. Emissions unit P003 was issued PTI #04-01200 on March 15, 2005, which contains restrictions on the emissions from float glass melting furnace 6F3 to remain below prevention of significant deterioration ("PSD") thresholds. PTI #04-01200 was issued as a permit modification for the upgrade of the combustion system in the float glass melting furnace. In order to allow for increased production and avoid a PSD review, Respondent agreed to restrict emissions by applying for synthetic minor permit conditions that established a rolling 12-month limit for particulate emissions ("PE"), sulfur dioxide ("SO_2"), and nitrogen oxides ("NOx"). Respondent also agreed to a 12-month rolling limit on production rates measured by rate of glass draw in tons. The PTI also included short-term hourly limits on PE and sulfuric acid mist.

4. ORC Section 3704.05(C) states, in part, that no person shall violate any term or condition of a permit issued by the Director of Ohio EPA pursuant to ORC Chapter 3704.

5. ORC Section 3704.05(G) states, in part, that no person shall violate any order, rule, or determination or the Director, issued, adopted, or made under ORC Chapter 3704.

6. TDOES cited Respondent for exceeding the 12-month production rate limit for emissions unit P003 for December 2005 in a notice of violation ("NOV") issued to Respondent on February 14, 2006.

7. In a letter dated March 24, 2006, Respondent responded to the February 14, 2006 NOV. Respondent acknowledged the apparent exceedance of the 12-month rolling production limit in December. In addition, Respondent also reported an exceedance of the production limit in November 2005. Additionally, Respondent reported that exceedances of the rolling 12-month PE limit occurred in July, August, October, November, and December 2005. Respondent outlined a plan to address potential reductions in PE that included:

- performing regenerator, port neck, tunnel and flue cleaning activities;
- conducting a controlled gypsum reduction program;
- analyzing the stack test filters to determine the dolomite contribution to the total PE value;
- conducting a compliance stack test on EZKOOL glass in April 2006; and,
- conducting a compliance stack test on GALAXSEE glass in May 2006.

Respondent also proposed longer term PE reduction activities that included replacing the current high decrepitating dolomite source with a low decrepitating dolomite source and enhanced maintenance and cleaning activities.

8. In a second letter dated March 24, 2006, Respondent submitted a revised third quarter 2005 quarterly deviation report. In the report, Respondent reported exceedances

of the rolling 12-month PE limitation of 144 TPY in July and August 2005. The reported PE were 145 TPY in July and 144.1 TPY in August.

9. In a third letter dated March 24, 2006, Respondent submitted a revised fourth quarter 2005 quarterly deviation report and a semi-annual report for the second half of calender year 2005. Respondent reported exceedances of the 12-month PE limits from emissions unit P003 for October, November, and December 2005. The reported PE were 144.15 TPY for October, 145.94 TPY for November, and 147.34 TPY for December. In addition, Respondent reported the exceedances of the 12-month rolling production limit in November and December 2005.

10. In a letter dated April 28, 2006, Respondent submitted its first quarter deviation report for 2006. In the report, Respondent reported exceedances of the rolling 12-month PE limit for emissions unit P003 for January, February, and March 2006. The reported PE were 147.47 TPY in January, 147.59 TPY in February, and 149.81 TPY in March.

11. In a letter dated July 31, 2006, Respondent submitted its second quarter deviation report for 2006. In the report, Respondent reported exceedances of the rolling 12-month PE limit for emissions unit P003 for April, May, and June 2006. The reported PE were 151.45 TPY in April, 152.12 TPY in May, and 153.11 TPY in June.

12. Respondent stated that it had conducted a series of four emissions evaluation stack tests that were observed by TDOES representatives between March 2006 and June 2006 in an attempt to determine the cause of the emissions exceedances. Respondent exceeded the allowable hourly PE rate of 41 pounds of PE per hour ("lb PE/hr") during stack tests conducted on March 1 and May 11, 2006. The PE rate during the March 1 stack test was measured at 43.5 lb PE/hr and the PE rate during the May 11 stack test was measured at 43.5 lb PE/hr. The sulfuric acid mist emission rate during the March 1 stack test was measured at 4.18 lb H_2SO_4/hr and during the April 20 stack test was measured at 6.94 lb H_2SO_4/hr, both of which exceeded the PTI emission rate limit of 2.67 lb H_2SO_4/hr. Subsequent stack tests did not indicate a sulfuric acid mist emission limit exceedance. These hourly emission rate exceedances were not reported in Respondent's quarterly deviation reports, nor was the cause of the acid mist emission rate exceedance.

13. Respondent indicated in its first and second quarter deviation reports for 2006 that it had exceeded the allowable rolling 12-month production rate for January through June 2006.

14. On August 10, 2006, TDOES issued a NOV to Respondent for violations of the terms and conditions of PTI #04-01200. TDOES also informed Respondent in the August 10, 2006 NOV that by exceeding the PE limit in the PTI that it may have triggered a PSD review.

15. In a letter dated September 1, 2006, Respondent responded to the August 10, 2006 NOV. In the letter, Respondent outlined corrective actions that were taken to control PE. In addition, Respondent confirmed that it conducted a series of stack tests to better understand the relative effect of several variables in the glass manufacturing process

on PE. Based on the results of the stack tests, Respondent concluded that the primary cause of the higher PE was the decrepitation characteristic of the dolomite used in emissions unit P003. According to Respondent, higher decrepitation causes the raw material to expand or "pop" to a greater degree when heated than would lower decrepitating dolomite. This expansion causes a disturbance of the air flow in the glass making process and can potentially result in greater PE. Respondent stated that it was securing a new supply of dolomite whose decrepitation characteristics are better suited for glass production and would decrease PE. Respondent stated that its previous supply of dolomite had become higher decrepitating, which caused batch materials to become airborne in the glass-making furnace, and entrained in the furnace exhaust gases. Respondent stated that analysis of its new supply of dolomite has shown it to be low decrepitating and, thus, would result in less airborne particles in the exhaust gas.

16. Due to the varying characteristics of raw materials used in the glass making process and the fact that Respondent has increased its overall throughput, Ohio EPA has not been able to definitively conclude that the use of high decrepitating dolomite is the primary cause of the increased PE. In any event, the use of low decrepitating dolomite shall not excuse future violations of PE limitations.

17. In a letter dated October 31, 2006, Respondent submitted its third quarter deviation report for calendar year 2006. In the report, Respondent reported additional potential deviations of the rolling 12-month PE limit. The reported PE were 155.5 TPY for July, 154.0 TPY for August, and 153.87 TPY for September.

18. The above-referenced NOVs identify violations by Respondent of the terms and conditions of PTI #04-01200 and ORC 3704.05(C) and 3704.05(G), including:

- exceeding the allowable hourly emission rate for PE and sulfuric acid mist during stack tests conducted in March, April, and May of 2006; and

- exceeding the allowable rolling 12-month PE limit of 144 TPY in July and August of 2005 and October 2005 to present.

19. On December 21, 2006, TDOES and Ohio EPA Division of Air Pollution ("DAPC") met with Respondent to discuss air permit noncompliance issues at Respondent's facility. During the meeting, Respondent presented information that indicated that it believes that the high decrepitating dolomite was the primary cause of the excess PE. Respondent stated that it had secured a new supply of low decrepitating dolomite that should allow Respondent to operate in compliance with the PE limits in its permit.

20. On May 10, 2007, TDOES sent a NOV to Respondent for violations pertaining to its first quarterly report for 2007 and its annual Title V compliance certification for 2006. Respondent submitted a satisfactory response to the NOV in a response dated May 29, 2007.

21. 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 benefits to the people of the State to be derived from such compliance.

V. ORDERS

The Director hereby issues the following Orders:

1. Effective immediately on the effective date of these Orders Respondent shall begin the sampling and analysis plan as outlined below:

A. During the first 12 months following the effective date of these Orders, Respondent shall perform a U.S. EPA Reference Method 5 stack test for particulates during each production run of a different glass color/type (i.e., after normal furnace operations are resumed following a transition from clear, light, or dark glass production to a different color/type of glass production). Respondent shall also obtain a corresponding sample of the dolomite being used as a raw material near the time of any Method 5 stack test, determine the percent decrepitation of such dolomite, and report the decrepitation value in the Method 5 stack test report.

B. After the first 12 months following the effective date of these Orders, Respondent shall perform at least one Method 5 stack test for particulates during each calendar year.

C. To ensure compliance with the particulate emission limits in the PTI, Respondent shall test the decrepitation of dolomite used for glass production on a biweekly basis. If the dolomite decrepitation value (percentage) obtained from biweekly testing exceeds the highest acceptable dolomite decrepitation value plus 0.7%, then Respondent shall perform a new particulate stack test as soon as practical after receipt of the dolomite decrepitation test result, and while using the type of dolomite that caused the exceedance. Ohio EPA reserves the right to propose a change in the 0.7% dolomite decrepitation buffer if stack test results indicate that particulate emissions are approaching the short-term emission limit. The "highest acceptable dolomite decrepitation value" shall mean the highest dolomite decrepitation test result, expressed as a percentage, that was measured in association with a Method 5 stack test that yielded an average emission rate less than or equal to 41 lbs/hr of particulates.

2. Respondent shall submit quarterly reports to Ohio EPA containing all stack test results and dolomite testing results conducted. The reports shall be due on January 31, April 30, July 31, and October 31 for the previous quarter.

3. Within 30 days of the effective date of these Orders Respondent shall submit a PTI modification to Ohio EPA that includes the sampling and analysis plan outlined in Order 1 and the reporting requirement in Order 2. The PTI modification should also include any operational and monitoring/record keeping changes that result from the new sampling and analysis plan. Once the PTI modification is approved as final, it will become the enforceable document of record and the sampling and analysis plan contained in Order 1 and the reporting requirement in Order 2 will no longer be in operation.

4. Respondent shall pay the amount of sixty thousand dollars ($60,000) in settlement of Ohio EPA's claims for civil penalties, which may be assessed pursuant to ORC Chapter 3704. Within thirty (30) days after the effective date of these Orders, payment to Ohio EPA shall be made by an official check made payable to "Treasurer, State of Ohio" for forty-eight thousand ($48,000) of the total amount. The official check shall be submitted to Brenda Case, or her successor, together with a letter identifying the Respondent to:

Ohio EPA
Office of Fiscal Administration
P.O. Box 1049
Columbus, Ohio 43216-1049

5. In lieu of paying the remaining twelve thousand dollars ($12,000) of civil penalty, Respondent shall within thirty (30) days of the effective date of these Orders, fund a Supplemental Environmental Project ("SEP") by making a contribution to the Ohio EPA's Clean Diesel School Bus Fund (Fund 5CD0). Respondent shall tender an official check made payable to "Treasurer, State of Ohio" for $12,000. The official check shall be submitted to Brenda Case, or her successor, together with a letter identifying the Respondent, to:

Ohio EPA
Office of Fiscal Administration
P.O. Box 1049
Columbus, Ohio 43216-1049

6. A copy of each check shall be sent to James A. Orlemann, Assistant Chief, SIP Development and Enforcement, or his successor, at the following address:

Ohio EPA
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216 - 1049

7. Should Respondent fail to fund the SEP within the required timeframe set forth in Order 5, Respondent shall immediately pay to Ohio EPA $12,000 of the civil penalty in accordance with the procedures in Order 4.

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 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 Respondent's activities at the 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. 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:

City of Toledo
Department of Environmental Services
348 South Erie Street
Toledo, Ohio 43602
Attn: Karen Granata

and to:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216-1049
Attn: John Paulian

or to such persons and addresses as may hereafter be otherwise specified in writing by 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 or its agents 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 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

C. Korleski 12/27/07

Chris Korleski
Director

Date

IT IS SO AGREED:

Pilkington of North America

Robert L Stevens 12/6/07

Signature

Date

Robert L. Stevens

Printed or Typed Name

Plant Manager - Rossford Operations

Title