



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

To: Interested Parties

Date: May 22, 2019

From: Jenny Acker, Chief
Permits Branch
Office of Air Quality

Source Name: Pilkington North America, Inc.

Permit Level: Registration

Permit Number: 081-41215-00067

Source Location: 1001 Hurricane Street
Franklin, Indiana

Type of Action Taken: Modification at an existing source

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above.

The final decision is available on the IDEM website at: <http://www.in.gov/apps/idem/caats/>
To view the document, choose Search Option **by Permit Number**, then enter permit 41215.

The final decision is also available via IDEM's Virtual File Cabinet (VFC). Please go to:
<http://www.IN.idem.gov> and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

(continues on next page)

If you would like to request a paper copy of the permit document, please contact IDEM's Office of Records Management:

IDEM - Office of Records Management
Indiana Government Center North, Room 1207
100 North Senate Avenue
Indianapolis, IN 46204
Phone: (317) 232-8667
Fax: (317) 233-6647
Email: IDEMFILEROOM@idem.in.gov

Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room N103, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

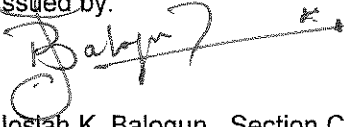
Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

REGISTRATION OFFICE OF AIR QUALITY

**Pilkington North America, Inc.
1001 Hurricane Street
Franklin, Indiana 46131**

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No R081-41215-00067 Master Agency Interest ID.: 29583	
Issued by:  Josiah K. Balogun, Section Chief Permits Branch Office of Air Quality	Issuance Date: May 22, 2019

SECTION A

SOURCE SUMMARY

This registration is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Registrant to obtain additional permits pursuant to 326 IAC 2.

A.1 General Information

The Registrant owns and operates a stationary

Source Address:	1001 Hurricane Street, Franklin, Indiana 46131
General Source Phone Number:	317-392-1087
SIC Code:	3231
County Location:	Johnson
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program
	Minor Source, under PSD and Emission Offset Rules
	Minor Source, Section 112 of the Clean Air Act
	Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) glass priming station, identified as Unit # 1, approved for construction in 2012, with a maximum capacity of 0.013 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.091 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (b) One (1) glass priming station, identified as Unit # 2, approved for construction in 2012, with a maximum capacity of 0.015 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.102 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (c) One (1) glass priming station, identified as Unit # 5, approved for construction in 2012, with a maximum capacity of 0.014 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.098 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (d) Two (2) primer dip tanks, collectively identified as Unit # 6, approved for construction in 2012 and modified in 2014 with a maximum primer application capacity of two types of primers of 0.1665 0.196 gallons per hour and 0.011 gallons of clean-up solvent applied by wipes, and exhausting to stack EP15.
- (e) Two (2) glass priming station, identified as Unit # 7, approved for construction in 2012, with a maximum capacity of two types of primers by felt tipped squeeze bottle of 0.015 and 0.075 gallons per hour, and exhausting to stack EP15.
- (f) One (1) glass priming station, identified as Unit # 8, approved for construction in 2012, with a with a maximum capacity of one types of primers by felt tipped squeeze bottle of 0.02, and 0.6 gallons per hour, and exhausting to stack EP15.
- (g) One (1) glass priming station, identified as Unit #9, approved for construction in 2012 and modified in 2014, with a maximum capacity of 0.06 gallons per hour of primer applied by felt tipped squeeze

bottle and exhausting to stack EP15.

- (h) One (1) glass priming station, identified as Unit #10, approved for construction in 2012, with a maximum capacity of 0.007 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.049 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (i) One (1) glass priming station, identified as Unit #11, approved in 2014 for construction, with a maximum capacity of 0.015 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15.
- (j) One (1) glass priming station, identified as Unit #12, approved in 2014 for construction, with a maximum capacity of 0.054 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.126 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (k) One (1) glass priming station, identified as Unit #13, approved in 2014 for construction, with a maximum capacity of 0.054 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.126 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (l) One (1) glass priming station, identified as Unit #14, approved in 2014 for construction, with a maximum capacity of 0.014 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.042 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (m) Seven (7) natural gas-fired space heaters, Identified as CU7-CU12, and CU18, each with a maximum capacity of 0.2 MMBtu/hour.
- (n) One (1) glass priming station, identified as Unit # 15, approved for construction in 2012, with a maximum capacity of 0.007 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.049 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (o) One (1) glass priming station, identified as Unit #16, approved in 2019 for construction, with a maximum capacity of 0.0268 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15.
- (p) One (1) glass priming station, identified as Unit #17, approved in 2019 for construction, with a maximum capacity of 0.0268 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this registration shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Effective Date of Registration [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this registration R081-41215-00067 is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

B.3 Registration Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation), this registration to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to Registration No. R081-41215-00067 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this registration.

B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003

Indianapolis, IN 46204-2251

- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]

Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

B.7 Registrations [326 IAC 2-5.1-2(i)]

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this registration:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Fugitive Dust Emissions [326 IAC 6-4]

The Registrant shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

SECTION D.1

EMISSION UNIT OPERATION CONDITIONS

Emission Unit Description:

- (a) One (1) glass priming station, identified as Unit # 1, approved for construction in 2012, with a maximum capacity of 0.013 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.091 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (b) One (1) glass priming station, identified as Unit # 2, approved for construction in 2012, with a maximum capacity of 0.015 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.102 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (c) One (1) glass priming station, identified as Unit # 5, approved for construction in 2012, with a maximum capacity of 0.014 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.098 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (d) Two (2) primer dip tanks, collectively identified as Unit # 6, approved for construction in 2012 and modified in 2014 with a maximum primer application capacity of two types of primers of 0.1665 0.196 gallons per hour and 0.011 gallons of clean-up solvent applied by wipes, and exhausting to stack EP15.
- (e) Two (2) glass priming station, identified as Unit # 7, approved for construction in 2012, with a maximum capacity of two types of primers by felt tipped squeeze bottle of 0.015 and 0.075 gallons per hour, and exhausting to stack EP15.
- (f) One (1) glass priming station, identified as Unit # 8, approved for construction in 2012, with a with a maximum capacity of one types of primers by felt tipped squeeze bottle of 0.02, and 0.6 gallons per hour, and exhausting to stack EP15.
- (g) One (1) glass priming station, identified as Unit #9, approved for construction in 2012 and modified in 2014, with a maximum capacity of 0.06 gallons per hour of primer applied by felt tipped squeeze bottle and exhausting to stack EP15.
- (h) One (1) glass priming station, identified as Unit #10, approved for construction in 2012, with a maximum capacity of 0.007 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.049 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (i) One (1) glass priming station, identified as Unit #11, approved in 2014 for construction, with a maximum capacity of 0.015 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15.
- (j) One (1) glass priming station, identified as Unit #12, approved in 2014 for construction, with a maximum capacity of 0.054 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.126 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (k) One (1) glass priming station, identified as Unit #13, approved in 2014 for construction, with a maximum capacity of 0.054 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.126 gallons per hour of adhesive applied by metered pump and exhausting to

stack EP15.

- (l) One (1) glass priming station, identified as Unit #14, approved in 2014 for construction, with a maximum capacity of 0.014 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.042 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (m) Seven (7) natural gas-fired space heaters, Identified as CU7-CU12, and CU18, each with a maximum capacity of 0.2 MMBtu/hour.
- (n) One (1) glass priming station, identified as Unit # 15, approved for construction in 2012, with a maximum capacity of 0.007 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.049 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (o) One (1) glass priming station, identified as Unit #16, approved in 2019 for construction, with a maximum capacity of 0.0268 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15.
- (p) One (1) glass priming station, identified as Unit #17, approved in 2019 for construction, with a maximum capacity of 0.0268 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

**REGISTRATION
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

Company Name:	Pilkington North America, Inc
Address:	1001 Hurricane Street
City:	Franklin, Indiana 46131
Phone Number:	317-392-1087
Registration No.:	R081-41215-00067

I hereby certify that Pilkington North America, Inc is:

☐ still in operation.

I hereby certify that Pilkington North America, Inc is:

☐ no longer in operation.

☐ in compliance with the requirements
of Registration No. R081-41215-00067.

☐ not in compliance with the requirements
of Registration No. R081-41215-00067.

Authorized Individual (typed):
Title:
Signature:
Phone Number:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a MSOP Transitioning to a
Registration**

Source Description and Location
--

Source Name: Source Location: County: SIC Code: Registration No.: Permit Reviewer:	Pilkington North America Inc. 1001 Hurricane Street, Franklin, IN 46131 Johnson 3231 (Glass Products, Made of Purchased Glass) 081-41215-00067 Ojo Adu
---	---

On March 18, 2019, the Office of Air Quality (OAQ) received an application from Pilkington North America, Inc. related to. The source transitioning from MSOP to Registration due to the new automotive glass window being produced for different vehicles that requires less material usage. The existing source applies primer to the glass and adhesive is applied to plastic clips that adheres to the glass surface.

Note: The automotive glass surface previously produced and permitted in MSOP 081-433960-00067 was of different size, shapes, etc. that required more material usage. The source is no longer capable of producing this type of glass product due to the need for specialized tooling. .

Existing Approvals

The source was issued MSOP No. 081-33960-00067 on July 17, 2014. The source has not received any approvals since

Due to this application, the source is transitioning from a MSOP to Registration.

County Attainment Status

The source is located in Johnson County.

County Attainment Status

The source is located in Johnson County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹
PM _{2.5}	Attainment effective July 11, 2013, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

- (a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when

evaluating the rule applicability relating to ozone. Johnson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) PM_{2.5}
Johnson County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Other Criteria Pollutants
Johnson County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The fugitive emissions of criteria pollutants and hazardous air pollutants (HAP) are counted toward the determination of Registration (326 IAC 2-5.1-5) applicability and source status under Section 112 of the Clean Air Act (CAA).

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Pilkington North America, Inc on March 18, 2019, relating to the source transitioning from MSOP to Registration due to new product being produced at the plant and with the following requested changes.

1. Recalculations of the PTE for the primer and adhesive application in Units 6-8, 10, and 14-15 due new product that requires less material usage: There have been no physical changes made to these emission units.
2. The removal of the primer and adhesive application identified as Unit #3, Instead this operation will now be identified as Unit #15
3. The addition of two (2) primer applications in emission units, identified as Emission Units #16 – 17:
Based on these requested changes, the source-wide PTE, has been re-calculated

This stationary source consists of the following existing emission units

- (a) One (1) glass priming station, identified as Unit # 1, approved for construction in 2012, with a

- maximum capacity of 0.013 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.091 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
- (b) One (1) glass priming station, identified as Unit # 2, approved for construction in 2012, with a maximum capacity of 0.015 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.102 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
 - (c) One (1) glass priming station, identified as Unit # 5, approved for construction in 2012, with a maximum capacity of 0.014 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.098 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
 - (d) Two (2) primer dip tanks, collectively identified as Unit # 6, approved for construction in 2012 and modified in 2014 with a maximum primer application capacity of two types of primers of 0.1665, 0.196 gallons per hour and 0.011 gallons of clean-up solvent applied by wipes, and exhausting to stack EP15.
 - (e) Two (2) glass priming station, identified as Unit # 7, approved for construction in 2012, with a maximum capacity of two types of primers by felt tipped squeeze bottle of 0.015 and 0.075 gallons per hour, and exhausting to stack EP15.
 - (f) One (1) glass priming station, identified as Unit # 8, approved for construction in 2012, with a with a maximum capacity of one types of primers by felt tipped squeeze bottle of 0.02, and 0.6 gallons per hour, and exhausting to stack EP15
 - (g) One (1) glass priming station, identified as Unit #9, approved for construction in 2012 and modified in 2014, with a maximum capacity of 0.06 gallons per hour of primer applied by felt tipped squeeze bottle and exhausting to stack EP15.
 - (h) One (1) glass priming station, identified as Unit #10, approved for construction in 2012, with a maximum capacity of 0.007 gallons per hour of primer by felt tipped squeeze bottle, a maximum capacity of 0.049 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
 - (i) One (1) glass priming station, identified as Unit #11, approved in 2014 for construction, with a maximum capacity of 0.015 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15.
 - (j) One (1) glass priming station, identified as Unit #12, approved in 2014 for construction, with a maximum capacity of 0.054 gallons per hour of primer by felt tipped squeeze bottle,. a maximum capacity of 0.0126 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15
 - (k) One (1) glass priming station, identified as Unit #13, approved in 2014 for construction, with a maximum capacity of 0.054 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15.
 - (l) One (1) glass priming station, identified as Unit #14, approved in 2014 for construction, with a maximum capacity of 0.014 gallons per hour of primer by felt tipped squeeze bottle,. a maximum capacity of 0.042 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.
 - (m) One (1) glass priming station, identified as Unit # 15, approved for construction in 2012, with a maximum capacity of 0.007 gallons per hour of primer by felt tipped squeeze bottle, a maximum

capacity of 0.049 gallons per hour of adhesive applied by metered pump and exhausting to stack EP15.

- (n) One (1) glass priming station, identified as Unit #16, approved in 2019 for construction, with a maximum capacity of 0.023 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15.
- (o) One (1) glass priming station, identified as Unit #17, approved in 2019 for construction, with a maximum capacity of 0.023 gallons per hour of primer by felt tipped squeeze bottle, and exhausting to stack EP15.
- (p) Seven (7) natural gas-fired space heaters, identified as CU7-CU12, and CU18, each with a maximum capacity of 0.2 MMBtu/hour.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination –Registration

This table reflects the unrestricted potential emissions of the source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

Unrestricted Source-Wide Emissions (ton/year)									
Emission Unit/Process ID	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	Total HAPs	Individual HAP
Unit #1	0.00	0.00	0.00	-----	-----	0.56	-----	0.61	0.40 Toluene
Unit #2	0.00	0.00	0.00	-----	-----	0.62	-----	0.68	0.442 Toluene
Unit #3 Included in Unit #15	0.00	0.00	0.00	-----	-----	0.30	-----	0.42	0.259 Toluene
Unit #5	0.00	0.00	0.00	-----	-----	0.60	-----	0.66	0.426 Toluene
Unit #6	0.00	0.00	0.00	-----	-----	9.44	-----	0.46	0.121
Unit #7	0.00	0.00	0.00	-----	-----	2.04	-----	0.92	0.636 Toluene
Unit #8	0.00	0.00	0.00	-----	-----	1.69	-----	1.74	0.000
Unit #9	0.00	0.00	0.00	-----	-----	1.82	-----	1.829	0.915 Toluene
Unit #10	0.00	0.00	0.00	-----	-----	0.30	-----	0.330	0.213 Toluene
Unit #11	0.00	0.00	0.00	-----	-----	0.46	-----	0.457	0.229 Toluene
Unit #12	0.00	0.00	0.00	-----	-----	1.87	-----	1.947	1.097 Toluene
Unit #13	0.00	0.00	0.00	-----	-----	1.65	-----	1.658	0.829 Toluene
Unit #14	0.00	0.00	0.00	-----	-----	1.18	-----	1.430	0.000
New Unit#16	0.00	0.00	0.00	-----	-----	0.81	-----	0.792	0.351 Toluene
New Unit#17	0.00	0.00	0.00	-----	-----	0.81	-----	0.701	0.351 Toluene
CU1, CU6, CU18	0.03	0.13	0.13	0.01	1.71	0.09	1.43	0.032	0.032
Natural Gas Combustion	0.01	0.05	0.05	0.00	0.61	0.03	0.51	0.01	0.01
Total PTE (Tons/yr)	0.04	0.18	0.18	0.01	2.32	24.28	1.95	14.69	6.17 Toluene

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1) of VOC is within the ranges listed in 326 IAC 2-5.5-1(b)(1). The potential to emit of all other criteria pollutants are less than the ranges listed in 326 IAC 2-5.5-1(b)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.5 (Registrations). The source will be issued a Registration.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

Federal rule applicability for this source has been reviewed as follows:

New Source Performance Standards (NSPS):

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the registration.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

- (b) The provisions of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, Subpart HHHHHH are not included in the permit for this source. This source does not perform paint stripping using MeCl for the removal of dried paint or spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.
- (c) 40 CFR Part 63, Subpart XXXXXX - National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal fabrication and Finishing Source Categories

This rule applies to new and existing area sources of HAPs that are primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514 (a)(1) through (9):

- (1) Electrical and Electronic Equipment Finishing Operations;
- (2) Fabricated Metal Products;
- (3) Fabricated Plate Work (Boiler Shops);
- (4) Fabricated Structural Metal Manufacturing;
- (5) Heating Equipment, except Electric;
- (6) Industrial Machinery and Equipment Finishing Operations;
- (7) Iron and Steel Forging;
- (8) Primary Metal Products Manufacturing; and
- (9) Valves and Pipe Fittings. .

The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPs) for 40 CFR 63, Subpart XXXXXX are not included for this area source because the source manufactures automotive glass windows and does not engage in one of the listed operations in this rule.

- (d) 40 CFR 63, Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

The requirements of 40 CFR 63, Subpart JJJJJJ are not included in the permit, because each of the natural gas-fired space heaters at this source are not considered boilers under the definition in 40 CFR 63.11237.

- (e) 40 CFR 63, Subpart PPPP- National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products

The requirements of 40 CFR 63, Subpart PPPP are not included in the permit, because this NESHAP only applies to major sources of HAP emissions, the source is an area source.

- (f) 40 CFR 63, Subpart SSSSSS -National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Source. The requirements of 40 CFR 63, Subpart SSSSSS are not

included in the permit, because the source does not manufacture by melting raw materials, the glass used in the production of the automotive windows.

- (g) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM):

- (h) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability - Entire Source

326 IAC 2-5.1-2 (Registrations)

Registration applicability is discussed under the Permit Level Determination – Registration section above.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this source will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, LaPorte, or Lawrenceburg Township, Dearborn County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the registration:

- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

326 IAC 6-2-1 (Particulate Emission Limitations for Sources of Indirect Heating)

The space heaters are not subject to 326 IAC 6-2, since they are not sources of indirect heating.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Units #1 – Unit#17

Units #1 through Unit #17 are not subject to the requirements of 326 IAC 6-3, because the application of primer and adhesives at these units is by felt tipped squeeze bottle which does not generate particulate overspray emissions.

Space Heaters

Pursuant to 326 IAC 6-3-2(b)(1), natural gas combustion units are manufacturing processes that are specifically exempt under this rule. Therefore, the space heaters are exempt from the requirements of this rule.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

The unlimited potential to emit VOC from each of the primer/adhesive application cells are less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)

Pursuant to 326 IAC 8-2-9(d), this rule is not applicable to the plastic clip coating operation because the source is not located in Lake County or Porter County.

326 IAC 8 (VOC Rules)

No other 326 IAC 8 Rules that are applicable to the source.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 18, 2019. Additional information was received on May 15, 2019.

The operation of this source shall be subject to the conditions of the attached proposed Registration No. 081-41215-00067. The staff recommends to the Commissioner that the Registration be approved.

IDEM Contact

- (a) If you have any questions regarding this permit, please contact Ojo Adu, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 234-4967 or (800) 451-6027, and ask for Ojo Adu or (317) 2341-4967.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: <http://www.in.gov/idem/airquality/2356.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

Appendix A: Emissions Calculations**Emissions Summary****Source Name:** Pilkington North America, Inc.**Source Location:** 1001 Hurricane Street, Franklin, IN 46131**County:** Johnson**SIC Code:** 3231**Operation Permit No.:** R081-41215-00067**Permit Reviewer:** Ojo Adu

Unlimited/Uncontrolled Potential to Emit (tons/year)*										
Emission Unit/Process ID	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	Total HAPs	Individual HAP	Worst Case HAP
Unit #1	0.00	0.00	0.00	-----	-----	0.56	-----	0.61	0.40	Toluene
Unit #2	0.00	0.00	0.00	-----	-----	0.62	-----	0.91	0.44	Toluene
Unit #3 Included in Unit #15	0.00	0.00	0.00	-----	-----	0.30	-----	0.42	0.26	Toluene
Unit #5	0.00	0.00	0.00	-----	-----	0.60	-----	0.66	0.43	Toluene
Unit #6	0.00	0.00	0.00	-----	-----	9.44	-----	0.46	0.17	MDI
Unit #7	0.00	0.00	0.00	-----	-----	2.04	-----	0.92	0.64	Toluene
Unit #8	0.00	0.00	0.00	-----	-----	1.69	-----	1.74	1.61	Hexamethylene-1,6-diisocyanate
Unit #9	0.00	0.00	0.00	-----	-----	1.82	-----	1.829	0.91	Toluene
Unit #10	0.00	0.00	0.00	-----	-----	0.30	-----	0.330	0.21	Toluene
Unit #11	0.00	0.00	0.00	-----	-----	0.46	-----	0.457	0.23	Toluene
Unit #12	0.00	0.00	0.00	-----	-----	1.87	-----	1.947	1.10	Toluene
Unit #13	0.00	0.00	0.00	-----	-----	1.65	-----	1.658	0.83	Toluene
Unit #14	0.00	0.00	0.00	-----	-----	1.18	-----	1.430	1.13	Hexamethylene-1,6-diisocyanate
New Unit#16	0.00	0.00	0.00	-----	-----	0.81	-----	0.792	0.35	Toluene
New Unit#17	0.00	0.00	0.00	-----	-----	0.81	-----	0.701	0.35	Toluene
CU1, CU6, CU18	0.03	0.13	0.13	0.01	1.71	0.09	1.43	0.032	0.03	Hexane
Natural Gas Combustion	0.01	0.05	0.05	0.00	0.61	0.03	0.51	0.01	0.01	Hexane
Total PTE (Tons/yr)	0.04	0.18	0.18	0.01	2.32	24.28	1.95	14.91	9.09	Toluene

VOC and Particulate

From Surface Coating Operations

Source Name: Pilkington North America, Inc.

Source Location: 1001 Hurricane Street, Franklin, IN 46131

County: Johnson

SIC Code: 3231

Operation Permit No.: R081-41215-00067

Permit Reviewer: Ojo Adu

Emission Unit	Material	VOC Content (Lb/Gal)	Usage (Gal./hour)	Potential VOC pounds per hour	Potential VOC tons per year	Total VOC tons per year	Transfer Efficiency	Particulate Potential (ton/yr)
Unit#1	Primer 43518	6.94	0.013	0.09022	0.40	0.56	100%	0.00
	Adhesive 53802	0.41	0.091	0.03731	0.16		100%	0.00
Unit#2	Primer 43518	6.94	0.015	0.10063	0.44	0.623	100%	0.00
	Adhesive 53802	0.41	0.102	0.04162	0.18		100%	0.00
Unit#3 Included in Unit#15	Primer 43518	6.94	0.007	0.04858	0.21	0.301	100%	0.00
	Adhesive 53802	0.41	0.049	0.02009	0.09		100%	0.00
Unit#5	Primer 43518	6.94	0.014	0.10	0.43	0.602	100%	0.00
	Adhesive 53802	0.41	0.098	0.04	0.18		100%	0.00
Unit#6	Primer 43518	6.94	0.011	0.08	0.33	9.430	100%	0.00
	RC50KE	6.40	0.196	1.25	5.49		100%	0.00
	Primer 5500	4.95	0.167	0.82	3.61		100%	0.00
Unit#7	Primer 43518	6.94	0.015	0.10	0.46	2.039	100%	0.00
	Primer 43520A	4.82	0.075	0.36	1.58		100%	0.00
Unit#8	Primer 43518	6.94	0.020	0.14	0.61	1.685	100%	0.00
	Adhesive 58302	0.41	0.600	0.25	1.08		100%	0.00
Unit#9	Primer 43518	6.94	0.060	0.42	1.82	1.82	100%	0.00
Unit#10	Primer 43518	6.94	0.007	0.05	0.21	0.301	100%	0.00
	Adhesive 53802	0.41	0.049	0.02	0.09		100%	0.00
Unit#11	Primer 43518	6.94	0.015	0.10	0.46	0.46	100%	0.00
Unit#12	Primer 43518	6.94	0.054	0.37	1.64	1.87	100%	0.00
	Adhesive 53802	0.41	0.126	0.05	0.23		100%	0.00
Unit#13	Primer 43518	6.94	0.054	0.38	1.65	1.65	100%	0.00
Unit#14	Primer 43518	6.94	0.014	0.10	0.43	1.18	100%	0.00
	Adhesive 58302	0.41	0.420	0.17	0.75		100%	0.00
New Unit#16	Primer 43518	6.94	0.0230	0.16	0.70	0.81	100%	0.00
New Unit#17	Primer 43518	6.94	0.0230	0.16	0.70	0.81	100%	0.00
Total Potential to Emit (TONS/YEAR)					23.93			0.00

METHODOLOGY

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Usage(Gal./Hr)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Usage(Gal./Hr)* (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = 0 tons per year because all materials are applied by hand and transfer efficiency is 100%

Appendix A: Emissions Calculations

VOC and Particulate

From Surface Coating Operations

Source Name: Pilkington North America, Inc.

Source Location: 1001 Hurricane Street, Franklin, IN 46131

County: Johnson

SIC Code: 3231

Operation Permit No.: R081-41215-00067

Permit Reviewer: Ojo Adu

Emission Unit	Material	Density (Lb/Gal)	Usage (Gal./hour)	Weight % Xylene	Weight % Toluene	Weight % MDI	Weight % Hexamethylene- 1,6-diisocyanate	Weight % Methanol	MEK %	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	MDI Emissions (ton/yr)	Hexamethylene- 1,6-diisocyanate Emissions (ton/yr)	Methanol Emissions (ton/yr)	Total HAP
Unit#1	Primer 43518	6.96	0.013	0%	50%	0%	0%	50%	0%	0.00	0.20	0.00	0.00	0.20	0.61
	Adhesive 58302	9.92	0.091	0%	5%	0.5%	0%	0%	0%	0.00	0.20	0.02	0.00	0.00	
Unit#2	Primer 43518	6.96	0.015	0%	50%	0%	0%	50%	0%	0.22	0.22	0.00	0.00	0.22	0.91
	Adhesive 58302	9.92	0.102	0%	5%	0.5%	0%	0%	0%	0.00	0.22	0.02	0.00	0.00	
Unit#3 Now Unit #15	Primer 43518	9.96	0.007	0%	50%	0%	0%	50%	0%	0.00	0.15	0.00	0.00	0.15	0.42
	Adhesive 58302	9.92	0.049	0%	5%	0.5%	0%	0%	0%	0.00	0.11	0.01	0.00	0.00	
Unit#5	Primer 43518	6.96	0.014	0%	50%	0%	0%	50%	0%	0.00	0.21	0.00	0.00	0.21	0.66
	Adhesive 58302	9.92	0.098	0%	5%	0.5%	0%	0%	0%	0.00	0.21	0.02	0.00	0.00	
Unit#6	Primer 43518	6.96	0.011	0%	50%	0%	0%	50%	0%	0.00	0.17	0.00	0.00	0.17	0.46
	RC50KE	8.20	0.196	0%	0%	0.9%	0%	0%	0%	0.00	0.00	0.06	0.00	0.00	
	Primer 5500	7.92	0.167	0%	0%	1%	0%	0%	60.0%	0.00	0.00	0.06	0.00	0.00	
Unit#7	Primer 43518	6.96	0.015	0%	50%	0%	0%	50%	0%	0.00	0.23	0.00	0.00	0.23	0.92
	Primer 43520A	8.26	0.075	1%	15%	0%	1%	0%	50.0%	0.03	0.41	0.00	0.03	0.00	
Unit#8	Primer 43518	6.96	0.020	0%	50%	0.0%	0%	0%	0%	0.00	0.30	0.00	0.00	0.00	1.74
	Adhesive 58302	9.92	0.600	0%	5%	0.5%	0%	0%	0%	0.00	1.30	0.13	0.00	0.00	
Unit#9	Primer 43518	6.96	0.060	0%	50%	0%	0%	50%	0%	0.00	0.91	0.00	0.00	0.91	1.83
Unit#10	Primer 43518	6.96	0.007	0%	50%	0%	0%	50%	0%	0.00	0.11	0.00	0.00	0.11	0.33
	Adhesive 58302	9.92	0.049	0%	5%	0.5%	0%	0%	0%	0.00	0.11	0.01	0.00	0.00	
Unit#11	Primer 43518	6.96	0.015	0%	50%	0%	0%	50%	0%	0.00	0.23	0.00	0.00	0.23	0.46
Unit#12	Primer 43518	6.96	0.054	0%	50%	0%	0%	50%	0%	0.00	0.82	0.00	0.00	0.82	1.95
	Adhesive 58302	9.92	0.126	0%	5%	0.5%	0%	0%	0%	0.00	0.27	0.03	0.00	0.00	
Unit#13	Primer 43518	6.96	0.054	0%	50%	0%	0%	50%	0%	0.00	0.83	0.00	0.00	0.83	1.66
Unit#14	Primer 43518	6.96	0.014	0%	50%	0%	0%	50%	0%	0.00	0.21	0.00	0.00	0.21	1.43
	Adhesive 58302	9.92	0.420	0%	5%	0.5%	0%	0%	0%	0.00	0.91	0.09	0.00	0.00	
New Unit#16	Primer 43518	6.96	0.023	0%	50%	0%	0%	50%	0%	0.00	0.35	0.09	0.00	0.35	0.79
New Unit#17	Primer 43518	6.96	0.023	0%	50%	0%	0%	50%	0%	0.00	0.35	0.00	0.00	0.35	0.70
						Total Individual HAP (TONS/YEAR)				0.25	9.04	0.45	0.03	4.30	
						Total Combined HAP (TONS/YEAR)				14.07					

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Usage of Material (gal/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Page 4 of 5 TSD App A

Company Name: Pilkington North America, Inc.
Source Address: 1001 Hurricane Street, Franklin, IN 46131
Permit Number: R081-41215-00067
Reviewer: Ojo Adu

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
3.98	1020	34.1

	Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
Potential Emission in tons/yr	0.03	0.13	0.13	0.01	**see below	0.09	1.43

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	3.6E-05	2.0E-05	1.3E-03	0.03	5.8E-05	0.03

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	8.5E-06	1.9E-05	2.4E-05	6.5E-06	3.6E-05	9.4E-05
Methodology is the same as above.					Total HAPs	0.03
The five highest organic and metal HAPs emission factors are provided above.					Worst HAP	0.03

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Emissions Calculations - Natural Gas-Fired Combustion

Page 5 of 5

Source Name: Pilkington North America, Inc.
Source Location: 1001 Hurricane Street, Franklin, IN 46131
County: Johnson
SIC Code: 3231
Operation Permit No.: R081-41215-00067
Permit Reviewer: Ojo Adu

Equipment Name	MMBtu/hr
CU7	0.2
CU8	0.2
CU9	0.2
CU10	0.2
CU11	0.2
CU12	0.2
CU18	0.2
Total	1.42

Heat Input Capacity

Potential Throughput

MMBtu/hr

MMCF/yr

1.42

12.20

	Pollutant						
	PM*	PM10*	PM2.5	SO ₂	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100.0	5.5	84.0
					**see below		
Potential Emission in tons/yr	0.01	0.05	0.05	0.00	0.61	0.03	0.51

*PM emission factor is filterable PM only. PM10 & PM2.5 emission factors are filterable and condensable fractions combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

	HAPs - Organics					
	Benzene	Dichloroben zene	Formaldehyde	Hexane	Toluene	
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.28E-05	7.32E-06	4.57E-04	1.10E-02	2.07E-05	Total Haps
						0.01

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.05E-06	6.71E-06	8.54E-06	2.32E-06	1.28E-05

The five highest organic and metal HAPs emission factors are provided above.

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	732	0.0	0.0
Summed Potential Emissions in tons/yr		732	
CO2e Total in tons/yr based on 11/29/2013 federal GWPs		736	

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Michael Jones
EHS Team Leader
Pilkington North America, Inc.
140 Dixie Highway
Rossford, OH 43460

DATE: May 22, 2019

FROM: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Registration
081-41215-00067

This notice is to inform you that a final decision has been issued for the air permit application referenced above. Our records show that you have chosen to access the final permit decision electronically, however the original signature page is enclosed for your convenience. The final permit documents are available electronically at:

IDEM's online searchable database: <http://www.in.gov/apps/idem/caats/> . Choose Search Option by Permit Number, then enter permit 41215

and

IDEM's Virtual File Cabinet (VFC): <http://www.IN.gov/idem> . Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

Our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.


A copy of this notice (without the original signature page) has also been sent via standard mail to: Thomas Burk, Plant Manager

In addition, the Notice of Decision has been sent to the OAQ Permits Branch Interested Parties List.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, or have difficulty accessing the documents online, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover Letter 10/19/18-acces via website

Mail Code 61-53

IDEM Staff	VHAUN 5/22/2019 Pilkington North America Incorporated 081-41215-00067 FINAL			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Michael Jones Pilkington North America Incorporated 140 Dixie Hwy Rossford OH 43460 (Source RM) VIA UPS										
2		Thomas Burk Plant Manager Pilkington North America Incorporated 1001 Hurricane St Franklin IN 46131 (RO RM)										
3		Johnson County Commissioners 86 West Court Street Franklin IN 46131 (Local Official)										
4		Johnson County Health Department 86 W. Court St, Courthouse Annex Franklin IN 46131-2345 (Health Department)										
5		Frederick & Iva Moore 6019 W 650 N Ligonier IN 46767 (Affected Party)										
6		Larry and Becky Bischoff 10979 North Smokey Row Road Mooresville IN 46158 (Affected Party)										
7		Greenwood City Council and Mayors Office 300 South Madison Avenue Greenwood IN 46142-3149 (Local Official)										
8												
9												
10												
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender 6	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--