

Fact Sheet



For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on May 18, 2009.

Permit Number: **R30-00300002-2009**
Application Received: **December 28, 2009**
Plant Identification Number: **003-00002**
Permittee: **Continental Brick Company**
Facility Name: **Martinsburg Facility**
Mailing Address: **154 Charles Town Road, Martinsburg, WV 25405**

Permit Action Number: *SM01* Revised: *September 15, 2010*

Physical Location: Martinsburg, Berkeley County, West Virginia
UTM Coordinates: 245.4 km Easting • 4,368.7 km Northing • Zone 18
Directions: From Interstate 81 take Exit 12, travel east on State Route 9 approximately 1.5 miles. The facility is on the right side of State Rte. 9.

Facility Description

The Martinsburg Facility is a face brick manufacturing operation which includes quarry to final brick production and storage. It operates under SIC Code 3251. The weathered Martinsburg Shale is quarried by the use of pans, crushed, screened, wetted, mixed in a pug mill, vacuum extruded, trimmed and cut to form the final shape of the green face bricks. Green face bricks then pass through the warming room, drying room, and kiln to remove the moisture in a controlled manner. Fired bricks are sorted and packaged for sale. Bricks not meeting the specifications (waste bricks) are disposed on property.

Emissions Summary

Modification of a face brick manufacturing operation to add a periodic kiln and increase SO₂ and HF emission limits from the tunnel kilns.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 129.13 tons per year of PM₁₀, 26.74 tons per year of HF and 12.29 tons per year of HCL. Due to this facility's potential to emit over 100 TPY of PM₁₀ and SO₂, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Continental Brick Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR13 45CSR30	Operating permit requirement.
State Only:	N/A	

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0682A	June 14, 2010	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

45CSR13 - Permits For Construction, Modification, Relocation And Operation Of Stationary Sources Of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, And Procedures For Evaluation (Permit R13-682)

The facility is adding a third kiln to its existing operations. This periodic kiln will increase emissions slightly to the facility (see Condition 4.1.1). Additionally, the emissions for the existing kilns (K1E and K2E) have been recalculated. The PTE of the facility calculated for the previous permit was 86.74 TPY for SO₂ and 26.74 TPY for HF. These values have been recalculated due to testing of the material (shale) used to make the bricks. These values are now 122.18 TPY for SO₂ and 130.87 TPY for HF, which also include an increase of 0.02 TPY for SO₂ and 0.07 TPY resulting from the third kiln.

Production of Kilns 1 and 2 are limited by Conditions 4.1.12 and 4.1.13 to 8.25 tons per hour each. Production from the Periodic Kiln is limited by Condition 4.1.14 to 2 tons per 72 hour cycle. However, only 48 hours of the cycle is for “firing”, the other 24 are for cooling. This rate comes out to 0.042 tons per hour. The resulting particulate matter limit from 45CSR§7- 4.1 for a Source Operation Type “a” is 13.9 lbs/hr for Kiln 1 and 2 each, and 0.10 lbs/hr for the Periodic Kiln. The particulate matter emissions given in R13-0682A Permit are 9.5 lbs/hr for Kiln 1 and 2, and 0.10 lbs/hr for the Periodic Kiln. Therefore compliance with the R13-0682A limits will also show compliance with the Rule 7 limits.

NO_x, CO, VOC, HCl, and Non HF/HCL HAP emissions are based on AP42 factors that assume an emission rate for these pollutants based upon the type of industry and production rate. Since these emissions are an assumption from production, then by limiting the production of the kilns, emissions will be at or less than those given in Condition 4.1.10. Conditions 4.1.12-14 limit the production rate for the kilns, and Conditions 4.4.3 and 4.4.4 requires the permittee to maintain operating schedules and fuel usage of each of the kilns, and also monthly records of the production rates.

SO₂ emission rates are based upon the percent sulfur of the coal used to fire the kilns. Condition 4.1.15 requires the permittee to use coal that is not more than 1% sulfur, and Condition 4.3.4 requires the permittee to verify with the fuel supplier that the coal does not exceed this percentage of sulfur.

HF emissions are based upon the fluoride concentration of the shale used to manufacture the bricks. Condition 4.3.3 requires the permittee to measure the fluoride concentration before and after firing of the brick at least once per 12,000 tons of production. Condition 4.1.16 also gives a HF emission per mass of production. Compliance is also by measuring the amount of fluoride concentration before and after firing of the brick.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:
N/A

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: July 28, 2010
Ending Date: August 27, 2010

All written comments should be addressed to the following individual and office:

Mike Egnor
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Mike Egnor
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Division of Air Quality
601 57th Street SE
Charleston, WV 25304
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Response to Comments (Statement of Basis)

Not applicable.