

Fact Sheet



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

Permit Number: **R30-00300002-2009**
Application Received: **May 19, 2008**
Plant Identification Number: **003-00002**
Permittee: **Continental Brick Company**
Facility Name: **Martinsburg Facility**
Mailing Address: **154 Charles Town Road, Martinsburg, WV 25405**

Revised N/A

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

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2007 Actual Emissions
Carbon Monoxide (CO)	88.57	28.73
Nitrogen Oxides (NO _x)	39.21	8.39
Particulate Matter (PM _{2.5})	73.95	1.98
Particulate Matter (PM ₁₀)	129.10	29.48
Total Particulate Matter (TSP)	188.64	43.09
Sulfur Dioxide (SO ₂)	86.74	16.04
Volatile Organic Compounds (VOC)	1.87	0.58

PM_{2.5} and PM₁₀ are a components of TSP.

Hazardous Air Pollutants	Potential Emissions	2007 Actual Emissions
Hydrogen Fluoride (HF)	26.74	8.85
Hydrogen Chloride (HCL)	12.28	4.07

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 129.10 tons per year of PM₁₀, 26.74 tons per year of HF and 12.28 tons per year of HCL. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Continental Brick Company's Martinsburg Facility 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.

This facility has been found to be subject to the following applicable rules:

Federal and State:

45CSR6	Open burning prohibited.
45CSR7	To Prevent And Control Particulate Matter Air Pollution From Manufacturing Processes And Associated Operations
45CSR10	To Prevent And Control Air Pollution From The Emission Of Sulfur Oxides
45CSR11	Standby plans for emergency episodes.
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

45CSR16	Standards Of Performance For New Stationary Sources Pursuant To 40 CFR Part 60
45CSR34	Emission Standards For Hazardous Air Pollutants Pursuant To 40 CFR Parts 61, 63 and section 112of the federal Clean Air Act
45CSR30	Operating permit requirement.
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
40 CFR Part 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants
40 CFR Part 61	Asbestos inspection and removal
40 CFR Part 63, Subpart B	Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)
40 CFR Part 82, Subpart F	Ozone depleting substances
State Only:	
45CSR4	No objectionable odors.

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 (if any)
R13-682	February 25, 1983	

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

45CSR7 - To Prevent And Control Particulate Matter Air Pollution From Manufacturing Processes And Associated Operations

- The two kilns are defined as "Duplicate Source Operations" and therefore have emission limits from each stack of twenty (20) percent opacity (except for opacity which is less than forty (40) percent for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period) and 11.9 lb/hr of particulate matter(PM). The PM limits are established using

Table 45-7A in Rule 7 for a Type ‘a’ source with a combined process weight rate of 33,000 pounds per hour and calculating the allowable emission rates for the separate stacks is using the formula in 45CSR§7-4.8. However, the Rule 13 permit establishes more stringent PM limits of 9.5 lb/hr for each kiln. Therefore the Rule 7 limits will be streamlined with the Permit R13-682 limits. Compliance with the Rule 13 permit limits will ensure compliance with the Rule 7 limits.

- In order to demonstrate compliance with the Opacity limits, Method 22–like observations will be made on a monthly basis. If visible emissions are observed for three consecutive months, Method 9 testing must be performed. Records of monitoring data will be maintained on site. Any violations of the allowable visible emission requirement must be reported in writing to the WVDAQ.
- Tests to determine the PM weight emissions are required to be conducted at least once in every five (5) year period. Such tests shall be conducted in accordance with the appropriate method set forth in 45CSR§7A-3. – “Mass Emission Test Procedures” or other equivalent EPA testing method approved by the Secretary. Also, records of the quantity and quality of fuel consumed in each kiln shall be maintained and at a minimum shall include an ash and BTU analysis of each shipment of coal.

45CSR10 - To Prevent And Control Air Pollution From The Emission Of Sulfur Oxide

- Sulfur Dioxide (SO₂) emissions from each Kiln shall not exceed a concentration of 2000 parts per million (ppm) by volume based on a block three (3) hour average as required by 45CSR§§4.1. & 4.2.
- Compliance with the sulfur dioxide limitations will be demonstrated in accordance with the DAQ approved “45CSR10 Monitoring Plan” and by demonstrating compliance with the Rule 13 permit limits of 9.5 lb/hr. The 45CSR10 Monitoring Plan is attached in Appendix A of the permit.

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)

- This permit established particulate matter (PM) emission limits of 9.5 lb/hr, sulfur dioxide (SO₂) emission limits of 9.5 lb/hr and a nitrogen oxide (NO_x) emission limit of 10.0 lb/hr through its application (pages 8&12 of 14).
- Compliance with the SO₂ and PM limits will be demonstrated through record keeping of the quantity and quality of coal consumed which includes an ash, BTU and sulfur analysis of each coal shipment. PM testing through Rule 7, at least once every five years will also be required.
- Compliance with the NO_x limits will be demonstrated through record keeping of the quantity and quality of coal consumed which includes a BTU analysis of each coal shipment. The NO_x emission limits are established in Permit R13-682 based on maximum design heat input of 23 mmBtu/hr for each of the kilns. The kilns burn a combination of pipeline natural gas and coal. Since the NO_x emissions would be lowered by the use of natural gas, as long as a maximum coal heat input of 23 mmBtu/hr is not exceeded, compliance with the NO_x limits can be reasonably assured. Furthermore, using the current AP-42 emission factors, the maximum NO_x emissions are calculated to be 4.21 lb/hr, well below the permit limit of 10 lb/hr.

40 CFR Part 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants

- The shale crusher (Crusher No.1) was replaced with a crusher of equal size in 2006. This was the only affected facility replaced and therefore in accordance with 40 CFR §60.670(d)(1) it is exempt from the provisions of 40 CFR §§60.672, 60.674, and 60.675.

40 CFR Part 63 Subpart B—Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)

- On June 18, 2007, the United States Court of Appeals for the District of Columbia Circuit issued a mandate vacating the NESHAP for Brick and Structural Products Manufacturing, “Brick MACT” (40 CFR Part 63 Subpart JJJJ). USEPA Region III has determined that 112(j) applies to facilities for which a federal standard has been vacated. Therefore the requirement to submit Part 1 and Part 2 “equivalent emission limitation by permit” applications for case-by-case MACT determination has been included in the permit.

Compliance Plan

- A compliance plan has been added to Section 3 of the permit which requires Continental Brick Company to enter into a Consent Order with the WVDAQ. The facility was found to be in violation of 45CSR30 for not submitting a timely and complete Title V application (45CSR§30-4.2) and for operating without submitting such application (45CSR§30-6.2). The original 1994 Certified Emission Statement (CES) submitted by the company stated that the facility was not a major source for any regulated air pollutant or Hazardous Air Pollutant. It has been recently determined that the facility is and was in fact a “Major” source subject to Title V permitting. DAQ’s Rule 30, 45CSR30, was federally approved on December 15, 1995 and required all existing stationary sources subject to Title V to submit a permit application by December 15, 1996.

General Permit G40-B

- In 2006, Rockbridge Stone Products, Inc. was issued a registration (G40-B-23) under General Permit G40-B for construction of a portable brick crusher. The purpose for the portable crusher is to crush unusable bricks at the Continental Brick site into landscape material. The portable crusher has not been constructed on the plant site. The crusher may be considered a support facility to a Title V source and therefore a Title V permit may be required. If so, within twelve (12) months after commencing operation of the crusher facility, a complete application to obtain a Title V permit must be filed by Rockbridge Stone Products, Inc. or a complete application to obtain a Title V permit revision to Continental Brick’s Title V permit must be filed.

Non-Applicability Determinations

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

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|---------------------------|-----|--|
| 45CSR5 | --- | The coal handling Operations are regulated by 45CSR7 and therefore are exempt in accordance with 45CSR§§5-2.4.b. & 2.14. |
| 45CSR17 | --- | The facility is regulated by 45CSR7 and therefore exempt in accordance with 45 CSR§7-10.2 and 45CSR§17-6. |
| 40 CFR Part 60, Subpart Y | --- | The coal handling facility processes less than 200 tons per day. |

- 40 CFR Part 60, Subpart OOO --- Excluding existing Crusher No. 1, all the other shale processing equipment known as the grinding building commenced construction prior to August 31, 1983 and have not been reconstructed or modified.
- 40 CFR Part 60, Subpart III --- The emergency generator commenced construction prior to July 11, 2005.
- 40 CFR Part 63, Subpart ZZZZ --- The emergency generator has a design capacity less than 500 HP.
- 40 CFR Part 64 --- There are no pollutant specific emissions units (PSEU) at this facility that satisfy all of the applicability criteria requirements of 40 CFR §64.2(a), i.e., that: 1) have pre-control regulated pollutant potential emissions (PTE) equal to or greater than the “major” threshold limits to be classified as a major source; 2) are subject to an emission limitation or standard and; 3) have a control device to achieve compliance with such emission limitation or standard. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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: March 31, 2009
Ending Date: April 30, 2009

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

Frederick Tipane
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

Frederick Tipane
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1215 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

The facility submitted a revised application after the comment period ended. An error in the calculations for the “Facility–Wide” potential emissions had been discovered and subsequently corrected in the revised application. There were no new applicable requirements triggered as a result of the correction and therefore no changes to the draft permit were needed or made. The “Emission Summary” table in the fact sheet has been revised to reflect the corrected potential emissions for NO_x, PM_{2.5}, PM₁₀, Total PM, and SO₂.