

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date:

Region: Mooresville Regional Office
County: Iredell
NC Facility ID: 4900070
Inspector's Name: Melinda Wolanin
Date of Last Inspection: 02/09/2016
Compliance Code: 3 / Compliance - inspection

Facility Data	Permit Applicability (this application only)
<p>Applicant (Facility's Name): Statesville Brick Company</p> <p>Facility Address: Statesville Brick Company 391 Brickyard Road Statesville, NC 28687</p> <p>SIC: 3251 / Brick And Structural Clay Tile NAICS: 327121 / Brick and Structural Clay Tile Manufacturing</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>	<p>SIP: Removed 2Q .0705 as it was repealed. NSPS: N/A NESHAP: Removed 2Q .0317 MACT Subpart JJJJ Avoidance. PSD: N/A PSD Avoidance: N/A NC Toxics: N/A 112(r): N/A Other: N/A</p>

Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	<p>Application Number: 4900070.16A Date Received: 04/04/2016 Application Type: Renewal Application Schedule: TV-Renewal</p> <p style="text-align: center;">Existing Permit Data</p> <p>Existing Permit Number: 02493/T10 Existing Permit Issue Date: 04/30/2012 Existing Permit Expiration Date: 03/31/2017</p>
Adam Foster Quality Control Manager (704) 746-1459 PO Box 471 Statesville, NC 28687	Steve Moose Director of Safety and Gov. Relations (704) 872-4123 PO Box 471 Statesville, NC 28687	Eric Potts Technical Services (704) 872-4123 PO Box 471 Statesville, NC 28687	

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2014	18.20	10.13	5.71	16.08	14.63	12.61	7.88 [Hydrogen fluoride (hydrofluori)]
2013	26.31	14.54	8.25	23.18	21.20	18.24	11.39 [Hydrogen fluoride (hydrofluori)]
2012	17.27	9.54	5.41	15.22	13.93	11.97	7.47 [Hydrogen fluoride (hydrofluori)]
2011	13.00	7.19	4.07	11.45	10.49	9.02	5.63 [Hydrogen fluoride (hydrofluori)]
2010	16.71	9.37	5.24	14.84	13.46	11.59	7.24 [Hydrogen fluoride (hydrofluori)]

<p>Review Engineer: Lori Ann Phillips</p> <p>Review Engineer's Signature: _____ Date: _____</p>	<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue 02493/T11 Permit Issue Date: _____ Permit Expiration Date: _____</p>
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1. Purpose of Application:

Statesville Brick Company has submitted a renewal application, 4900070.16A, for their current Title V air permit, 02493T10. The facility is located at 391 Brickyard Road in Statesville, Iredell County, NC. The renewal application was received at the Mooresville Regional Office on April 4, 2016 and the Raleigh Central Office on April 11, 2016.

2. Facility Description:

Statesville Brick Company is a brick manufacturing facility. The permitted equipment include: one sawdust/natural gas-fired brick tunnel kiln (30 million Btu/hr, 11 tons/hr maximum process rate), two rotary dryers heated by hot gases from the kilns (3.75 tons/hr maximum process rate, each), one sawdust/natural gas-fired brick tunnel kiln (30 million Btu per hour, 9.5 tons/hr maximum process rate), and one shale/clay grinding and screening operation consisting of one crusher, one dry pan, one single screen, two double screens, and one hammermill.

3. Application Chronology:

April 4, 2016	Received permit renewal application at the Mooresville Regional Office.
April 11, 2016	Received permit renewal application at the Raleigh Central Office. Application included authorized signature, required forms, and a statement of compliance. Also included in the package was a change in responsible official delegation letter that named Steve Moose and Adam Foster as the new responsible officials for the facility.
April 28, 2016	The Regional Office submitted comments on the permit application to Lori Ann Phillips via email. No significant issues were noted.
June 24, 2016	Emailed a copy of the draft permit and review to Steve Moose and Adam Foster, Authorized Representatives for Statesville Brick, for their review.
June 29, 2016	Received response from Steve Moose requested that the maximum process rate for ES-KS1 be changed from 11 tons per hour to 9.95 tons per hour.
July 7, 2016	Emailed Steve Moose and requested an explanation for the process rate change for ES-KS1. This kiln had been permitted for 10.1 tons per hour prior to 2003 and was changed to 9.98 tons per hour in 2003. In 2004, the facility requested and was granted a process rate increase to 11 tons per hour for ES-KS1 to satisfy increased facility production.

July 8, 2016 Received call from Eric Potts, Technical Services with Statesville Brick. He explained that the facility looked at the production data for ES-KS1 for the past 13 years and the highest hourly production rate recorded was 9.44 tons per hour. The facility took that rate and added 5% and rounded up to 9.95 tons per hour to arrive at the current process rate request. Mr. Potts said he was unaware of the reasoning behind the request for the 11 tons per hour process rate that had been placed in the permit in 2003.

July 12, 2016 Sent the revised draft permit and review to Steve Moose and the Regional Office for their review.

July 15, 2016 Received a call from Steve Moose indicating that the facility approved the draft permit and permit review documents.

July 20, 2016 Received an email from Melinda Wolanin, Regional Office Contact, indicating that the Mooresville Regional Office did not have any comments on the draft permit documents.

4. New Equipment/Changes in Emissions and Regulatory Review:

New Equipment: There is no new equipment associated with this permit renewal.

Equipment Updates: The facility has requested that the process rate for kiln ES-KS1 be changed from 11 tons per hour (TPH) to 9.95 TPH. As mentioned above in the application chronology, this kiln was at one point permitted at 10.1 TPH and this was lowered to 9.98 TPH at the facility's request sometime around 2003. In 2004, the facility requested a process rate increase to 11 TPH for this kiln. This change was implemented in the T09 permit. The changes to maximum permitted process rate are confusing and the facility contact was unable to provide a clear explanation for the multiple requests over the years; however, the facility contact did state that the highest hourly process rate that was recorded in 13 years of summary reports was 9.44 TPH. Data found in the quarterly reports has shown that process rates, on average, have been far below 9.44 TPH. Therefore, the rate change request of 9.95 TPH will be implemented in the permit as it appears that the facility should not exceed this maximum rate.

Additionally, the facility contact explained that the 9.95 TPH process rate value was derived from taking the highest hourly production rate from the past 13 years, 9.44 TPH, adding 5% safety factor which takes the rate to 9.91 TPH, and rounding up to 9.95 TPH.

Change in Emissions: There are no changes in emissions associated with this permit renewal.

Regulatory Review: The permit stipulation for 15A NCAC 02Q .0705 – Existing Facilities and SIC Calls for Toxics – shall be removed from the permit as this rule was repealed on May 1, 2014.

The permit stipulation for 02Q .0317 Avoidance Condition for MACT Subpart JJJJJ shall be removed from the permit. The original MACT Subpart JJJJJ was vacated on March 13, 2007. It had included a production rate cut-off of 10 TPH for applicability and the facility had accepted a limitation to produce less than 10 TPH in ES-KS1 to avoid applicability. On October 26, 2015, the new MACT Subpart JJJJJ (NESHAP for Brick and Structural Clay Products Manufacturing) rule was published in the Federal Register. This rule includes new limits for emissions and operating, as well as work practice standards and testing requirements. The terms of Subpart JJJJJ shall be placed in the permit during the next permit renewal in five years and will be effective beginning December 28, 2023 once the Case-by-Case MACT for Subpart JJJJJ (02D .1109) expires on December 27, 2023. Further discussion of this rule is found in Section 6 below.

No other changes to current permit stipulations shall be made at this time.

5. Changes to Permit:

- Updated all dates and permit revision numbers. Changed the name of the department to “Department of Environmental Quality”.
- Updated all page numbers, as appropriate.
- Added a leading “0” to all NC Administrative Code citations in the permit.
- Updated the General Conditions to the most current version (4.0).
- Removed 15A NCAC 02Q .0705 as this permit condition was repealed on May 1, 2014.
- Removed 15A NCAC 02Q .0317 Avoidance Condition for MACT Subpart JJJJJ. New standards for Subpart JJJJJ were posted in the Federal Register on October 26, 2015.

6. NSPS, NESHAPS, MACT, PSD, and Attainment Status:

The brick kilns (ID Nos. KS1 and KS2) and sawdust dryers (ID Nos. SD1 and SD2) are not subject to any NSPS regulations. Two of the screens (ID Nos. F-DDS1 and F-DDS2) are subject only to Section 60.7 and 60.676(a) of 40 CFR Subpart OOO, for notification and reporting requirements, respectively, and these requirements have been met.

The saw dust dryers (ID Nos. SD1 and SD2) and screens (ID Nos. F-DDS1 and F-DDS2) are not subject to any NESHAPS/MACT regulations.

Previously, the facility had taken an avoidance condition to avoid applicability of MACT Subpart JJJJJ (NESHAP for Brick and Structural Clay Manufacturing Products) for the brick kilns (ID Nos. KS1 and KS2). The original Subpart JJJJJ was vacated on March 13, 2007, shortly after promulgation. Originally, the rule had a 10 TPH process rate cut off for applicability of the standard and the facility requested that a limitation of less than 10 TPH be placed on kiln KS1 since the process rate was listed as 11 TPH at the time.

On September 26, 2015, the new MACT Subpart JJJJ was published in the Federal Register. This new rule features operating limits, emission limits, work practice standards, and performance testing requirements for both small and large tunnel kilns. Per the rule, small tunnel kilns are designated as those that have a capacity of less than 10 TPH and large tunnel kilns are those that have a capacity of equal to or greater than 10 TPH. Both kilns at Statesville Brick are considered small tunnel kilns according to the new Subpart JJJJ rule. The compliance date for existing affected sources is December 26, 2018. Both kilns at Statesville Brick are still currently subject to the Case-by-case MACT Standard for Brick Kilns (02D .1109) and they shall remain subject until the compliance date for Subpart JJJJ occurs. The new permit stipulation for MACT Subpart JJJJ shall be added to the permit during the next permit renewal in five years. Statesville Brick Company is a PSD minor source located in Iredell County, which is in attainment for PM₁₀ and ozone.

7. Facility Wide Air Toxics:

This permit renewal does not warrant an air toxics review. No changes are being made to permitted equipment or control devices; therefore, no unsafe health risks would be expected and continued compliance is expected.

8. Compliance Status:

The facility was in compliance during the most recent inspection conducted by Melinda Wolanin on February 9, 2016.

9. Facility Emissions Review:

The emissions summary in the table below is based on potential emissions from the revision T10 emissions summary and reported actual emissions from the 2014 air emissions inventory.

Facility Emissions Summary

Pollutant	Actual Emissions (tpy)	Permit Potential Emissions (tpy)
TSP	17.60	125.6
PM-10	14.63	95.5
SO₂	18.20	54.2
NO_x	10.13	29.9
VOC	5.71	14.6
CO	16.08	129.4
Single largest HAP (HF)	7.88	57.1
All HAPs (combined)	12.61	>57.1

Based on the emissions summary, this facility is correctly classified as a Title V.

10. Other Considerations:

- A P.E. seal is NOT required for this application.
- A zoning consistency determination is NOT required for this application.

- This facility is not subject to the 112(r) program as it does not store any of the listed chemicals in quantities above the program thresholds.

11. Public Notice Review:

A 30-day public notice and 45-day EPA review period is required for this permit renewal.

The 30-day public notice period was from XX through XX.

The EPA 45-day review period was from XX through XX.

12. Conclusions, Comments, and Recommendations:

This air permit application for the Statesville Brick Company, located at 391 Brickyard Road in Statesville, Iredell County, has been reviewed by DAQ to determine compliance with all procedures and requirements. The Mooresville Regional Office has made comments on the draft permit. Continued compliance with this air permit is expected. Recommend issuance of revised air permit No. 02493T11.