

REGULATION III - CONTROL OF AIR CONTAMINANTS
RULE 325
BRICK AND STRUCTURAL CLAY PRODUCTS (BSCP) MANUFACTURING

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Adopted 08/10/05

**MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION III - CONTROL OF AIR CONTAMINANTS
RULE 325
BRICK AND STRUCTURAL CLAY PRODUCTS (BSCP) MANUFACTURING**

SECTION 100 – GENERAL

- 101 PURPOSE:** To limit particulate matter emissions from the use of tunnel kilns for curing in the brick and structural clay product (BSCP) manufacturing processes.
- 102 APPLICABILITY:** This rule applies to any existing, new or reconstructed tunnel kiln, used in the commercial and industrial brick and structural clay product manufacturing processes. Compliance with the provisions of this rule shall not relieve any person subject to the requirements of this rule from complying with any other federally enforceable New Sources Performance Standards (NSPS). In such cases, the most stringent standard shall apply.
- 103 EXEMPTIONS:** Existing, new or reconstructed tunnel kilns that are used exclusively for research and development and are not used to manufacture products for commercial sale are not subject to this rule.

SECTION 200 – DEFINITIONS: See Rule 100 (General Provisions And Definitions) of these rules for definitions of terms that are used but not specifically defined in this rule. For the purpose of this rule, the following definitions shall apply:

- 201 BRICK AND STRUCTURAL CLAY PRODUCTS (BSCP) MANUFACTURING FACILITY** - A site that manufactures brick including, but not limited to: face brick, structural brick and brick pavers; claypipe; roof tile; extruded floor and wall tile; and/or other extruded, dimensional, clay products. Brick products manufacturing facilities typically process raw clay and shale, form the processed materials into bricks or shapes, and dry and fire the bricks or shapes.

- 202 CONTINUOUS KILN** – A heated chamber that heats dense loads uniformly and efficiently, and can be used without interruption for high volume production. Continuous kilns are kilns that perform well in the consistent high production of wares. Continuous kilns include tunnel kilns, shuttle kilns, fixed-hearth kilns, bee hive kilns, roller kilns, sled kilns, decorating kilns, and pusher slab kilns. Most continuous kilns are tunnel kilns.
- 203 EXISTING KILN** - A kiln that is in operation before the date of adoption of this rule.
- 204 KILN FEED** – All materials except fuel entering the tunnel kiln, including raw feed and recycle dust, measured on a dry basis.
- 205 PERIODIC KILN** – A kiln that operates on an intermittent basis to heat wares, holding them at a uniform peak temperature and cool the wares. Periodic kilns are best for inconsistent or low-volume production.
- 206 RESEARCH AND DEVELOPMENT TUNNEL KILN** - Any tunnel kiln whose purpose is to conduct research and development for new processes and products and is not engaged in the manufacture of commercial products for sale.
- 207 TUNNEL KILN** – Any continuous kiln that is used to fire brick and structural clay products. Tunnel kilns may have two process streams, including a process stream that exhausts directly to the atmosphere or to an Air Pollution Control Device, and a process stream in which the kiln exhaust is ducted to a brick dryer where it is used to dry bricks before the exhaust is emitted to the atmosphere.

SECTION 300 – STANDARDS

- 301 OPACITY LIMITATIONS FOR ALL TUNNEL KILNS SUBJECT TO THIS RULE:** No person shall discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20% opacity.

302 LIMITATIONS FOR EXISTING TUNNEL KILNS AT BRICK OR STRUCTURAL PRODUCT (BSCP) MANUFACTURING FACILITIES:

302.1 No owner or operator shall emit more than 0.42 lbs. of particulate matter per ton of fired product from a tunnel kiln with a capacity of ≥ 1 tons per hour throughput.

303 LIMITATIONS FOR NEW OR RECONSTRUCTED TUNNEL KILNS AT BRICK OR STRUCTURAL PRODUCT (BSCP) MANUFACTURING FACILITIES:

303.1 No owner or operator shall emit more than 0.42 lbs. of particulate matter per ton of fired product from a tunnel kiln with a capacity of < 10 tons per hour throughput.

303.2 No owner or operator shall emit more than 0.12 lbs. of particulate matter per ton of fired product from a tunnel kiln with a capacity of ≥ 10 tons per hour throughput.

SECTION 400 - ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE: Any owner or operator of a tunnel kiln subject to this rule shall meet the following milestones:

401.1 Submit a compliance plan, by December 31, 2005, to the Control Officer for approval which describes the method(s) used to achieve full compliance with the rule. This plan shall specify dates for completing increments of progress, such as the contractual arrival date of new control equipment. The Control Officer may require an owner or operator submitting the compliance plan to also submit subsequent reports on progress in achieving compliance; and

401.2 Attain full compliance with all of the standards in this rule by December 31, 2006.

SECTION 500 - MONITORING AND RECORDS

501 COMPLIANCE DETERMINATION: Compliance shall be demonstrated as follows:

501.1 Compliance with Section 301 shall be demonstrated by performance of Method 9 listed in Section 503.1; and

501.2 Compliance with Sections 302 and 303 shall be demonstrated by performance of the test methods listed in Section 503.2 and 503.3.

502 RECORDKEEPING / RECORDS RETENTION: The owner or operator of any kiln subject to this rule shall comply with the following requirements and keep records for a period of 5 years:

502.1 Daily records of kiln feed fired and hours of operation; and

502.2 Monthly records of material delivered to the site for processing in the tunnel kiln and the amount of product produced reported in tons.

503 TEST METHODS: The Environmental Protection Agency (EPA) test methods as they exist in the Code of Federal Regulations (CFR) (July 1, 2004), as listed below, are adopted by reference. These adoptions by reference include no future editions or amendments. Copies of test methods referenced in this section of this rule are available at the Maricopa County Air Quality Department, 1001 North Central Avenue, Suite 695, Phoenix, Arizona, 85004.

503.1 EPA Reference Method 9 ("Visual Determination of the Opacity of Emissions from Stationary Sources"), (40 CFR 60, Appendix A).

503.2 EPA Reference Method 5 ("Determination of Particulate Emissions from Stationary Sources"), (40 CFR 60, Appendix A).

503.3 EPA Reference Method 202 (“Determination of Condensable Particulate Emissions from Stationary Sources”), (40 CFR 51, Appendix M).