



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

01/20/00

CERTIFIED MAIL

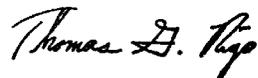
RE: Proposed Title V Chapter 3745-77 permit
15-76-06-0004
Stark Ceramics, Inc.

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Stark Ceramics, Inc., has been created in Ohio EPA's State Air Resources System (STARS) on 01/20/00, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's electronic notification of this proposed action. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 before the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,



Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Canton Division of Air Pollution Control
Becky Castle, DAPC PMU



Ohio EPA

State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Date: 01/20/00

Effective Date:

Expiration Date:

The duration of this permit will be five years.

This document constitutes issuance to:

Stark Ceramics, Inc.
600 West Church Street
East Canton, OH 44730

of a Title V permit for Facility ID: 15-76-06-0004

Emissions Unit ID (Company ID)/

Emissions Unit Activity Description:

P003 (D Plant Baghouse)

Gardner-Denver Grinder with Baghouse Controls

P004 (A Plant Clay Grinding)

A Plant Clay Grinding, Crushing and Screening with Baghouse Controls

P005 (# 3 Tunnel Kiln)

Natural Gas Fired Tunnel Kiln for Glaze Tile and Brick Firing

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Canton Division of Air Pollution Control
420 Market Avenue N.
Canton, OH 44702-1544
(330) 489-3385

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations excluding deviations resulting from malfunctions monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions during the quarter.
 - iii. monitoring, recordkeeping, and
requirements
Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar 07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period. Each written report shall be signed by a responsible official certifying that, based on information and belief

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. (“Act”); and, pursuant to 40 CFR 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

This permit does not convey any property rights of any sort, or any exclusive privilege.

- e. permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may

7. Fees

permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

Marketable Permit Programs

No and other similar programs or processes for changes that are provided for in this permit.

9.

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be

semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and

ii. An
preventive or corrective measures adopted.

d. certifications concerning the terms and conditions contained in this permit that are federally enforceable
District Office or local air agency and to the Administrator of U.S. EPA in the following manner and with the

i. Compliance
shall be submitted on or before April 30th of each year during the permit term.

ii.

(a) An identification of each term or condition of this permit that is the basis of the certification.
The permittee's current compliance status.

(c)

(d) The
required reporting period.

(e) other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

Compliance certifications shall contain such additional requirements as may be specified pursuant to

13. Permit Shield

Compliance with the terms and conditions of this permit (including terms and conditions established for alternate scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2),
source.

14.

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the stationary source without obtaining a permit revision, if such change is not a modification under any provision

emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of

Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible
rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

18.

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices

- b. Equipment standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c. performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

4. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

5. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

6.

Federally Enforceable Emission

This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B001 - boiler #2
B004 - boiler #1
F001 - plant roadways and parking lots
P010 - wet glaze making
P011 - #1 & #7 extruders
P012 - Grog crusher
P015 - C plant glaze coating line
P016 - Keller glaze coating line

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: D Plant Baghouse (P003)
Activity Description: Gardner-Denver Grinder with Baghouse Controls

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Gardner-Denver grinders (Nos. 4, 5, & 30") controlled by a baghouse (P003B-BGHS)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(A)	50 lbs/hr of particulates
		See A.I.2.e below.

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions, from any stack, shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b** Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.
- 2.c** The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
 - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and
 - ii. a collection efficiency that is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

At a minimum, the permittee's employment of RACM shall include localized hooding over each grinder.
- 2.d** If the permittee can demonstrate compliance with the visible emissions restriction contained in Section A.I.2.b above, the employment of the permittee's RACM, in accordance with the requirements of Section A.I.2.c above, will be deemed adequate.

2. Additional Terms and Conditions (continued)

- 2.e** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the AP-42 emission factor of 8.5 lbs of particulates per ton of brick from Table 11.3-2. Multiplying this factor by the maximum process rate of 130 tons/hr results in an UMRE of 1,105 lbs of particulates per hour. The allowable particulate limit was determined from Figure II of OAC rule 3745-17-11.

II. Operational Restrictions

1. The maximum hourly process weight rate for this emissions unit shall not exceed 130 tons.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain hourly records of the amount (in tons) of material processed by this emissions unit.
2. The permittee shall perform weekly checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any exceedances of the maximum hourly process weight rate limitation identified in section A.II.1.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and/or any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emissions limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

50 lbs/hr of particulates

Applicable Compliance Method:

If necessary, compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: A Plant Clay Grinding (P004)

Activity Description: A Plant Clay Grinding, Crushing and Screening with Baghouse Controls

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
"A" plant clay grinding, crushing, and screening controlled with a baghouse (P004A-BGHS)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11	10 lbs/hr of particulates
		See A.I.2.e below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions, from any stack, shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.
- 2.c The permittee shall minimize or eliminate visible particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
 - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and
 - ii. a collection efficiency that is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

At a minimum, the permittee's employment of RACM shall include:

- a. localized hooding over each muller dry pan (which processes raw materials transferred from the raw material storage bins);
- b. localized hooding for each elevator (which moves the raw material to the screens after passing through the mullers); and
- c. localized hooding over each screen (which processes the raw material transferred by the elevators).

2. Additional Terms and Conditions (continued)

- 2.d** If the permittee can demonstrate compliance with the visible emissions restriction contained in section A.I.2.b above, the employment of the permittee's RACM, in accordance with the requirements of section A.I.2.c above, will be deemed adequate.
- 2.e** The permittee shall comply with the more restrictive requirement of either Table 1 or Figure II. Based on calculations using an AP-42 emission factor from section 11.3, Figure II does not apply because the uncontrolled mass rate of emissions (UMRE) was determined to be less than 10 lbs/hr. The allowable limit of 10 lbs/hr of particulates was established to ensure that Figure II will not become applicable to this emissions unit.

II. Operational Restrictions

1. The maximum hourly process weight rate for this emissions unit shall not exceed 90 tons.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain hourly records of the amount (in tons) of material processed by this emissions unit.
2. The permittee shall perform weekly checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any exceedances of the maximum hourly process weight rate limitation identified in section A.II.1.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and/or any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emissions limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

10 lbs/hr of particulates

Applicable Compliance Method:

If necessary, compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: # 3 Tunnel Kiln (P005)

Activity Description: Natural Gas Fired Tunnel Kiln for Glaze Tile and Brick Firing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#3 tunnel kiln, 30 mmBtu/hr, natural gas-fired, for glaze tile and brick firing	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11	10 lbs/hr of particulates
	OAC rule 3745-18-06(E)(1)	See A.I.2.b below. 93.6 lbs/hr of sulfur dioxide (SO ₂)
		See A.II.3 below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions, from any stack, shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b The permittee shall comply with the more restrictive requirement of either Table 1 or Figure II. Based on calculations using an AP-42 emission factor from section 11.3, Figure II does not apply since the uncontrolled mass rate of emissions (UMRE) was determined to be less than 10 lbs/hr. The allowable limit of 10 lbs PM/hr was established to ensure that Figure II will not become applicable to this emissions unit.

II. Operational Restrictions

1. The maximum hourly process weight rate for this emissions unit shall not exceed 10 tons.
2. The permittee shall burn only natural gas as fuel for this emissions unit.
3. The amount of sulfur in the clay/shale mix used in this emissions unit shall not exceed 87.5 lbs/hour as a rolling, 12-month, hourly average. Based on two separate stack tests (1989 and 1993), for every one pound of sulfur in the clay mix, 1.07 pounds of SO₂ are emitted.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain hourly records of the amount (in tons) of material processed by this emissions unit.
2. The permittee shall maintain records of the following information for the purpose of determining the amount of sulfur processed by this emissions unit:

III. Monitoring and/or Record Keeping Requirements (continued)

2.a The permittee shall take a daily composite sample of the clay/shale mix and determine the sulfur content of the clay/shale mix. The composite sample shall be taken from the stock pile and/or the production mix, and shall consist of approximately 5 to 10 grab samples. The sulfur content shall be determined using LECO analytical methods. Daily records shall be maintained of the sulfur content results.

2.b The sulfur content shall be used to determine the amount of sulfur (in pounds) used each day based on the daily amount of clay/shale mix processed. Daily records shall be maintained of the amount of sulfur usage. The following formula shall be used for this determination:

$$\text{pounds sulfur/day} = (\text{percent sulfur}/100\%) \times \text{pounds clay/shale mix/day}$$

2.c The total amount of sulfur used each month shall be calculated by summing the daily usages for each month. Monthly records shall be maintained of the total amount (in pounds) of sulfur processed in this emissions unit.

2.d Monthly records shall be maintained of the hours of operation of this emissions unit.

2.e Monthly records shall be maintained of the rolling, 12-month, hourly average sulfur usage (in lbs/hr). The hourly average shall be determined by summing the sulfur usages over a consecutive 12-month period (section A.III.2.c) and dividing by the 12-month summation of hours of operation (section A.III.2.d). The following formula shall be used for this determination:

$$\text{rolling, 12-month average lbs sulfur/hr} = \text{lbs sulfur}/12 \text{ months} \times 1/(\text{number of hours of operation}/12 \text{ months})$$

3. The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any exceedances of the maximum hourly process weight rate limitation identified in section A.II.1.
2. The permittee shall submit deviation (excursion) reports that identify any deviation of the natural gas fuel usage restriction identified in section A.II.2.
3. The permittee shall submit deviation (excursion) reports that identify any exceedances of the rolling, 12-month, hourly average sulfur usage identified in section A.II.3.
4. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emissions limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

10 lbs/hr of particulates

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

93.6 lbs/hr of SO₂

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Method 6.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emissions testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit renewal.

b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate matter and sulfur dioxide, and the visible particulate emissions limitation.

c. The following parameters, at a minimum, shall be monitored and recorded during the emissions testing: the process weight rate (in pounds); the sulfur content of the clay/shale mix; and the amount of sulfur processed in this emissions unit during the testing.

d. The following test method shall be employed to demonstrate compliance with the allowable hourly mass emission rate for particulate matter: Methods 1 through 5 of 40 CFR Part 60, Appendix A.

e. The following test method shall be employed to demonstrate compliance with the sulfur dioxide emission limitation: Method 6 of 40 CFR Part 60, Appendix A.

f. The following test method shall be employed to demonstrate compliance with the visible particulate emissions limitation: Method 9 of 40 CFR Part 60, Appendix A.

g. The tests shall be conducted while the emissions unit is operating at or near its maximum allowable operating capacity of 10 tons per hour, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD,APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD,APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD,APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD,APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD,APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Stark Ceramics, Inc.**
Facility ID: **15-76-06-0004**

THIS IS THE LAST PAGE OF THE PERMIT
