

**PERMIT CONDITIONS  
PHOENIX BRICKYARD  
V97-021  
Table of Contents  
November 3, 2006**

|                                                                           |               |
|---------------------------------------------------------------------------|---------------|
| <b>GENERAL CONDITIONS .....</b>                                           | <b>Page 1</b> |
| <b>1. AIR POLLUTION PROHIBITED .....</b>                                  | <b>Page 1</b> |
| <b>2. CIRCUMVENTION .....</b>                                             | <b>Page 1</b> |
| <b>3. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS .....</b>         | <b>Page 1</b> |
| <b>4. COMPLIANCE .....</b>                                                | <b>Page 2</b> |
| A. Compliance Required.....                                               | Page 2        |
| B. Compliance Certification Requirements .....                            | Page 2        |
| C. Compliance Plan.....                                                   | Page 3        |
| <b>5. CONFIDENTIALITY CLAIMS .....</b>                                    | <b>Page 3</b> |
| <b>6. CONTINGENT REQUIREMENTS .....</b>                                   | <b>Page 3</b> |
| A. Acid Rain.....                                                         | Page 3        |
| B. Asbestos.....                                                          | Page 4        |
| C. Risk Management Plan (RMP) .....                                       | Page 4        |
| D. Stratospheric Ozone Protection .....                                   | Page 4        |
| <b>7. DUTY TO SUPPLEMENT OR CORRECT APPLICATION .....</b>                 | <b>Page 5</b> |
| <b>8. EMERGENCY EPISODES .....</b>                                        | <b>Page 5</b> |
| <b>9. EMERGENCY PROVISIONS .....</b>                                      | <b>Page 5</b> |
| <b>10. EXCESS EMISSIONS .....</b>                                         | <b>Page 5</b> |
| A. Exemptions .....                                                       | Page 5        |
| B. Affirmative Defense For Malfunctions .....                             | Page 6        |
| C. Affirmative Defense For Startup And Shutdown.....                      | Page 6        |
| D. Affirmative Defense For Malfunctions During Scheduled Maintenance..... | Page 7        |
| E. Demonstration of Reasonable and Practicable Measures .....             | Page 7        |
| <b>11. FEES.....</b>                                                      | <b>Page 7</b> |
| <b>12. MODELING .....</b>                                                 | <b>Page 7</b> |
| <b>13. MONITORING / TESTING .....</b>                                     | <b>Page 8</b> |
| <b>14. PERMITS .....</b>                                                  | <b>Page 8</b> |
| A. Basic.....                                                             | Page 8        |
| B. Dust Control Plan Requirements .....                                   | Page 8        |
| C. Permits and Permit Changes, Amendments and Revisions .....             | Page 9        |

|            |                                                                   |                |
|------------|-------------------------------------------------------------------|----------------|
| D.         | Posting .....                                                     | Page 9         |
| E.         | Prohibition on Permit Modification .....                          | Page 10        |
| F.         | Renewal .....                                                     | Page 10        |
| G.         | Revision / Reopening / Revocation .....                           | Page 10        |
| H.         | Revision Under a Federal Hazardous Air Pollutant Standard .....   | Page 11        |
| I.         | Requirements for a Permit .....                                   | Page 11        |
| J.         | Rights and Privileges .....                                       | Page 12        |
| K.         | Severability .....                                                | Page 12        |
| L.         | Scope.....                                                        | Page 12        |
| M.         | Term of Permit .....                                              | Page 13        |
| N.         | Transfer.....                                                     | Page 13        |
| <b>15.</b> | <b>RECORDKEEPING .....</b>                                        | <b>Page 13</b> |
| A.         | Records Required .....                                            | Page 13        |
| B.         | Retention of Records .....                                        | Page 13        |
| C.         | Monitoring Records.....                                           | Page 13        |
| D.         | Right of Inspection of Records .....                              | Page 13        |
| <b>16.</b> | <b>REPORTING.....</b>                                             | <b>Page 14</b> |
| A.         | Annual Emission Inventory Report .....                            | Page 14        |
| B.         | Data Reporting.....                                               | Page 14        |
| C.         | Deviation Reporting .....                                         | Page 14        |
| D.         | Emergency Reporting.....                                          | Page 14        |
| E.         | Emission Statements Required as Stated in the Act.....            | Page 15        |
| F.         | Excess Emissions Reporting .....                                  | Page 15        |
| G.         | Other Reporting .....                                             | Page 16        |
| <b>17.</b> | <b>RIGHT TO ENTRY AND INSPECTION OF PREMISES .....</b>            | <b>Page 16</b> |
|            | <b>SPECIFIC CONDITIONS .....</b>                                  | <b>Page 17</b> |
| <b>18.</b> | <b>ALLOWABLE EMISSIONS LIMITATIONS .....</b>                      | <b>Page 17</b> |
| A.         | Facility-Wide Requirements .....                                  | Page 17        |
| B.         | Allowable Emissions for Clay Raw Material Storage Pile .....      | Page 17        |
| C.         | Allowable Emissions for Clay Raw Material Handling.....           | Page 18        |
| D.         | Allowable Emissions for Tunnel Kiln .....                         | Page 18        |
| E.         | Allowable Emissions for Volatile Organic Compounds (VOCs).....    | Page 18        |
| F.         | Allowable Emissions for Hydrogen Fluoride (HF).....               | Page 19        |
| <b>19.</b> | <b>OPERATIONAL LIMITATIONS AND STANDARDS.....</b>                 | <b>Page 19</b> |
| A.         | Facility-Wide Requirements .....                                  | Page 19        |
| B.         | Operational Requirements for Clay Raw Material Storage Pile ..... | Page 20        |
| C.         | Operational Requirements for Clay Raw Material Handling.....      | Page 22        |
| D.         | Operational Requirements for VOCs.....                            | Page 22        |
| E.         | Operational Requirements for Storage Tanks .....                  | Page 23        |
| F.         | Operational Requirements for Production Limits .....              | Page 25        |
| G.         | Operational Requirements for Baghouses .....                      | Page 26        |
| H.         | Operational Requirements for the Tunnel Kiln Baghouse.....        | Page 26        |
| <b>20.</b> | <b>MONITORING AND RECORDKEEPING REQUIREMENTS.....</b>             | <b>Page 26</b> |
| A.         | Facility-Wide Requirements .....                                  | Page 26        |

|                                                     |                                                                                                                |                |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------|
| B.                                                  | Monitoring and Recordkeeping Requirements for Clay Raw Material Storage Pile .....                             | Page 28        |
| C.                                                  | Monitoring and Recordkeeping Requirements for Clay Raw Material Handling.....                                  | Page 28        |
| D.                                                  | Monitoring and Recordkeeping Requirements for VOCs.....                                                        | Page 29        |
| E.                                                  | Monitoring and Recordkeeping Requirements for Storage Tanks .....                                              | Page 30        |
| F.                                                  | Monitoring and Recordkeeping Requirements for Production Limits and Hydrogen<br>Fluoride Emission Limits ..... | Page 30        |
| G.                                                  | Monitoring and Recordkeeping Requirements for Baghouses Vented Outdoors .....                                  | Page 30        |
| H.                                                  | Monitoring and Recordkeeping Requirements for Tunnel Kiln .....                                                | Page 31        |
| <b>21.</b>                                          | <b>REPORTING REQUIREMENTS .....</b>                                                                            | <b>Page 32</b> |
| A.                                                  | Production Log and Hydrogen Fluoride Emissions Log.....                                                        | Page 32        |
| B.                                                  | Odor Log.....                                                                                                  | Page 32        |
| C.                                                  | Storage Tanks .....                                                                                            | Page 32        |
| D.                                                  | Walk-around Reporting.....                                                                                     | Page 32        |
| E.                                                  | Baghouse Reporting .....                                                                                       | Page 33        |
| <b>22.</b>                                          | <b>TESTING REQUIREMENTS.....</b>                                                                               | <b>Page 33</b> |
| A.                                                  | Testing Requirements.....                                                                                      | Page 33        |
| B.                                                  | Testing Criteria.....                                                                                          | Page 34        |
| C.                                                  | Test Methods .....                                                                                             | Page 34        |
| D.                                                  | Operating Conditions .....                                                                                     | Page 35        |
| <b>23.</b>                                          | <b>OTHER REQUIREMENTS .....</b>                                                                                | <b>Page 37</b> |
| A.                                                  | Dust Control Plan Required .....                                                                               | Page 37        |
| B.                                                  | Stack Requirements for the Tunnel Kiln .....                                                                   | Page 37        |
| <b>APPENDIX A: EQUIPMENT LIST.....</b>              |                                                                                                                | <b>Page 39</b> |
| <b>APPENDIX B: TECHNICAL SUPPORT DOCUMENT .....</b> |                                                                                                                | <b>Page 40</b> |

# Permit Conditions

Phoenix Brickyard

V97-021

June 6, 2005

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under Section 304 of the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

## GENERAL CONDITIONS:

1. **AIR POLLUTION PROHIBITED:** [County Rule 100 §301] [SIP Rule 3]  
The Permittee shall not discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or State Implementation Plan (SIP) Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).
2. **CIRCUMVENTION:** [County Rule 100 §104] [40 CFR 60.12] [40 CFR 63.4(b)]  
The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of regulated air pollutants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. The Permittee shall not circumvent the requirements concerning dilution of regulated air pollutants by using more emission openings than is considered normal practice by the industry or activity in question.
3. **CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:**  
[County Rule 100 §401] [County Rule 210 §§301.7, 302.1e(1), 305.1c(1) & 305.1e]  
Any application form, report, or compliance certification submitted under the County Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application form or report as of the time of submittal. This certification and any other certification required under the County Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**4. COMPLIANCE:**

**A. COMPLIANCE REQUIRED:**

- 1) The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit non-compliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only]

[County Rule 210 §§301.8b(4) & 302.1h(1)]

- 2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit.

[County Rule 210 §302.1h(2)]

- 3) For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in County Rule 100.

[County Rule 210 §302.1(h)(6)] [SIP Rule 220 §302.2]

- 4) For any major source operating in a nonattainment area designated as serious for PM<sub>10</sub>, for which the source is classified as a major source for PM<sub>10</sub>, the source shall comply with the best available control technology (BACT), as defined in County Rule 100.

[County Rule 210 §302.1(h)(7)]

**B. COMPLIANCE CERTIFICATION REQUIREMENTS:** [County Rule 210 §305.1d]

The Permittee shall file an annual compliance certification with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:

- 1) The identification of each term or condition of the permit that is the basis of the certification;
- 2) The compliance status;
- 3) Whether compliance was continuous or intermittent;
- 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- 5) Other facts as the Control Officer may require to determine the compliance status of the source.

The annual certification shall be filed at the same time as the second semiannual monitoring report required by the Specific Condition section of these Permit Conditions and every 12 months thereafter.

C. **COMPLIANCE PLAN:** [County Rule 210 §305.1g]

Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the first date of public notice of the proposed conditions for this Permit unless a compliance plan is included in the Specific Conditions section of this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis. [This Condition is federally enforceable if the applicable requirement itself is federally enforceable and only locally enforceable if the applicable requirement itself is locally enforceable only]

**5. CONFIDENTIALITY CLAIMS:**

Any records, reports or information obtained from the Permittee under the County Rules or this Permit shall be available to the public, unless the Permittee files a claim of confidentiality in accordance with ARS §49-487(c) which:

- A. precisely identifies the information in the permit(s), records, or reports which is considered confidential, and
  - B. provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position.
- The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies the claim for trade secrets.

[County Rule 100 §402] [County Rule 200 §411]

A claim of confidentiality shall not excuse the Permittee from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

[County Rule 100 §402]

If the Permittee submits information with an application under a claim of confidentiality under ARS §49-487 and County Rule 200, the Permittee shall submit a copy of such information directly to the Administrator of the USEPA.

[County Rule 210 §301.5]

**6. CONTINGENT REQUIREMENTS:**

*NOTE: This Permit Condition covers activities and processes addressed by the CAA which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA, which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act as well as the Acid Rain provisions required to be in all Title V permits.*

A. **ACID RAIN:** [County Rule 210 §§302.1b(2) & 302.1f] [County Rule 371 §301]

- 1). Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the CAA and incorporated under County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
- 2) The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds under Title IV of the CAA or the regulations promulgated thereunder and incorporated under County Rule 371.

- a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired under the acid rain program and incorporated under County Rule 371, provided that such increases do not require a permit revision under any other applicable requirement.
- b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.
- c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the CAA.
- d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit under County Rule 371:
  - (1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
  - (2) Exceedances of applicable emission rates.
  - (3) The use of any allowance prior to the year for which it was allocated.
  - (4) Violation of any other provision of the permit.

B. ASBESTOS: [40 CFR 61, Subpart M] [County Rule 370 §301.8 - locally enforceable only]  
The Permittee shall comply with the applicable requirements of Sections 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and County Rule 370 for all demolition and renovation projects.

C. RISK MANAGEMENT PLAN (RMP): [40 CFR 68]  
Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in 40 CFR Part 68, then the Permittee shall submit an RMP by the date specified in 40 CFR Section 68.10 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

D. STRATOSPHERIC OZONE PROTECTION: [40 CFR 82 Subparts E, F, and G]  
If applicable, the Permittee shall follow the requirements of 40 CFR 82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices under 40 CFR 82.156.
- 2) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician under 40 CFR 82.161.

If applicable, the Permittee shall follow the requirements of 40CFR 82 Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

**7. DUTY TO SUPPLEMENT OR CORRECT APPLICATION:** [County Rule 210 §301.6]  
If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

**8. EMERGENCY EPISODES:** [County Rule 600 §302] [SIP Rule 600 §302]  
If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 §302.

**9. EMERGENCY PROVISIONS:** [County Rule 130 §§201 & 402]  
An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that cause the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. An emergency occurred and that the Permittee can identify the cause or causes of the emergency;
- B. At the time of the emergency, the permitted source was being properly operated;
- C. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and
- D. The Permittee as soon as possible telephoned the Control Officer, giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210 §302.1.e(2) with respect to deviation reporting. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**10. EXCESS EMISSIONS:** [County Rule 140 §§103, 400]

*NOTE: There are reporting requirements associated with excess emissions. These requirements are contained in the Reporting section of the General Permit Conditions in a subparagraph called Excess Emissions. The definition of excess emissions can be found in County Rule 100 §200.*

- A. Exemptions: The excess emissions provisions of this Permit Condition do not apply to the following standards and limitations:

- 1) Promulgated pursuant to Section 111 (Standards Of Performance for New Stationary Sources) of the Clean Air Act (Act) or Section 112 (National Emission Standards For Hazardous Air Pollutants) of the Act;
  - 2) Promulgated pursuant to Title IV (Acid Deposition Control) of the Act or the regulations promulgated thereunder and incorporated under Rule 371 (Acid Rain) of these rules or Title VI (Stratospheric Ozone Protection) of the Act;
  - 3) Contained in any Prevention Of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the Environmental Protection Agency (EPA);
  - 4) Included in a permit to meet the requirements of Rule 240 (Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources), Subsection 308.1(e) (Permit Requirements For Sources Located In Attainment And Unclassified Areas) of these rules.
- B. Affirmative Defense For Malfunctions: Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
- 1) The excess emissions resulted from a sudden and unavoidable breakdown of the process equipment or the air pollution control equipment beyond the reasonable control of the operator;
  - 2) The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
  - 3) If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, then the owner and/or operator satisfactorily demonstrated that such measures were impractical;
  - 4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
  - 5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
  - 6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
  - 7) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 that could be attributed to the emitting source;
  - 8) The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
  - 9) All emissions monitoring systems were kept in operation, if at all practicable; and
  - 10) The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
- C. Affirmative Defense For Startup And Shutdown:
- 1) Except as provided in paragraph 2) below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to

startup and shutdown shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:

- a. The excess emissions could not have been prevented through careful and prudent planning and design;
- b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
- c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable, during periods of such emissions;
- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- f. During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 (Air Quality Standards) that could be attributed to the emitting source;
- g. All emissions monitoring systems were kept in operation, if at all practicable; and
- h. The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.

- 2) If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to paragraph A. of this Permit Condition.

D. **Affirmative Defense For Malfunctions During Scheduled Maintenance:** If excess emissions occur due to malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to paragraph B. of this Permit Condition.

E. **Demonstration Of Reasonable And Practicable Measures:** For an affirmative defense under paragraphs A and B of this Permit Condition, the owner and/or operator of the source shall demonstrate, through submission of the data and information required by this Permit Condition and the excess emissions reporting requirements of these Permit Conditions, that all reasonable and practicable measures within the owner's and/or operator's control were implemented to prevent the occurrence of the excess emissions.

**11. FEES:** [County Rule 200 §409] [County Rule 210 §§302.1i & 401]  
The Permittee shall pay fees to the Control Officer under ARS 49-480(D) and County Rule 280.

**12. MODELING:** [County Rule 200 §407] [locally enforceable only]  
Where the Control Officer requires the Permittee to perform air quality impact modeling, the Permittee shall perform the modeling in a manner consistent with the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air

Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.

**13. MONITORING / TESTING:**

A. The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order in accordance with County Rule 200 §309.

[County Rule 200 §309] [SIP Rule 41]

B. Except as otherwise specified in these Permit Conditions or by the Control Officer, the Permittee shall conduct required testing used to determine compliance with standards or permit conditions established under the County or SIP Rules or these Permit Conditions in accordance with County Rule 270 and the applicable testing procedures contained in the applicable Rule, the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.

[County Rule 200 §408] [County Rule 210 §302.1.c] [County Rule 270 §§300 & 400]  
[SIP Rule 27]

C. The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:

- 1) Sampling ports adequate for test methods applicable to such source.
- 2) Safe sampling platform(s).
- 3) Safe access to sampling platforms(s).
- 4) Utilities for sampling and testing equipment.

[County Rule 270 §405] [SIP Rule 42]

**14. PERMITS:**

A. BASIC:

[County Rule 210 §302.1h(3)]

This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

B. DUST CONTROL PLAN REQUIREMENTS:

*(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)*

- 1) The Permittee must first submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan before commencing any routine dust generating operation.

[County Rule 310 §303.3] [SIP Rule 310 §303.3]

- 2) A Dust Control Plan shall not be required to play on a ball field and/or for landscape maintenance. For the purpose of this Permit Condition, landscape maintenance does not include grading, trenching, nor any other mechanized surface disturbing activities.  
[County Rule 310 §303.4] [SIP Rule 310 §303.4]
  - 3) Any Dust Control Plan shall, at a minimum, contain all the information described in Section 304 of Rule 310.  
[County Rule 310 §§303.1 & 304] [SIP Rule 310 §§303.1 & 304]
  - 4) Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of Rule 310 at all times.  
[County Rule 310 §303] [SIP Rule 310 §303]
- C. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:
- 1) The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in County Rule 200 §308 and County Rule 210 §§301 & 302.3.  
[County Rule 200 §§301 & 308] [County Rule 210 §§301.4a, b, c, & 400]
  - 2) The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.  
[County Rule 210 §§303.1a, 303.2, 405.4, & 406.4]
  - 3) While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response.  
[County Rule 210 §301.4f]
  - 4) No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
[County Rule 210 §302.1j]
- D. POSTING:
- 1) The Permittee shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.  
[County Rule 200 §311]
  - 2) If a Dust Control Plan, as required by Rule 310, has been approved by the Control Officer, the Permittee shall post a copy of the approved Dust Control Plan in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise keep a copy of the Dust Control Plan available on site at all times.  
[County Rule 310 §401] [SIP Rule 310 §401]

- E. PROHIBITION ON PERMIT MODIFICATION: [County Rule 200 §310]  
The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.
- F. RENEWAL:
- 1) The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §308 and Rule 210 §§301 & 302.3.  
[County Rule 210 §§301.2a, 301.4a, b, c, d, h & 302.3]
  - 2) The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. To apply for a permit renewal, the Permittee shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the CAA, ARS and County Rules.  
[County Rule 200 §§308 & 309] [County Rule 210 §301.1]
  - 3) The Control Officer may require the Permittee to provide additional information and may set a reasonable deadline for a response.  
[County Rule 210 §301.4f]
  - 4) If the Permittee submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit, by the deadline specified by the Control Officer, any additional information identified as being needed to process the application.  
[County Rule 200 §403.2] [County Rule 210 §§301.4f & 301.9]
- G. REVISION / REOPENING / REVOCATION:
- 1) This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.  
[County Rules 200 §402.1]  
  
Any permit revision required under this Permit Condition, 14.G.1, shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal (*Note: this includes a facility wide application and public comment on the entire permit*) and shall reset the five year permit term.  
[County Rules 200 §402.1a(1) & 210 §302.5]
  - 2) This permit shall be reopened and revised under any of the following circumstances:
    - a) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by

the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.

- b) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- c) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a permit under this Permit Condition, 14.G.2, shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 §402.1]

- 3) This permit shall be reopened by the Control Officer and any permit shield revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

[County Rule 210 §407.3]

- 4) This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit revision, revocation and reissuance, or termination or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

[County Rule 210 §302.1h(3)]

#### H. REVISION UNDER A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD:

[County Rule 210 §301.2c] [locally enforceable only]

If the Permittee becomes subject to a standard promulgated by the Administrator under Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

#### I. REQUIREMENTS FOR A PERMIT:

- 1) Air Quality Permit: Except as noted under the provisions in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 §301, for permit issuance, revision, or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application. If a source submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the permit renewal has been issued or denied.

[County Rule 210 §301.9]

- 2) Earthmoving Permit:  
*(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Non-routine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)*

The Permittee shall not cause, commence, suffer, allow, or engage in any earthmoving operation that disturbs a total surface area of 0.10 acre or more without first obtaining a permit from the Control Officer. Permits shall not be required for earthmoving operations for emergency repair of utilities, paved roads, unpaved roads, shoulders, and/or alleys.

[County Rule 200 §305]

- 3) Burn Permit: The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in County Rule 314 §§302.1 and 302.2.

[County Rule 314] [County Rule 200 §306] [SIP Rule 314]

- J. RIGHTS AND PRIVILEGES: [County Rule 210 §302.1h (4)]

This Permit does not convey any property rights nor exclusive privilege of any sort.

- K. SEVERABILITY: [County Rule 210 §302.1g]

The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

- L. SCOPE:

The issuance of any permit or permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a permit or permit revision required under the County Rules.

[County Rule 200 §308]

Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Act (Emergency Orders), including the authority of the Administrator of the USEPA under that section.
- 2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
- 4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee under Section 114 of the Act, or any provision of State law.
- 5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [locally enforceable only]

[County Rule 210 §407.2]

M. **TERM OF PERMIT:** [County Rule 210 §§302.1a & 402]  
This Permit shall remain in effect for no more than 5 years from the date of issuance.

N. **TRANSFER:** [County Rule 200 §404]  
Except as provided in ARS §49-429 and County Rule 200, this permit may be transferred to another person if the Permittee gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of County Rule 200 and the administrative permit amendment procedures under County Rule 210.

**15. RECORDKEEPING:**

A. **RECORDS REQUIRED:** [County Rule 100 §501] [County Rule 310 §502] [SIP Rule 40 A]  
The Permittee shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced, and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

B. **RETENTION OF RECORDS:**  
Unless a longer time frame is specified by these Permit Conditions, information and records required by applicable requirements and copies of summarizing reports recorded by the Permittee and submitted to the Control Officer shall be retained by the Permittee for 5 years after the date on which the information is recorded or the report is submitted

The Permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[County Rule 210 §§302.1d(2)]

C. **MONITORING RECORDS:** [County Rule 210 §§302.1d(1) & 305.1b]  
Records of any monitoring required by this Permit shall include the following:

- 1) The date, place as defined in the permit, and time of sampling or measurements;
- 2) The date(s) analyses were performed;
- 3) The name of the company or entity that performed the analysis;
- 4) The analytical techniques or methods used;
- 5) The results of such analysis; and
- 6) The operating conditions as existing at the time of sampling or measurement.

D. **RIGHT OF INSPECTION OF RECORDS:** [County Rule 100 §106] [SIP Rule 40 D]  
When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of County Rule 100 or any County Rule adopted under County Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that the Permittee produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted under County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

**16. REPORTING:**

*NOTE: See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.*

- A. ANNUAL EMISSION INVENTORY REPORT: [County Rule 100 §505] [SIP Rule 40 B]  
Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30, or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later.

The annual emissions inventory report shall be in the format provided by the Control Officer.

The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under ARS §49-476.01, ARS §49-480.03 and ARS §49-480.04.

- B. DATA REPORTING: [County Rule 100 §502]  
When requested by the Control Officer, the Permittee shall furnish to the Maricopa County Air Quality Division (Division hereafter) information to locate and classify air contaminant sources according to type, level, duration, frequency, and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The Permittee may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

- C. DEVIATION REPORTING: [County Rule 210 §§302.1e & 305.1c]  
The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard. The Permittee shall submit the report to the Control Officer within 2 working days from knowledge of the deviation. The report shall contain a description of the probable cause of such deviations and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time of any long-term corrective actions or preventative actions taken as the result of any deviations from permit requirements.

All instances of deviations from the requirements of this Permit shall also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

- D. EMERGENCY REPORTING: [County Rule 130 §402.4]  
*(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of County Rule 130. These provisions are listed earlier in these General Conditions in the section titled "Emergency Provisions". Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of County Rule 210 to file a deviation report.)*

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

[County Rule 100 §503]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of NO<sub>x</sub> and volatile organic compounds (VOC) from that source. At a minimum, the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually.

F. EXCESS EMISSIONS REPORTING: [County Rule 140 §500] [Locally Enforceable Only]

(NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)

- 1) The owner and/or operator of any source shall report to the Control Officer any emissions in excess of the limits established by the County or SIP Rules or by these Permit Conditions. The report shall be in two parts as specified below:
  - a) Notification by telephone or facsimile within 24 hours of the time when the owner and/or operator first learned of the occurrence of excess emissions that includes all available information from paragraph 2) of this Permit Condition.
  - b) Detailed written notification by submission of an excess emissions report within 72 hours of the notification required by paragraph 1) a) of this Permit Condition.
- 2) The excess emissions report shall contain the following information:
  - a) The identity of each stack or other emission point where the excess emissions occurred;
  - b) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
  - c) The time and duration or expected duration of the excess emissions;
  - d) The identity of the equipment from which the excess emissions emanated;
  - e) The nature and cause of such emissions;
  - f) The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
  - g) The steps that were or are being taken to limit the excess emissions; and
  - h) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the Permit procedures.
- 3) In the case of continuous or recurring excess emissions, the notification requirements of this Permit Condition shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time

period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to paragraphs 1) and 2) of this Permit Condition.

- G. OTHER REPORTING: [County Rule 210 §302.1h(5)]  
The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator of the USEPA along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

**17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:**

The Control Officer, during reasonable hours, for the purpose of enforcing and administering County Rules or any provision of ARS relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

[County Rule 100 §105]

The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;  
[County Rule 210 §305.1f] [SIP Rule 43]
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;  
[County Rule 210 §305.1f] [SIP Rule 43]
- C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;  
[County Rule 210 §305.1f] [SIP Rule 43]
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and  
[County Rule 210 §305.1f] [SIP Rule 43]
- E. To record any inspection by use of written, electronic, magnetic, and photographic media.  
[County Rule 210 §305.1f] [Locally enforceable only]

**SPECIFIC CONDITIONS:****18. ALLOWABLE EMISSIONS LIMITATIONS****A. Facility-Wide Requirements:****1) Visible Emissions Limitations:**

- a) The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity, except as provided in County Rule 300 §302.

[County Rule 300 §301][Locally Enforceable Only]

- b) Except as otherwise provided in Regulation I, Rule 4, Exceptions, the opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.

[SIP Rule 30]

**2) Sulfur Oxide Emissions**

The Permittee shall not emit into the ambient air any sulfur oxide in such manner and amounts as to result in ground level concentrations at any place beyond the premises on which the source is located exceeding the limits shown in Table 1:

**Table 1**

**Sulfur Dioxide Ambient Concentration Limits**

| Concentration of Sulfur Dioxide<br>( $\mu\text{g}/\text{m}^3$ ) | Averaging Time (hours) |
|-----------------------------------------------------------------|------------------------|
| 850                                                             | 1                      |
| 250                                                             | 24                     |
| 120                                                             | 72                     |

[SIP Rule 32 F]

**B. Allowable Emissions for Clay Raw Material Storage Pile:**

The Permittee shall not allow visible fugitive dust emissions to exceed 20% opacity. Exceedances of the opacity limit that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the Permittee demonstrates all of the following conditions:

- 1) All control measures required were followed and one or more of the control measures listed below were applied and maintained;
- a) Cease dust-generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour. If dust generating operations are ceased for the remainder of the work day, stabilization measures must be implemented; or
- b) Apply water or other suitable dust suppressant twice per hour; or
- c) Apply water as necessary to maintain a soil moisture content at a minimum of 12% as determined by ASTM Method D2216-98 or other equivalent as approved by the Control Officer and the Administrator of the EPA. For areas which have an

optimum moisture content for compaction of less than 12% as determined by ASTM Method D1557-91(1998) or other equivalent as approved by the Control Officer and the Administer of EPA, maintain at least 70% of the optimum soil moisture content.

- 2) The 20% opacity exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measures;
- 3) The Permittee compiled and retained records, in accordance with Recordkeeping requirements of this permit; and
- 4) The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Environmental Services Department Air Quality Division monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.

[County Rule 310 §301 and Table 2][SIP Rule 310 §301 and Table 2]

C. Allowable Emissions for Clay Raw Material Handling:

The Permittee shall not discharge, cause or allow to be discharged into the ambient air:

- 1) Stack emissions exceeding 7 percent opacity and containing more than 0.02 gr/dscf (50 mg/dscm) of particulate matter.
- 2) Fugitive dust emissions from any "transfer point" on a conveying system exceeding 7% opacity.
- 3) Fugitive dust emissions exceeding 15% opacity from any crusher.
- 4) Fugitive dust emissions exceeding 10% opacity from any affected operation or process source, excluding truck dumping directly into any screening operation, feed hopper or crusher.
- 5) Fugitive dust emissions exceeding 20% opacity from truck dumping directly into any screening operation, feed hopper, or crusher.

[County Rule 316 §301][SIP Rule 316 §301]

All other activities not specifically listed in paragraph 1) of this permit condition associated with the processing of nonmetallic minerals shall, at a minimum, meet the provisions of County Rule 310.

[County Rule 316 §304][Locally Enforceable Only]

D. Allowable Emissions for Tunnel Kiln:

1) Visible Emissions Limitations:

- a) The Permittee shall not discharge, cause or allow to be discharged into the ambient air any air contaminant from a single source of emissions, other than uncombined water, in excess of 20% opacity.

[County Rule 325 §301][Locally Enforceable Only]

2) Particulate Matter Limitations:

- a) The Permittee shall limit Particulate Matter (PM) from the tunnel kiln to no more than 0.42 lbs per ton of fired brick.

[County Rule 325 §302.1][Locally Enforceable Only]

E. Allowable Emissions for Volatile Organic Compounds (VOCs):

The Permittee shall not discharge more than 15 pounds (6.8 kg) of volatile organic compounds into the atmosphere in any one day from any machine, equipment, device or other article in which any volatile organic compound or any material containing a volatile organic compound comes into contact with flame or is evaporated at temperatures exceeding

200 °F (93.3 °C) in the presence of oxygen, unless the entire amount of such discharge has been reduced in accordance with County Rule 330 §304.

[County Rule 330 §301][Locally Enforceable Only]

F. Allowable Emissions for Hydrogen Fluoride (HF):

The Permittee shall limit the average daily HF emission rate from the kilns to 287 lbs/day, averaged over a one-month period, as determined by the following equation:

$$Q_{HF} = P \times EF_{HF} \div D$$

where,

$Q_{HF}$  = Daily average hydrogen fluoride emission rate [lbs/day]

$P$  = Material throughput into kiln [tons/month]

$EF_{HF}$  = Hydrogen fluoride emission factor [lbs HF / ton of brick processed]. This emission factor shall be the average emission factor as determined from all data obtained from a series of approved source tests conducted in accordance with Permit Condition 22.B. Prior to conducting source testing, an emission factor of 1.602 lbs HF / ton of brick fired shall be used.

$D$  = Number of operating days during the month [days/month]

[County Rule 220 §304][Locally Enforceable Only]

## 19. OPERATIONAL LIMITATIONS AND STANDARDS REQUIREMENTS

### A. Facility-Wide Requirements:

- 1) **Gaseous and Odorous Emissions:** The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[County Rule 320 §300][SIP Rule 32A]

- 2) **Material Containment Required:** Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalis, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[County Rule 320 §302][SIP Rule 32C]

- 3) **Stack Requirements:** Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

The Permittee shall not reinstall the rain caps on the kiln stacks unless appropriate dispersion technology is used to maintain or reduce the concentration of pollutants emitted from the kiln stack at the property boundaries. If the rain caps are reinstalled, the Permittee shall submit an application for a permit revision and conduct emissions modeling to ensure compliance with all applicable standards.

[County Rule 320 §303][SIP Rule 32D]

B. Operational Requirements for Clay Raw Material Storage Pile:

- 1) Stabilization Requirements for Fugitive Dust Sources
  - a) The Permittee shall not allow visible dust emissions from unpaved haul/access road to exceed 20% opacity and either;
    - (1) shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>; or
    - (2) shall not allow the silt content to exceed 6%
  - b) The Permittee shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road, limit vehicle trips to no more than 20 per day and limit vehicle speeds to no more than 15 miles per hour. If complying with subsection 302.2(b) of County Rule 310, the Permittee must include, in the Dust Control Plan, the number of vehicles traveled on the unpaved haul/access road (i.e. number of employee vehicles, earthmoving equipment, haul trucks and water trucks)

[County Rule 310 §302.2][SIP Rule 310 §302.2]

- 2) Control Measures: The Permittee shall implement control measures before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. See subsection 304.3, Table 1 and Table 2 of County Rule 310. For the purpose of these Permit Conditions, any control measure that is implemented must meet the applicable standard(s) described in County Rule 310§301 and §302, as determined by the corresponding test method(s), as applicable, and must meet other applicable standard(s) set forth in County Rule 310. Failure to comply with the provisions of County Rule 310 §308 (Work Practices), as applicable, and/or of an approved Dust Control Plan, is deemed a violation of this Permit.

[County Rule 310 §306][SIP Rule 310 §306]

- 3) Should any primary control measures(s) in an approved Dust Control Plan prove ineffective, the Permittee shall immediately implement the contingency control measure, which may obviate the requirement of submitting a revised Dust Control Plan. Any control measure that is implemented must meet the applicable standards described in these permit conditions, as determined by the corresponding test method(s), as applicable, and must meet other applicable standards set forth in County Rule 310.

[County Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]

[SIP Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]

- 4) Work Practices: The Permittee shall comply with the following work practices.
  - a) Spillage, Carry-out, Erosion, and/or Trackout
    - (1) Install a suitable trackout control device (examples of trackout control devices are described in Table 1 (trackout –1J, 2J, 3J) of County Rule 310 that controls and prevents trackout and/or remove particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse such work site at all exits onto a paved public roadway:
      - (a) From all work sites with a disturbed surface area of five acres or larger
      - (b) From all work sites where 100 cubic yards of bulk materials are hauled on-site and/or off-site per day
    - (2) Cleanup spillage, carry-out, erosion and/or trackout on the following time-schedule:

- (a) immediately, when spillage, carry-out, and/or trackout extends cumulative distance of 50 linear feet or more; or
- (b) At the end of the work day, when spillage, carry-out, erosion, and/or trackout are other than the spillage, carry-out, erosion, and/or trackout described above, in subsection 308.3(b)(1) of County Rule 310.

[County Rule 310 §308.3]

[SIP Rule 310 §308.3][SIP Rule 31 §§6 (a) and (b)]

- b) Unpaved Haul/Access Roads: Implement 1 or more control measure(s) described below before engaging in the use of or in the maintenance of unpaved haul/access roads.

- (1) Limit vehicle speed to 15 miles per hour or less and limit vehicular trips to no more than 20 per day;
- (2) Apply water, so that the surface is visibly moist and subsection 302.2 of County Rule 310 is met;
- (3) Pave;
- (4) Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with subsection 302.2 of County Rule 310;
- (5) Apply a suitable dust suppressant, in compliance with subsection 302.2 of County Rule 310.

[County Rule 310 §308.4]

[SIP Rule 310 §308.4][SIP Rule 31 §§6 (a),(b) and 7(b)]

- c) Open Storage Piles: For the purpose of these permit conditions, an open storage pile is any accumulation of bulk material with a 5% or greater silt content which in any one point attains a height of three feet and covers a total surface area of 150 square feet or more. Silt content shall be assumed to be 5% or greater unless a person can show, by testing in accordance with ASTM Method C136-96A or other equivalent method approved in writing by the Control Officer and the Administrator of EPA, that the silt content is less than 5%.

- (1) During stacking, loading, and unloading operations, apply water, as necessary, to maintain compliance with Section 301 of County Rule 310; and
- (2) When not conducting stacking, loading, and unloading operations, comply with one of the following work practices:
  - (a) Cover open storage piles with tarps, plastic, or other material to prevent wind from removing the coverings; or
  - (b) Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-98, or other equivalent as approved by the Control Officer and the Administrator of EPA. For areas which have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-91(1998) or other equivalent approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the optimum soil moisture content; or
- (c) Meet one of the stabilization requirements described in subsection 302.3 of County Rule 310; or
- (d) Construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose

porosity is no more than 50%. If implementing the option specified under this paragraph, the Permittee must also implement either paragraph (b) or (c) above.

[County Rule 310 §308.6]

[SIP Rule 310 §308.6][SIP Rule 31 §4 (a) and (b)]

C. Operational Requirements for Clay Raw Material Handling :

1) Control Requirements:

- a) Whenever a grinder or brick machine is in operation, its dust collection system shall be in operation and vented to a baghouse.
- b) Baghouses shall be operated with a pressure drop of between 1 and 8 inches of water.
- c) The Permittee shall install, maintain and properly calibrate manometers or differential pressure gauges to monitor the pressure drop across each baghouse.

2) Operation and Maintenance Plan Requirements:

- a) The Permittee shall provide and maintain, readily available on-site at all times, (an) N/A plan(s) for any ECS, any other emission processing equipment, and any ECS monitoring devices that are used pursuant to these permit conditions.  
[County Rule 316 §305.1(a)][SIP Rule 316 §304]
- b) The Permittee shall submit to the Control Officer for approval the N/A plans of each ECS and of each ECS monitoring device that is used pursuant to these Permit Conditions.  
[County Rule 316 §305.1(b)][SIP Rule 316 §304]
- c) The Permittee shall comply with all the identified actions and schedules provided in each N/A Plan.  
[County Rule 316 §305.1(c)][SIP Rule 316 §304]
- d) The Permittee shall install, maintain and calibrate monitoring devices described in the N/A Plan. The monitoring devices shall measure pressures, rates of flow, and/or other operating conditions necessary to determine if the control devices are functioning properly.  
[County Rule 316 §305.2][SIP Rule 316 §304]
- e) Unless notified in writing by the Control Officer, the Permittee must fully comply with all N/A Plans that the Permittee has submitted for approval, even if such N/A Plans have not yet been approved.  
[County Rule 316 §305.3][Locally Enforceable Only]

D. Operational Requirements for VOCs:

- 1) Mold Release Lube Oil: The Permittee shall use mold release lube oil with a vapor pressure of less than 1 mm Hg at 20 °C.  
[County Rule 210 §302.1]
- 2) Equipment Cleanup: The Permittee shall not use any liquid materials containing more than 10 percent volatile organic compounds for the cleanup of equipment unless:
  - a) The used cleaning liquids are collected in a container which is closed when not in use and is disposed of in a manner such that volatile organic compounds are not emitted into the atmosphere, or

- b) The equipment is disassembled and cleaned in a solvent vat, which is closed when not in use, or cleaning is done by other methods, approved in writing by the Control Officer, which limit evaporation.

[County Rule 330 §305][Locally Enforceable Only]

- 3) VOC Containment and Disposal: The Permittee shall not store, discard, or dispose of VOC or VOC-containing material in a way intended to cause or to allow the evaporation of VOC to the atmosphere. Reasonable measures shall be taken to prevent such evaporation, which include but are not limited to the following:
- a) All materials from which VOC can evaporate, including fresh solvent, waste solvent and solvent-soaked rags and residues, shall be stored in closed containers when not in use;
  - b) Such containers one gallon and larger shall be legibly labeled with their contents;
  - c) Records of the disposal/recovery of such materials shall be kept. Records of hazardous waste disposal shall be kept in accordance with hazardous waste disposal statutes.

[County Rule 330 §306][Locally Enforceable Only]

E. Operational Requirements for Storage Tanks:

- 1) The Permittee shall limit gasoline deliveries to less than 120,000 gallons in any 12 consecutive calendar months.

[County Rule 353 §305.2][SIP Rule 353 §303.2]

- 2) Basic Tank Integrity: No vapor or liquid escapes are allowed through a dispensing tank's outer surfaces, nor from any of the joints where the tank is connected to pipe(s), wires or other system.

a) VOC Emissions Standard:

Tanks and their fittings shall be vapor tight except for the outlet of a pressure/vacuum relief valve on a dispensing tank's vent pipe. Specifically, this means that at a probe tip distance of 1 inch (2.5 cm) from a surface, no vapor escape shall exceed 1/5 of the lower explosive limit. This applies to tanks containing gasoline regardless of whether they are currently being filled, and to caps and other tank fittings.

[County Rule 353 §301.1][SIP Rule 353 §301.1]

b) Leakage Limits –Liquid Leaks and Spills:

- (1) Gasoline storage and receiving operations shall be leak free. Specifically, no liquid gasoline escape of more than 3 drops per minute is allowed. This includes leaks through the walls of piping, fittings, fill hose(s), and vapor hose(s).

- (2) There shall be no excess gasoline drainage from the end of a fill hose or a vapor hose. Specifically, not more than 2 teaspoonful of gasoline shall be lost in the course of a connect or disconnect process.

[County Rule 353 §301.2][SIP Rule 353 §301.2]

- c) Spill Containment Equipment: The entire spill containment system including gaskets shall be kept vapor-tight.

- (1) The Spill Containment Receptacle:

- (a) The outer surface of the spill containment receptacle shall have no holes or cracks and shall allow no vapors to pass from the dispensing tank through it to the atmosphere.
  - (b) Spill containment receptacles shall be kept clean and free of foreign material at all times.
  - (c) Spill containment receptacles shall be inspected at least weekly. Records of inspection and cleaning shall be kept in accordance with the recordkeeping requirements of these permit conditions. [NOTE: Pursuant to the Department's Technical Guidance Memo (TG00-002), if delivery of gasoline occurs less than weekly, inspection and recording of the inspection at the time of delivery will be considered an acceptable alternative to weekly inspection and recordkeeping requirements of this permit condition.]
- (2) If the spill containment is equipped with a passageway to allow material trapped by the containment system to flow into the interior of the dispensing tank:
- (a) The passageway shall be kept vapor tight at all times, except during the short period when a person opens the passageway to immediately drain material trapped by the containment system into the tank.
  - (b) The bottom of the receptacle shall be designed and kept such that no puddles of gasoline are left after draining through the passageway has ceased.
- (3) The Permittee is responsible for assuring that before a delivery vessel leaves the premises after a delivery:
- (a) Any gasoline in a dispensing tank's spill containment receptacle has been removed.
  - (b) Any gasoline that a person has taken out of a spill receptacle, as a free liquid or as absorbed into/onto other material removed from the receptacle, shall be contained in such a way that VOC emission is prevented; disposal in conformance with applicable hazardous waste rules is sufficient to meet this requirement.
  - (c) Any plunger/stopper assembly is unimpeded and sealing correctly.
- d) Criteria Of Violation/Exceedance For Spill-Containment Receptacles: A reading on a CGD or OVA exceeding 1/5 LEL (10,000 ppm as methane) is an exceedance. The procedure for performing a determination is set forth in County Rule 353 §504.3.

[County Rule 353 §301.3][SIP Rule 353 §301.3]

### 3) Fill Pipe Requirements

- a) Each fill-line into a stationary dispensing tank shall be equipped with a permanent submerged fill pipe that has a discharge opening which is completely submerged when the liquid level is 6 inches above the tank bottom.
  - (1) Threads, gaskets, and mating surfaces of the fill pipe assembly shall be designed and maintained tight. There shall be no liquid or vapor leakage at the joints of the assembly.
  - (2) The Permittee is responsible to assure that external fittings of a fill pipe assembly shall be inspected weekly to assure that cap, gasket, and piping are intact and are not loose. [NOTE: Pursuant to the Department's Technical Guidance Memo (TG00-002), if delivery of gasoline occurs less than weekly, inspection and recording of the inspection at the time of delivery

will be considered an acceptable alternative to weekly inspection and recordkeeping requirements of this permit condition].

- (a) A record of the inspection shall be made in accordance with the recordkeeping requirements of these permit conditions.
- (b) The Permittee shall act to prevent driver/deliverers from connecting the delivery hose coupling to a fill pipe coupling with so much twisting force that the fill pipe assembly is loosened. One method of complying is to have a CARB-certified swivel coupling as part of the fill pipe assembly (reference County Rule 353 §503.4 for CARB).

[County Rule 353 §302.1][SIP Rule 353 §302.1]

b) **Fill Pipe Caps:**

- (1) The cap shall have a securely attached, intact gasket.
- (2) The cap and its gasket shall always function properly, latch completely so that it cannot then be easily twisted by hand, and have no structural defects.
- (3) The cap of a gasoline fill pipe shall always be fastened securely on the fill pipe except immediately before, during, and immediately after:
  - (a) "Sticking" the tank to measure gasoline depth.
  - (b) Delivering gasoline into the tank.
  - (c) Doing testing, maintenance or inspection on the gasoline/vapor system.
- (4) Do not unfasten or remove a fill pipe cap unless every other fill pipe is either securely capped or connected to a delivery hose, except as otherwise needed for testing, maintenance, or inspection.

[County Rule 353 §302.2][SIP Rule 353 §302.2]

c) **Fill Pipe Obstructions:**

- (1) Any type of screen and/or other obstructions in fill pipe assemblies shall be permanently removed by November 1, 1999, unless it is specifically allowed by an Air Pollution Permit or is CARB-certified, as referenced in County Rule 353 §503.4.
- (2) A screen or other obstruction, allowed by Air Pollution Permit or CARB, shall be temporarily removed by the Permittee prior to inspection by the Control Officer to allow measurements pursuant to this rule.

[County Rule 353 §302.4][SIP Rule 353 §302.4]

- d) **Overfill Protection Equipment:** Overfill prevention equipment shall be vapor tight to the atmosphere. Any device mounted within the fill pipe shall be so designed and maintained that no vapor from the vapor space above the gasoline within the tank can penetrate into the fill pipe or through any of the fill pipe assembly into the atmosphere.

[County Rule 353 §302.5][SIP Rule 353 §302.5]

F. Operational Requirements for Production Limits:

- 1) The Permittee shall limit the production of bricks such that the hydrogen fluoride emission limit indicated in Permit Condition 18.E is not exceeded. The production limit shall be calculated using the following equation:

$$P = Q_{HF} \times D \div EF_{HF}$$

where,

- $Q_{HF}$  = Daily average hydrogen fluoride emission limit of 287 lbs/day  
 $P$  = Production limit of brick [tons/month]  
 $EF_{HF}$  = Hydrogen fluoride emission factor [lbs HF / ton of brick processed]. This emission factor shall be the average emission factor as determined from all data obtained from a series of approved source tests conducted in accordance with Permit Condition 22.B. Prior to conducting source testing, an emission factor of 1.602 lbs HF / ton of brick fired shall be used  
 $D$  = Number of operating days during the month [days/month]

The production limit shall be recalculated each time the hydrogen fluoride emission factor is revised pursuant to testing requirements of Permit Condition 22.B.

Recalculation of the hydrogen fluoride emission factor shall occur within 15 days following the submittal of each test report required under Permit Condition 22.B.

[County Rule 210 §302.1]

- 2) The Permittee shall limit the combined throughput of material into the Tunnel Kiln and Roller Kiln to 9.9 tons/hr.  
[County Rule 210 §302.1]
- 3) The Permittee shall not use the round kiln for firing bricks.  
[County Rule 210 §302.1]

H. Operational Requirements for Tunnel Kiln Baghouse:

- 1) The Permittee shall install, operate and maintain the Donaldson Torit (DC-005) baghouse on the tunnel kiln. The tunnel kiln shall be vented to the baghouse without bypass.  
[SIP Rule 3]  
[County Rule 210 §302.1b]
- 2) The Permittee shall operate and maintain the Donaldson Torit (DC-005) baghouse in accordance with the requirements of the most recently submitted Operations and Maintenance (O&M) Plan for that piece of equipment.  
[County Rule 200 §309] [Locally Enforceable Only]
- 2) The Permittee shall operate the Donaldson Torit (DC-005) baghouse at:
  - a) No less than 95% removal efficiency for PM as demonstrated by EPA Methods 5 and 202.  
[County Rule 210 §302.1b] [Locally Enforceable Only]

20. **MONITORING AND RECORDKEEPING REQUIREMENTS**

A. Facility-Wide Requirements:

- 1) Visible Emissions Requirements:
  - a) On a daily basis, the Permittee shall conduct a facility walk-through and observe visible emissions from any device capable of emitting any air contaminant other than uncombined water. The Permittee shall log the visual observations, including the date and time when that reading was taken, whether or not visible emissions were present, name of the person who took the reading and any other related information.  
[County Rules 300, 210 §302.1(c)(1)][SIP Rule 30]

- b) If visible emissions are observed from any device capable of emitting any air contaminant other than uncombined water; the Permittee shall obtain an opacity reading conducted in accordance with EPA Reference Method 9 by a certified visible emissions (VE) reader. This reading shall be taken immediately after the observation of visible emissions and taken daily thereafter during each day that the unit is in operation until there are no visible emissions during operation. The Permittee shall log all visual observations including the following:
- (1) The date and time that a visible emissions or Method 9 reading was taken;
  - (2) The name of the person who took the reading;
  - (3) Whether or not visible emissions were present;
  - (4) The opacity of visual emissions determined by a Method 9 reading, if applicable;
  - (5) A description of any corrective actions taken, including date, if applicable; and
  - (6) Any other related information.
- [County Rule 210 §302.1(c)(1)][SIP Rule 31]
- c) Opacity Readings:
- (1) Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9.  
[40 CFR 60.11.b][County Rule 300 §501]
  - (2) Opacity of visible emissions from intermittent sources as defined by County Rule 300 §201 shall be determined by observations conducted in accordance with 40 CFR Part 60 Appendix A, Method 9, except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.  
[County Rule 300 §502][Locally Enforceable Only]
- 2) Odor Log Requirement:  
The Permittee shall maintain a log of complaints of odors detected off-site. The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.
- [County Rule 210 §302.1.c.(2)]

B. Monitoring and Recordkeeping Requirements for Clay Raw Material Storage Pile:

- 1) The Permittee shall keep a daily written log recording the actual application or implementation of the control measures delineated in the approved Dust Control Plan. The log or the records and supporting documentation shall be made available to the Control Officer within 48 hours, excluding weekends, from written or verbal request. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

[County Rule 310 §502][SIP Rule 310 §502]

- 2) Copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation shall be retained at least five years from the date such records are established.

[County Rule 310 §503][SIP Rule 310 §503]

- 3) The following test methods shall be used as appropriate.

- a) Dust Generating Operations: Opacity observations of a source engaging in dust generating operations shall be conducted in accordance with County Rules Appendix C, Section 3 (Visual Determination Of Opacity Of Emissions From Sources For Time-Averaged Regulations), except opacity observations for intermittent sources shall require 12 rather than 24 consecutive readings at 15-second intervals for the averaging time.

[County Rule 310 §501.1(a), Appendix C Section 3]

[SIP Rule 310 §501.1(a), Appendix C Section 3]

- b) Unpaved Haul/Access Road: Opacity observations of any unpaved haul/access road (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 (Test methods for Stabilization-for unpaved Roads and Unpaved Parking Lots) of the County Rules.

[County Rule 310 §501.1(c), Appendix C Section 2.1]

[SIP Rule 310 §501.1(c), Appendix C Section 2.1]

- c) Unpaved Haul/Access Road: Stabilization observations for unpaved haul/access roads (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 (Test Methods for Stabilization-for Unpaved Roads and Unpaved Parking Lots) of the County Rules. When more than 1 test method is permitted for a determination, an exceedance of the limits, established in this rule, determined by any of the applicable test methods constitutes a violation of the County Rules.

[County Rule 310 §501.2(b), Appendix C Section 2.1]

[SIP Rule 310 §501.2(b), Appendix C Section 2.1]

C. Monitoring and Recordkeeping Requirements for Clay Raw Material Handling :

The Permittee shall keep the following records for at least five years and shall make them available to the Control Officer upon request:

- 1) Operational information required by these Permit Conditions shall be kept in a complete and consistent manner on site and be made available without delay to the Control Officer upon request.

- 2) Daily records shall be kept for all days that a plant is actively operating. Records shall include the following:
  - a) hours of operation;
  - b) throughput per day of basic raw materials, including sand, aggregate, cement, (tons/day)
  - c) amount of each basic raw material including sand, aggregate, cement, fly ash delivered per day (tons/day)
- 3) Baghouse records shall include dates of inspection, dates and designation of bag replacement, dates of service or maintenance, related activities, static pressure gauge (manometer) daily readings. Records of time, date and cause of all control device failure and down time shall also be maintained.
- 4) The Permittee shall maintain a record of the periods of time that an approved ECS is used to comply with these Permit Conditions. The following system parameters shall be recorded in accordance with the approved N/A Plan: pressure drop, compressed cleaning air pressure and visible emissions. The records shall account for any periods when the control system was not operating. The Permittee shall also maintain results of the visual inspection and shall record any corrective action taken, if necessary.

[County Rule 316 §501][County Rule 210 §302]

[SIP Rule 316 §§501 &502]

D. Monitoring and Recordkeeping Requirements for VOCs:

- 1) The Permittee shall keep the following records for at least five years and shall make them available to the Control Officer upon request:
  - a) Current List: Maintain a current list of coatings, adhesives, makeup solvents, and any other VOC-containing materials (including mold release lube oils); state the VOC content of each in pounds per gallon or grams per liter. VOC content shall be expressed less water and non-precursor compounds for materials, which are not used for cleaning, or cleanup. Monthly Usage Records: Maintain monthly records of the amount of each coating; adhesive; makeup solvent; solvent used for surface preparation, for cleanup, and for the removal of materials; and any other VOC-containing materials used.
  - b) Discarded Materials: Maintain records of the type, amount, and method of disposing of VOC-containing materials on each day of disposal.
  - c) Measurement of VOC content of materials shall be conducted and reported in accordance with EPA Test Method 24. If acceptable to the Control Officer, VOC content may also be determined using Certified Product Data Sheets or their equivalent as supplied by the manufacturer as long as no additional VOC containing material is added prior to use.

[County Rule 330 §§503 and 504.1][Locally Enforceable Only]

- 2) On a weekly basis, the Permittee shall conduct a facility walk-through and observe that reasonable measures are being taken to prevent evaporation of VOC to the atmosphere. The Permittee shall log the observations, including the date and time, whether reasonable measures were being taken, name of the person who took the reading, any problems observed and correction actions taken.

[County Rule 210 §302.1c][Locally Enforceable Only]

E. Monitoring and Recordkeeping Requirements for Storage Tanks:

- 1) The Permittee shall record by the end of the following month, the total amount of gasoline received each month.
- 2) The Permittee shall cause weekly records of fill tube, vapor valve and spill containment inspection to be kept, as well as, records of any corrective actions and their dates. The finding of such weekly inspections shall be permanently entered in a record or logbook by the end of Saturday of the following week. [NOTE: Pursuant to the Department's Technical Guidance Memo (TG00-002), if delivery of gasoline occurs less than weekly, inspection and recording of the inspection at the time of delivery will be considered an acceptable alternative to weekly inspection and recordkeeping requirements of this permit condition].
- 3) These records and any reports or supporting information required by these permit conditions or by the Control Officer shall be retained for at least 5 years.
- 4) The Permittee shall maintain records of the past 12 months in a readily accessible location and must be made available to the Control Officer without delay upon verbal or written request.

[County Rule 210 §302.1c.(2)][County Rule 353 §502][SIP Rule 353 §502]

F. Monitoring and Recordkeeping Requirements for Production Limits and Hydrogen Fluoride Emission Limits:

- 1) The Permittee shall maintain a daily log and a 30-day rolling total [in tons] of the combined throughput of material into the kilns.
- 2) The Permittee shall maintain a daily log and a 30-day rolling total of the combined number of hours of operation of the kilns.
- 3) On a daily basis the Permittee shall calculate the average throughput of material into the kilns [in tons per hour] over the most recent 30-day period. The average throughput shall be calculated by dividing the total combined throughput of material into the kilns over the most recent 30-day period by the total combined number of operating hours of the kilns over the same 30-day period.
- 4) The Permittee shall maintain a log of the production limit calculated pursuant to Permit Condition 19.F.1.
- 5) By the 15<sup>th</sup> day following the end of each calendar month, the Permittee shall calculate the average daily emission rate of hydrogen fluoride for the preceding month, using the equation specified in Permit Condition 18.F. The hydrogen fluoride emission factor [lbs HF / ton of brick processed] used in each calculation shall be clearly indicated.

[County Rule 210 §302.1]

G. Monitoring and Recordkeeping Requirements for Baghouses Vented Outdoors:

- 1) If visible emissions are observed from a baghouse and the problem isn't corrected within twelve (12) hours of the observation, the Permittee shall investigate the problem, document the findings, and provide a description of the corrective action taken to bring the control device into proper operation by the following business day. In addition, the Control Officer may require the Permittee to submit a Corrective Action Plan (CAP).

[County Rule 200 §309] [Locally Enforceable Only]

- 2) The Control Officer may require the CAP contain one or more of the following elements:
  - a) Improved preventive maintenance practices.
  - b) Improved baghouse operating practices.
  - c) Process operation changes.

- d) Other actions appropriate to improve baghouse performance.
- e) Schedule for CAP implementation and periodic reporting on the progress of CAP implementation.

[County Rule 200 §309] [Locally Enforceable Only]

- 3) The Permittee shall install, operate and maintain pressure differential devices on the baghouses.

[County Rule 210 §302.1c] [Locally Enforceable Only]

- 4) Daily pressure differential readings shall be performed for each baghouse every day that the facility operates. These records shall be completed by the next business day following the last day of each week. The Permittee shall log all pressure differential readings, including the date when the reading was taken, identify each baghouse, name or initials of the person who took the reading, and any other related information. The Permittee shall investigate the cause of any pressure differential reading outside of the applicable parametric range of 0.5 to 8 inches of water column as specified in the O & M Plan for the Donaldson Torit baghouse to identify, correct or repair the problem and record in a log book the cause of the problem and the corrective action initiated to remedy the abnormal pressure differential reading.

[County Rule 210 §302.1d] [Locally Enforceable Only]

- 5) If the frequency of measurement of a pressure differential outside the applicable pressure differential range of 0.5 to 8 inches of water column for the Donaldson Torit baghouse (DC-005) or other information indicate that the baghouse is not being operated in accordance with the O&M plan most recently approved by the Control Officer, the Department may require the Permittee to submit a Corrective Action Plan (CAP).

[County Rule 200 §309] [Locally Enforceable Only]

H. Monitoring and Recordkeeping Requirements for Tunnel Kiln:

- 1) Daily records of kiln feed fired and hours of operation. These records shall be completed by the next business day following the last day of each week.

[County Rule 325 §502] [Locally Enforceable Only]

- 2) Monthly records of material delivered to the site for processing in the tunnel kiln and the amount of product produced reported in tons. These records shall be completed by the 15<sup>th</sup> day following the end of each calendar month.

[County Rule 325 §502] [Locally Enforceable Only]

## 21. REPORTING REQUIREMENTS

*\* Note: Additional reporting requirements are found in the general conditions of this permit.*

The Permittee shall file semiannual monitoring reports, which shall be certified as to its truth, accuracy and completeness by a responsible official in the manner required by County Rule 210 §§301.7 and 305.1(e), with the Control Officer, Attn: Large Source Compliance Supervisor. The initial reporting period shall begin on the permit issuance date and shall cover a period of 6 months or less. The second and subsequent reporting periods shall be in 6 month intervals after the end of the initial reporting period. The semiannual monitoring reports shall be filed within 30 days after the end of the reporting period. Each report shall cover all instances of deviations from these permit conditions during the reporting period, the cause of the deviations if any were present, and any applicable corrective actions taken. The monitoring report shall also contain the following information at a minimum:

[County Rule 210 §302.1 e (1)] [Locally Enforceable Only]

### A. Production Log and Hydrogen Fluoride Emissions Log:

- 1) The Permittee shall include the result of the daily calculation of the hourly throughput of material into the kilns (averaged over a 30-day rolling period), as required in Permit Condition 20.F(3).

[County Rule 210 §302.1 e (1)]

- 2) The Permittee shall include the average daily hydrogen fluoride emissions, as required in Permit Condition 20.F(5).

[County Rule 210 §302.1 e (1)] [Locally Enforceable Only]

- 3) The Permittee shall include calculations of all production limits in accordance with Permit Condition 19.F.1.

[County Rule 210 §302.1 e (1)] [Locally Enforceable Only]

### B. Odor Log:

The Permittee shall include a copy of the portion of the odor log, which covers the applicable 6-month reporting period in each of the semiannual compliance reports. If no complaints were received during the reporting period, a statement to that effect may be substituted for the copy of the odor log.

[County Rule 210 §302.1(e)] [Locally Enforceable Only]

### C. Storage Tanks:

- 1) A summary of the monthly and 12-month rolling total gasoline delivery records; and
- 2) Date of fill pipe reinstallation and result of follow up inspection if applicable; and
- 3) A summary of any problems discovered during the inspection of the full table, vapor valve and vapor containment inspection, the date the problem was discovered, any corrective actions taken and the date that the corrective action was taken.

[County Rule 210 §302.1 e. (1)] [Locally Enforceable Only]

### D. Walk-around Reporting:

- 1) Visible emissions
  - a) Dates of any day that the required visible emissions observations were not taken, an explanation for the deviation from the required monitoring schedule, and a description of any action taken to ensure that the future observations are performed, if applicable.

- b) If any of the opacity limits were exceeded during the reporting period, the following information shall be provided:
- (1) Dates on which opacity was exceeded;
  - (2) Source of visible emissions causing opacity limit exceedance;
  - (3) Length of time until opacity exceedance was corrected;
  - (4) The opacity of visible emissions determined by a Method 9 reading;
  - (5) A description of any corrective actions taken, including date taken, if applicable; and
  - (6) Name of individual certified as Method 9, opacity reader, which includes date of last certification, and company/agency providing the certification;
  - (7) Any other related information.

[County Rule 210 §302.1(e)] [Locally Enforceable Only]

- 2) VOC Emissions: the Permittee shall report information found and documented during the weekly walk-through regarding the storage of VOC containing materials including:
- a) Weeks when no walk-through was performed and explanation for the deviation from the required monitoring schedule.
  - b) Instances of unnecessary VOC evaporation found and corrective actions taken.
  - c) Any instances of materials containing more than 10 percent VOC content used in cleaning solutions.

[County Rule 210 §302.1(e)] [Locally Enforceable Only]

E. Baghouse Reporting:

The Permittee shall report all differential pressure drop readings outside of the range specified in these Permit Conditions. The report shall include the date of the excursion, what corrective actions were taken to correct the excursion, and when the reading was brought back within the allowable range.

[County Rule 210 §302.1(e)] [Locally Enforceable Only]

## 22. TESTING REQUIREMENTS

- A. Testing Requirements: The Permittee shall conduct performance tests on the following equipment within 60 days after the permit issuance date or within 60 days after the new applicable equipment has achieved the capability to operate at its maximum production rate on a sustained basis, whichever occurs last. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including test report submittal, extend beyond 180 days after the permit issuance date.

[County Rule 270 §401][SIP Rule 27 §A][40 CFR §60.8(a)]

[County Rule 210 §302.1b]

- 1) Baghouses (DC-001 through DC-004):
  - a) The source tests shall verify that the Permittee is capable of operating the baghouses at an overall particulate emission outlet concentration of no more than 0.02 grains/dry standard cubic foot under normal operating conditions.
  - b) A visible emissions evaluation shall demonstrate that emissions do not exceed 20 percent opacity.
  - c) Following the initial performance test for this permit, the Permittee shall conduct a performance test at least once in the permit cycle.
- 2) Baghouses (DC-005):
  - a) The source tests shall verify that the Permittee is capable of operating the baghouse at an overall particulate emission outlet concentration of no more than 0.42 lbs of PM

per ton of fired brick under normal operating conditions. The following calculation shall be used:

$$MP = \frac{ER}{P}$$

Where:

MP=mass per unit of production, pounds of pollutant per ton of fired product

ER=mass emission rate of PM during each performance test run, pounds per hour

P=production rate during each performance test run, tons per hour

- b) A visible emissions evaluation shall demonstrate that emissions do not exceed 20 percent opacity.
  - c) Following the initial performance test for this permit, the Permittee shall conduct a performance test at least once in the permit cycle.
- 3) Tunnel Kiln Exhaust Stacks:
- a) The source tests shall verify that the Permittee is capable of operating the tunnel kiln at an average hydrogen fluoride emissions rate of 287 pounds per day. The Permittee shall begin a series of mass balance tests on fluorine in the bricks in order to determine the correlation between the measured hydrogen fluoride emission rate and the fluorine content of the raw material. The Permittee shall use this correlation to determine an emission factor for hydrogen fluoride [lbs HF / ton of brick processed] that shall be used in calculating the hydrogen fluoride emissions rate and to monitor for compliance with the emission rate of 287 pounds per day pursuant to Condition 18.E. The hydrogen fluoride emission factor shall be revised upon subsequent mass balance testing conducted in accordance with this permit condition. The revised hydrogen fluoride emission factor shall be based on all sampling data collected during source testing, including sampling data obtained from all prior source tests conducted in accordance with this permit condition and approved by the Department.
  - b) A visible emissions evaluation shall demonstrate that emissions do not exceed 20 percent opacity.
  - c) Following the initial mass balance test, subsequent mass balance testing shall occur once every four months. Each test shall include three representative samples each of brick mixture used in normal operations. Upon completion of the first three tests, the Permittee may petition the Department to reduce the test frequency based on the variability of the data obtained during the first three mass balance tests.

B. Testing Criteria: Performance tests shall be conducted and data reduced in accordance with the test methods and procedures specified unless the Control Officer and Administrator specifies or approves minor changes in methodology to a reference method, approves the use of an equivalent test method, approves the use of an alternative method that has been determined to be acceptable for demonstrating compliance, or waives the requirement for performance tests because the Permittee has demonstrated by other means that the source is in compliance with the standard. For NSPS facilities, only EPA has the authority to waive initial testing requirements.

[County Rule 270 §402][SIP Rule 27 §B][40 CFR §60.8(b)]

C. Test Methods: Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4. These methods must be performed, as applicable, during each test run.

[County Rule 270 §301.1][SIP Rule 27 §B]

- 1) Baghouses (DC-001 through DC-004):
    - a) PM testing shall be conducted in accordance with EPA Test Method 5.
    - b) The visible emissions evaluation shall be conducted in accordance with EPA Test Method 9.
  - 2) Baghouse (DC-005):
    - a) PM testing shall be conducted in accordance with EPA Test Methods 5 and 202.
    - b) The visible emissions evaluation shall be conducted in accordance with EPA Test Method 9.
  - 3) Tunnel Kiln Exhaust Stacks:
    - a) Hydrogen fluoride testing shall be conducted using EPA Test Method EPA Method 26A. Unless otherwise approved by the Department in writing, the test method used for mass balance testing of fluorine within the brick shall be based on test methods discussed in the report titled, An Engineering Based Study to Minimize the Impact of Requirements of the Clean Air Act in Brick Manufacturing<sup>1</sup>. The brick mix used during each test shall contain all additives (e.g., marble dust) that are used in normal operations. During testing, kiln operations shall be representative of normal operations (i.e., throughput, temperature, and firing rate) and shall include any additives that are used under normal operating conditions (e.g., granular limestone).
    - b) The visible emissions evaluation shall be conducted in accordance with EPA Test Method 9.
- D. Operating Conditions: Performance tests shall be conducted under representative operating conditions and all equipment shall be operated during testing in accordance with the most recently approved O&M Plan or according to its operations manual if no O&M Plan is required. The Permittee shall make available to the Control Officer any records necessary to determine appropriate conditions for performance tests. Operations during periods of startup, shutdown, and equipment malfunction shall not constitute representative conditions for performance tests unless otherwise specified in the applicable standard or permit conditions.  
[County Rule 270 §403][40 CFR §60.8(c)]
- E. Monitoring Requirements: The Permittee shall record all process and control equipment information that are necessary to document operating conditions during the test and explain why the conditions represent normal operation. Operational parameters shall be monitored and recorded at least once every 30 minutes during each of the required test runs and documented in the test report. The operational parameters monitored shall be capable of indicating that the equipment is operating within the permitted limits, both during and after the performance tests.  
[County Rule 270 §301.1][SIP Rule 27 §B]
- 1) Baghouses: The Permittee shall record the baghouse pressure drop during the performance test. This and any additional operational parameters shall be identified in the test protocol and recorded during testing.

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<sup>1</sup> Bronson, Denis A. September 2, 1995. An Engineering Based Study to Minimize the Impact of Requirements of the Clean Air Act in Brick Manufacturing. The Center for Engineering Ceramic Manufacturing, Clemson University, Clemson, SC.

- F. Test Protocol Submittal: The Permittee shall submit a separate test protocol for each performance test to the Department for review and approval at least 30 days prior to each performance test. The test protocol shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. A completed copy of the Department's "Test Protocol Submittal Form" shall accompany each test protocol.  
[County Rule 270 §301.1][SIP Rule 27 §B][40 CFR §60.8(d)]
- G. Notice of Testing: The Permittee shall notify the Department in writing at least two weeks in advance of the actual date and time of each performance test so that the Department may have a representative attend.  
[County Rule 270 §404][40 CFR §60.8(d)]
- H. Testing Facilities Required: The Permittee shall install any and all sample ports or platforms necessary to conduct the performance tests, provide safe access to any platforms and provide the necessary utilities for testing equipment.  
[County Rule 270 §405][SIP Rule 42][40 CFR §60.8(e)]
- I. Minimum Testing Requirements: Each performance test shall consist of three separate test runs with each test run being at least one hour in duration unless otherwise specified in the applicable standard or in this permit. The same test methods shall be conducted for both the inlet and outlet measurements, if applicable, which must be conducted simultaneously. Emissions rates, concentrations, grain loadings, and/or efficiencies shall be determined as the arithmetic average of the values determined for each individual test run. Performance tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of a performance test without good cause after the first test run has commenced shall constitute a failure of the performance test.  
[County Rule 270 §406][40 CFR §60.8(f)]
- J. Test Report Submittal: The Permittee shall complete and submit a separate test report for each performance test to the Department within 30 days after the completion of testing. The test report shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. A completed copy of the Department's "Test Report Submittal Form" shall accompany each test report.  
[County Rule 270 §301.1][SIP Rule 27 §B]
- K. Compliance with Emission Limits: Compliance with allowable emission limits and standards shall be determined by the performance tests specified in this permit. If test results do not demonstrate compliance with the requirements of these permit conditions, the Permittee shall make the necessary repairs and/or adjustments to the equipment and demonstrate compliance through retesting. This will not nullify the fact that test results did not demonstrate compliance with the requirements of the permit conditions or nullify any violations that may result from this noncompliance. In addition to compliance demonstrations, test results shall be used for annual emissions inventory purposes, if applicable.  
[County Rule 270 §407]

- L. All test extension requests; test protocols, test date notifications, and test reports required by this permit shall be submitted to the Department and addressed to the attention of the Performance Test Evaluation Supervisor.

[County Rule 270 §301.1][SIP Rule 27 §B]

### 23. OTHER REQUIREMENTS

A. Dust Control Plan Required:

- 1) The Permittee shall submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan, before commencing any routine dust generating operation. The Dust Control Plan shall describe all control measures to be implemented before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. The Plan shall include at least all the information contained in County Rule 310 §304. At least one primary control measure and one contingency control measure must be identified from Table 1 of County Rule 310.

[County Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]

[SIP Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]

- 2) Failure to comply with the provisions of an approved Dust Control Plan is deemed to be a violation of this Permit. Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of these permit conditions at all times. In addition, the Permittee with an approved Dust Control Plan is still subject to all of the requirements of County Rule 310, even if the Permittee is complying with the approved Dust Control Plan.

[County Rule 310 §§303.1 and 306][SIP Rule 310 §§303.1 and 306]

- 3) If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any given fugitive dust source still exceed limits specified in these Permit Conditions, then the Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that the Permittee is preparing revisions to the approved Dust Control Plan, the Permittee must still comply with all requirements of these permit conditions.

[County Rule 310 §305][SIP Rule 310 §305]

- 4) If any changes to a Dust Control Plan, associated with a Title V Permit, are necessary as a result of the most recent revisions of County Rule 310, then the Permittee shall submit a revised Dust Control Plan to the Control Officer, according to the minor permit revision procedures describe in County Rule 210, no later than 6 months after the effective date of the most recent revisions to County Rule 310.

[County Rule 310 §402.2][SIP Rule 310 §402.2]

B. Stack Requirements for the Tunnel Kiln:

The Permittee shall maintain a minimum stack height of 9.6 meters, a maximum stack diameter of 1.2 meters and a minimum exit velocity of at least 22.42 meters/second for all tunnel kiln stacks. If any of these parameters are not met, the Permittee shall notify the Control Officer in writing and shall modify the facility as necessary within a reasonable period of time to assure that air dispersion modeling for the facility shows that the maximum off site concentrations for hydrogen fluoride are equal to or less than the concentrations shown by the modeling submitted as part of the application to obtain the initial issuance of

this Title V permit. The modeling shall be conducted in accordance with the Arizona Department of Environmental Quality's Air Dispersion Modeling Guidelines, shall use the same or similar assumptions as the original model, and shall be approved by the Control Officer.

[County Rule 220 §304] [Locally Enforceable Only]

DRAFT

**Appendix A**

**List of Equipment  
Phoenix Brick Yard  
V97-021**

**EQUIPMENT SUBJECT TO PERMITTING**

| Equipment # | Serial #       | Qty | Device Name/Description                                           | Manufacturer        | Design Capacity        |
|-------------|----------------|-----|-------------------------------------------------------------------|---------------------|------------------------|
| P-016       |                | 1   | Round Kiln                                                        | Custom              | 32,200,000 BTU         |
| P-017       |                | 1   | #1 Conveyor Belt (# 1 Grind Feed Bin to #1 hammermill)            | Custom              | 50 ton/hr              |
| P-018       |                | 1   | #2 Conveyor Belt (#1 Ground Clay Storage Bin to #1 Brick Machine) | Custom              | 50 ton/hr              |
| P-019       |                | 1   | #3 Conveyor Belt (#2 Ground Clay Storage Bin to #2 Brick Machine) | Custom              | 50 ton/hr              |
| P-020       |                | 1   | #4 Conveyor Belt (#3 Ground Clay Storage Bin to #3 Brick Machine) | Custom              | 25 ton/hr              |
| P-021       |                | 1   | #1 Ground Clay Storage Bin                                        | Custom              | NA                     |
| P-022       |                | 1   | #2 Ground Clay Storage Bin                                        | Custom              | NA                     |
| P-023       |                | 1   | #3 Ground Clay Storage Bin                                        | Custom              | NA                     |
| P-024       |                | 3   | #1, #2, & #3 Raw Clay Feed Bin                                    | Custom              | NA                     |
| DC-001      | BV 1123        | 1   | Baghouse for #1 grinder and #3 brick machine                      | Ultra Industries    | 64 bags 2,500 cfm      |
| DC-002      | BB 1816        | 1   | Baghouse for #3 grinder                                           | Ultra Industries    | 25 bags 1,000 cfm      |
| DC-003      | 300018         | 1   | Baghouse for #2 grinder                                           | Peabody             | 25 bags 1,000 cfm      |
| DC-004      | BB 3833        | 1   | Baghouse for #1 and #2 brick machines                             | Ultra Industries    | 25 bags 1,000 cfm      |
| DC-005      | DLMC3/7/15     | 1   | Torit Baghouse                                                    | Donaldson           | 210 filters 30,000 cfm |
| T-002       |                | 1   | BG Unleaded Gasoline Storage Tanks                                | NI                  | 6,000 gals             |
| P-002       |                | 2   | #1 & #2 Hammermills (tunnel kiln line)                            | Custom              | 50 ton/hr              |
| P-003       |                | 1   | #3 Hammermill (roller kiln line)                                  | Custom              | 25 ton/hr              |
| P-004       | F10-272H       | 1   | #1 Screen                                                         | Simons              | 50 ton/hr              |
| P-005       | 5660, 5661     | 2   | #2 Screens                                                        | Midwestern Industry | 50 ton/hr              |
| P-006       | NI             | 2   | #3 Screens                                                        | Midwestern Industry | 25 ton/hr              |
| P-007       | 570920, 581216 | 2   | #1 & #2 Brick Machines                                            | J.C. Steel          | 50 ton/hr              |
| P-008       | 720508, 791020 | 2   | #1 & #2 Brick Cutters                                             | J.C. Steel          | 50 ton/hr              |
| P-009       | 850415         | 1   | #3 Brick Machine                                                  | J.C. Steel          | 25 ton/hr              |
| P-010       | 861006         | 1   | #3 Brick Cutter                                                   | J.C. Steel          | 25 ton/hr              |
| P-011       |                | 1   | Tunnel Kiln Dryer                                                 | Custom              | 6,000,000 BTU/hr       |
| P-012       |                | 1   | Roller Kiln Dryer                                                 | Custom              | 6,000,000 BTU/hr       |
| P-013       |                | 1   | Tunnel Kiln                                                       | Custom              | 40,000,000 BTU/hr      |
| P-014       |                | 1   | Roller Kiln                                                       | Custom              | 17,000,000 BTU/hr      |

**EQUIPMENT EXEMPT FROM PERMITTING**

| Equipment # | Serial # | Quantity | Device Name/Description    | Manufacturer | Design Capacity  |
|-------------|----------|----------|----------------------------|--------------|------------------|
| WS-001      |          | 1        | Water Sprinkler System     | Custom       | 1,860,000 gal/yr |
| WS-002      |          | 1        | Water Truck                | Custom       |                  |
| T-001       |          | 2        | AG Additive-A Storage Tank | NI           | 12,000 gals      |
| T-003       |          | 1        | BG Diesel Storage Tank     | NI           | 10,000 gals      |

**TECHNICAL SUPPORT DOCUMENT**

**Permit Number V97-021**  
**Significant Permit Revision Number S06009**  
**October 31, 2006**

**1. IDENTIFYING INFORMATION**

Facility Name: Phoenix Brick Yard  
Address: 1814 South 7<sup>th</sup> Avenue  
City, State, Zip: Phoenix, AZ 85007

Date Application Received: August 11, 2006

**NOTE: The information in this document only covers the changes proposed by the revision; it does not cover the entire facility.**

**2. INTRODUCTION**

This document is intended to provide additional information associated with the issuance of the Significant Permit Revision to Title V permit no V97-021 for Phoenix Brick Yard (Phoenix Brick).

The facility is located in an area within Maricopa County that is designated which is currently designated non-attainment for ozone, carbon monoxide and PM<sub>10</sub>.

**3. DESCRIPTION OF REVISION**

The permit is being revised to show the installation of a baghouse for PM abatement from the tunnel kiln to meet the particulate matter limitation required in Rule 325.

Donaldson Torit Baghouse  
30,000 CFM  
Equipment #: DC-005  
Serial #: DLMC3/7/15

**4. DESCRIPTION OF REGULATED ACTIVITIES**

**4.1** The formed bricks are loaded onto kiln cars (Tunnel Kiln) or dryer cars (Roller Kiln) and moved into a holding room and then they are gradually moved into the natural gas dryer. The temperature of the dryer is kept at a constant 300 °F. The dryer is heated through waste heat from the kiln, ambient outside temperature and natural gas (usually only necessary in the winter). Once the bricks are dried, they are gradually moved into the kilns, where most of the natural gas is burned. The firing temperature in the tunnel kiln is approximately 1,930 °F. Each kiln car spends at least 33 hours in the Tunnel Kiln. After the bricks are removed from the kiln they are packaged and stored for shipment.

**5. ALTERNATIVE OPERATING SCENARIOS**

N/A

## 6. EMISSIONS

### 6.1 FACILITY-WIDE EMISSION LIMIT CHANGES

No change

### 6.2 Volatile Organic Compound Emissions

No change

### 6.3 Particulate Matter Emissions

Particulate Matter emissions with an aerodynamic diameter smaller than or equal to one-hundred microns (PM) from the tunnel kiln have been modified due to tunnel kiln performance testing and the addition of the Donaldson Torit baghouse control device.

Rule 325 §302.1 requires a PM emission rate of less than or equal to 0.42 lbs PM/ton fired brick from tunnel kilns with a capacity greater than or equal to 1 ton/hr.

Compliance with the PM emission rate in Rule 325 is determined by using EPA Reference Method 5 (Determination of Particulate Emissions from Stationary Sources, 40 CFR 60, Appendix A) and EPA Reference Method 202 (Determination of Condensable Particulate Emissions from Stationary Sources, 40 CFR 51 Appendix M). The results of the Method 5 and Method 202 testing are combined, resulting in a determination of total PM emissions (filterable and condensable, respectively) which are compared to the Rule 325 standard.

The performance testing for PM conducted on 1/17/06 on the tunnel kiln provided a new uncontrolled emission factor of 1.61 lbs PM/ton fired brick, replacing the previous AP-42 Chapter 11.3, Bricks and Related Clay Products Table 11.3-2, emission factor of 0.96 lbs PM/ton fired brick.

The Donaldson Torit baghouse has a reported removal efficiency of 99.97% for PM greater than or equal to one micron. However, for the purpose of compliance with the Rule 325 PM limitation, Phoenix Brick has agreed to accept a minimum 95% removal efficiency requirement on the baghouse.

Uncontrolled PM tunnel kiln emissions per test results: 1.61 lbs PM/ton fired brick  
Controlled PM tunnel kiln emissions: 0.0805 lbs PM/ton fired brick

Controlled PM emissions were calculated with the following equation:

$$\begin{aligned} \text{PM, Controlled} &= \text{PM, Uncontrolled} \times \text{Baghouse PM Removal Efficiency} \\ &= 1.61 \text{ lbs PM/ton fired brick} \times (1 - 95\%) \\ &= 0.0805 \text{ lbs PM/ton fired brick} \end{aligned}$$

It shall be noted that while testing was performed as required per the applicable methods mentioned above for PM, the results from the total filterable and condensable particulate test were referred to as particulate matter with an aerodynamic diameter smaller than or equal to 10 microns (PM<sub>10</sub>). This is incorrect. The results actually reflect PM (aerodynamic diameter less than or equal to 100 microns) as tested per EPA Method 202.

The facility wide allowable PM emission limit for this permit has not been modified in this revision; PM (TSP) allowable emissions remain at 84 tons/yr.

**6.4 Federally Listed Hazardous Air Pollutants (HAPS) Emissions**

No change

**7. OPERATIONAL LIMITATIONS**

The following tunnel kiln baghouse operational limitations have been added to the permit per conditions 19.G.1, 19.G.2 and 19.G.3, respectively, to meet applicable requirements in the rules referenced.

- 1) The Permittee shall install, operate and maintain the Donaldson Torit baghouse on the tunnel kiln. The tunnel kiln shall be vented to the baghouse without bypass.  

[SIP Rule 3]  
[County Rule 210 §302.1b]  
[County Rule 241 §302] [Locally Enforceable Only]
  
- 2) The Permittee shall operate and maintain the baghouse in accordance with the requirements of the most recently submitted Operations and Maintenance (O&M) Plan for that piece of equipment.  

[County Rule 200 §309]
  
- 3) The Permittee shall operate the Donaldson Torit baghouse at no less than 95% removal efficiency for PM.  

[County Rule 210 §302.1b]

**8. APPLICABLE REQUIREMENTS COVERED BY THE REVISION**

Table 8.1 provides a summary of the applicable requirements addressed in this significant revision with a list of the corresponding permit condition numbers that incorporate the pertinent requirements.

**Table 8.1 Summary of Applicable Requirements**

| Applicable Requirement  | Permit Conditions Incorporating  |                          |            |                  |         |
|-------------------------|----------------------------------|--------------------------|------------|------------------|---------|
|                         | Emission Limitations & Standards | Operational Requirements | Monitoring | Reporting        | Testing |
| County Rule 325 §301    | 18.D.1                           | 19.G.1                   | 20.A.1     | 20.G.1 & 2, 21.D | N/A     |
| County Rule 325 §302.1  | 18.D.2                           | 19.G.1                   | 20.H       | 21.D             | 22.A    |
| County Rule 210 §302.1b | 19.H.2                           | 19.H                     | 20.G       | 21.E             | 22.A    |

The following sections provide detailed information related to the incorporation of each applicable requirement into Permit V97-021.

**County Rule 325 §301, Opacity Limitations, adopted 3/9/05**

**Relevant Permit Conditions: 18.D.1, 19.G.1, 20.A.1, 20.G.1 & 2, 21.D**

- a. DISCUSSION  
 Rule 325 was not yet promulgated at the time this permit was last open for revision; Rule 325 opacity conditions have been added during this revision. These opacity limitations are applicable to existing, new or reconstructed tunnel kilns, used in the commercial and industrial brick and structural clay product manufacturing processes.

- b. **EMISSION LIMITATIONS AND STANDARDS**  
Condition 18.D.1 requires that no person shall discharge into the ambient air from any single source of emissions any air contaminant, other than water, in excess of 20% opacity.
- c. **EMISSIONS CALCULATIONS**  
N/A
- d. **OPERATIONAL REQUIREMENTS**  
Condition 19.G.1 requires the Permittee to operate the baghouse in accordance with the requirements of the most recently submitted O&M plan.
- e. **MONITORING/RECORDKEEPING**  
Monitoring and recordkeeping conditions have been incorporated into condition 20.A.1 and 20.G.1. The following table summarizes the requirements.

| <b>Monitoring Item</b>                                     | <b>Required Frequency</b>                                                                                                                                            | <b>Applicability Criteria</b>                                                             | <b>Deadline to Perform</b>                             |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Walk-through to observe visible emissions                  | Daily.                                                                                                                                                               | Required for devices capable of emitting any air contaminant other than uncombined water. | Daily.                                                 |
| Walk-through logs                                          | Daily. Update records on a daily basis.                                                                                                                              | Required at all times, whether or not visible emissions are present.                      | By the end of the same day of the observation.         |
| Opacity readings in accordance with EPA Reference Method 9 | Immediately after the observation of visible emissions and daily thereafter each day the unit is in operation until there are no visible emissions during operation. | Required upon the observation of visible emissions.                                       | Immediately upon the observation of visible emissions. |
| Opacity records in accordance with EPA Reference Method 9  | Immediately after the observation of visible emissions and daily thereafter each day the unit is in operation until there are no visible emissions during operation. | Required upon the observation of visible emissions.                                       | Immediately upon the observation of visible emissions. |

- f. **REPORTING**  
Condition 21.D requires the Permittee to report any exceedances of the opacity limit during the reporting period.

**County Rule 325 §302.1, PM Limitations for Existing Kilns, adopted 3/9/05**

**Relevant Permit Conditions: 18.D.2, 19.G.1, 20.H, 22.A**

- a. **DISCUSSION**  
Rule 325 was not yet promulgated at the time this permit was last open for revision; Rule 325 PM limitations have been added during this revision. These PM limitations

are applicable to existing, new or reconstructed tunnel kilns, used in the commercial and industrial brick and structural clay product manufacturing processes.

- b. **EMISSION LIMITATIONS AND STANDARDS**  
Condition 18.D.2 states no owner or operator shall emit more than 0.42 lbs of PM per ton of fired product from a tunnel kiln with a capacity of  $\geq 1$  tons per hour throughput.
- c. **EMISSIONS CALCULATIONS**  
N/A
- d. **OPERATIONAL REQUIREMENTS**  
Condition 19.G.1 requires the Permittee to operate the baghouse in accordance with the requirements of the most recently submitted O&M plan. Production limits are now based on the emissions factors from testing.
- e. **MONITORING/RECORDKEEPING**  
Monitoring and recordkeeping conditions have been incorporated into Condition 20.H. The following table summarizes the requirements.

| <b>Monitoring Item</b>                       | <b>Required Frequency</b>                   | <b>Applicability Criteria</b> | <b>Deadline to Perform</b>                                               |
|----------------------------------------------|---------------------------------------------|-------------------------------|--------------------------------------------------------------------------|
| Production records of kiln feed fired        | Daily. Update records on a weekly basis.    | Required at all times         | By the end of the next business day following the last day of each week. |
| Operation records of kiln hours of operation | Daily. Update records on a weekly basis.    | Required at all times         | By the end of the next business day following the last day of each week. |
| Usage records of materials delivered to site | Monthly. Update records on a monthly basis. | Required at all times         | By the 15 <sup>th</sup> day following the end of each calendar month.    |
| Emissions records of PM emission rates       | Daily. Update records on a weekly basis.    | Required at all times         | By the end of the next business day following the last day of each week. |

- f. **REPORTING**  
N/A

**County Rule 210 §302.1b, Enforceable Emissions Limitations, adopted 11/15/93**

**Relevant Permit Conditions: 19.H, 20.G, 21.E, 22.A**

- a. **DISCUSSION**  
Condition 19.G requires the Permittee to install, operate and maintain the Donaldson Torit baghouse on the tunnel kiln. The baghouse shall be vented to the tunnel kiln without bypass.

Condition 19.H requires the Permittee to operate and maintain the Donaldson Torit baghouse in accordance with the requirements of the most recently submitted Operations and Maintenance (O&M) Plan for that piece of equipment.

- b. **EMISSION LIMITATIONS AND STANDARDS**  
Condition 19.H.2 states the baghouses shall have no less than 95% removal efficiency for PM.
- c. **EMISSIONS CALCULATIONS**  
N/A
- d. **OPERATIONAL REQUIREMENTS**  
Condition 19.G.1 requires the Permittee to operate the baghouse in accordance with the requirements of the most recently submitted O&M plan.
- e. **MONITORING/RECORDKEEPING**  
Monitoring and recordkeeping conditions have been incorporated into Condition 20.H.3. The following table summarizes the requirements.

| <b>Monitoring Item</b>                 | <b>Required Frequency</b>                | <b>Applicability Criteria</b> | <b>Deadline to Perform</b>                                               |
|----------------------------------------|------------------------------------------|-------------------------------|--------------------------------------------------------------------------|
| Emissions records of PM emission rates | Daily. Update records on a weekly basis. | Required at all times         | By the end of the next business day following the last day of each week. |

- f. **REPORTING**  
N/A

**9. POTENTIALLY APPLICABLE REQUIREMENTS**  
N/A

**10. NON-APPLICABLE REQUIREMENTS**  
The owner/operator of the facility has voluntarily accepted a production limit of 9.9 tons per hour to avoid being classified as a large source by having a large kiln per 40 CFR Part 63 Subpart JJJJ and thus avoid applicability of the above named NESHAP.

**11. STREAMLINING**  
No streamlining performed in this permit revision.

**12. TESTING**  
The following is a summary of the testing that must be performed as a result of this revision.

Donaldson Torit baghouse testing

Condition 22.A requires the Permittee shall conduct a source test on the Donaldson Torit baghouse associated with the Tunnel Kiln. The source test shall be conducted by a date to demonstrate full compliance with the Rule 325 compliance date of December 31, 2006. The source tests shall verify that the Permittee is capable of operating the baghouse at an overall particulate emission outlet concentration of no more than 0.42 lbs of PM per ton of fired product under normal operating conditions.

**13. PERMIT SHIELD**  
Source did not request

**14. OTHER CONSIDERATIONS**  
N/A

**15. DISPERSION MODELING**  
N/A

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