

# **ADEQ OPERATING AIR PERMIT**

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation No. 26:

**Permit No. : 1343-AOP-R2**

**IS ISSUED TO:**

**Acme Brick Company - Ouachita Plant  
Malvern, AR 72104  
Hot Spring County  
AFIN: 30-00086**

**THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO  
INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND  
EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON  
THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:**

**AND**

**IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.**

Signed:

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Mike Bates, Chief  
Air Division

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Date

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### List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO <sub>x</sub>	Nitrogen Oxide
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO <sub>2</sub>	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

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**SECTION I: FACILITY INFORMATION**

PERMITTEE: Acme Brick Company - Ouachita Plant

AFIN: 30-00086

PERMIT NUMBER: 1343-AOP-R2

FACILITY ADDRESS: 1615 Grigsby Ford Rd.  
Malvern, AR 72104

MAILING ADDRESS: 1615 Grigsby Ford Rd.  
Malvern, AR 72104

COUNTY: Hot Spring County

CONTACT POSITION: Joe Spence, Plant Manager

TELEPHONE NUMBER: 501-332-6991

REVIEWING ENGINEER: Bryan Leamons

UTM Zone: 15

UTM North - South (Y): 3801688.72

UTM East - West (X): 515547.20

## **SECTION II: INTRODUCTION**

### **Summary of Permit Activity**

Acme Brick Company owns and operates a clay brick manufacturing facility located at 1615 Grigsby Ford Road in Malvern, Arkansas. This facility manufactures hard fired clay brick for use in the construction of commercial and residential structures.

This permit action re-establishes the facility as a Title V affected facility. Previously the permittee was allowed to attain minor source status to avoid MACT applicability because previous stack testing had shown facility HAP emissions below the major source thresholds. After attaining the minor source permit, further required stack testing showed the facility is in fact subject to Title V and the MACT, 40 CFR Part 63, Subpart JJJJ, *National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing*.

This permit provides a compliance plan for achieving compliance with Subpart JJJJ. The permittee is currently developing plans for installing control equipment for compliance with the MACT standards. Upon startup of the control equipment and successful stack testing required by MACT standards, the permittee is required to submit a final application to incorporate the changes and lower emission limits associated with the new equipment. A CAO currently exists which allows for construction of control equipment in order to comply with the MACT.

This permit action also increases permitted operation of the Standby Generator from 800 to 3,000 hours per year.

### **Process Description**

A combination of raw materials is used to form the brick clay body. These materials include shale, alluvial clay, sand, rock, and kaolin clay. All materials are hauled to the plant by trucks and are stored under roof in the clay preparation building. The trucks travel on paved haul roads.

The raw materials are placed in proportioning feeders with a front end loader. The materials are conveyed from the feeders to a primary crusher. The crusher reduces the materials to an approximate four inch maximum size and then the materials are conveyed to the adjoining grinding and sizing operation. This area contains a hammermill for further size reduction and vibrating screens for final sizing. Grinding operation emissions are accounted for in Grinding Building emissions (SN-09).

The raw material is conveyed from the grinding operations to a screw auger extruder. The clay is extruded through a die and cut to size. Several types of materials are used as surface coatings during this process. A dust collector (IA-23) is utilized to capture any fugitive dust from the additive area. After the brick are cut to size and coated, an automated setting head places brick on refractory kiln cars.

The kiln cars move from the extrusion to the drying process. The kiln cars wait in a surge area holding room before entry into the dryers. The holding room (IA-18) has a tubeaxial exhaust fan that removes ambient air from this area in order to prevent condensate from forming. The tunnel dryers are continuous counterflow heat exchangers which reduce the moisture in the wet brick to approximately 1% by weight. Waste heat from the cooling zone of the kiln is introduced near the dryer exit. Two exhaust fans pull this waste heat toward the entrance end of the dryer as the

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product flows in the opposite direction. The moisture from the drying operation is exhausted from SN-04 and SN-05. The dryer uses the waste heat from the kiln as its only heat source.

The tunnel kiln is also a counterflow heat exchanger and also operates continuously. A neutral pressure zone exists at the end of the firing zones. The combustion gases are pulled toward the entrance of the kiln by an exhaust fan (SN-06). Simultaneously, ambient cooling air is introduced into the cooling zone of the kiln. Product discoloration will occur if combustion gases are pulled into the cooling zone. The heat for the dryers is supplied by the dryer supply fan in the cooling zone, which redirects the heated ambient air which has been utilized for cooling the brick.

The final process is the brick packaging. The brick are automatically removed from the kiln cars and are inspected, sorted, and tied with steel and plastic bands. After the brick are removed from the kiln cars, brick chips are removed from the kiln cars by a kiln car cleaning system equipped with a HEPA filter (IA-25). The plant has two vacuum systems (IA-22 and IA-26) that are insignificant activities.

### Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective May 28, 2006
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR Part 60, Subpart OOO – <i>Standards of Performance for Nonmetallic Mineral Processing Plants</i>
40 CFR Part 63, Subpart JJJJJ, <i>National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing</i>

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The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

**Emission Summary**

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	8.4	29.6
		PM <sub>10</sub>	8.3	29.3
		SO <sub>2</sub>	17.9	66.9
		VOC	5.2	14.9
		CO	16.8	63.8
		NO <sub>x</sub>	30.2	59.3
HAPs		HF*	7.75	28.47
		HCl*	3.58	11.09
SN	Description	Pollutant	lb/hr	tpy
01	Screen and Hammermill Exhaust	Sources combined to form source number SN-09 (Grinding Building)		
02	Hammermill			
03	Holding Room Exhaust Fan	Insignificant Activity No. 18 (IA-18) – Regulation 19, Group A, Number 13		
04	Dryer Exhaust #1	PM	1.4	3.5
		PM <sub>10</sub>	1.4	3.5
		SO <sub>2</sub>	0.2	0.6
		VOC	1.2	3.9
		CO	0.2	0.3
		NO <sub>x</sub>	0.0	0.0
		HF	0.26	0.82
		HCl	0.11	0.17
05	Dryer Exhaust #2	PM	1.4	3.5
		PM <sub>10</sub>	1.4	3.5
		SO <sub>2</sub>	0.2	0.6
		VOC	1.2	3.9
		CO	0.2	0.3
		NO <sub>x</sub>	0.0	0.0
		HF	0.26	0.82
		HCl	0.11	0.17

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EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
06	Tunnel Kiln	PM	5.0	21.3
		PM <sub>10</sub>	5.0	21.3
		SO <sub>2</sub>	14.9	61.8
		VOC	1.4	5.0
		CO	15.0	61.1
		NO <sub>x</sub>	5.2	21.8
		HF	7.23	26.83
		HCl	3.36	10.75
09	Grinding Building	PM	0.2	0.7
		PM <sub>10</sub>	0.1	0.4
10	Standby Generator	PM	0.4	0.6
		PM <sub>10</sub>	0.4	0.6
		SO <sub>2</sub>	2.6	3.9
		VOC	1.4	2.1
		CO	1.4	2.1
		NO <sub>x</sub>	25.0	37.5

\*HF and HCl are not included in any other totals.



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### **SECTION III: PERMIT HISTORY**

Air permit # 1343-A was the initial State Implementation Plan (SIP) permit issued to Acme Brick Company's Ouachita plant in Malvern, Arkansas. The permit was issued on October 16, 1992, for the permitting of a hard fired clay brick manufacturing facility.

Air Permit # 1343-AR-1 was issued to Acme Brick Company's Ouachita plant on April 26, 1993. The air permit was modified by removing two old source numbers (SN-01 and SN-02) by incorporating the use of a dust collector on the emissions of these sources. A new source number (SN-08) was also added to account for the dust collector installed on the emissions from the additive area.

Air Permit # 1343-AOP-R0 was issued to Acme Brick Company's Ouachita plant on August 14, 1998. The facility modified their existing air permit by incorporating on-site stack test data to quantify emissions from four sources, the removal of six sources (SN-03, SN-04, SN-05, SN-07, SN-08, and SN-09) by defining them as insignificant under Regulation 19 Appendix A Group C Number 5, and the addition of a high efficiency HEPA filter on the plant vacuum system.

Air Permit # 1343-AOP-R1 was issued to Acme Brick Company's Ouachita plant on August 4, 2003. This Title V permit renewal changed two sources (SN-04 and SN-05) from insignificant activities (Group C Number 5) to permitted emission sources. The proposed change resulted in an increase of 6.9 tons per year (tpy) of PM/PM<sub>10</sub> emissions, 1.0 tpy of SO<sub>2</sub> emissions, 0.5 tpy of CO emissions, 7.6 tpy of VOC emissions, 1.64 tpy of HF emissions, and 0.35 tpy of HCl emissions.

Air Permit # 1343-AR-2 was issued Acme Brick Company's Ouachita plant on December 19, 2005. This modification allowed the permittee to add six new conveyors and two clay silos to the existing grinding building (SN-09), to lengthen the holding room, to replace seventy burners, to revise the emission rates for the tunnel kiln (SN-06), and to change the standby generator from an insignificant activity to a permitted source. The new equipment added to the grinding building is subject to NSPS Subpart OOO. Based on June 26, 2003 test data for SN-06, the facility was a minor source for HAPs. The compliance date for 40 CFR 63, Subpart JJJJ – National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing was May 16, 2006. Therefore, it was determined that the facility was no longer subject to 40 CFR 63, Subpart JJJJ. Minor source status was established based upon the reduction to below 10 tons per year (tpy) of any individual HAP or 25 tpy of any combination of HAPs. The changes resulted in permitted increases of 0.9 tons per year (tpy) in PM emissions, 0.6 tpy in PM<sub>10</sub> emissions, 0.6 tpy in VOC emissions, 0.6 tpy in CO emissions, 10.0 tpy in NO<sub>x</sub> emissions, and permitted decreases of 10.16 tpy in HF emissions and 6.09 tpy in HCl emissions.

**SECTION IV: SPECIFIC CONDITIONS**

**SN-04 and SN-05 - Tunnel Dryer Exhausts #1 and #2**

**Source Description**

Source SN-04 is tunnel dryer exhaust #1, and SN-05 is tunnel dryer exhaust #2. The tunnel dryers are continuous heat exchangers which reduce the moisture in the wet brick to approximately 1% by weight. Waste heat from the cooling zone of the kiln is introduced near the dryer exit. Two exhaust fans pull this waste heat toward the entrance end of the dryer as the product flows in the opposite direction. The moisture from the drying operation is exhausted from SN-04 and SN-05. The dryer uses waste heat from the kiln as its only heat source. The equipment was installed in 1980.

The Dryer exhausts are not subject to requirements of 40 CFR Part 63, Subpart JJJJJ, *National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing* because the cooling zone waste heat contains no kiln emissions. The cooling section and kiln are separated by a neutral pressure zone. Kiln emissions are directed towards the kiln entrance and completely exhausted through SN-06.

**Specific Conditions**

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition 8. [Regulation 19, §19.501 et seq., effective May 28, 2006 and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-04	Dryer Exhaust #1	PM <sub>10</sub>	1.4	3.5
		SO <sub>2</sub>	0.2	0.6
		VOC	1.2	3.9
		CO	0.2	0.3
SN-05	Dryer Exhaust #2	PM <sub>10</sub>	1.4	3.5
		O <sub>2</sub>	0.2	0.6
		VOC	1.2	3.9
		CO	0.2	0.3

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition 8. [Regulation 18, §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
SN-04	Dryer Exhaust #1	PM	1.4	3.5
		HF	0.26	0.82
		HCl	0.11	0.17
SN-05	Dryer Exhaust #2	PM	1.4	3.5
		HF	0.26	0.82
		HCl	0.11	0.17

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3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
04	20%	§19.503 and 40 CFR Part 52, Subpart E
05	20%	§19.503 and 40 CFR Part 52, Subpart E

4. Monthly observations of the opacity from source SN-04 and SN-05 shall be conducted by personnel familiar with the permittee's visible emissions. Personnel shall be trained but not necessarily certified for EPA Method 9 evaluations. The permittee shall accept such observations for demonstration of compliance. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective actions, and document that the visible emissions did not appear to be in excess of the permitted opacity following the corrective actions. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated daily, kept on site, and made available to Department personnel upon request.

- a. The date and the time of the observation;
- b. If visible emissions which appeared to be above the permitted limit were detected;
- c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken;
- d. The name of the person conducting the opacity observations.

[Regulation No. 19, §19.705 and 40 CFR Part 52, Subpart E]

### SN-06 - Tunnel Kiln Exhaust

#### Source Description

Source SN-06 is the tunnel kiln exhaust fan. The tunnel kiln is a counter flow heat exchanger that operates continuously. The combustion gases are pulled toward the entrance end of the kiln by an exhaust fan. Ambient air is introduced into the cooling zone of the kiln. The heat for the dryers is supplied by the dryer supply fan in the cooling zone. The equipment was installed in 1980. The tunnel kiln exhaust is subject to requirements of 40 CFR Part 63, Subpart JJJJ, *National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing*

#### Specific Conditions

5. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition 8 and Specific Conditions 9 and 10. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	5.0	21.3
SO <sub>2</sub>	14.9	61.8
VOC	1.4	5.0
CO	15.0	61.1
NO <sub>x</sub>	5.2	21.8

6. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition 8 and Specific Conditions 9 and 10. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	5.0	21.3
HF	7.23	26.83
HCl	3.36	10.75

7. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
06	20%	§19.503 and 40 CFR Part 52, Subpart E

8. Weekly observations of the opacity from source SN-06 shall be conducted by personnel familiar with the permittee's visible emissions. Personnel shall be trained but not necessarily certified for EPA Method 9 evaluations. The permittee shall accept such observations for demonstration of compliance. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective actions, and document

that the visible emissions did not appear to be in excess of the permitted opacity following the corrective actions. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated daily, kept on site, and made available to Department personnel upon request.

- a. The date and the time of the observation;
- b. If visible emissions which appeared to be above the permitted limit were detected;
- c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken;
- d. The name of the person conducting the opacity observations.

[Regulation No. 19, §19.705 and 40 CFR Part 52, Subpart E]

9. Natural gas shall be the only fuel used to fire the kiln, SN-06. [Regulation No. 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
10. SN-06, the tunnel kiln exhaust, shall not use more than 321,667,000 cubic feet of natural gas per any consecutive twelve month period. [Regulation No. 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and A.C.A. §8-4-311, and 40 CFR 70.6]
11. The permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 10. The records shall include a rolling 12 month total in addition to each individual month's data. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records onsite, and make the records available to Department personnel upon request. The monthly reports shall also be submitted to the Department in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
12. SN-06 is subject to and shall comply with all applicable portions of 40 CFR Part 63, Subpart JJJJ, *National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing*. See Section V, Compliance Plan and Schedule and Specific Conditions 12 and 13 for additional details. [§19.304 and 40 CFR §63.8385]
13. On or before June 15, 2007, the permittee shall submit an application which identifies applicable requirements of 40 CFR Part 63, Subpart JJJJ. The application shall list the permittee's selected compliance options and final HAP emission limits. The application date may be variable with ADEQ approval. [Regulation 26, §26.401]
14. The permittee shall submit certified progress reports every 6 months pertaining to the compliance schedule found in Section V of this permit. Reports shall be submitted with compliance reports required by General Provision 7. Reports shall contain the following:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

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- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

[Regulation 26, §26.703(D)]

**SN-09 – Grinding Building**

Source SN-09 is the Grinding Building. It is an enclosed operation, including storage. The two 100-ton clay silos and six conveyors in the grinding building are subject to NSPS Subpart OOO, while all other existing equipment in the building is exempt as pre-1983 construction.

**Specific Conditions**

15. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition 8. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	0.1	0.4

16. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition 8. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.2	0.7

17. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
09	0%	§19.304 of Regulation 19 and 40 CFR 60.672(e)(1)

18. Monthly observations of the opacity from source SN-09 shall be conducted by personnel familiar with the permittee’s visible emissions using EPA Reference Method 22. The permittee shall accept such observations for demonstration of compliance. The permittee shall maintain personnel trained but not necessarily certified in EPA Reference Method 22. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective actions, and document that the visible emissions did not appear to be in excess of the permitted opacity following the corrective actions. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated daily, kept on site, and made available to Department personnel upon request.
- a. The date and the time of the observation;
  - b. If visible emissions which appeared to be above the permitted limit were detected;

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- c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken;
- d. The name of the person conducting the opacity observations.

[Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]



**SN-10 - Standby Generator**

SN-10 is the standby electrical generator. It is a diesel-fired reciprocating engine generator rated at 1250 KW.

**Specific Conditions**

19. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 22. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	0.4	0.6
SO <sub>2</sub>	2.6	3.9
VOC	1.4	2.1
CO	1.4	2.1
NO <sub>x</sub>	25.0	37.5

20. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 22. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.4	0.6

21. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
10	20%	§19.503 and 40 CFR Part 52, Subpart E

22. The permittee shall not use the standby generator more than 3,000 hours per any consecutive twelve month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and A.C.A. §8-4-311, and 40 CFR 70.6]
23. The permittee shall maintain monthly records which demonstrate compliance with the limit set in Specific Condition 22. The records will include a rolling 12 month total in addition to each individual month's data. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records on-site, and make the records available to Department personnel upon request. Records shall be submitted to the Department in accordance to General Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

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## **SECTION V: COMPLIANCE PLAN AND SCHEDULE**

As a result of source testing performed on April 5, 2006, it was discovered that the facility was not in compliance with permit #1343-AR-2 emission limit for hydrogen fluoride (HF) from the tunnel kiln (SN-06). As of May 16, 2006, the permittee is non-compliant with 40 CFR Part 63, Subpart JJJJJ, *National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing*.

The permittee shall meet the following compliance schedule to achieve compliance with Subpart JJJJJ:

- Design new control device by July 31, 2006;
- Complete fabrication of new control device by December 31, 2006;
- Installation, commissioning, and final compliance demonstration by May 15, 2007.

A Consent Administrative Order, LIS #06-100, (CAO) has been executed which authorized the construction of control equipment required by the MACT. The CAO allows the permittee to operate in accordance with the Title V application, the compliance schedule, and this permit.

After a successful compliance demonstration in accordance with the MACT, the permittee is required to submit to ADEQ a final application regarding the matter. The application will identify applicable regulatory requirements and selected compliance options. The application will also propose final HAP emission rates. See Specific Condition 12.

Acme Brick will continue to operate in compliance with other identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

## SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]
3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. The permittee must provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. Sampling ports adequate for applicable test methods;
  - b. Safe sampling platforms;
  - c. Safe access to sampling platforms; and
  - d. Utilities for sampling and testing equipment.
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
7. On or before June 15, 2007, the permittee must prepare and implement a Startup, Shutdown, and Malfunction Plan (SSM). If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's location and retain all previous versions of the SSM plan for five years. [Regulation 19, §19.304 and 40 CFR 63.6(e)(3)]
8. The maximum allowable production at the facility is 150,042 tons of fired clay brick at the facility during any consecutive 12 month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

9. The permittee shall maintain monthly records to demonstrate compliance with Plant wide Condition 8. The records shall include a rolling 12 month total. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records on-site, and make the records available to Department personnel upon request. Records shall be submitted to the Department in accordance with General Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

#### **Title VI Provisions**

10. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]
  - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
11. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC like appliance” as defined at §82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
12. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

13. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

14. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

**Permit Shield**

15. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application received April 19, 2006.

**Applicable Regulations**

<b>Source No.</b>	<b>Regulation</b>	<b>Description</b>
facility	Regulation 19, effective May 28, 2006	Regulations of the Arkansas Plan of Implementation for Air Pollution Control
facility	Regulation 26, effective September 26, 2002	Regulations of the Arkansas Operating Air Permit Program
09	40 CFR Part 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants
06	40 CFR Part 63, Subpart JJJJ	National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application received April 19, 2006.

**Inapplicable Regulations**

<b>Source No.</b>	<b>Regulation</b>	<b>Description</b>
None specified.		

16. Nothing shall alter or affect the following:

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- a. Provisions of Section 303 of the Clean Air Act;
- b. The liability of an owner or operator for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; or
- d. The ability of the EPA to obtain information under Section 114 of the Clean Air Act.

**SECTION VII: INSIGNIFICANT ACTIVITIES**

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated April 19, 2006.

Description	Category
IA-1, Dry Coating Mixer	A-13
IA-2, Bat Loss Drop	A-13
IA-3, Proportioning Feeders	A-13
IA-4, Pugmill	A-13
IA-5, Brick / Refractory Saw	A-13
IA-6, Brick Packaging / Dehacking	A-13
IA-7, Brick Setting	A-13
IA-9, Slurry Mixers	A-13
IA-10, Additive Storage	A-13
IA-11, Clay Storage	A-13
IA-12, 550 Gallon Gasoline Tank	A-13
IA-14, Conveyor Drop Points and Material Storage	A-13
IA-15, Sand Dryer	A-13
IA-18, Holding Room	A-13
IA-22, Manufacturing Vacuum System	A-13
IA-23, Brick Process Dust Collector	A-13
IA-25, Kiln Car Cleaner	A-13
IA-26, Grinding Vacuum System	A-13
Diesel Tank, 500 Gallons, 0.0074 psi vapor pressure at STP	A-3

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<b>Description</b>	<b>Category</b>
Diesel Tank, 1000 Gallons, 0.0074 psi vapor pressure at STP	A-3
Waste Oil, 275 Gallons, <0.01 psi vapor pressure at STP	A-3
Hydraulic Reservoir, 40 gallons, <0.01 psi vapor pressure at STP	A-3
Hydraulic Reservoir, 40 gallons, <0.01 psi vapor pressure at STP	A-3
Hydraulic Reservoir, 40 gallons, <0.01 psi vapor pressure at STP	A-3
Hydraulic Reservoir, 400 gallons, <0.01 psi vapor pressure at STP	A-3
Hydraulic Reservoir, 400 gallons, <0.01 psi vapor pressure at STP	A-3
Motor / Engine Oil, 55 gallons, <0.01 psi vapor pressure at STP	A-3
Die Lube Reservoir, 55 gallons, <0.01 psi vapor pressure at STP	A-3
Vacuum Pump Reservoir, 300 gallons, <0.01 psi vapor pressure at STP	A-3
Gear Lube Reservoir, 55 gallons, <0.1 psi vapor pressure at STP	A-3
Transmission Oil Reservoir, 55 gallons, <0.01 psi vapor pressure at STP	A-3
Antifreeze Tank, 200 gallons, <0.01 psi vapor pressure at STP	A-3
Generator Diesel Supply Tank, ~2200 gallons, <0.5 psi vapor pressure at STP	A-3



### **SECTION VIII: GENERAL PROVISIONS**

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]
2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective September 26, 2002]
3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26, §26.406]
4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]
5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses performed;
  - c. The company or entity performing the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.
6. The permittee must retain the records of all required monitoring data and support information for at least five (5) 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 this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

Arkansas Department of Environmental Quality  
Air Division  
ATTN: Compliance Inspector Supervisor  
Post Office Box 8913  
Little Rock, AR 72219

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
- a. For all upset conditions (as defined in Regulation 19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
- i. The facility name and location
  - ii. The process unit or emission source deviating from the permit limit,
  - iii. The permit limit, including the identification of pollutants, from which deviation occurs,
  - iv. The date and time the deviation started,
  - v. The duration of the deviation,
  - vi. The average emissions during the deviation,
  - vii. The probable cause of such deviations,
  - viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
  - ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

- b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]
11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]
12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]
13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]
14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]
15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]
16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]

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17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]
18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]
19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]
20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]
  - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]
  - a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The compliance status;
  - c. Whether compliance was continuous or intermittent;
  - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and

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- e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.
22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]
- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act or,
  - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Appendix A – 40 CFR Part 60, Subpart OOO – *Standards of Performance for Nonmetallic Mineral Processing Plants*

Appendix B – 40 CFR Part 63, Subpart JJJJ, *National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing*