

ADEQ MINOR SOURCE AIR PERMIT

Permit #: 1100-AR-1

IS ISSUED TO:

AAF International
2355 Armstrong Avenue
Fayetteville, AR 72701
Washington County
CSN: 72-0268

THIS PERMIT IS YOUR AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND YOUR APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 ET SEQ.) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date

SECTION I: FACILITY INFORMATION

PERMITTEE: AAF International

CSN: 72-0268

PERMIT NUMBER: 1100-AR-1

FACILITY ADDRESS: 2355 Armstrong Avenue
Fayetteville, AR 72701

COUNTY: Washington

CONTACT POSITION: Plant Manager - Steve Nagel

TELEPHONE NUMBER: (501)521-8621

FAX NUMBER: (501)521-0600

REVIEWING ENGINEER: Paul Osmon

UTM North-South (Y): 3988.8 km N

UTM East-West (X): 397.4 km E

Zone 15

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SECTION II: INTRODUCTION

Summary

AAF-McQuay, Inc (dba AAF International) operates a facility in Fayetteville Arkansas which manufactures fiberglass air filter media. Permit No. 1100-A was issued to American Air Filter on April 9, 1991. The permit limit for formaldehyde emissions in the original permit was listed as 13.4 tons per year. This permit modification is issued to make several changes to the emission limits including changing the formaldehyde emission limit to 8.1 tons per year and to substantiate that facility is not required to obtain a part 70 operating permit.

Process Description

Fiberglass filter media is manufactured by spinning glass fibers onto a drum and then spraying with a urea-formaldehyde resin. Glass cullet is melted in forty eight small natural gas furnaces which vent through 4 stacks (SN-04). The molten glass is fed to the fiber spinning equipment.

The uncured filter media blankets then proceed to curing ovens (SN-1, SN-2, and SN-3) where the media is heated and expanded. Formaldehyde and ethylene glycol from some of the resins are released in the curing process. Some of the filter media is sprayed with a low vapor pressure oil solution to enhance collection efficiency which is listed as an insignificant activity. The cured filter media is then packaged as a final product or shipped to other facilities for production of final products.

Fugitive emissions (SN-5) of VOC and HAPs occur from minor usages of compounds at the facility.

Regulations

AAF International is subject to regulation under the *Arkansas Air Pollution Control Code* (Regulation 18) and the *Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19). The facility is not subject to NSPS 40 CFR 60, Subpart CC - Glass Manufacturing because no unit furnace can produce over 4550 kg (10,000 lbs) of glass per day. It is not anticipated that the facility will be subject to NESHAP 40 CFR 63, Subpart HHHH - Wet-Formed Fiberglass Mat Production when it is promulgated since the facility is not a major source.

The following table is a summary of the facility's total emissions.

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TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	3.9	8.8
PM ₁₀	3.9	8.8
SO ₂	0.2	0.2
VOC	25.6	18.4
CO	0.5	1.9
NO _x	2.1	8.9
Formaldehyde	4.3	8.1
Ethylene Glycol	21.3	8.0
Ammonia	—	1.0
Small Usage HAP	—	1.0

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SECTION III: PERMIT HISTORY

Permit No. 1100-A was issued to American Air Filter on April 9, 1991. Emission limits listed NO_x - 8.8 tpy , VOC - 13.4 tpy, and formaldehyde - 13.4 tpy.

A Consent Administrative Order was signed May 24, 2000 detailing American Air Filter's failure to apply for a type 70 operating permit and requiring a new permit application which clarified the Title V status of the permittee.

SECTION IV: EMISSION UNIT INFORMATION

Specific Conditions

- Pursuant to §19.501 et seq of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective February 15, 1999 (Regulation 19) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. The pound per hour emission limits are based on the capacity of the equipment and the ton per year emission limits for the point sources are based on facility throughput limits contained in Specific Condition No. 8. The ton per year limit on non-stack emissions is based on a material balance.

SN	Description	Pollutant	lb/hr	tpy
SN-1	Curing Oven #1	PM ₁₀	3.0	4.8
SN-2	Curing Oven #2	SO ₂	0.1	0.1
SN-3	Curing Oven #3	VOC	25.5	16.1
		CO	0.2	0.9
		NO _x	1.0	4.2
SN-4	48 Glass Spinning Furnaces - 4 stacks	PM ₁₀	0.9	4.0
		SO ₂	0.1	0.1
		VOC	0.1	0.3
		CO	0.3	1.0
		NO _x	1.1	4.7
SN-5	Miscellaneous Non-Stack Emissions	VOC	—	2.0

- Pursuant to §18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. The pound per hour emission limits are based on the capacity of the equipment and the ton per year emission limits for the point sources are based on facility throughput limits contained in Specific Condition No. 8. The ton per year limits on non-stack emissions are based on a material balance.

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SN	Description	Pollutant	lb/hr	tpy
SN-1	Curing Oven #1	PM	3.0	4.8
SN-2	Curing Oven #2	formaldehyde	4.3	8.1
SN-3	Curing Oven #3	ethylene glycol	21.3	8.0
SN-4	48 Glass Spinning Furnaces - 4 stacks	PM	0.9	4.0
SN-5	Miscellaneous Non-Stack Emissions	Small Usage HAP Ammonia	— —	1.0 1.0

3. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, visible emissions shall not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance with this limit will be shown by utilizing only natural gas or LP gas as fuel.

SN	Limit	Regulatory Citation
SN-1 SN-2 SN-3 SN-4	5%	§18.501

4. Pursuant to §18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303.
5. Pursuant to §18.901 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne.
6. Pursuant to §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records of HAPs usage at the facility. A monthly total and rolling 12 month sum shall be kept for each HAP used (including small usage HAP). The records shall be kept on site and made available to the Department upon request.

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7. Pursuant to §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not emit any single HAP except formaldehyde, ethylene glycol, and ammonia such that the instantaneous lb/hr emission rate multiplied by 4.4 exceeds the relative toxicity rating.

SN-4 Conditions

8. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not process more than 7,884 tons of cullet glass at the facility per consecutive 12 month period.
9. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain monthly records which demonstrate compliance with Specific Condition No. 8. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request.

SN-1, SN-2, & SN-3 Conditions

10. Pursuant to §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the resins sprayed into the curing ovens shall not be more than 0.2 % formaldehyde by weight and 1.0 % ethylene glycol by weight. The permittee shall maintain MSDS sheets for all resins used in the curing ovens. These records shall be made available to the Department upon request.

SN-5 Conditions

11. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records of miscellaneous VOC usage at the facility. A monthly total and rolling 12 month sum shall be kept for each VOC used (not including oil coating applied to filter media listed in Insignificant Activities List). The records shall be kept on site and made available to the Department upon request.

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SECTION V: INSIGNIFICANT ACTIVITIES

The following types of activities or emissions are deemed insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated October, 2000.

Description	Category
filter media coating oil usage	Group A13
oil storage tanks (6 tanks @ 4,200 gallons each)	Group A3
resin storage tanks (8 tanks @ 4,200 gallons each)	Group A3
resin day tanks (2 tanks @ 2,000 gallons each)	Group A3
steam cleaners (4 natural gas fired @ 0.44 MMBTU/hr) (4 kerosene fired @ 0.63 MMBTU/hr)	Group A1
dust collectors (4)	emission vent inside building
Boilers (2) (used for building heat only)	Group B2

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SECTION VI: GENERAL CONDITIONS

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.
2. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.
3. Pursuant to §19.704 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19) and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the Department shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
4. Pursuant to §19.410(B) of Regulation 19 and/or §18.309(B) of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, construction or modification must commence within eighteen (18) months from the date of permit issuance.
5. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, records must be kept for five years which will enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset conditions, and continuous monitoring data. The records may be used, at the discretion of the Department, to determine compliance with the conditions of the permit.

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6. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any reports required by any condition contained in this permit shall be certified by a responsible official and submitted to the Department at the address below.

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

7. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
8. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
 - a. Sampling ports adequate for applicable test methods
 - b. Safe sampling platforms
 - c. Safe access to sampling platforms
 - d. Utilities for sampling and testing equipment
9. Pursuant to §19.303 of Regulation 19 and/or §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.

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10. Pursuant to §19.601 of Regulation 19 and/or §18.1101 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, if the permittee exceeds an emission limit established by this permit, they shall be deemed in violation of said permit and shall be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met:
 - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and that all reasonable measures have been taken to immediately minimize or eliminate the excess emissions.
 - b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
 - c. The permittee shall submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, it need not be submitted again.

11. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall allow representatives of the Department upon the presentation of credentials:
 - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act
 - c. To inspect any monitoring equipment or monitoring method required in this permit
 - d. To sample any emission of pollutants
 - e. To perform an operation and maintenance inspection of the permitted source

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12. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit is issued in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus.
13. Pursuant to §19.410(A) of Regulation 19 and/or §18.309(A) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be subject to revocation or modification when, in the judgment of the Department, such revocation or modification shall become necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.
14. Pursuant to §19.407(B) of Regulation 19 and/or §18.307(B) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit may be transferred. An applicant for a transfer shall submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. A transfer may be denied on the basis of the information revealed in the disclosure statement or other investigation or, if there is deliberate falsification or omission of relevant information.
15. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be available for inspection on the premises where the control apparatus is located.
16. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.
17. Pursuant to Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit supersedes and voids all previously issued air permits for this facility.