ADEQ
OPERATING
AIR PERMIT

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

Permit No. : 982-AOP-R1

Renewal #1

IS ISSUED TO:

Amfuel

Magnolia, AR 71753

Columbia County

AFIN: 14-00040

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:

Mike Porta
Interim Chief, Air Division

March 21, 2006

Date

Facility: Amfuel
Permit No.: 982-AOP-R1
AFIN: 14-00040

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Table 1 - List of Acronyms

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_x	Nitrogen Oxide
PM	Particulate matter
PM_{10}	Particulate matter smaller than ten microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Ton per year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound
NCAC	Non Criteria Air Contaminant

Section I: FACILITY INFORMATION

PERMITTEE:	Amfuel
AFIN:	14-00040
PERMIT NUMBER:	982-AOP-R1
FACILITY ADDRESS:	601 Firestone Drive
	Magnolia, AR 71753
MAILING ADDRESS:	PO Box 887
	Magnolia, AR 71753-0887
COUNTY:	Columbia County
CONTACT POSITION:	Scott Brice, Safety & Envir. Manager
TELEPHONE NUMBER:	870-235-7235
REVIEWING ENGINEER:	Charles Hurt
UTM Zone:	15
UTM North - South (Y):	3681.911 km
UTM East - West (X):	477.104 km

Section II: INTRODUCTION

Summary of Permit Activity

American Fuel Cell and Coated Fabrics Company, Inc. (Amfuel) is engaged in the manufacture of fuel cells used in the aircraft industry. This is the first Title V renewal permit for the facility. Amfuel requested to increase the HAP limit by 10.00 tpy to use additional coatings and adhesive formulas and permission to use up to 90.00 tpy non-VOC, non-HAP air contaminants as a substitute to VOC and HAP usage. A TLV table and additional record keeping requirements were added to allow increased flexibility in demonstrating compliance with HAP emission limits. While increases for HAP and Non-VOC/non-HAP materials were requested, plantwide VOC emissions were not increased.

Process Description

FUEL CELLS

Production of fuel cells involves the fabrication of containers of various shapes and sizes. Fuel cells are molded onto plaster-of-paris or cardboard forms made by outside vendors. Panels of fabric are cut out using templates. Each fuel cell has a specific set of templates designed just for that cell. Metal fittings are integrated into the fabric in a separate process and fitted onto the molds with the fabric. Cement, made from rubber stock, solvents and adhesives, is used to adhere the various pieces of fabric together. Fuel cells are made of layers of fabric in stages called innerliner and outerply. Each layer may require a specific type of material molded to the form; it is sprayed with a coat of cement or nylon in a spray booth. The cell is then autoclave cured and the form removed from the cell by soaking with water in the wash pit. The cell is then tested for structural integrity and proper fit, repaired as needed and then routed to final finish for packing and shipping.

TOWABLE DRUMS

Production of towable drums is identical to that of fuel cells, except that metal cylinders are used as forms and no spray operations are performed on the drums.

ONION TANKS

Production of onion tanks involves using adhesives that are mixed in the cement house for the purpose of splicing panels of fabric together to form tanks. The tanks are tested, inspected, repaired as needed, packed and shipped.

FABRITANKS

Production of fabritanks is identical to the production of onion tanks with the exception of shape and size.

FOAM

Reticulated foam is used to stabilize fuel in aircraft fuel cells by retarding movement. The foam is received in block form and is hot wire sliced to thickness. The foam is stenciled per specific templates and additional cuts are made by hot wire and/or mechanical means. The foam is packaged in kit form for shipping.

FIRESTONE

Partial rolls of rubber roofing are spliced together to form one continuous piece of a specified length. After the partial rolls are received, they are rolled out, measured and trimmed to size. The lengths are seamed and rolled and packaged for shipment.

SUPPORT OPERATIONS

Production support operations include the cement/mill room, the dip unit, the calendar, the fitting department and fuel test.

A. Cement/Mill Room

Rubber pigments are milled together to make rubber stock to be blended with solvents, adhesives and elastomers to make cements. After the cements have been mixed, a sample of each batch is sent to the M & P Lab for testing for quality control purposes.

B. Dip Unit

This is used to apply cements and adhesives to nylon sheeting to make various fabrics. The nylon is dipped or knife coated with cement and then dried in an oven. A sample of fabric is sent to the M & P Lab from each finished roll for testing before it is released for further processing at the calendar.

C. Calendar

Rubber is applied to the fabric from the dip unit to make the finished fabric for fuel cell, fabritank, onion tank and towable drum manufacture. This fabric is tested by the M & P Lab before release for manufacturing use.

D. Fitting Department

Metal inserts, received from outside vendors, are made into fittings for fuel cells, towable drums, fabritanks and onion tanks. The inserts are sandblasted, cemented and then have fabric flanges bonded to them.

E. Fuel Test

Customer specifications require testing of certain fuel cells and towable drums by filling them with fuel and checking for leaks. Specially fabricated holding fixtures are used to support the items under test and observe leaks.

Regulations

The following table contains the regulations applicable to this permit.

Table 2 – Regulations

Source No.	Regulation Citations
Facility	Regulation 18, *Arkansas Air Pollution Control Code*
Facility	Regulation 19, *Regulations of the Arkansas Plan of Implementation for Air Pollution Control*
Facility	Regulation 26, *Regulations of the Arkansas Operating Air Permit Program*
13	40 CFR Part 60, Subpart Dc - *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*
Facility	40 CFR Part 63, Subpart GG – *National Emission Standards for Hazardous Air Pollutants for Aerospace Manufacturing and Rework Facilities*
15.1 15.2	40 CFR Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters*
Facility	40 CFR §52.21 Prevention of Significant Deterioration of Air Quality

The following table is a summary of emissions from the facility. The following table contains cross-references to the pages containing specific conditions and emissions for each source. This table, in itself, is not an enforceable condition of the permit.

Table 3 – Emission Summary

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
Total Allowable Criteria Emissions		PM	0.4	1.6	N/A
		PM_{10}	0.3	1.3	
		SO_2	0.2	0.2	
		VOC	132.1	297.3	
		CO	3.8	16.3	
		NO_x	4.4	19.3	
Total Allowable Hazardous Air Pollutant Emission [D]		HAP	130.11	194.72	N/A
Total Allowable Non-Criteria Pollutant Emissions [E]		NCAC	65.07	90.00 [C]	N/A
01	Cement Room	VOC HAP	16.8 16.78	297.3 [A] 194.72 [B]	12

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
		NCAC	8.39	90.00 [C]	
02	Manufacturing Area	VOC HAP NCAC	6.8 6.71 3.36	297.3 [A] 194.72 [B] 90.00 [C]	12
03	Nylon Spray	VOC HAP NCAC	16.3 16.25 8.12	297.3 [A] 194.72 [B] 90.00 [C]	12
04	Cement Spray	VOC HAP NCAC	19.2 19.14 9.57	297.3 [A] 194.72 [B] 90.00 [C]	12
05	Manufacturing Area	VOC HAP NCAC	6.8 6.71 3.36	297.3 [A] 194.72 [B] 90.00 [C]	12
08	Manufacturing Area	VOC HAP NCAC	13.5 13.42 6.71	297.3 [A] 194.72 [B] 90.00 [C]	12
09	Manufacturing Area	VOC HAP NCAC	6.8 6.71 3.36	297.3 [A] 194.72 [B] 90.00 [C]	12
10	Manufacturing Area	VOC HAP NCAC	6.8 6.71 3.36	297.3 [A] 194.72 [B] 90.00 [C]	12
14.2	Jet Fuel Storage Tank (10,000 gallon)	VOC	0.9	297.3 [A]	19
14.3	Jet Fuel Storage Tank (12,000 gallon)				19
14.10	Jet Fuel Storage Tank (5,000 gallon)				19
15.1	Boiler #1 (10.5 MMBTU/hr, Natural Gas Fired)	PM PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.9 1.0	0.4 0.4 0.1 0.3 3.9 4.6	20

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
15.2	Boiler #2 (33.5 MMBTU/hr, Natural Gas Fired)	PM	0.3	1.2	20
		PM_{10}	0.2	0.9	
		SO_2	0.1	0.1	
		VOC	0.2	0.9	
		CO	2.9	12.4	
		NO_X	3.4	14.7	
16	Calender Operation	VOC	0.9	297.3 [A]	12
		HAP	0.84	194.72 [B]	
		NCAC	0.42	90.00 [C]	
18	Spray Booth	VOC	16.8	297.3 [A]	12
		HAP	16.71	194.72 [B]	
		NCAC	8.35	90.00 [C]	
19	Dipping Operation	VOC	26.9	297.3 [A]	12
		HAP	26.84	194.72 [B]	
		NCAC	13.42	90.00 [C]	

A Plantwide VOC Limit (excludes Boilers)
B Plantwide HAP Limit
C Plantwide NCAC Limit and may only be used to substitute VOC/HAP usage.
D HAP limits are included in VOC total.
E Non-Criteria Air Contaminants are pollutants which are not VOC and/or HAP.

Section III:PERMIT HISTORY

Permit 982-A was issued on August 13, 1990 for the facility already in operation. This permit was for the manufacture of rubber fuel cells. The major permitted emission was VOC's at 213.20 tons per year.

Permit 982-AR-1 was issued on January 8, 1993. Several small emission sources were added and the major permitted emission was VOC's at 264 tons per year.

Permit 982-AR-2 was issued on October 15, 1993. This permit was for a change in the degreaser solvent from 1,1,1-trichloroethane to trichloroethylene. All emissions, lb/hr and tpy, remained identical to the previous permit.

Permit No. 982-AOP-R0 was issued on October 24, 2000. This was the first Title V permit to be issued to Amfuel. A replacement boiler was installed, HAPs were quantified for the first time, and allowable VOC rates were increased.

Section IV: SPECIFIC CONDITIONS

SN-01 through SN-05, SN-08, SN-09, SN-10, SN-16, SN-18, SN-19

Fabrication Operations

Emissions from the production area are combined into one mass rate and recordkeeping requirement. The individual sources and a brief description are as follows:

SN-01 Cement/Mill Room

This building is separated into two sections. The cement mixing room is an explosion proof room where components are mixed to produce the adhesives (cement) which are used in the manufacturing of rubber coated fuel cells. The bulk solvent storage tanks are piped directly into the cement room; raw rubber and pigments are mixed with the solvents to produce the cement. All of the HAPs listed in the permit will be used at some time in the cement room. Components are mixed in various amounts from 55-gallon drums to one-pint cans according to the necessary process usage. The cell builders move the cement from the cement room to the manufacturing areas dispensing areas for use. Solvents used in this area can include methyl ethyl ketone, methyl isobutyl ketone, toluene, acetone, naphtha, isopropanol and xylene. The ventilation is through roof vents.

The Mill Room is connected to the cement room and houses a banberry type mill which is used to mix pigments and rubber according to the formula for the cement used. No solvents are used or mixed in this area.

SN-02 Manufacturing Area

This area encompasses a large part of the plant, which is used for all stages of production of fuel cells. This area includes forms storage, building areas, cutting tables, autoclave areas, repair areas, final finish areas. Solvents are used in each of these areas except cutting tables, autoclave and forms storage. Builders and repair personnel use various solvents to activate the rubber and adhesives as the cells are constructed in layers as required in specific specifications. Some solvents are used in cleaning cells for dipping. Each end of the plant has a solvent/adhesive dispensing area. The solvents and adhesives are dispensed from 30, 5 and 1 gallon safety cans or containers. Each individual builder has several small squeeze bottles of the solvent needed for construction of fuel cells. Solvents used in this area can include MEK, MIBK, toluene, xylene, naphtha, acetone and ethanol. Ventilation is into plant area and roof vents. Large ceiling fans keep air moving to assist ventilation.

SN-03 Environmental Room/Nylon Spray

This room is a temperature and humidity controlled area where powdered nylon in an alcohol medium is sprayed on the inside layer of rubber of a fuel cell. The alcohol evaporates leaving the nylon layer on the cell. This nylon layer allows the cell to be non-permeable in contact with fuel and also strengthens the cell. Solvents used in this area can include MEK, ethanol and isopropanol. Powered ventilation controls air movement and ventilation to regulate temperature

and humidity.

SN-04 Environmental Room/Cement Spray Room

After the inner liner layer of rubber is placed on the form, the cell is moved to the cement spray room. Cement (adhesive) is sprayed on the cell so the layer is evenly coated on the cell. After the spray operation another layer of rubber is worked over the cell. A cell may come back to the cement spray room more than once for further coats of cement. Solvents used in this area can include MEK, MIBK, toluene, MNPK, Methanol, ethanol and isopropanol. Ventilation is a filtered air return system and powered ventilation through roof.

SN-05 Manufacturing Area/Fabritanks

In this area, small rubber tanks called dunage bags are produced. The construction of the bags is very similar to the fuel cell except no form is used. The bags are built in flat layers with a plastic layer in the middle to keep sides from adhering to each other. Solvents used can include ethyl ketone, naphtha, methyl isobutyl ketone, toluene, naphta and acetone. Ventilation is into the general plant area and through roof vents.

SN-08, SN-09, and SN-10 Manufacturing Areas

These three manufacturing areas perform essentially similar activities, use the same solvent-based cements, and manufacture the same variety of products to customer specifications.

Custom-blended solvent-based cement mixtures (mixed elsewhere on-site in the Cement Room, SN-01, to required specifications from rubber stock, solvents, and adhesives) are dispensed from larger containers with agitators (i.e. 55-gallon and 30-gallon drums, 5-gallon buckets) into smaller buckets/cans and applied by paint brushes to seal or bond together the various nylon fabrics and rubber sheet outer ply material that has been cut to specific patterns per product requirements. Multiple pieces of fabric/rubber are typically assembled on a custom form in the shape of the fuel cell or tank being fabricated. Small squirt bottles are utilized to apply solvents to parts that may bond prematurely, so they can be re-positioned.

Air emissions occur from evaporative drying (i.e. flashoff) of solvents from the cement mixtures during the cement application, assembly and drying stages. Once the components have been assembled, they are moved to an autoclave for final curing under heat and pressure. The manufacturing area designated SN-08 has five (5) exhaust vents; SN-09 has fourteen (14) exhaust vents; SN-10 has two (2) exhaust vents.

SN-16 Fittings/Calendar

The fittings area builds rubber/metal fittings which are used for plumbing connections for the fuel cells. Metal rings are bonded to rubber flanges which are attached to layers of rubber in the fuel cells. A vapor degreaser (SN-17) is used in this area to clean metal rings for a super clean bonding surface. The raw fittings are placed in molds and placed in large steam heated presses to complete the bonding process. Solvents used can include MEK, MIBK, toluene, xylene and naphtha. Trichloroethylene is used in the degreaser. Ventilation is into the plant area and into

roof vents.

The calendar area used a large calendar to mill raw rubber into sheets which are to be used as the large panels in building fuel cells. Small amounts of MEK are used as cleaners on the mill rollers. Ventilation is into the plant area and into roof vents. The fabrication operations produce a wide range of products and utilize a corresponding range of solvents. Solvent usage occurs interchangeably.

SN-18 Spray Room

Solvent-based urethane rubber specialty coating products (i.e. "paint") are custom-blended elsewhere on-site in the Cement Room, SN-01, to required specifications from rubber stock, solvents, and adhesives. Different colors and coating formulations are used based on customer specifications.

The paint is typically agitated in 5-gallon buckets in the spraybooth area prior to use, where it is pumped directly from the buckets to a spraygun operation. The coating is sprayed onto fabricated pieces of nylon fabric or rubber stock in the spraybooth.

Air emissions occur from evaporative drying (i.e. flashoff) of solvents during spray application and drying. Once the components are dry, they are moved to another part of the facility for further processing or assembly. Spray room SN-18 has one (1) exhaust vent.

SN-19 Dip Tank (Unit)

The dip tank or unit is located near the fittings department in a separate room. The unit is used to apply adhesives to nylon sheeting or milled rubber sheeting to produce various fabrics for building fuel cells. The sheeting is dipped and knife coated in the adhesive and then dried in an oven. The fabric is moved to cutting tables and cell panels are cut. Solvents used in this area can include MEK, MIBK, toluene, xylene, naphtha and ethanol. Powered ventilation removes air and vapors through roof vents.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee will demonstrate compliance with annual emission limit by complying with Specific Condition #3. The permittee will demonstrate compliance with hourly emission limit by complying with Specific Condition #4. [Regulation No. 19 §19.501 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 4 – Fabrication Operations Maximum Criteria Pollutant Emission Rates

SN	Description	Pollutant	lb/hr	tpy
01	Cement Room	VOC	16.8	--
02	Manufacturing Area	VOC	6.8	--
03	Nylon Spray Operations	VOC	16.3	--
04	Cement Spray Operations	VOC	19.2	--
05	Manufacturing Area	VOC	6.8	--

SN	Description	Pollutant	lb/hr	tpy
08	Manufacturing Area	VOC	13.5	--
09	Manufacturing Area	VOC	6.8	--
10	Manufacturing Area	VOC	6.8	--
16	Calender Operations	VOC	0.9	--
18	Spray Room	VOC	16.8	--
19	Dipping Operations	VOC	26.9	--
	Total Fabrication Operation	VOC	--	297.3*

*** Plantwide Limit**

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee will demonstrate compliance with annual emission limit by complying with Specific Condition #3. The permittee will demonstrate compliance with hourly emission limit by complying with Specific Condition #4. [Regulation No. 18 §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 5 – Fabrication Operations Maximum Non-Criteria Pollutant Emission Rates

SN	Description	Pollutant	lb/hr	tpy
01	Cement Room	HAP NCAC	16.78 8.39	-- --
02	Manufacturing Area	HAP NCAC	6.71 3.36	-- --
03	Nylon Spray Operations	HAP NCAC	16.25 8.12	-- --
04	Cement Spray Operations	HAP NCAC	19.14 9.57	-- --
05	Manufacturing Area	HAP NCAC	6.71 3.36	-- --
08	Manufacturing Area	HAP NCAC	13.42 6.71	-- --
09	Manufacturing Area	HAP NCAC	6.71 3.36	-- --
10	Manufacturing Area	HAP NCAC	6.71 3.36	-- --
16	Calender Operations	HAP NCAC	0.84 0.42	-- --
18	Spray Room	HAP NCAC	16.71 8.35	-- --
19	Dipping Operations	HAP NCAC	26.84 13.42	-- --
	Total Fabrication Operations	HAP NCAC	-- --	194.72* 90.00**

*** Plantwide HAP Limit**

**** Plantwide NCAC Limit and may only be used to substitute VOC and/or HAP usage. See Specific Condition #8.**

3. The facility shall maintain monthly records that demonstrate compliance with the annual limits in Specific Conditions #1 and #2. Each month's data and a rolling twelve (12) month total shall be calculated. The records shall be maintained on-site and available to Department personnel upon request. These records shall be submitted to the Department in accordance with General Provision 7. [Regulation No. 19 §19.705, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

4. The permittee will not exceed the facility-wide Hazardous Air Pollutant (HAP) content limits set forth in the following table. Materials which are not compliant with the requirements of this table may be exempted from this condition provided that they meet all of the requirements of Specific Condition #6. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 6 – TLV Table

Maximum Single HAP Concentration (lb/gal)*	Minimum TLV (mg/m^3)
6.71	Greater Than 200
6.71	200
6.04	180
5.37	160
4.70	140
4.03	120
3.36	100
2.68	80
2.01	60
1.34	40
0.67	20
0.34	10
0.07	2
<0.06	**

*** HDI (822-06-0), MDI (101-68-8), and other low TLV substances which are not able to comply with this table may be used if they comply with Specific Condition #6.**

5. The permittee will maintain records which demonstrate compliance with the limits set in Table 6 and which may be used by the Department for enforcement purposes. Compliance will be determined by inspecting the ACGIH TLV values as listed on current MSDS forms, or in the most recently published ACGIH handbook of Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs) and properly noting on the monthly HAP records (required by Specific Condition #3) whether the material in question is compliant with Table 6. These records will be maintained on site and will be provided to Department personnel upon request. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. Certain HAP containing materials that are unable to meet the requirements of Table 1 may be exempted provided that all of the following conditions are met. Any exemptions that are claimed must be noted on the HAP records required by Specific Condition #3. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

    a. Emissions of the exempted pollutants will not exceed 200 lb of any single HAP during any one month.

    b. This exemption may only be claimed if the source material of the HAP is used for touch-up or other small quantity application. This exemption may not be claimed for any HAP emissions resulting from the usage of bulk process materials (such as paints) that are used in large quantities on a regular basis. The Department will reserve the right to determine whether a material qualifies under this condition.

    c. Total emissions of any single HAP that are claimed as an exemption may not exceed 1.00 tpy and the combined HAP emissions that are claimed as an exemption may not exceed 2.50 tpy.

7. The permittee may use all scrap VOCs and HAPs that are drummed and shipped offsite to a proper disposal site as a credit towards the facility's VOC emissions. Only the VOC and HAP portion of the shipment may be taken as a credit. Before a credit can be given the following conditions must be met. [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]

    a. Representative samples shall be taken from 10% of the drums containing VOCs and HAPs. The samples shall be tested for percentage of VOC and HAP content by weight and reported as such. The average of the samples shall be applied to all the VOC and HAP containing drums in that shipment. Sampling data taken by the offsite disposal facility shall be accepted provided it meets the requirements of this condition.

    b. The sampling reports shall be maintained on site with the VOC and HAP emissions records required by this permit. These records shall be made available to Department personnel upon request.

8. The permittee may substitute any part of VOC and/or HAP usage with up to 90.00 tpy with materials that are considered to be non-criteria air contaminants provided that each compound's concentration and TLV comply with the TLV table in Specific Condition #4. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

9. The permittee shall maintain records of the amount of material used to substitute VOC and/or HAP usage. These records shall be made available to department personnel upon request, updated by the 15th day following the month to which the records pertain, and submitted in accordance with General Provision 7. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

10. The permittee is an existing affected source pursuant to 40 CFR Part 63, Subpart GG – *National Emission Standards for Hazardous Air Pollutants for Aerospace Manufacturing and Rework Facilities* because the facility engages in the manufacturing and rework of commercial, civil, or military aerospace vehicles or components. The permittee shall comply with all applicable provisions of the subpart including, but not limited to, the following: [40 CFR Part 63, Subpart GG]

    a. The permittee shall store fresh and spent solvent in closed containers. [40 CFR 63 §63.744 (a)]

    b. The permittee shall place used solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers. The bags or containers shall remain closed at all times except when depositing or removing materials from the container. [40 CFR 63 §63.744 (a)]

    c. The permittee shall only use one or more of the techniques, or their equivalent, specified under 40 CFR Part 63 §63.744 (c) for cleaning spray guns and associated equipment unless the cleaning solvent solutions contain HAP and VOC below the de minimis levels specified in §63.741 (f). [40 CFR Part 63 §63.744 (c)]

SN-14.2, SN-14.3, SN-14.10

Jet Fuel Storage Tanks

There are 3 storage tanks on site to store jet fuel. All three tanks are vertical fixed roof tanks.

Table 7 – Storage Tank Capacities and Dates of Installation

SN	Capacity (Gallons)	Date Installed
14.2	10,000	1981
14.3	12,000	1983
14.10	5,000	1983

Specific Conditions

11. The permittee shall not exceed the emission rates set forth in the following table. The permittee will demonstrate compliance with this condition by permitting these sources at maximum capacity. [Regulation No. 19 §19.501 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 8 – Jet Fuel Storage Tanks Maximum Criteria Pollutant Emission Rates

SN	Pollutant	lb/hr	tpy
14.2 14.3 14.10	VOC	0.9	297.3*

* **Plantwide VOC Limit**

12. The facility shall only store petroleum distillates with vapor pressures less than or equal to jet fuel in each tank and shall not exceed a total throughput of 5,000 gallons per consecutive twelve (12) months. The total throughput shall be calculated by the following equation:

    Fuel Throughput = Beginning Fuel Inventory + Purchases – End of Fuel Inventory

    [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]

13. The facility shall maintain monthly records that demonstrate compliance with Specific Conditions #12. Each month's data and a rolling twelve (12) month total shall be calculated. The records shall be maintained on-site and available to Department personnel upon request. These records shall be submitted to the Department in accordance with General Provision 7. [Regulation No. 19 §19.705, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-15.1 and SN-15.2

Boilers

The facility operates two boilers which use only natural gas. SN-15.1 is a Cleaver Brooks, Model CB266X25, rated at 10.461 MMBTU/hr boiler moved to the plant in 2000 from Amfuel's Plant 2. SN-15.2 is a Cleaver Brooks, Model CB400-800, rated at 33.476 MMBTU/hr boiler installed in 1996.

Both units are subject to 40 CFR 60 Subpart Dc, but only recordkeeping requirements apply.

Both units are subject to 40 CFR 63, Subpart DDDDD. They are classified as existing large gaseous fuel units, but they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSM, site-specific monitoring plans, record keeping and reporting requirements of DDDDD or any other requirements in 40 CFR Part 63, Subpart A.

Specific Conditions

14. The permittee shall not exceed the emission rates set forth in the following table. The permittee will demonstrate compliance with this condition by permitting these sources at maximum capacity. [Regulation No. 19 §19.501 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 9 – Boiler Maximum Criteria Pollutant Emission Rates

SN	Pollutant	lb/hr	tpy
15.1	PM_{10}	0.1	0.4
	SO_2	0.1	0.1
	VOC	0.1	0.3
	CO	0.9	3.9
	NO_X	1.0	4.6
15.2	PM_{10}	0.2	0.9
	SO_2	0.1	0.1
	VOC	0.2	0.9
	CO	2.9	12.4
	NO_X	3.4	14.7

15. The permittee shall not exceed the emission rates set forth in the following table. The permittee will demonstrate compliance with this condition by permitting these sources at maximum capacity. [Regulation No. 18 §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 10 – Boiler Maximum Non-Criteria Pollutant Emission Rates

SN	Pollutant	lb/hr	tpy
15.1	PM	0.1	0.4
15.2	PM	0.3	1.2

16. Visible emissions from SN-15.1 and SN-15.2 shall not exceed 5%. Compliance with this condition will be demonstrated by Specific Condition #17. [Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

17. The boilers shall use pipeline quality natural gas as the sole fuel. [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]

18. The facility will maintain records of the amount of natural gas used in each boiler on a monthly basis. These records shall be updated monthly, maintained on site and made available to the Department upon request. [Regulation No. 19 §19.304 and 40 CFR 60, Subpart Dc]

19. The permittee is an existing affected source pursuant to 40 CFR Part 63, Subpart DDDDD –*National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters* because the facility is a major source of HAPs and operates two large, natural gas fired boilers. The permittee shall comply with all applicable requirements of the subpart. [40 CFR Part 63, Subpart DDDDD]

Section V: COMPLIANCE PLAN AND SCHEDULE

Amfuel will continue to operate in compliance with those 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: PLANT WIDE CONDITIONS

1. The permittee will 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 No. 19 §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §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 No. 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 will submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation No. 19 §19.702 and/or Regulation No. 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 No. 19 §19.702 and/or Regulation No. 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 will maintain the equipment in good condition at all times. [Regulation No. 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 No. 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Title VI Provisions

7. 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.

8. 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.

9. 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.

10. 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.

11. 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, "Significant New Alternatives Policy Program".

Section VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement is a significant activity even if this activity meets the criteria of §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 **9/6/2005.**

Table 11 - Insignificant Activities

Description	Category
Sand Blast Units	A-13
Lab	A-13
Foam Operations	A-13
Calender Operations – Heat Sources	A-13

Pursuant to §26.304 of Regulation 26, the Department determined the emission units, operations, or activities contained in Regulation 19, Appendix A, Group B, to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

Section VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation No. 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 No. 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 No. 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 No. 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 No. 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 §26.701(C)(3)(a) of Regulation #26]

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

8. The permittee will 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 19.601), 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 will 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 will 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 in the initial and full report required in 8a**.** [40 CFR 70.6(a)(3)(iii)(B), Regulation No. 26 §26.701(C)(3)(b), Regulation No. 19 §19.601 and §19.602]

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), §26.701(E) of Regulation No. 26, and A.C.A. §8-4-203, as referenced by §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 No. 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 No. 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 No. 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 No. 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 No. 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 No. 26 §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [40 CFR 70.6(a)(7) and Regulation No. 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 No. 26 §26.701(H)]

17. If the permit allows different operating scenarios, the permittee will, 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 No. 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 No. 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 No. 26 §26.2. [40 CFR 70.6(c)(1) and Regulation No. 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 No. 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 will 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 No. 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

    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 No. 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 §8-4-304 and §8-4-311]

APPENDIX A

40 CFR Part 60, Subpart Dc - *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

APPENDIX B

40 CFR Part 63, Subpart GG – *National Emission Standards for Hazardous Air Pollutants for Aerospace Manufacturing and Rework Facilities*

APPENDIX C

40 CFR Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters*