# ADEQ MINOR SOURCE AIR PERMIT

Permit No.: 1317-AR-3

IS ISSUED TO:

Alumacraft Boat Company, Inc. 1329 North 10th Street Arkadelphia, AR 71923 Clark County AFIN: 10-00079

THIS PERMIT IS THE ABOVE REFERENCED PERMITTEE'S 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 THE 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:	
Mike Bates	Date
Chief, Air Division	

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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

No. Number

NO<sub>x</sub> Nitrogen Oxide

PM Particulate Matter

PM<sub>10</sub> Particulate Matter Smaller Than Ten Microns

SO<sub>2</sub> Sulfur Dioxide

Tpy Tons Per Year

UTM Universal Transverse Mercator

VOC Volatile Organic Compound

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### Section I: FACILITY INFORMATION

PERMITTEE: Alumacraft Boat Company, Inc.

AFIN: 10-00079

PERMIT NUMBER: 1317-AR-3

FACILITY ADDRESS: 1329 North 10th Street

Arkadelphia, AR 71923

MAILING ADDRESS: 1329 North 10th Street

Arkadelphia, Arkansas 71923

COUNTY: Clark

CONTACT POSITION: Gerald Holcomb

TELEPHONE NUMBER: (870) 246-5555

REVIEWING ENGINEER: Siew C. Low

UTM North South (Y): Zone 15: 3776.87

UTM East West (X): Zone 15: 494.057

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### **Section II: INTRODUCTION**

### Summary of Permit Activity

Alumacraft Boat Co. owns and operates an aluminum boat manufacturing facility in Arkadelphia, Arkansas. The facility requested plantwide VOC and total HAPs yearly emissions increase to 60.2 tpy and 23.5 tpy respectively. Hourly VOC and HAPs emissions are revised to reflect worst case emissions. SN-05 and SN-06 have been reclassified as insignificant activities. Permitted emission changes include: decreases of PM/PM<sub>10</sub>, NO<sub>X</sub>, and CO by 0.2 tons per year (tpy), 1.9 tpy, and 0.5 tpy respectively, increases of VOC and total HAPs by 17.2 tpy, and 6.17 tpy respectively. Permitted emissions decreases are a result of reclassification of SN-05 and SN-06.

#### **Process Description**

Alumacraft Boat Co. is a manufacturer of aluminum fishing boats ranging from 10' to 18'. Alumacraft has owned this factory since 1974 and has generally operated as a two-shift, 8-hour operation since its beginning. The process begins with cutting and fabricating aluminum into boat parts, which are riveted and welded together. Foam flotation and plywood reinforcement are also added. After the boats are assembled, they move into an area for hand wiping prior to surface priming in preparation for spray painting.

The first emission point, SN-01, is a 25' x 8' spray booth (SB-1). This spray booth is used to prime the boats. The production through this booth varies depending on the size of boat being processed. The spray booth has two stacks, which are 2.833 ft. in diameter each. It is assumed 50% of the total emissions in this operation are exhausted through each stack. A 1:1 mixture of Primer Base and Primer Catalyst is applied by a HVLP spray gun from a plural component pumping system.

After the boats are primed for the final surface coating of paint, the process is split depending on the type of boat to be painted. The jon boats go to SB-2 Jon Boat Spray Paint Booth which is source SN-02. The bass boats go to SB-3 (SN-03) and on through the drying oven.

At emission point SN-02, the jon boats receive their final surface coating in a 25' x 8' spray booth. This spray booth also has two stacks, which are 2.833 ft. in diameter. It is assumed 50% of the total emissions in this operation are exhausted through each stack. The production through this booth varies depending on the size of the boat being painted. Enamel paints are applied with a HVLP air spray gun from a 55 gallon drum and wall mounted heated pump system.

After the jon boats are painted, they currently go into inventory or are loaded. The boats go by the touch-up booth (SN-07), which is SB-4. This booth is 6' x 6' and has one 2.0 ft. stack. The touch-up is accomplished using a conventional air spray gun. After the jon boats are touched up, they go into inventory or loading.

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After the bass boats leave the Boat Priming Spray Booth (SB-1), they enter the Bass Boat Spray Booth (SB-3). The bass boats receive the final surface coating in a 25' x 10' spray booth. This booth has only one stack, which measures 2.833 ft. in diameter. The production through this booth varies depending on the size of the boat being painted. This paint mix is applied from air-assisted cup gun. The pump dispenses the material in the ratio of four parts paint to one part hardener.

After the bass boats are painted, they enter DO-1, the Drying Oven, which is source SN-04. This batch oven is a 545,000 BTU/hr natural gas fired unit. The oven is an enclosed unit with one 6" stack to vent to the atmosphere. All VOCs from the painting operation are assumed to be exhausted at SN-03. After the bass boats leave the drying oven, they enter a final assembly area for carpeting, steering, upholstery, etc. The boats go through a touch-up process (SN-07) for completion. Then, a cleaning process with Naphtha takes place at SN-08 to complete the process. After this, the boats go into inventory or loading.

Emissions point SN-05 is a 6,000,000 BTU/hr natural gas fired air make-up unit. This unit is located outside the west end of the paint building and provides heat for employees comfort unit and aids in the paint process by warming the boats in the shop. This unit also replaces air being exhausted out of the paint booths by the exhaust fans. This unit has no stack. This is an insignificant activity.

## 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

The facility is not subject to 40 CFR 63, Subpart VVVV - National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing because the facility is not a major source of Hazardous Air Pollutants (HAPs).

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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.

**Total Allowable Emissions** 

TOTAL ALLOWABLE EMISSIONS			
D 11	Emission Rates		
Pollutant	lb/hr	tpy	
PM	0.1	0.3	
PM <sub>10</sub>	0.1	0.3	
$SO_2$	0.1	0.1	
VOC	271.5	60.2	
СО	0.1	0.1	
NO <sub>x</sub>	0.1	0.3	
Single HAP*	-	9.5	
Total HAPs*	237.4	23.5	

<sup>\*</sup> HAPs include in VOC totals.

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#### Section III: PERMIT HISTORY

Permit #1317-A was issued on May 12, 1992. This was the first permit issued to the facility.

Permit #1317-AR-1 was issued on July 11, 1996. The facility installed an additional air make-up unit (SN-06) for its painting operations and completed some duct work for the touch-up booth (SN-07).

Permit #1317-AR-2 was issued on October 22, 2002. The modification allowed greater flexibility in the permitted concentration of hazardous air pollutants (HAP) and volatile organic compounds (VOC) present in the coatings and adhesives used in the boat manufacturing process. This modification also addressed the addition of the Boat Cleaning Area (SN-08) which emitted 11.3 tons per year of VOC.

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### Section IV: EMISSION UNIT INFORMATION

## **Specific Conditions**

1. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 19, §19.501 et seq., effective May 28, 2006 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
01	Boating Priming Spray Booth	VOC		
02	Boating Spray Paint Booth	VOC	258.8	*
03	Bass Boat Spray Booth	VOC	238.8	·
07	Boat Touch-up Spray Booth	VOC		
04	Drying Oven (0.545 MM Btu/Hr)	PM <sub>10</sub> SO <sub>2</sub> VOC CO NO	0.1 0.1 0.1 0.1 0.1	0.3 0.1 0.1 0.1 0.3
08	Boating Cleaning Area	VOC	12.6	*

<sup>\*</sup> Total five sources (SN-01, SN-02, SN-03, SN-07, and SN-08) emissions of 60.1 tpy of VOC.

2. The permittee shall not exceed the emission rates set forth in the following table. [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
01	Boating Priming Spray Booth			
02	Boating Spray Paint Booth	Single HAP	-	9.5
03	Bass Boat Spray Booth	Total HAPs	258.8	23.5
07	Boat Touch-up Spray Booth			
04	Drying Oven (0.545 MM Btu/Hr)	PM	0.1	0.1

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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. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
All source	5%	§18.501

- 4. 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. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 5. The permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [Regulation 18, §18.901 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 6. The permittee shall not apply any amount of primer mix, paint/thinner, or naphtha solvents that exceed the following limits per consecutive 12-month period. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Material	Limit gallons
01, 02, 03, 07	primer mix, paint/thinner	15146
08	naphtha	4000

- 7. The permittee shall maintain monthly records which demonstrate compliance with Specific Condition #6. The permittee will update the records by the fifteenth day of the month following the month to which the records pertain. The permittee will keep the records onsite, and make the records available to Department personnel upon request. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 8. The permittee shall not exceed the formulation of HAPs for the given minimum TLV in the following table in any HAP containing compound used at the facility. Compliance with this table shall be demonstrated through compliance with Specific Conditions #9 and #10. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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Minimum TLV (mg/m³)	Maximum Single HAP Content (lb/gal)
187.8	7.22
182.07	7
156.06	6
130.05	5
104.04	4
78.03	3
52.02	2
26.01	1
13.00	0.5
6.50	0.25
2.60	0.10

HDI (CAS: 822-06-0) is exempt from this table because it has a very low vapor pressure.

- 9. The permittee shall maintain records which demonstrate compliance with the limits set in Specific Condition #8, and which may be used by the Department for enforcement purposes. Compliance shall be determined by inspecting the American Conference of Governmental Industrial Hygienists (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 #10) whether the material in question is compliant with the table contained in Specific Condition #8. These records shall be maintained on site and shall be provided to Department personnel upon request. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 10. The permittee shall maintain monthly records of the HAP emissions from the facility in order to demonstrate compliance with tons per year emission limits. All HAPs that are capable of being emitted as air emissions and are contained in materials issued for use at the facility shall be considered to be emitted to the air. A 12-month rolling total and each individual month's data shall be maintained on a facility-wide basis. These records shall be maintained on site and shall be made available to Department upon request. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 11. The permittee shall limit total HAP concentration of all coatings applied to 7.22 lb/gal. Compliance with this condition shall be demonstrated through compliance with Specific Condition #9. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 12. The permittee shall limit all HAP emissions to 9.5 tons per year any single HAP and 23.5 tons per year combination of HAPs. Compliance with this condition shall be

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demonstrated through compliance with Specific Condition #10. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

- 13. The permittee shall limit total VOC concentrations of all coatings applied to 8.14 lb/gal. Compliance with this condition shall be demonstrated by maintaining MSDS or other information indicating the VOC concentration for each coating applied at the facility and shall be made available to Department personnel upon request. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 14. The permittee shall not emit more than 60.1 tons of VOC from SN-01, SN-02, SN-03, Sn-07, and SN-08 based on a consecutive 12 month period. Compliance with this condition shall be shown through compliance with Specific Condition #6. [Regulation 19, §19.501 et seq. and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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## Section V: INSIGNIFICANT ACTIVITIES

The Department deems the following types of activities or emissions as 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 June 28, 2006.

Description	Category
SN-05 Air Make Up Unit	A-13
SN-06 Air Make Up Unit	A-13

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## Section VI: GENERAL CONDITIONS

- 1. Any terms or conditions included in this permit that 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 that 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. This permit does 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 under the Act. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 3. The permittee shall notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [Regulation 19, §19.704 and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [Regulation 19, §19.410(B) and/or Regulation 18, §18.309(B) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 5. The permittee must keep records for five years to 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 Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [Regulation 19, §19.705 and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 6. A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [Regulation 19, §19.705 and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Arkansas Department of Environmental Quality Air Division ATTN: Compliance Inspector Supervisor Post Office Box 8913

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- 7. The permittee shall 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) newly constructed or 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) existing equipment already operating according to the time frames set forth by the Department. 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 must submit compliance test results to the Department within thirty (30) days after the completion of 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]
- 8. The permittee shall 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
  - d. Utilities for sampling and testing equipment
- 9. The permittee shall operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee shall maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [Regulation 19, §19.303 and/or Regulation 18, §18.1104 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will 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: [Regulation 19, §19.601 and/or Regulation 18, §18.1101 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - 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 the permittee took all reasonable measures 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 must 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,

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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, the information need not be submitted again.

- 11. The permittee shall allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - 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; and
  - e. To perform an operation and maintenance inspection of the permitted source.
- 12. The Department issued this permit 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. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [Regulation 19, §19.410(A) and/or Regulation 18, §18.309(A) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 14. This permit may be transferred. An applicant for a transfer must 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. The Department may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [Regulation 19, §19.407(B) and/or Regulation 18, §18.307(B) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 15. This permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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16. This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 17. This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 18. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [A.C.A §8-1-105(c)]