

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 2395-AOP-R0 AFIN: 36-00508

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Aronda Manufacturing, Inc.  
1446 County Road 3291  
Clarksville, Arkansas 72830

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Boat Building  
NAICS Code: 336612

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
11/21/2017	New	Two existing spray booths increasing usage rate to 2.4 times initial usage to account for hull manufacturing.

6. REVIEWER'S NOTES:

Aronda is planning to expand operations to produce boat hulls using the same manufacturing process and components currently used for producing boat components. Expanding into hull manufacturing makes the facility subject to NESHAP VVVV. This is the initial Title V air permit for the facility. The facility's permitted annual emissions are 0.5 tpy PM/PM<sub>10</sub>, 46.6 tpy VOC, 44.34 tpy styrene, 44.90 tpy total HAPs, and 22.34 tpy acetone

7. COMPLIANCE STATUS:

This is the initial air permit for the facility.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N  
If yes, were GHG emission increases significant?

b) Is the facility categorized as a major source for PSD? N

- *Single pollutant  $\geq 100$  tpy and on the list of 28 or single pollutant  $\geq 250$  tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-01 and SN-02	HAPs	NESHAP WWWW
SN-01 and SN-02	HAPs	NESHAP VVVV

10. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N

(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Regulation 18 requirement.)

If yes, are applicable requirements included and specifically identified in the permit?  
If not, explain why.

For any requested inapplicable regulation in the permit shield, explain the reason why it is not applicable in the table below.

Source	Inapplicable Regulation	Reason
N/A		

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. AMBIENT AIR EVALUATIONS:

Include the results for any ambient air evaluations or modeling. Include NSR/PSD permits and permits that require an evaluation in accordance with revisions to the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark Code Ann. § 8-4-318, dated March 2017 and the ADEQ Air Permit Screening Modeling Instructions.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the ADEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Department procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

1<sup>st</sup> Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m<sup>3</sup>), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m <sup>3</sup> )	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Ethylbenzene	86.84	9.55	0.004	Y
Methyl Methacrylate	204.76	22.52	1.163	Y
Styrene	85.20	9.37	42.62	N
Acetone	1187.12	130.58	21.48	Y

2<sup>nd</sup> Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL ( $\mu\text{g}/\text{m}^3$ ) = 1/100 of Threshold Limit Value	Modeled Concentration ( $\mu\text{g}/\text{m}^3$ )	Pass?
Styrene	852.0	842.9*	Y

\* The facility is required to construct a vertical stack with a stack height at a minimum of 20 feet and stack inside diameter not to exceed 22 inches to achieve a modeled concentration below the PAIL.

c) H<sub>2</sub>S Modeling:

The facility does not report any H<sub>2</sub>S emissions.

13. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01 & 02	Mass Balance	65% retention PM/PM <sub>10</sub>  See MSDS for PM/PM <sub>10</sub> , VOC and HAPs wt%	Particulate Filter	98.81% PM/PM <sub>10</sub>	See usage limit in Specific Condition #5
04	Mass Balance	100% of the acetone are emitted through the stack	None	N/A	44,676 lb/yr usage

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
N/A				

15. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
N/A				

16. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
Facility	Product usage	<u>In lb/yr</u> LHA-8008 = 21,000 LHB-9062 = 13,800 HD-5624 = 1,728 HD-8579 = 307.2 966-AT-539 = 348 966-RT-330 = 360 LHA-3062 = 1,632 LHA-2443 = 3,480 LHA-2900 = 1,440 966-LT-587 = 360 AG-37629 = 324 LHM-1513 = 1,444.8 LHA-8578 = 348 HD-9166 = 1,087.2 XTEND 838 = 73.2 H834-RCZ-35 = 226,800	Monthly	Y
01	HAP content limits for open molding operation	<u>In lb/ton</u> Tooling gel coat: 440 White/off-white pigmented gel coating: 267 All other pigmented gel coating: 377 Corrosion-resistant/high strength or high performance gel coat: 605 Fire retardant gel coat: 854 Clear production gel coat: 522	Monthly	Y
02	HAP content limits for open molding operation	<u>In lb/ton</u> Manual resin application: 87	Monthly	Y
01 & 02	Resin/gel coat use and operation	See Specific Condition #15	Monthly	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	where the resin is used			
01 & 02	Records required by Specific Condition #25	See Specific Condition #25	As Required	Y
01 & 02	Amount of resin and gel coat used, HAP content, application method, and calculations to demonstrate compliance based on MACT model point values	See Specific Condition #29	Monthly	Y
01 & 02	Organic HAP content of cleaning solvents	Not to exceed 5% organic HAP by weight	As Required	Y
01 & 02	Records required by Specific Condition #38	See Specific Condition #38	As Required	Y
04	Acetone usage	44,676 lb per rolling 12 month period	Monthly	Y

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01 & 02	20%	Reg.19.503	Monthly Observation

18. DELETED CONDITIONS:

Former SC	Justification for removal
N/A	

19. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Category	Emissions (tpy)						
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
No Group A insignificant activities are listed in the application. The facility reports a hand trimming/cutting operation as B-17 IA.								

20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
N/A





## APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

## Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Aronda Manufacturing, Inc.  
 Permit Number: 2395-AOP-R0  
 AFIN: 36-00508

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	100
Permit Type	Initial Permit	Permit Fee \$	2393

Minor Modification Fee \$	500
Minimum Modification Fee \$	1000
Renewal with Minor Modification \$	500
Check if Facility Holds an Active Minor Source or Minor Source General Permit	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	69.34
Initial Title V Permit Fee Chargeable Emissions (tpy)	69.34

*HAPs not included in VOC or PM:*

*Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride*

*Air Contaminants:*

*All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensable PM, H2S in TRS, etc.)*

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
PM		0	0.5	0.5		
PM <sub>10</sub>		0	0.5	0.5	0.5	0.5
PM <sub>2.5</sub>		0	0	0		
SO <sub>2</sub>		0	0	0	0	0
VOC		0	46.5	46.5	46.5	46.5
CO		0	0	0		
NO <sub>x</sub>		0	0	0	0	0
Styrene	<input type="checkbox"/>	0	44.34	44.34		

