

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0576-AOP-R6 AFIN: 14-00046

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

SAPA Extrusions, Inc., Magnolia Operations
245 West Greene Street
Magnolia, Arkansas 71753

3. PERMIT WRITER:

Shawn Hutchings

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Metal Window and Door Manufacturing
NAICS Code: 332321

5. SUBMITTALS:

7/6/2011

6. REVIEWER'S NOTES:

SAPA Extrusions, Inc. operates an extrusion and surface treatment aluminum forming facility located in Magnolia, Arkansas. The plant processes include die processing, extrusion operations, surface treatment (including surface coating) and fabrication. During the Title V renewal issues arose with the sulfuric acid modeling. SAPA was required to shut down sources SN-04, 05, and 06 submit modeling showing the sulfuric acid emissions from the facility do not cause air pollution. The modeling was submitted with the application for this modification. Sulfuric Acid emissions from SN-04, 05, 06, and 51 were updated. CAM provisions were added for SN-04, 05, and 06. Source SN-61 was removed as it was never installed. Permitted emissions were reduced 24 tpy of particulate and 12.1 tpy of sulfuric acid.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

There are no known enforcement issues with the facility.

8. PSD APPLICABILITY:

a. Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N

b. Is the facility categorized as a major source for PSD? N
Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list?

If yes, explain why this permit modification is not PSD?

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-14	-	NSPS Subpart Dc
SN-51	HAPs	MACT Subpart WWWW
04, 05, 06	PM ₁₀	CAM

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Examination of the source type, location, plot plan, land use, emission parameters, and other available information indicate that modeling is not warranted at this time.

Non-Criteria Pollutants:

1st 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/m³), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Sulfuric Acid	0.2	.022	0.7	No

2nd 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 (µg/m ³) = 1/100 of Threshold Limit Value	Modeled Concentration (µg/m ³)	Pass?
Sulfuric Acid	2	8.1	No

SAPA has submitted studies showing effects from Sulfuric Acid are non-detectable below 100 µg/m³ on an 8 hour basis. The 8 hr modeling (12.4 µg/m³) and the 24 hour model shown above are sufficiently below the reported levels of no observable adverse effect level for Sulfuric Acid.

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
04, 05, 06	Performance testing	Varied per source see application	Scrubber	90% PM, 10% NO _x , 60% acids	
51	Based on Usage except Sulfuric Acid which is based on sampling	Varied according to usage and material	None		

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
There were no additional testing requirements added in this permit.				

14. 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)
04, 05, 06	Scrubber flow rate	Flow Meter	Daily	Y

15. 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)
04, 05, 06	Scrubber Flow Rate	Based on testing	Daily	Y
51	Usage rates	See Table Specific Condition 28	Monthly	Y
51	MACT Subpart WWWW requirements	None	Varied	Y

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
04, 05, 06	20	Department Guidance	Weekly Observation
51	5	Department Guidance	Weekly Observation

17. DELETED CONDITIONS:

Former SC	Justification for removal
07	Requirement to submit modeling or shut down source which was satisfied by this application.

18. GROUP A INSIGNIFICANT ACTIVITIES

Source	Group A	Emissions (tpy)
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Name	Category	PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
No insignificant activities were reviewed.								

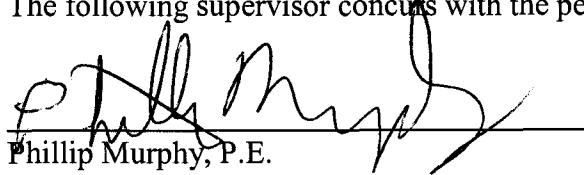
19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

List all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
0576-AOP-R5

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.


Phillip Murphy, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 12-15-10

SAPA Extrusions, Inc., Magnolia Operations
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\$/ton factor	22.07	Annual Chargeable Emissions (tpy)	278.432
Permit Type	Modification	Permit Fee \$	1000

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)	-36.1
Initial Title V Permit Fee Chargeable Emissions (tpy)	

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 condensible 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	<input checked="" type="checkbox"/>	100.7	76.7	-24	-24	76.7
PM ₁₀	<input type="checkbox"/>	100.7	76.7	-24		
SO ₂	<input checked="" type="checkbox"/>	0.9	0.9	0	0	0.9
VOC	<input checked="" type="checkbox"/>	6.8	6.8	0	0	6.8
CO	<input type="checkbox"/>	17.7	17.7	0		
NO _x	<input checked="" type="checkbox"/>	156.7	156.7	0	0	156.7
Chromium	<input type="checkbox"/>	0.0003	0.0003	0		
Hydrogen Fluoride	<input checked="" type="checkbox"/>	0.232	0.232	0	0	0.232
Nickel	<input type="checkbox"/>	0.09	0.09	0		
Phosphoric Acid	<input checked="" type="checkbox"/>	1.5	1.5	0	0	1.5
Nitric Acid	<input checked="" type="checkbox"/>	33.1	33.1	0	0	33.1
Sulfuric Acid	<input checked="" type="checkbox"/>	14.6	2.5	-12.1	-12.1	2.5