

## STATEMENT OF BASIS

for the issuance of Draft Air Permit # : 2111-AOP-R1

**1. PERMITTING AUTHORITY:**

Arkansas Department of Environmental Quality  
8001 National Drive  
Post Office Box 8913  
Little Rock, Arkansas 72219-8913

**2. APPLICANT:**

Crane Composites, Inc.  
8500 CW Post Road  
Jonesboro, AR 72401

**3. PERMIT WRITER: Charles Hurt**

**4. PROCESS DESCRIPTION AND NAICS CODE:**

NAICS Description: All Other Plastics Product Manufacturing  
NAICS Code: 326199

**5. SUBMITTALS: 04/24/2007**

**6. REVIEWER'S NOTES:**

Crane Composites, Inc. (Crane), formerly Kemlite, operates a facility located at 8500 CW Post Road, Jonesboro, Arkansas 72401. The changes agreed upon in the Permit Appeal Resolution (PAR, Docket No. 06-006) have been incorporated into the permit. The changes include:

- revised emission limits and demonstrating compliance with the emissions limits through tracking material usage and formulation
- no visible emissions from the RTO (SN-01) and the raw material silos (SN-02 and SN-07),
- EPA test method 204 to evaluate the permanent total enclosure for leaks, and
- a revised schedule for submitting semi-annual compliance reports to coincide the with last day of the anniversary month of the initial Title V permit

Permitted PM/PM<sub>10</sub>, VOC, and NO<sub>x</sub> decreased by 0.2 tpy, 0.1 tpy, and 0.2 tpy, respectively. Permitted CO increased by 0.1 tpy.

**7. COMPLIANCE STATUS:**

There are no enforcement issues or actions against the facility at this time. The facility was last inspected in August 2006 and determined to be in compliance with the permit.

**8. APPLICABLE REGULATIONS:**

**PSD Applicability**

Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, et cetera)? N  
 Has this facility undergone PSD review in the past? N Permit#  
 Is this facility categorized as a major source for PSD?  
 ≥ 100 tpy and on the list of 28 (100 tpy)? N  
 ≥ 250 tpy all other N

**Source and Pollutant Specific Regulatory Applicability**

Source	Pollutant	Regulation [NSPS, NESHAP (Part 61 & Part 63), or PSD only]
SN-01	VOC/HAP	40 CFR Part 63, Subpart SS
Facility	VOC/HAP	40 CFR Part 63, Subpart WWWW

**9. EMISSION CHANGES:**

The following table summarizes plant wide emission changes associated with this permitting action.

Plant Wide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 2111-AOP-R0	Air Permit 2111-AOP-R1	Change
PM/PM <sub>10</sub>	1.1	0.9	-0.2
SO <sub>2</sub>	0.1	0.1	0
VOC	36.6	34.8	-1.8
CO	7.5	7.6	0.1
NO <sub>x</sub>	9.2	9.0	-0.2
Styrene	33.96	33.90	-0.06
Xylene	0.10	0.04	-0.06
Ethylbenzene	0.03	0.02	-0.01
MMA*	1.64	2.40	0.76
Vinyl Acetate	0.20	0.51	0.31

**10. 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 deemed 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).

<b>Pollutant</b>	<b>TLV (mg/m<sup>3</sup>)</b>	<b>PAER (lb/hr) = 0.11*TLV</b>	<b>Proposed lb/hr</b>	<b>Pass?</b>
Styrene	85.2	9.3	7.54	Y
Xylene	434.1	47.7	0.01	Y
Ethylbenzene	434.1	47.7	0.01	Y
MMA*	204.7	22.5	0.52	Y
Vinyl Acetate	35.2	3.8	0.10	Y

\* Methyl Methacrylate CAS # 80-62-6

**11. CALCULATIONS:**

<b>SN</b>	<b>Emission Factor Source (AP-42, Testing, etc)</b>	<b>Emission Factor and units (lbs/ton, lbs/hr, etc)</b>	<b>Control Equipment Type (if any)</b>	<b>Control Equipment Efficiency</b>	<b>Comments (Emission factor controlled/uncontrolled, etc)</b>
01	Natural Gas Combustion AP-42	7.6 lb PM/10 <sup>6</sup> scf 0.6 lb SO <sub>2</sub> /10 <sup>6</sup> scf 5.5 lb VOC/10 <sup>6</sup> scf 84 lb CO/10 <sup>6</sup> scf 100 lb NO <sub>x</sub> /10 <sup>6</sup> scf			
01	Panels Mass Balance	0.0219 lb VOC/lb core resin 0.0849 lb VOC/lb gel coat resin	RTO	95%	100% Capture 95% Destruction
02	Mass Balance	3.0 lb PM/ton	Fabric Filter	99.9%	

SN	Emission Factor Source (AP-42, Testing, etc)	Emission Factor and units (lbs/ton, lbs/hr, etc)	Control Equipment Type (if any)	Control Equipment Efficiency	Comments (Emission factor controlled/uncontrolled, etc)
07	Mass Balance	3.0 lb PM/ton	Fabric Filter	99.9%	
08	Tanks 4.0	0.20 lb VOC/hr			uncontrolled

**12. TESTING REQUIREMENTS:**

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
01	VOC	25A	5 yr	Required By 40 CFR Part 63, Subpart WWWW

**13. MONITORING OR CEMS**

The permittee must monitor the following parameters with CEMs or other monitoring equipment (temperature, pressure differential, etc), frequency of recording and the need for records included in any annual, semiannual or other reports.

SN	Parameter or Pollutant to be Monitored	Method of Monitoring (CEM, Pressure Gauge, etc)	Frequency*	Report (Y/N)**
01	Combustion Chamber Temperature	Thermocouple	Continuously	Y

\* Indicate frequency of recording required for the parameter (Continuously, hourly, daily, etc.)

\*\* Indicates whether the parameter needs to be included in reports.

**14. RECORD KEEPING REQUIREMENTS**

The following are items (such as throughput, fuel usage, VOC content of coating, etc) that must be tracked and recorded, frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

SN	Recorded Item	Limit (as established in permit)	Frequency*	Report (Y/N)**
01	Core Resin Throughput	83,044,800 lb/yr	Daily	Y
	Gel Coat Resin Throughput	14,948,064 lb/yr		
	Combustion Chamber Temperature	1500 °F (minimum)	Continuously	Y

\* Indicate frequency of recording required for the item (Continuously, hourly, daily, etc.)

\*\* Indicates whether the item needs to be included in reports

**15. OPACITY**

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
01	5	Department Guidance	Weekly
02	5	Department Guidance	Monthly
07	5	Department Guidance	Monthly

**16. DELETED CONDITIONS:**

No specific conditions were deleted. However, Specific Condition #7 was revised to specify maximum allowable VOC and HAP content of formulas.

**17. VOIDED, SUPERSEDED OR SUBSUMED PERMITS**

Permit #
2111-AOP-R0

**18. CONCURRENCE BY:**

The following supervisor concurs with the permitting decision:

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 Phillip Murphy, P.E.  
 Engineering Supervisor, Air Division