

## STATEMENT OF BASIS

for the issuance of Draft Air Permit # 1630-AR-3

**1. PERMITTING AUTHORITY:**

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

**2. APPLICANT:**

Thomas & Betts Corporation  
5601. E. Highland Drive  
Jonesboro, Arkansas 72401

**3. PERMIT WRITER: Charles Hurt**

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

NAICS Description: Noncurrent-Carrying Wiring Device Manufacturing  
NAICS Code: 335932

**5. SUBMITTALS: August 9, 2004**

**6. REVIEWER'S NOTES:**

Thomas & Betts Corporation (T&B), located at 5601 E. Highland Drive, in Jonesboro, AR requested to update emission rate tables and Permit No. 1630-AR-2 to account for updated stack parameters and installation of new process equipment. The new equipment includes two 0.15 MMBTU/hr pipe primer pre-heat burners, a centrifuge to recover sulfuric acid used in the dip tanks, and 8.6 MMBTU/hr boiler (SN-17) to provide steam for the pipe inside and outside blow off units. The new boiler replaced Boiler #1 (formerly SN-17), Boiler #2 (SN-19), and Superheaters No. 1 and 2 (SN-18 and SN-19). T&B also requested the permit be modified to account for emissions exhausted through the vents in the Chemical Storage and Mix Rooms, from sandblasting Off-Spec pipe and fittings (SN-41 and SN-42), and from pipe and fitting primer application (SN-43 and SN-44). The pipe primer pre-heat burners, centrifuge, and vents were added to the Insignificant Activities list. Permitted emissions of SO<sub>2</sub>, VOC, CO, NO<sub>x</sub>, and Acetone increased by 1.1 tpy, 0.1 tpy, 5.2 tpy, 4.6 tpy, and 58.24 tpy, respectively. PM/PM<sub>10</sub> decreased by 18.1 tpy.

**7. COMPLIANCE STATUS:**

There are currently no enforcement issues or actions against the facility at this time.

**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#	N/A
Is this facility categorized as a major source for PSD?	N		
\$ 100 tpy and on the list of 28 (100 tpy)?	N		
\$ 250 tpy all other	N		

**PSD Netting**

Was netting performed to avoid PSD review in this permit? N

**Source and Pollutant Specific Regulatory Applicability**

There are no applicable source or pollutant specific regulations.

**9. EMISSION CHANGES:**

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

<b>Plant Wide Permitted Emissions (ton/yr)</b>			
<b>Pollutant</b>	<b>Air Permit 1630-AR-2</b>	<b>Air Permit 1630-AR-3</b>	<b>Change</b>
PM/PM <sub>10</sub>	85.9	67.8	-18.1
SO <sub>2</sub>	1.5	2.6	1.1
VOC	98.9	99.0	0.1
CO	7.7	12.9	5.2
NO <sub>x</sub>	15.2	19.8	4.6
HAP	24.90	24.90	0.00
Acetone	177.50	235.74	58.24

**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.

**Odor Modeling**

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. This facility is not a source for hydrogen sulfide or styrene.

**Non-Criteria Pollutants**

This permit contains a TLV table for non-criteria pollutants. Modeling was used to determine the permitted emission rates for ranges of non-criteria pollutants (grouped by TLVs) that pass the PAER. Therefore, modeling of specific non-criteria pollutants was not performed.

<b>Minimum Allowable TLV (mg/m<sup>3</sup>)</b>	<b>Maximum Allowable Single HAP Content (lb/gal)<sup>a</sup></b>
>290	8.33
290	8.33
278.5	8.00
208.9	6.00
139.3	4.00
69.6	2.00
34.8	1.00
31.3	0.90
27.9	0.80
24.4	0.70
20.9	0.60
17.4	0.50
13.9	0.40
10.4	0.30
7.0	0.20
3.5	0.10

<sup>a</sup> Chemicals such as HDI (CAS 822-06-0), MDI (CAS 101-68-8), and other low vapor pressure chemicals are not expected to rapidly volatilize and are emitted at a rate of less than 1.0 tpy shall be exempt from this table.

**11. CALCULATIONS:**

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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)
09, 10	NYSDEC - Estimated Emissions Table A12-C	Gassing Factor = 3% to 5%	None		All HAPs below 1 tpy
11, 12, 15, 16, 17, 18, 19, 20, 21, 22, 26, 28, 30, 35, 36, 37	AP-42 Tables 1.4-1,2,3	NO <sub>x</sub> = 100 lb/MMft <sup>3</sup> , etc.	None		Combustion
13, 15, 16	AP-42 Table 12.14-2	5 lb/ton	Baghouse	90%	Hot Dip Galvanizing
14	AP-42 Table 12.14-2	5 lb/ton	Scrubber	90%	Hot Dip Galvanizing
23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 38, 39, 40	Material Balances and MSDS	100% Evaporation 10% overspray			
29, 30	Engineering Estimate	0.20 gr/dscf	Baghouse	90%	
41	Engineering Estimate	0.2 gr/dscf @10,900 dscfm	Baghouse	90%	
42	Engineering Estimate	0.2 gr/dscfm @6,700 dscfm	Baghouse	90%	
43	Engineering Estimate	2.43 lb/hr VOC			
44	Engineering Estimate	2.7 lb/hr VOC			

**12. TESTING REQUIREMENTS:**

This permit does not require stack testing.

**13. MONITORING OR CEMS**

This permit does not require CEMs or any other monitoring equipment.

**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)**
Plantwide	Coatings and Solvent usage	99.0 tpy VOC	Monthly	N
		9.9 tpy Single HAP 24.9 tpy Combination HAP	Monthly	N

\* 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, 09, 10, 14, 23, 24	20%	§18.501 These are uncontrolled sources, or low efficiency controls, such as paint filters.	Inspector's Observation
Plantwide	5%	§18.501	Inspector's Observation

**16. DELETED CONDITIONS:**

The previous permit contained the following deleted Specific Conditions.

Former SC	Justification for removal
9, 10, 11	Replaced with conditions to demonstrate compliance through use of a TLV table.

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

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

Permit #
1630-AR-2

**18. CONCURRENCE BY:**

The following supervisor concurs with the permitting decision:

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