

STATEMENT OF BASIS

for the issuance of Draft Air Permit # 511-AR-6

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Amercable, Inc.
350 Bailey Road
El Dorado, Arkansas 71730

3. PERMIT WRITER: Ann Sudmeyer

4. PROCESS DESCRIPTION AND SIC CODE:

NAICS Description: Drawing and Insulating of Nonferrous Wire
NAICS Code: 331422

5. SUBMITTALS: January 10, 2005

6. REVIEWER'S NOTES:

Amercable, Inc. is a manufacturer of industrial cable. This facility is located in El Dorado, Union County, Arkansas. This de minimis modification is necessary to permit the cable curing tape operations (SN-10). This change will result in permitted emission rate increases of 2.0 tons per year of VOC, 0.21 tpy ethylene glycol, and 0.01 tpy formaldehyde.

The permit application referenced Glo-Tex Stripper PD. However, subsequent conversations revealed that Glo-Tex Stripper PD would not be used at the facility.

7. COMPLIANCE STATUS:

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

There are currently no enforcement actions against this facility.

8. APPLICABLE REGULATIONS:

PSD Applicability

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

PSD Netting

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

Source and Pollutant Specific Regulatory Applicability

Source	Pollutant	Regulation [NSPS, NESHAP (Part 61 & Part 63), or PSD only]
Not Applicable		

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 511-AR-5	Air Permit 511-AR-6	Change
PM	1.4	1.4	0
PM ₁₀	1.4	1.4	0
SO ₂	0.4	0.4	0
VOC	42.3	44.3	2.0
CO	8.0	8.0	0
NO _x	9.6	9.6	0
Acetone	19.7	19.7	0
Acetophenone	7.5	7.5	0
Di(2-ethylhexyl)phthalate	1.48	1.48	0
Ethyl Benzene	0.86	0.86	0
Ethylene Glycol	0	0.21	0.21
Formaldehyde	0	0.01	0.01
Lead	0.3	0.3	0

Plant Wide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 511-AR-5	Air Permit 511-AR-6	Change
Methanol	6.00	6.00	0
Methylene Chloride	9.5	9.5	0
Methyl Ethyl Ketone	3.5	3.5	0
Methyl Isobutyl Ketone	9.5	9.5	0
Toluene	9.5	9.5	0
Xylene	3.77	3.77	0

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. All criteria pollutants are less than 100 tpy.

11. 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^3), 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?
Acetone	1187.11	130.58	15.5	Y
Acetophenone	49.14	5.40	11.2	N
Di(2-ethylhexyl)phthalate	5	0.55	0.94	N
Ethyl Benzene	434.19	47.76	0.24	Y
Ethylene Glycol	100	11	2.63	Y
Formaldehyde	0.3684	0.04	0.05	N
Lead	0.05	0.0055	0.3	N
Methanol	262.08	28.82	3.0	Y

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11*TLV	Proposed lb/hr	Pass?
Methylene Chloride	173.68	19.10	5.5	Y
Methyl Ethyl Ketone	589.77	64.87	7.0	Y
Methyl Isobutyl Ketone	204.82	22.53	5.9	Y
Toluene	188.40	20.72	9.4	Y
Xylene	434.19	47.76	0.86	Y

2nd Tier Screening (PAIL)

ISCST3 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 was 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?
Acetophenone	491.4	184.5	Y
Di(2-ethylhexyl)phthalate	50	15.6	Y
Formaldehyde	3.6	0.05	Y
Lead	0.5	0.325	Y

12. CALCULATIONS:

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)
SN-01	AP-42, Natural Gas Combustion Factors	PM/PM ₁₀ : 7.6 lb/MMft ³ SO ₂ : 0.6 lb/MMft ³ VOC: 5.5 lb/MMft ³	N/A	N/A	6.5 MMBTU/hr

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)
		CO: 84 lb/MMft ³ NO _x : 100 lb/MMft ³			
SN-02	AP-42, Natural Gas Combustion Factors	PM/PM ₁₀ : 7.6 lb/MMft ³ SO ₂ : 0.6 lb/MMft ³ VOC: 5.5 lb/MMft ³ CO: 84 lb/MMft ³ NO _x : 100 lb/MMft ³	N/A	N/A	6.5 MMBTU/hr
SN-03	AP-42, Natural Gas Combustion Factors	PM/PM ₁₀ : 7.6 lb/MMft ³ SO ₂ : 0.6 lb/MMft ³ VOC: 5.5 lb/MMft ³ CO: 84 lb/MMft ³ NO _x : 100 lb/MMft ³	N/A	N/A	4.2 MMBTU/hr
SN-04	AP-42, Natural Gas Combustion Factors	PM/PM ₁₀ : 7.6 lb/MMft ³ SO ₂ : 0.6 lb/MMft ³ VOC: 5.5 lb/MMft ³ CO: 84 lb/MMft ³ NO _x : 100 lb/MMft ³	N/A	N/A	4.2 MMBTU/hr
SN-05	Thermoplastic extrusion factor from similar facility	0.191 lb VOC/ton	N/A	N/A	Hourly emission rates based on 1050 lb compound/hr. Annual emission rates based on 2.5 MM lb/yr.
SN-06	Material Balance, MSDS	VOC: Chemlok 6.903 lb/gal Toluene Extender 7.18 lb/gal HAPs: Ethyl Benzene 1.534 lb/gal Toluene 7.18 lb/gal Xylene 5.369 lb/gal	N/A	N/A	Annual emission rates based on 600 gal/yr Chemlock and 2220 gal/yr toluene extender. Hourly emission rates based on 0.1 gal/hr Chemlock and 0.5 gal/hr toluene extender.

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)
SN-07	MSDS, Rubber Tire Manufacturing Industry	1.0 wt% acetophenone (from the decomposition of cumene peroxide) 0.002 lb VOC/25.3 lb Adhesive (DOP): 8.2 lb/gal VOC 8.2 lb/gal di(2-ethylhexyl)phthalate	N/A	N/A	Hourly emission rates based on 371 lb compound/hr and 3 lines of acetophenone-producing compounds. Total maximum extrusion rate of 17,500 lb compound/hr. Hourly emission rate based on 0.94 lb/hr Adhesive (DOP). Annual emission rates based on 1.5 MM lb/yr of acetophenone-producing compounds and 12 MM lb/yr of total thermoset compounds. Annual emission rate based on 360 gal/yr Adhesive (DOP).

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)
SN-08	Material Balance, MSDS	VOC M-1055: 7.5 lb/gal Lacquer (Telecom Cable): 25 wt% Varsol: 6.34 lb/gal Ink/Extender: 9.84 lb/gal HAPs Methylene Chloride Solvent: Methylene Chloride 11.0 lb/gal M-1055: MIBK 3.75 lb/gal Lacquer (Telecom Cable): Methanol 20 wt% Toluene 5 wt% Varsol: Ethyl benzene 0.04 lb/gal Xylene 0.32 lb/gal Acetone Acetone: 6.7 lb/gal Lacquer (Telecom Cable): 25 wt% Ink/Extender: MEK 6.9 lb/gal Acetone 4.02 lb/gal MIBK 3.75 lb/gal Toluene 4.97 lb/gal	N/A	N/A	Hourly emission rates based on: 0.5 gal/hr Methylene Chloride, 0.5 gal/hr M-1055, 1 gal/hr acetone, 15 lb/hr Lacquer (Telecom Cable), 1 gal/hr Varsol, and 1.0 gal/hr ink/extender. Annual emission rates based on: 360 gal/yr Methylene Chloride, 360 gal/yr M-1055, 3000 gal/yr Acetone, 60000 lb/yr Lacquer (Telecom Cable), 2000 gal/yr Varsol, and 1,000 gal/yr ink/extender.
SN-09	MSDS	Quickkote: 15 wt% VOC	Baghouse	97%	Hourly VOC emission rate based on 4.8 lb/hr Quickkote. Hourly lead emission rate based on a worst case of 2000 hr/yr. Annual emission rates based on 18,000 lb/yr Quickkote and 15,000 lb/yr lead dust produced.

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)
SN-10	Material Balance, MSDS	Tape: VOC 4% by weight Formaldehyde 0.0061% by weight Release Agent: VOC 18% by weight Ethylene Glycol 3.5% by weight Formaldehyde 0.04% by weight	N/A	N/A	Hourly emission rates based on 250 lb/hr tape and 75 lb/hr release agent. Annual emission rates based 42,000 lb/yr tape and 12,000 lb/yr release agent.

13. TESTING REQUIREMENTS:

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
Not Applicable				

14. 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)**
Not Applicable				

* Indicate frequency of recording required for the parameter (Continuously, hourly, daily, etc.)
 ** Indicates whether the parameter needs to be included in reports.

15. 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)**
SN-05	Thermoplastic Compound Usage	2,500,000 pounds/year	Monthly	N
SN-06 and SN-08	VOC Emissions	30.4 tons/year	Monthly	N
SN-06	MSDS (or equivalent) for VOC Content	Chemlok: 6.903 lb/gal Toluene Extender: 7.18 lb/gal	As Needed	N
SN-06	MSDS (or equivalent) for Pollutant Content	Chemlok: Ethyl Benzene 1.534 lb/gal Xylene 5.369 lb/gal Toluene Extender: Toluene 7.18 lb/gal	As Needed	N
SN-07	Thermoset Compound Usage	12,000,000 pounds/year	Monthly	N
SN-07	Acetophenone-producing Thermoset Compound Usage	1,500,000 pounds/year	Monthly	N
SN-07	Adhesive (DOP) Usage	360 gallons/year	Monthly	N
SN-07	MSDS (or equivalent)	1.0 wt% acetophenone (from the decomposition of cumene peroxide) Adhesive (DOP): 8.2 lb VOC/gal 8.2 lb di(2-ethylhexyl)phthalate/gal	As Needed	N
SN-08	Material Throughput	Acetone 3,000 gal/yr Lacquer (Telecom Cable) 60,000 lb/yr Ink/Extender 1,000 gal/yr	Monthly	N
SN-08	MSDS (or equivalent) for VOC Content	M-1055: 7.5 lb/gal Lacquer (Telecom Cable): 25% by weight Varsol: 6.34 lb/gal Ink/Extender: 9.84 lb/gal	As Needed	N

SN	Recorded Item	Limit (as established in permit)	Frequency *	Report (Y/N)**
SN-08	MSDS (or equivalent) for Pollutant Content	Methylene Chloride Solvent: Methylene Chloride 11.0 lb/gal M-1055 Solvent: MIBK 3.75 lb/gal Lacquer (Telecom Cable): Acetone 25 wt% Methanol 20 wt% Toluene 5 wt% Varsol: Ethyl benzene: 0.04 lb/gal Xylene 0.32 lb/gal Ink/Extender: Acetone 4.02 lb/gal Methyl Ethyl Ketone 6.9 lb/gal MIBK 3.75 lb/gal Toluene 4.97 lb/gal	As Needed	N
SN-09	VOC Emissions	1.4 tons/year	Monthly	N
SN-09	MSDS (or equivalent) for VOC Content	Quickkote Lead Release Agent: 15% by wt	As Needed	N
SN-09	Material Throughput	Lead Dust Produced 15,000 pounds/year	Monthly	N
SN-09	Baghouse Maintenance Inspection Log	N/A	Weekly	N
SN-10	Material Throughput	Tape: 42,000 pounds/year Release Agent: 12,000 pounds/year	Monthly	N
SN-10	MSDS (or equivalent) for VOC Content	Tape: 4% by weight Release Agent: 18% by weight	As Needed	N
SN-10	MSDS (or equivalent) for Pollutant Content	Tape: Formaldehyde 0.0061% by weight Release Agent: Ethylene Glycol 3.5% by weight Formaldehydye 0.04% by weight	As Needed	N
Plant wide	HAP Emissions	9.5 tons/year single HAP 23.75 tons/year total HAPs	Monthly	N

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

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

16. OPACITY

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
SN-01 through SN-04	5%	Department Guidance	Natural Gas Combustion
SN-05	5%	Department Guidance	---
SN-09	5%	Department Guidance	Baghouse Operation

17. DELETED CONDITIONS:

The previous permit contained the following deleted Specific Conditions.

Former SC	Justification for removal
	Not Applicable

18. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

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

Permit #
511-AR-5

19. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

Phillip Murphy, P.E.