

STATEMENT OF BASIS

For the issuance of Final Air Permit # 511-AR-8 AFIN: 70-00103

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

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

3. PERMIT WRITER:

Ann Sudmeyer

4. PROCESS DESCRIPTION AND NAICS CODE:

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

5. SUBMITTALS:

May 21, 2007

6. REVIEWER'S NOTES:

AmerCable, Inc. is a manufacturer of industrial cable. This facility is located in El Dorado, Union County, Arkansas. This permitting action is necessary to:

1. Update the facility contact;
2. Permit the use of acetophenone producing thermosets at SN-12;
3. Limit the annual emissions of acetophenone at SN-07, SN-12, and SN-14 combined to 9.9 tpy;
4. Permit a 4.2 MMBTU/hr natural gas fired boiler (SN-13);
5. Permit a new slant CV line with one extruder at SN-07 (increases hourly throughput by 600 lb/hr);
6. Permit a new catenary line with three extruders at SN-07;
7. Permit the use of acetophenone-producing thermosets at all lines at SN-07;
8. Transfer the 4.5 inch resin line from SN-05 to a new source (SN-14) and allow thermosets and acetophenone-producing thermosets to be used on this line;

9. Increase the VOC, xylene, and ethylbenzene content limits for the Chemlok (SN-06);
10. Replace the 1.75 MMBTU/hr oven in the insignificant activities list with a 1 MMBTU/hr oven;
11. Increase the annual throughput limits for the thermoset compounds (SN-07) and inks and extenders (SN-08);
12. Increase the annual throughput for thermoplastic compounds at SN-05 to maximum capacity; and
13. Correct the UTM coordinates.

The total permitted emission rate increases due to this permitting action include: 0.2 tons per year (tpy) PM/PM₁₀, 0.1 tpy SO₂, 5.4 tpy VOC, 1.6 tpy CO, 1.9 tpy NO_x, 0.2 tpy acetophenone, 0.01 tpy xylene, and 0.5 tpy acetone.

The facility requested a daily limit of 99,000 pounds of acetophenone-producing thermoset compounds instead of being limited to using only 4 lines at SN-07. Extensive modeling was conducted to find the amount that would pass the PAIL.

7. COMPLIANCE STATUS:

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

An inspection conducted on April 17, 2007 showed the facility to be out of compliance for exceeding the Chemlok ethyl benzene and xylene content limits.

On August 13, 2007, the Department was inadvertently notified that the facility had already installed equipment associated with this modification. (An email was received from the consultant that requested an update on the status of the permit. The bottom of the email included a message forwarded from the facility stating that they had already installed the equipment.) The enforcement section was notified.

8. APPLICABLE REGULATIONS:

PSD Applicability

| | |
|--|---|
| Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? | N |
| Has the facility undergone PSD review in the past? | N |
| Is the facility categorized as a major source for PSD? | N |
| ≥ 100 tpy and on the list of 28? | 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

| Source | Pollutant | Regulation (NSPS, NESHAP or PSD) |
|--------|-----------|-------------------------------------|
| N/A | | |

9. EMISSION CHANGES:

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

| Plantwide Permitted Emissions (tpy) | | | |
|-------------------------------------|-------------------|------------------|--------|
| Pollutant | Permit # 511-AR-7 | Permit #511-AR-8 | Change |
| PM | 1.6 | 1.8 | 0.2 |
| PM ₁₀ | 1.6 | 1.8 | 0.2 |
| SO ₂ | 0.5 | 0.6 | 0.1 |
| VOC | 48.1 | 53.5 | 5.4 |
| CO | 9.6 | 11.2 | 1.6 |
| NO _x | 11.5 | 13.4 | 1.9 |
| Lead | 0.3 | 0.3 | 0 |
| Acetophenone | 9.70 | 9.90 | 0.2 |
| Di(2-ethylhexyl)phthalate | 1.48 | 1.48 | 0 |
| Ethyl Benzene | 0.86 | 0.86 | 0 |
| Ethylene Glycol | 0.21 | 0.21 | 0 |
| Formaldehyde | 0.01 | 0.01 | 0 |
| Methanol | 6.00 | 6.00 | 0 |
| Methylene Chloride | 9.5 | 9.5 | 0 |
| Methyl Isobutyl Ketone | 9.5 | 9.5 | 0 |
| Toluene | 9.5 | 9.5 | 0 |
| Xylene | 3.77 | 3.78 | 0.01 |
| Total HAP | 23.75 | 23.75 | 0 |
| Acetone | 19.7 | 20.2 | 0.5 |

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.

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/m^3), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

| Pollutant | TLV (mg/m^3) | PAER (lb/hr) = $0.11 \times \text{TLV}$ | Proposed lb/hr | Pass? |
|---------------------------|-----------------------------------|--|----------------|-------|
| Acetone | 1187.11 | 130.58 | 15.5 | Y |
| Acetophenone | 49.14 | 5.40 | 156.3 | 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 |
| Methylene Chloride | 173.68 | 19.10 | 5.5 | 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)

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? |
|---------------------------|--|--|-------|
| Acetophenone | 491.4 | 459.4 ^{1,2} | Y |
| Di(2-ethylhexyl)phthalate | 50 | 15.6 | Y |
| Formaldehyde | 3.6 | 0.05 | Y |
| Lead | 0.5 | 0.325 | Y |

1. This is the only pollutant that was modeled with AERMOD. All other pollutants did not increase the lb/hr emission rates with this modification.
2. Numerous scenarios were modeled. This concentration is assuming that the Tuber lines emit at capacity for 11 hours (the worst case of the scenarios modeled). The 99,000 lb/day limit was determined based on this worst case scenario. Any adjustment to the daily limit will have to be evaluated against the PAIL.

Other Modeling:

Odor:

Odor modeling for sources emitting styrene.

| Pollutant | Threshold value 1-hour average | Modeled Concentration ($\mu\text{g}/\text{m}^3$) | Pass? |
|-----------|--------------------------------|--|-------|
| Styrene | 1361 $\mu\text{g}/\text{m}^3$ | N/A | N/A |

H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards
 If exempt, explain: _____

Y/N

| Pollutant | Threshold value | Modeled Concentration (ppb) | Pass? |
|------------------|--|-----------------------------|-------|
| H ₂ S | 20 parts per million (5-minute average*) | N/A | N/A |
| | 80 parts per billion (8-hour average) residential area | N/A | N/A |
| | 100 parts per billion (8-hour average) nonresidential area | N/A | N/A |

*To determine the 5-minute average use the following equation

$$C_p = C_m (t_m/t_p)^{0.2} \text{ where}$$

C_p = 5-minute average concentration

C_m = 1-hour average concentration

t_m = 60 minutes

t_p = 5 minutes

11. CALCULATIONS:

| SN | Emission Factor Source (AP-42, testing, etc.) | Emission Factor (lb/ton, lb/hr, etc.) | Control Equipment | Control Equipment Efficiency | Comments |
|-------|---|--|-------------------|------------------------------|--------------|
| 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 CO: 84 lb/MMft ³ NO _x : 100 lb/MMft ³ | N/A | N/A | 6.5 MMBTU/hr |
| 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 | Emission Factor Source (AP-42, testing, etc.) | Emission Factor (lb/ton, lb/hr, etc.) | Control Equipment | Control Equipment Efficiency | Comments |
|-------|--|---|-------------------|------------------------------|--|
| 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 300 lb compound/hr. Annual emission rates based on 8760 hr/yr. |
| SN-06 | Material Balance, MSDS | VOC: Chemlok 6.93 lb/gal Toluene Extender 7.18 lb/gal HAPs: Ethyl Benzene 1.54 lb/gal Toluene 7.18 lb/gal Xylene 5.39 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-07 | MSDS, Rubber Tire Manufacturing Industry | 1.0 wt% acetophenone (from the decomposition of cumene peroxide) 67% of acetophenone emitted based on testing 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 21,350 lb/hr of acetophenone-producing compounds. Total maximum extrusion rate of 21,350 lb compound/hr. Hourly emission rate based on 0.94 lb/hr |

| SN | Emission Factor Source (AP-42, testing, etc.) | Emission Factor (lb/ton, lb/hr, etc.) | Control Equipment | Control Equipment Efficiency | Comments |
|-------|---|--|-------------------|------------------------------|---|
| | | | | | Adhesive (DOP). Annual emission rates based on 9.9 tpy of acetophenone emissions and 30.0 MM lb/yr of total thermoset compounds. Annual emission rate based on 360 gal/yr Adhesive (DOP). |
| 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: | 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 |

| SN | Emission Factor Source (AP-42, testing, etc.) | Emission Factor (lb/ton, lb/hr, etc.) | Control Equipment | Control Equipment Efficiency | Comments |
|-------|---|--|-------------------|------------------------------|--|
| | | Acetone 4.02 lb/gal MIBK 3.75 lb/gal Toluene 4.97 lb/gal | | | Cable), 2000 gal/yr Varsol, and 1,300 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-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. |
| SN-11 | 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-12 | Rubber Tire Manufacturing Industry | Thermoset compounds: 0.002 lb VOC/25.3 lb Thermoplastic compounds: 0.191 lb VOC/ton | N/A | N/A | Hourly emission rates based on 1,200 lb/hr each of thermoset, acetophenone |

| SN | Emission Factor Source (AP-42, testing, etc.) | Emission Factor (lb/ton, lb/hr, etc.) | Control Equipment | Control Equipment Efficiency | Comments |
|-------|---|---|-------------------|------------------------------|---|
| | | 1.0 wt% acetophenone (from the decomposition of cumene peroxide) 67% of acetophenone emitted based on testing | | | producing compounds, and thermoplastic compounds. Annual emission rates based on 8760 hr/yr. Cap of 9.9 tpy acetophenone (VOC). |
| SN-13 | 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-14 | Rubber Tire Manufacturing Industry | Thermoset compounds: 0.002 lb VOC/25.3 lb Thermoplastic compounds and resin line emissions: 0.191 lb VOC/ton 1.0 wt% acetophenone (from the decomposition of cumene peroxide) 67% of acetophenone emitted based on testing | N/A | N/A | Hourly emission rates based on 750 lb/hr of thermoset/acetophenone producing compounds or thermoplastic compounds. Annual emission rates based on 8760 hr/yr. Cap of 9.9 tpy acetophenone (VOC). |

12. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

| SN | Pollutants | Test Method | Test Interval | Justification |
|-----|------------|-------------|---------------|---------------|
| N/A | | | | |

13. 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 | | | | |

14. RECORD KEEPING 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) |
|-----------------|--|---|-----------|--------------|
| SN-06 and SN-08 | VOC Emissions | 34.2 tons/year | Monthly | N |
| SN-06 | MSDS (or equivalent) for VOC Content | Chemlok: 6.93 lb/gal Toluene Extender: 7.18 lb/gal | As Needed | N |
| SN-06 | MSDS (or equivalent) for Pollutant Content | Chemlok: Ethyl Benzene 1.54 lb/gal Xylene 5.39 lb/gal Toluene Extender: Toluene 7.18 lb/gal | As Needed | N |

| SN | Recorded Item | Permit Limit | Frequency | Report (Y/N) |
|-------------------------|--|--|-----------|--------------|
| SN-07 | Thermoset Compound Usage | 30,000,000 pounds/year | Monthly | N |
| SN-07, SN-12, and SN-14 | Acetophenone Emissions | 9.9 tpy | Monthly | N |
| SN-07 | Adhesive (DOP) Usage | 360 gallons/year | Monthly | N |
| SN-07, SN-12, and SN-14 | MSDS (or equivalent) | 1.0 wt% acetophenone (from the decomposition of cumene peroxide) | As Needed | N |
| SN-07, SN-12, and SN-14 | Acetophenone-producing thermoset compounds usage | 99,000 lb/day | Daily | N |
| SN-07 | MSDS (or equivalent) | 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 1,300 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-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 | As Needed | N |

| SN | Recorded Item | Permit Limit | Frequency | Report (Y/N) |
|-----------|--|---|-----------|--------------|
| | | lb/gal Xylene 0.32 lb/gal Ink/Extender: Acetone 4.02 lb/gal MIBK 3.75 lb/gal Toluene 4.97 lb/gal | | |
| 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 Formaldehyde 0.04% by weight | As Needed | N |
| Plantwide | HAP Emissions | 9.5 tons/year single HAP (except acetophenone) 23.75 tons/year total HAPs (include acetophenone) | Monthly | N |

15. OPACITY:

| SN | Opacity | Justification for limit | Compliance Mechanism |
|-----------------------------------|---------|-------------------------|------------------------|
| SN-01 through SN-04, SN-11, SN-13 | 5% | Department Guidance | Natural Gas Combustion |
| SN-05 | 5% | Department Guidance | --- |
| SN-09 | 5% | Department Guidance | Baghouse Operation |

16. DELETED CONDITIONS:

| Former SC | Justification for removal |
|-----------|---|
| 7 and 8 | These conditions limited the thermoplastic compounds and required recordkeeping at SN-05. The permittee has requested to be permitted at the maximum capacity. Therefore, the conditions were removed. |
| 34 | This condition prohibited the permittee from using acetophenone-producing compounds at SN-12. The permittee has requested to be permitted to use acetophenone-producing compounds at SN-12. Therefore, the condition was removed. |

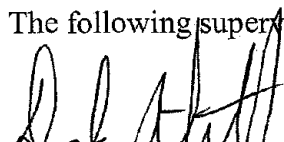
17. VOIDED, SUPERCEDED, OR SUBSUMED PERMITS:

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

| Permit # |
|----------|
| 511-AR-7 |

18. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.



 David Triplett, P.E.