

Facility Name: **Armstrong World Industries**

City: Macon

County: Bibb

AIRS #: 04-13-021-00030

Application #: 15643

Date SIP Application Received: September 24, 2004 Revised on July 28, 2005

Date Title V Application Received: September 24, 2004 Revised on July 28, 2005

Permit No: 3296-021-0030-V-01-1

| <b>Program</b> | <b>Review Engineers</b> | <b>Review Managers</b> |
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## **Introduction**

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft/proposed operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the proposed permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the EPA review process will be described in an addendum to this narrative

**I. Facility Description****A. Existing Permits**

Table 1 below lists the current Title V permit, and all administrative amendments and minor and significant modifications and 502(b)(10) changes. Comments are listed in Table 2 below.

**Table 1: Current Title V Permit and Amendments**

| Permit/Amendment Number | Date of Issuance | Comments |    |
|-------------------------|------------------|----------|----|
|                         |                  | Yes      | No |
| 3296-021-0030-V-01-0    | June 13, 2003    | v        |    |

**Table 2: Comments on Specific Permits**

| Permit Number | Comments |
|---------------|----------|
| None          |          |

**B. Regulatory Status****1. PSD/NSR/RACT**

This facility is considered to be a major source according to PSD (Prevention of Significant Deterioration, 40 CFR Part 51.21) having the potential to emit PM (Particulate Matter), PM-10 (PM less than 10 microns in diameter), and CO (carbon monoxide) greater than 250 tpy (tons per year). On June 15, 2004, Macon was designated as non-attainment for Ozone (8 hour) and PM-2.5 (PM less than 2.5 microns in diameter). This facility has potential to emit PM, PM-10, VOC (volatile organic compounds), and NO<sub>x</sub> (nitrogen oxides) greater than 100 tpy. Hence, this facility is expected to be a major non-attainment NSR source for VOC, NO<sub>x</sub>, and PM-2.5. Any future major modification at this facility will be subject to New Source Review (NSR). This review involves reducing the existing PSD avoidance limit set on stacks 092S, 088S and 083S from 2.5 lbs/hr (pounds per hour) to 1.6 lbs/hr, which offset higher than expected emissions data from the lin-o-flames and dryers. The emission limit change is associated with a PSD avoidance project originally permitted on November 24, 1986.

## 2. Title V Major Source Status by Pollutant

**Table 3: Title V Major Source Status**

| Pollutant        | Is the Pollutant Emitted? | If emitted, what is the facility's Title V status for the Pollutant? |                                   |                         |
|------------------|---------------------------|--|-----------------------------------|-------------------------|
|                  |                           | Major Source Status  | Major Source Requesting SM Status | Non-Major Source Status |
| PM               | v                         | v  |                                   |                         |
| PM <sub>10</sub> | v                         | v  |                                   |                         |
| SO <sub>2</sub>  | v                         |  |                                   | v                       |
| VOC              | v                         | v  |                                   |                         |
| NO <sub>x</sub>  | v                         | v  |                                   |                         |
| CO               | v                         | v  |                                   |                         |
| TRS              |                           |  |                                   | v                       |
| H <sub>2</sub> S |                           |  |                                   | v                       |
| Individual HAP   | v                         | v  |                                   |                         |
| Total HAPs       | v                         | v  |                                   |                         |

## II. Proposed Modification

### A. Description of Modification

The facility has submitted an application requesting (1) use of new emission factors for Lin-o-flames and Dryers, (2) replacement of two bin vent baghouses (Baghouses CD20 and CD21), (3) removal of baghouse CD22 and 4BPL Equalizer from service, (4) lower allowable PM emissions to 1.6 lbs/hr from 2.5 lbs/hr for Paint Booths K055, K040 and K010, and (5) correction of some typographical error, revise and update Title V permit.

Condition No. 3.2.1 will be modified by correcting the unit of PM limit from grains/dscf to lb/hr for Source Code D020. Several changes are made to Table 3.1.1 as highlighted in the attached permit amendment.

### B. Emissions Change

**Table 4: Emissions Change Due to Modification**

| Pollutant        | Is the Pollutant Emitted? | Net Actual Emissions Increase (Decrease) (tpy) | Net Potential Emissions Increase (Decrease) (tpy) |
|------------------|---------------------------|--|---|
| PM               | v                         | 0  | 0   |
| PM <sub>10</sub> | v                         | 0  | 0   |
| SO <sub>2</sub>  | v                         | 0  | 0   |
| VOC              | v                         | 0  | 0   |
| NO <sub>x</sub>  | v                         | 0  | 0   |
| CO               | v                         | 0  | 0   |
| TRS              |                           | 0  | 0   |
| H <sub>2</sub> S |                           | 0  | 0   |
| Individual HAP   | v                         | 0  | 0   |
| Total HAPs       | v                         | 0  |   |

### C. PSD/NSR Applicability

This review involves reducing the existing PSD avoidance limit set on stacks 092S, 088S and 083S from 2.5 lbs/hr to 1.6 lbs/hr, which offset higher than expected emissions data from the lin-o-flames and dryers. The emission limit changes are associated with a PSD avoidance project originally permitted on November 24, 1986. With the new limits, the potential PM emissions will be 23.6 tons per year from the November 24, 1986 project, which is less than the 25 tons per year trigger value. Hence, PSD is avoided realizing that the trigger value for PM10 was not established until July 1, 1987. The proposed changes to the limit do not trigger a PSD review, but rather preserves the intent to avoid the PSD review.

### III. Facility Wide Requirements

This permit amendment does not involve any facility wide requirement contained in Part 2.0 of the permit.

### IV. Regulated Equipment Requirements

#### A. Brief Process Description

This permit amendment authorizes (1) use of new emission factors for Lin-o-Flames and Dryers, (2) replacement of two bin vent baghouses (Baghouses CD20 and CD21), (3) removal of baghouse CD22 and 4BPL Equalizer from service, (4) lower allowable PM emissions to 1.6 lbs/hr from 2.5 lbs/hr for Paint Booths K055, K040 and K010 associated with stacks 092S, 088S and 083S respectively, and (5) correction of some typographical error, revise and update Title V permit.

#### B. Equipment List for the Process

Several changes are made to Part 3.0 Section 3.1.1 list of emission units, which are highlighted in Table 3.1.1. Condition 3.2.1 for Source Code D020 is modified by correcting the units from grains/dscf to lb/hr for the PM limit and allowable emission rates for Paint Booths K055, K040 and K010 are lowered from 2.5 lbs/hr to 1.6 lbs/hr.

#### C. Equipment & Rule Applicability

There will be no changes to equipment and rule applicability.

#### D. Compliance Status

The facility has not indicated any compliance problems.

#### E. Operational Flexibility

The facility has not indicated any need for additional operational flexibility.

#### F. Permit Conditions

Condition 3.2.1 for Source Code D020 is modified by correcting the units from grains/dscf to lb/hr for the PM limit and allowable emission rates for Paint Booths K055, K040 and K010 are lowered from 2.5 lbs/hr to 1.6 lbs/hr.

### V. Testing Requirements (with Associated Record Keeping and Reporting)

No additional testing is required. Testing conducted on paint booths at the facility similar to K055, K040 and K010 have shown emissions should be well below 1.6 lbs/hr.

### VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

No changes have been made to the monitoring requirements.

## VII. Other Record Keeping and Reporting Requirements

No changes have been made to the Record Keeping and Reporting Requirements.

## VIII. Specific Requirements

### A. Operational Flexibility

This amendment does not address or alter any operational flexibility.

### B. Alternative Requirements

This amendment does not address or alter any alternative requirements.

### C. Insignificant Activities

#4 BPL (STIF) Intermediate Dryer (F060) is removed from the insignificant activities based on emission levels and listed in table 3.1.1 as an emission unit. #4 BPL (STIF) Intermediate Cooler (F065) is removed from Table 3.1.1 and listed as an insignificant activities based on emission levels.

E030 is listed as an Embosser and L030 is listed as a Cooler, but should be listed as Coolers. Correction has been made with this permit amendment.

### D. Temporary Sources

This amendment does not address or alter any temporary sources.

### E. Short-Term Activities

This amendment does not address or alter any short-term activities.

### F. Compliance Schedule/Progress Reports

Section 13.00 contained in Application 15643 was signed. The certification shows that the facility believed itself to be in compliance with all applicable requirements as of the date of the certification and will continue to comply with such requirements.

### G. Emissions Trading

This amendment does not address or alter any emissions trading.

### H. Acid Rain Requirements

This amendment does not address or alter any acid rain requirements.

I. Prevention of Accidental Releases

This amendment does not address or alter any prevention of accidental release equipment.

J. Stratospheric Ozone Protection Requirements

This amendment does not address or alter any stratospheric ozone protection requirements.

K. Pollution Prevention

This amendment does not address or alter any pollution prevention.

L. Specific Conditions

This amendment does not add any new conditions.

**Addendum to Narrative**

The 30-day public review started on September 14, 2005 and ended on October 14, 2005. Comments were not received by the Division.