Title V Air Operation Permit Revision
Permit No. 0330006-019-AV

APPLICANT

The applicant for this project is Armstrong World Industries, Inc. The applicant's responsible official and mailing address are: Mr. Michael A. Wright, Plant Manager, Armstrong World Industries, Inc., 300 South Myrick Street, Pensacola, Florida 32505-8064.

FACILITY DESCRIPTION

The applicant operates the Pensacola Facility, which is located at 300 South Myrick Street in Pensacola, Escambia County.

This existing facility manufactures acoustical ceiling tiles using mineral wool, perlite, starch and paper as the main raw materials. In addition to those raw materials, the plant utilizes "broke" in the form of reclaimed process waste (trim material, dust and scrap board) and recycled post-consumer ceiling tiles. These materials are mixed with water to form a slurry that is then formed, dried, embossed, cut, painted and packaged into a variety of ceiling tile products. The facility includes a number of emissions units that can be grouped into five major categories: activities controlled by wet scrubbers; perlite expanding; board drying; activities controlled by baghouses; and, activities not subject to specific emission limits (unregulated, insignificant). The facility is subject to Compliance Assurance Monitoring (CAM).

Emissions Unit 056, Scrubber 8, is subject to 40 Code of Federal Regulations (CFR) 63 subpart HHHHH -- National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing. The process vessels comply with the alternative means of compliance in 40 CFR 63.8055, which states that coatings manufactured in the process vessels must contain less than 5% by weight hazardous air pollutants (HAP).

Also included in this permit are miscellaneous unregulated and insignificant emissions units and/or activities. An expansion has been made to the unregulated # 3 Finish Paint Line Booth of EU 077, which includes an increase in the length of the booth, the addition of a 300 gallon use tank to feed new spray guns, and several environmental controls inside the paint booth to reduce overspray paint adhesion (see letter dated June 13, 2011).

PROJECT DESCRIPTION

The purpose of this permitting project is to revise the existing Title V permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Renewed Title V Air Operation Permit issued June 18, 2010
Application for a Title V Air Operation Permit Revision received January 7, 2011
Additional Information received March 18, 2011
Notice of Intent to Issue Air Permit issued April 4, 2011
Public Notice Published April 11, 2011

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of HAP due to emissions of formaldehyde (H095) and triethylamine (H179).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD) - major stationary source of air pollution in accordance with Rule 62-212.400, F.A.C., because the facility has a potential-to-emit greater than 250 tons per year of CO. For the expander component replacement in permit 0330006-017-AC, effective February 11, 2010, a comparison of projected actual emissions to baseline actual emissions was less than the significant emissions rate. Therefore, the project was not subject to PSD preconstruction review

NSPS: The facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 CFR 60.

NESHAP: The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63, specifically subpart A and subpart HHHHH (Miscellaneous Coating Manufacturing).

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: CAM applies to EU 003, EU 009, EU 010, EU 011, EU 012, EU 014, EU 050, EU 054, EU 055, EU 056, EU 080 and EU 081. The listed emissions units are subject to CAM for the regulated emissions of particulate matter, which are controlled by scrubbers, with the exception of EU 050, which is also controlled by a multicyclone and EU 080 and EU 081, which are controlled by baghouses.

PROJECT REVIEW

The subject of this permit revision is to incorporate construction permit 0330006-017-AC, which authorized the replacement of worn out components of the two existing perlite expanders (EU 055) with like-kind components from the manufacturer in order to return the expanders to optimal operating condition. Additionally, a small package boiler (8.4 MMBtu/hr) was added at the plant to generate more steam for the forming process. The boiler burns natural gas and is an insignificant activity per 62-210.300(3)(a) and 62-213.430(6)(b). Other updates included in this revision are new cutters and dust hoods that were added to one of the existing tenoners of FMS Line of EU 014 (exempt from air permitting, DEP letter dated 09/27/10. Armstrong also notified by letter to DEP dated 3/14/ 2011 that the salvage equalizer saw of EU 011 has been permanently removed from service. The specific conditions of EU 011 are still applicable to the remaining Mylar Line and PIF Line equalizers of EU 011.

No change in operating rates or emissions was associated with the project. The expanders are not subject to 40 CFR 60 subpart UUU, Standards of Performance for Calciners and Dryers in Mineral Industries, because original construction was prior to the April 23, 1986 date of applicability in 40 CFR 60.730(c). The expander component replacement is also not subject to subpart UUU because it is not a modification (no increase in emissions) or a reconstruction (component replacement is well below 50% of cost that would be required to construct a comparable entirely new emissions unit).

Appendix CP-1, Compliance Plan dated January 5, 2011 for EU 014 (Scrubber 5) has been added in this revision. The plan for EU 014 includes visual inspection of the emissions unit and scrubber No. 5 has been added to the monthly routine preventative maintenance to verify that no wet particulates are escaping the stack. A management of change procedure has also been put in place requiring that repairs to dust equipment will be coordinated and approved by both the engineering and environmental managers before such repairs are made. Also, there is a facility improvement project to repair compressed air leaks in the plant's #3 Paint Line as a result of the consent order for EU 014.

Preliminary test results for EU 055 indicated elevated PM emissions. However, the test results were invalidated after the unit was determined to have cyclonic flow greater than 20 degrees. The problem was corrected and the emissions unit was retested. EU 055 is currently in compliance.

CONCLUSION

This project revises Title V air operation permit No. 0330006-018-AV, which was issued on June 18, 2010. This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.