Armstrong World Industries, Inc.
Pensacola Facility
Facility ID No.: 0330006
Escambia County

Title V Air Operation Permit Revision

FINAL Permit No.: 0330006-019-AV
Revision to Title V Air Operation Permit No.: 0330006-018-AV

Permitting and Compliance Authority:
Florida Department of Environmental Protection
Northwest District Air Program
160 W. Government Street, Suite 308
Pensacola, FL 32502-5740
Telephone: 850/595-8300
Fax: 850/595-8096

Title V Air Operation Permit Revision

FINAL Permit No.: 0330006-019-AV
Revision to Title V Air Operation Permit No.: 0330006-018-AV

Table of Contents

Section **Page Number**

Placard Page 1

I. Facility Information 2
- A. Facility Description.
- B. Summary of Emissions Unit ID No(s). and Brief Description(s).
- C. Relevant Documents.

II. Facility-wide Conditions 5

III. Emissions Unit(s) and Conditions
- A. Activities associated with ceiling tile manufacture controlled by scrubbers: EUs 003, 009, 010, 011, 012, 014 and 054 8
- B. EU 056 Dust sources controlled by Scrubber 8 11
- C. EU 055 Perlite expanding controlled by Scrubber 55 15
- D. EU 050 Board Drying controlled by Scrubber 53 and multicyclone 54.. 17
- E. EUs 080 and 081 Dust sources controlled by baghouses..... 19
- F. Common Conditions 21

Florida Department of Environmental Protection
Northwest District
160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

Permittee:
Armstrong World Industries, Inc.
300 South Myrick Street
Pensacola, Florida 32505-8064

FINAL Permit No.: 0330006-019-AV
Facility ID No.: 0330006
SIC No(s).: 39, 3999
Project: Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating the terms and conditions of the air construction permit 0330006-017-AC, issued February 11, 2010 which authorized the replacement of worn out components of two existing perlite expanders (EU 055) with like-kind components at the existing Pensacola Facility. This facility is located at 300 South Myrick Street, Pensacola, Florida in Escambia County; UTM Coordinates: Zone 16, 475.9 km East and 3363.5 km North; and, Latitude: 30° 24'19" North and Longitude: 87° 15' 00" West.

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix CAM, Compliance Assurance Monitoring Requirements
Appendix CAM Conditions
Appendix HHHHH, 40 CFR 63 Subpart HHHHH
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
APPENDIX TV-6, TITLE V CONDITIONS version dated 06/23/06
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix CP-1, Compliance Plan dated January 5, 2011
Attachment PLD, Process Line Drawings for EUs 003, 009, 010, 011, 012, 014, 050, 054, 055, 056, 080 and 081

Initial Effective Date: June 18, 2010
Revision Effective Date: July 6, 2011
Renewal Application Due Date: November 5, 2014
Expiration Date: June 18, 2015
/s/

Rick Bradburn
Air Program Administrator

RB/dm/c

Section I. Facility Information.

This permit is a revision to Permit Renewal No. 0330006-018-AV, effective June 18, 2010, and incorporates construction permit 0330006-017-AC, effective February 11, 2010.

Subsection A. Facility Description.

The Armstrong World Industries, Inc., Pensacola 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 emissions limits (unregulated, insignificant).

This permit revision incorporates construction permit 0330006-017-AC, which authorized the replacement of worn out components of the two existing perlite expanders with like-kind components from the manufacturer (Sibrico Corporation Model M-30) 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).

No change in operating rates or emissions is 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 proposed 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).

Since Armstrong has a potential-to-emit of greater than 250 tons per year of carbon monoxide, the facility is a major stationary source under PSD and any future permit actions must document and include an evaluation of the net emissions increases and applicability of NSR/PSD. For this project a comparison of projected actual emissions to baseline actual emissions was less than the significant emissions rate. Therefore, the project is not subject to PSD preconstruction review.

Although this emissions unit has Particulate Matter potential emissions estimated at 36.29 tons per year, the recent actual emissions level of 17.5 TPY is expected to continue for the next few years due to recent and projected economic conditions.

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).

The following are the estimated potential emissions, in tons per year, for this facility, excluding insignificant activity emissions:

Activity	PM	CO	SO2	NOx	VOC	Form.[1] (HAP)	TEA[2] (HAP)	Total HAP
Regulated Units	187.49	979.40	0.30	49.20	15.36	12.66	N/A	12.66
Unregulated Units	10.13	14.40	0.11	17.62	38.41	1.34	11.48	14.06
Facility Total [3]	197.61	993.79	0.41	66.82	53.77	14.00	11.48	26.72

1 Form. = Formaldehyde
2 TEA = Triethylamine (data based on historical material usage)
3 Facility total = estimated potential emissions except for insignificant activity emissions

Based on the initial Title V Air Operation Permit application received November 6, 2009, this facility is a major source of hazardous air pollutants (HAP).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
	Activities associated with ceiling tile manufacture controlled by wet scrubbers
003	Dust sources controlled by Scrubber 3
009	Dust sources controlled by Scrubber 4
010	Dust sources controlled by Scrubber 6
012	Dust sources controlled by Scrubber 7
014	Dust sources controlled by Scrubber 5
054	Dust sources controlled by Scrubber 9
056	Dust sources controlled by Scrubber 8
	Perlite Expanding
055	Dust and combustion byproducts from the perlite expanding and starch storage tank controlled by Scrubber 55
	Board Drying
050	Board Drying controlled by Scrubber 53 and multicyclone 54
	Activities associated with ceiling tile manufacture controlled by baghouses
080	Dust sources associated with the PIF line controlled by baghouse 21
081	Dust sources associated with the PIF line controlled by baghouse 22

Unregulated Emissions Units and/or Activities

075	Perlite, Clay and Starch Receiving, Storage and Transport
076	Natural gas fired Tile Drying
077	Paint lines and booths
078	Natural gas fired Comfort Heaters
079	Fugitive Emissions

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Appendix A-1: Abbreviations, Acronyms, Citations, and Identification Numbers
Statement of Basis

These documents are on file with the permitting authority:
Initial Title V Air Operation Permit issued May 12, 1999
Appendix H-1: Permit History
Application for a Title V Air Operation Permit Revision received January 7, 2011
Additional Information Received March 18, 2011

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit.

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 10162
Fairfax, VA 22038
Telephone: 703/227-7650

and,
b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C. [40 CFR 68]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

7. Compliance Plan. Based on the application, emissions unit 014 was not in compliance. Appendix CP-1, Compliance Plan, is a part of this permit. [Rule 62-213.440(2), F.A.C.]

8. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

These shall include as a minimum the following procedures to minimize pollutant emissions:

a. VOC containers shall be tightly covered or closed when not in use.
b. Piping, valves, fittings, for VOCs shall be maintained in good operating condition.

c. Excessive air turbulence across exposed VOCs shall be prevented.
d. VOC spills shall be immediately confined and cleaned up, and waste VOCs shall be placed in closed containers for reuse, recycling, or proper disposal.

[Rule 62-296.320(1), F.A.C.; Permit 0330006-007-AC]

9. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1, 3 & 4, F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57 of APPENDIX TV-6, TITLE V CONDITIONS):

a. Paving and maintenance of roads, parking areas, and yards.
b. Application of water, or other dust suppressants to unpaved roads, yards, and similar areas as necessary.
c. Removal of excessive particulate matter from roads and other paved areas to prevent excess particulate matter from manufacturing buildings or work areas from reentrainment or becoming airborne.
d. Use of landscaping or planting vegetation.
e. Use of hoods, fans, filters, and similar equipment.
f. Confining abrasive blasting as necessary.

[Rule 62-296.320(4)(c)3., F.A.C.; Permit 0330006-007-AC]

10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51 of APPENDIX TV-6, TITLE V CONDITIONS)}

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Northwest District office.

Department of Environmental Protection
Northwest District Office
160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740
Telephone: 850/595-8300; Fax: 850/595-8096

Notification of compliance testing may be submitted by electronic mail to nwdair@dep.state.fl.us.

12. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on

information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

14. Source Obligation:

(a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
(b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
[Rule 62-212.400(12), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions units.

E.U. ID No.	Brief Description
003	Dust sources controlled by Scrubber 3
009	Dust sources controlled by Scrubber 4
010	Dust sources controlled by Scrubber 6
011	Dust sources controlled by Scrubber 2
012	Dust sources controlled by Scrubber 7
014	Dust sources controlled by Scrubber 5
054	Dust sources controlled by Scrubber 9

These emissions units are regulated emissions units and controlled by scrubbers. The emissions unit activities include various dust sources associated with the manufacture of ceiling tile. These sources include feeders, stackers, conveyors, equalizers, tile knives, saws and sanders. These scrubbers are Ducon, Dynamic Gas Scrubbers, Type UW-4. Emissions unit 056 is not included in this section due to its applicability to 40 CFR 63 subpart HHHHH - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing.

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The process/operation rates shall not exceed the following:

EU No.	Scrubber	Process Line	Maximum Operation rate
003	Scrubber 3	Dry saw sample planer	not limited
		Board mill dry saw stacker	75 ft/min
		Dry saw sample table saw	not limited
		Dry broke pulper weigh conveyor	2.9 tons/hour
009	Scrubber 4	FMS Line	120 feet/minute (20 boards/min)
010	Scrubber 6	PIF Line Sources	198 feet/minute (33 boards/min)
011	Scrubber 2	Mylar Line	28 feet minute (4.7 boards/min)
		PIF Line (Equalizer)	198 feet/minute (33 boards/min)
012	Scrubber 7	PIF Line (2 pass tenoners)	198 feet/minute (33 boards/min)
014	Scrubber 5	Kiln Line Feeder	16 feet/minute (3.0 boards/min)
		FMS (2 tenoners)	120 feet/minute (20 boards/min)
054	Scrubber 9	PIF Slice feeders	198 ft/min (33 boards/min)
		Dry saw trim breakers	75 ft/min
		Dry saw trim conveyors	75 ft/min
		Dry saw 1st and 2nd pass saws	75 ft/min

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; BACT/PSD-FL-117, 0330006-007-AC and 0330006-009-AC]

{Permitting Note: Attachment PLD shows the revised process lines. The salvage equalizer (saw) of EU 011 has been removed from service (letter to DEP dated 3/14/2011). New cutters and dust hoods were added to one of the existing tenoners of FMS Line of EU014 (exempt from air permitting, DEP letter dated 09/27/10. A new dust hood and air knife were installed on the PIF Line and routed to Scrubber 6 (exempt from air permitting, DEP letter dated 10/23/08).}

A.2. Hours of Operation. The hours of operation are limited to 8,064 hours/year. Records of twelve-month rolling totals shall be maintained of the hours of operation. [Rule 62-210.200(PTE), F.A.C.; Permit 0330006-007-AC]

Emission Limitations and Standards

A.3. Particulate Matter: Particulate Matter (PM) shall not exceed the following:

EU No.	Scrubber	lbs/hr
003	Scrubber 3	4.0 lbs/hr
009	Scrubber 4	2.0 lbs/hr
010	Scrubber 6	2.0 lbs/hr
011	Scrubber 2	3.0 lbs/hr
012	Scrubber 7	4.5 lbs/hr
014	Scrubber 5	3.5 lbs/hr
054	Scrubber 9	3.0 lbs/hr

[Permits BACT/PSD-FL-117 and 0330006-007-AC]

A.4. Visible Emissions. Visible emissions shall not equal or be greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Test Methods and Procedures

A.5. Emissions Tests. To demonstrate compliance, the permittee shall conduct emissions tests for particulate matter and visible emissions for each emission unit. Tests shall be conducted annually during the federal fiscal year (October 1 – September 30). [Rule 62-297.310(7), F.A.C.; Permit 0330006-017-AC]

A.6. Test Methods. The test method for particulate matter shall be EPA Method 5 and for visible emissions, EPA Method 9 (30 minutes), incorporated and adopted by reference in Rule 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

Monitoring and Recordkeeping of Operations

A.7. The permittee shall maintain the following records:

- **a.** Scrubber water inlet pressure, or scrubber water flow rate, recording the data in accordance with Appendix CAM.
- **b.** Process rates for each shift.
- **c.** Hours of operation (12-month rolling totals).

[Rule 62-4.070(3), F.A.C.; DEP Letter dated 11/21/02 and Armstrong letter received 11/12/02]

{Permitting Note: The deadline for submitting semi-annual monitoring reports is 60 days following the reporting period. See Item 43 of TV-6.}

Compliance Assurance Monitoring (CAM) Requirements

A.8. These emissions units are subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a, F.A.C.]

A.9. These emission units are also subject to Common Conditions in Subsection F. (Test Methods and Procedures, Monitoring of Operations, Excess Emissions and Special Compliance Tests). [Rule 62-4.070(3), F.A.C.]

Subsection B. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
056	Dust sources controlled by Scrubber 8

Emissions Unit 056 is a regulated emissions unit that includes the #3 Finish Paint Line air knife and dust brush, and various sources associated with the operation of the paint mix line. The sources associated with the paint mix line include the Bevel Paint Mixer (300 gal.), West 408 Mixer, East 210 Mixer, Big West Mixer, Big East Mixer, and the Limestone Hopper/Feeder. Particulate emissions are controlled by Scrubber 8 (EU 056), which is a wet scrubber (Ducon Dynamic Gas Scrubber Type UW-4). Scrubber 8 was upgraded which involved replacing the air knife , installing a new hood prior to the #3 Finish Paint line , and installing a new rotating dust brush and dust hood at the end of #3 Finish Paint Line Equalizer. The specific processes and equipment associated with this emission unit are identified in Attachment PLD, Process Line Drawings. This emissions unit is subject to 40 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 all coatings manufactured in the process vessels must contain less than 5% by weight HAP.

The following conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Capacity. The process/operation rates shall not exceed the following:

EU No.	Scrubber	Process Line	Maximum Operation rate
056	Scrubber 8	#3 Finish Paint Line	198 ft/min (33 boards/min)
		Paint mixer (300 gallon)	not limited*
		Paint mix line	not limited*
		West 408 mixer	
		East 210 mixer	
		Big west mixer	
		Big east mixer	
		Limestone hopper/feeder	
		Dust brush and air knife	

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; BACT/PSD-FL-117, 0330006-007-AC and 0330006-015-AC; DEP letter dated October 13, 2009]

*{Permitting Note: * shall operate at the maximum practical operating rate during testing. The operation rate for Scrubber 8 was revised to reflect the #3 Finish Paint Line rate of 198 ft/min rather than the board mill rate of 75 ft/min (DEP letter dated October 13, 2009). Attachment PLD shows the revised process lines.}*

B.2. Hours of Operation. Hours of operation are limited to 8,064 hours/year. Records of 12-month rolling totals shall be maintained of the hours of operation. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permits 0330006-007-AC and 0330006-015-AC]

Emission Limitations and Standards

B.3. Particulate Matter: Particulate matter (PM) shall not exceed the following:

EU No.	Scrubber	lbs/hr
056	Scrubber 8	3.0 lbs/hr

[BACT/PSD-FL-117, 0330006-007-AC and 0330006-015-AC]

B.4. Visible Emissions. Visible emissions shall not equal or be greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

B.5. HAPS. Coatings manufactured in process vessels shall contain less than 5% by weight HAP. Formulation data from raw material suppliers shall be used to determine compliance if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4), and at 1.0 percent by mass or more for other compounds. [40 CFR 63.8055(b)(4) and Permit 0330006-017-AC]

Test Methods and Procedures

B.6. Emissions Tests. To demonstrate compliance, the permittee shall conduct emissions tests for particulate matter and visible emissions for each emission unit. Tests shall be conducted annually during the federal fiscal year (October 1 – September 30). [Rule 62-297.310(7), F.A.C.; Permit 0330006-017-AC]

B.7. Test Methods. The test method for particulate matter shall be EPA Method 5 and for visible emissions, EPA Method 9 (30 minutes), incorporated and adopted by reference in Rule 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

Monitoring and Recordkeeping of Operations

B.8. The permittee shall maintain the following records:
a. Scrubber water inlet pressure, recording the data in accordance with Appendix CAM.
b. Process rates for each shift.
c. Hours of operation (twelve-month rolling totals).
[Rule 62-4.070(3), F.A.C.; DEP Letter dated 11/21/02 and Armstrong letter received 11/12/02; Permit 0330006-015-AC]

{Permitting Note: the deadline for submitting semi-annual monitoring reports is 60 days following the reporting period. See Item 43 of TV-6.}

B.9. This emissions unit shall comply with the relevant requirements of 40 CFR 63 subpart A and subpart HHHHH--National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing (see Appendix HHHHH). [40CFR 63.7985]

Compliance Assurance Monitoring (CAM) Requirements

B.10. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason

to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

B.11. This emissions unit is also subject to Common Conditions in Subsection F (Test Methods and Procedures, Monitoring of Operations, Excess Emissions and Special Compliance Tests). [Rule 62-4.070(3), F.A.C.]

Reporting

B.12. Compliance Reports. Compliance reports must be submitted semiannually. Each subsequent compliance report must cover the six-month period following the preceding period and contain the following information:

a. Company name and address.
b. Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.
c. Date of report and beginning and ending dates of the reporting period.
d. For each SSM during which excess emissions occur, the compliance report must include the following information:
   (i) Records that the procedures specified in the startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP.
   (ii) A description of each malfunction.
e. Information on deviations, as defined in Sec. 63.8105, according to the following:
   (i) If there are no deviations from any emission limit, operating limit, or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.
   (ii) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where a continuous monitoring system (CMS) is not being used to comply with the emission limit or work practice standards in this subpart, the following information must be included:
      (A) The total operating time of each affected source during the reporting period.
      (B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
      (C) Operating logs for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.
f. Notification of process change.
   (i) Except as specified in paragraph (ii) below, whenever there is a change in any of the information submitted in either the notification of compliance status report or any previously reported change to the notification of compliance status report, the change must be documented in the compliance report. The notification must include all of the following information:
      (A) Revisions to any of the information reported in the original notification of compliance status report.
      (B) Information required by the notification of compliance status report for changes involving the addition of processes or equipment at the affected source.
   (ii) A report must be submitted 60 days before the scheduled implementation date of any of the changes identified in paragraphs (A), (B), or (C) below.

(A) Any change to the information contained in either the precompliance report or any previously reported change to the precompliance report.
(B) A change in the status of a control device from small to large.
(C) A change in compliance status.

[40 CFR 63.8075 (b)(1) & (e)

Subsection C. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
055	Perlite Expanding

Raw perlite is expanded with natural gas fired perlite expanders with 16 MMBtu/hr heat input. Expanded perlite is separated from the flue gases in cyclones, and particulate and combustion by-product emissions are controlled by a scrubber (Ducon, Dynamic Gas Scrubber, Type UW-4). The worn out components of the two perlite expanders have been replaced with like-kind components from the manufacturer (Sibrico Corporation Model M-30). The expanders are not be 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 was not a modification (no increase in emissions) nor a reconstruction (component replacement was well below 50% of cost that would be required to construct a comparable entirely new emissions unit). Attachment PLD shows the process line.

The following conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

C.1 Capacity. The maximum operation rate shall not exceed 6.75 tons of perlite expanded per hour. [Rules 62-210.200 (PTE), F.A.C.; BACT/PSD-FL-117 and 0330006-007-AC]

C.2. Methods of Operation – (i.e. fuels). The perlite expanders shall be operated using natural gas only. Propane may be used in case of natural gas unavailability. Total fuel gas usage shall be limited to 123 MMCF per year (based on 16 MMBtu/hr, 8,064 hours/year, 1,050 Btu/CF). The permittee shall maintain records showing monthly and annual gas usage. [Rules 62-4.160(2) and 62-213.440(1), F.A.C.; BACT/PSD-FL-117 and 0330006-007-AC]

C.3. Hours of Operation. Hours of operation are limited to 8,064 hours/year, based on a twelve-month rolling total. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit 0330006-007-AC]

Emission Limitations and Standards

C.4. Particulate Matter. Particulate matter (PM) shall not exceed 9.0 pounds per hour. [Permit 0330006-007-AC]

C.5. Visible Emissions. Visible emissions shall not equal or be greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C., and Permit 0330006-017-AC]

Test Methods and Procedures

C.6. Emissions Tests. To demonstrate compliance, the permittee shall conduct emissions tests for particulate matter and visible emissions. Tests shall be conducted annually during the federal fiscal year (October 1 – September 30). [Rule 62-297.310(7), F.A.C., and Permit 0330006-017-AC]

C.7. Test Methods. The test method for particulate matter shall be EPA Method 5 and for visible emissions EPA Method 9 (30 minutes), incorporated and adopted by reference in Rule 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

Monitoring and Recordkeeping of Operations

C.8. The permittee shall maintain a record of:

- **a.** Scrubber water flow, recording the data in accordance with Appendix CAM.
- **b.** Process rates for each shift.
- **c.** Natural gas usage (MMCF) recorded on a twelve-month total rolling basis.
- **d.** Hours of operation per month and 12-month rolling totals.

[Rule 62-4.070(3), F.A.C.; DEP Letter dated 11/21/02 and Armstrong letter received 11/12/02]

{Permitting Note: The deadline for submitting semi-annual monitoring reports is 60 days following the reporting period. See Item 43 of TV-6.}

Compliance Assurance Monitoring (CAM) Requirements

C.9. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

C.10. These emission units are also subject to Common Conditions in Subsection F. (Test Methods and Procedures, Monitoring of Operations, Excess Emissions, and Special Compliance Tests). [Rule 62-4.070(3), F.A.C.]

Subsection D. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
050	Board Drying with emissions controlled by scrubber 53 and multicyclone 54

Formed pulp boards are dried in a 112.35 MMBtu/hr natural gas fired board dryer. Emissions from the board dryer north exhaust are controlled by scrubber 53 (W.W. Sly Impinjet Wet Scrubber, Model 3140) and from the board dryer south exhaust by multicyclone 54 (Ducon, Model 6UP). The remaining fugitive emissions from circulation are captured by a Wet End Seal and mixed with ambient air before being exhausted to the atmosphere. Attachment PLD shows the process line.

The following conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Capacity. The maximum operation rate shall not exceed 75 feet/minute of board dried. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC17-51017, 0330006-007-AC and 0330006-014-AC]

D.2. Methods of Operation - (i.e., Fuels). The board dryer operates using natural gas only. However, propane may be used in case of natural gas unavailability. The permittee shall maintain a log showing monthly fuel usage. [Rules 62-4.160(2), 62-210.200(PTE) and 62-213.440(1), F.A.C.]

D.3. Hours of Operation. The hours of operation are limited to 8,064 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permits 0330006-007-AC and 0330006-014-AC]

Emission Limitations and Standards

D.4. Particulate Matter. Combined emissions from the north dryer exhaust, the south dryer exhaust, and the Wet End Seal exhaust for particulate matter (PM) shall not exceed 11.0 pounds per hour. [Permits 0330006-007-AC and 0330006-014-AC]

D.5. Visible Emissions. Visible emissions shall not equal or be greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Test Methods and Procedures

D.6. Emissions Tests. To demonstrate compliance, the permittee shall conduct emissions tests for particulate matter and visible emissions on both the north and south dryer exhausts and the Wet End Seal exhaust. Tests shall be conducted annually during the federal fiscal year (October 1 – September 30). [Rule 62-297.310(7), F.A.C.; Permit 0330006-014-AC]

D.7. Test Methods. The test method for particulate matter shall be EPA Method 5 and for visible emissions, EPA Method 9 (30 minutes), incorporated and adopted by reference in Rule 62-297, F.A.C. [Rule 62-297.401(9), F.A.C.]

Monitoring and Recordkeeping of Operations

D.8. The permittee shall maintain a record of:

- **a.** Scrubber water inlet pressure and multicyclone static air pressure, recording the data in accordance with Appendix CAM.
- **b.** Process rates for each shift.
- **c.** Natural gas usage (MMCF) recorded on a 12-month total rolling basis.
- **d.** Hours of operation (12-month rolling totals).

[Rule 62-4.070(3), F.A.C.; DEP Letter dated 11/21/02 and Armstrong letter received 11/12/02]

{Permitting Note: the deadline for submitting semi-annual monitoring reports is 60 days following the reporting period. See Item 43 of TV-6.}

Compliance Assurance Monitoring (CAM) Requirements

D.9. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

D.10. This emission unit is also subject to Common Conditions in Subsection F. (Test Methods and Procedures, Monitoring of Operations, Excess Emissions, and Special Compliance Tests). [Rule 62-4.070(3), F.A.C.]

Subsection E. This section addresses the following emissions units.

E.U. ID No.	Brief Description
	Activities associated with ceiling tile manufacture controlled by a baghouse
080	Dust sources associated with the PIF Line Sander controlled by Baghouse 21
081	Dust sources associated with the PIF Line Flipper and Wheelabrator controlled by Baghouse 22

Emissions units 080 and 081 are regulated emissions units that include various dust sources associated with the operation of the PIF line. Emissions are controlled by two baghouse filters (EU 080, Fuller jet pulse model 272 C10 baghouse; EU 081, Fuller jet pulse model 168 C10 baghouse). These sources include a line sander, flipper, and wheelabrator. Attachment PLD show the process lines.

{*Permitting Note: The Travertone Fabrication line, EU065, vented to Stacks 55 and 56, has not operated since 2000 and was permanently removed from service by letter dated October 6, 2006.}*

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

E.1. Capacity. The process/operation rates for emissions units 080 and 081 shall not exceed 198 feet/minute (33 boards/minute) processed through the PIF Line. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Permit 0330006-007-AC]

E.2. Hours of Operation. Hours of operation are limited to 8,064 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit 0330006-007-AC]

Emission Limitations and Standards

E.3. Particulate Matter. Total particulate matter (PM) from emission units 080 and 081 shall not individually exceed 0.75 lbs/hr. [Permit 0330006-007-AC]

E.4. Visible Emissions. Visible emissions (VE) shall not exceed 5% opacity. [Permit 0330006-007-AC]

Test Methods and Procedures

E.5. VE. To demonstrate compliance, the permittee shall conduct emissions tests for visible emissions on emission units 080 and 081. Tests shall be conducted annually during the federal fiscal year (October 1 – September 30). The test method shall be EPA Method 9 (30 minutes), incorporated and adopted by reference in Rule 62-297, F.A.C. The testing will include verification of the CAM Plan parameters at the range minimum limits. [Rule 62-297.401, F.A.C.; Permit 0330006-007-AC]

E.6. PM. Rule 62-297.620(4), F.A.C., allows the waiver of particulate matter compliance test requirements for an emission unit that has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse. If the Department has reason to believe that the particulate weight emission standard applicable to such emission unit is not being met, it shall require that compliance be demonstrated by the applicable test method. If any emission unit does not satisfactorily demonstrate compliance as required by condition E.5 above, each such emission unit shall demonstrate compliance by EPA Method 5 within 45 days of a Departmental written request. [Rule 62-297.620(4), F.A.C.]

Monitoring and Recordkeeping of Operations

E.7. The permittee shall maintain a record of:

- **a.** Static pressure across the baghouse, recording the data in accordance with Appendix CAM.
- **b.** Process rates for each shift.
- **c.** Hours of operation (twelve-month rolling totals).

[Rule 62-4.070(3), F.A.C.; DEP Letter dated 11/21/02 and Armstrong letter received 11/12/02]

{Permitting Note: The deadline for submitting semi-annual monitoring reports is 60 days following the reporting period. See Item 43 of TV-6.}

Compliance Assurance Monitoring (CAM) Requirements

E.8. These emissions units are subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

E.9. These emission units are also subject to Common Conditions in Subsection F. Test Methods and Procedures, Monitoring of Operations, Excess Emissions, and Special Compliance Tests). [Rule 62-4.070(3), F.A.C.]

Subsection F. Common Conditions.

{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A through E for applicability.}

F.1. Test Methods and Procedures. Emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. Tests shall be conducted as stipulated in each subsection of this permit. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing. [Rule 62-297.310(7), F.A.C.]

Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]

The test reports shall comply with applicable portions of Rule 62-297.310, F.A.C., Test Reports. The Department can require special compliance tests in accordance with Rule 62-297.310(7) F.A.C. Other test methods and alternate compliance procedures may be used only after prior Departmental approval has been obtained in writing. [Rules 62-297.310(7) and 62-297.620(1), F.A.C.]

F.2. Determination of Process Variables. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

F.3. Excess Emissions.

(1) Excess emissions resulting from startup, shutdown, or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. The Department authorized excess emissions resulting from startup, shutdown, or malfunction of EU050 associated with board drying (Scrubber 53, Multicyclone 54) provided (1) the board feeder to the board mill dryer is shut down as soon as the production supervisor determines that a shutdown will be required to resolve the cause of the excess emissions, but in no case more than 2 hours from the start of the excess emissions, and (2) the board mill dryer is

shut down as soon as all the boards are removed from the dryer, but in no case more than 2.5 hours from the shut down of the board feeder.

(4) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

(5) Considering operational variations in types of industrial equipment operations affected by this rule, the Department may (by permit) adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

(6) In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700, F.A.C.]

{Permitting Note: The requirements of this rule do not vary any requirement of a NSPS, NESHAP or Acid Rain program provision.}

F.4. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]