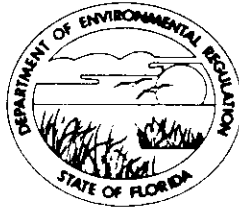


Jul

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. R. D. Herr
Production Manager
Armstrong World Industries, Inc.
P. O. Box 1991
Pensacola, Florida 32589

July 9, 1987

Enclosed is construction permit No. AC 17-128287 to Armstrong World Industries, Inc. to construct the FMS manufacturing line at your existing facility. This permit is issued pursuant to Section 403, Florida Statutes.

Any Party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management

Copy furnished to:

J. Preece
W. Aronson, EPA
D. Buff, P.E.
Tom Rogus

} 6/11/87
mr

P 408 531 202

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. R.D. Herr Armstrong World Inds.	
Street and No. Post Office Box 1991	
P.O., State and ZIP Code Pensacola, Florida 32589	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: July 9, 1987 AC 17-128287 PSD-FL-117	

PS Form 3800, Feb. 1982

1. RETURN TO SENDER
Put your address in the RETURN TO SENDER space on the envelope. Failure to do this will prevent the card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult Postmaster for rates and check box(es) for service(s) requested.

Show to whom, date and address of delivery.

Restricted Delivery

3. Article Addressed to:
Mr. R.D. Herr, Product Mgr. Manager
Armstrong World Industries, Inc.
Post Office Box 1991
Pensacola, Florida 32589

4. Type of Service: **Article Number**
 Registered Insured
 Certified COD P 408 531 202
 Express Mail

5. Signature - Addressee
X

6. Signature - Agent
X *[Signature]*

7. Date of Delivery JUL 13 1987

8. Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT

file

Final Determination

Armstrong World Industries, Inc.

Escambia County
Pensacola, Florida

Permit Number:
AC 17-128287
Federal: PSD-FL-117

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

July 2, 1987

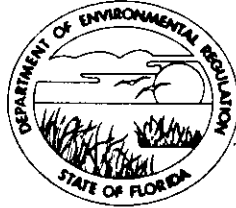
Final Determination

The construction permit application has been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in the Pensacola News Journal on May 26, 1987. The Technical Evaluation and Preliminary Determination were available for public inspection at the DER's Northwest District office and the Bureau of Air Quality Management office.

No comments were received during the Public Notice period. Therefore, the final action of the Department will be to issue the construction permit as drafted.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

PERMITTEE:
Armstrong World Industries, Inc.
P. O. Box 1991
Pensacola, Florida 32589

Permit Number: AC 17-128287
Expiration Date: June 30, 1989
County: Escambia
Latitude/Longitude: 30° 24' 19" N
87° 15' 00" W
Project: To Construct and Operate
a New Product Line, "FMS"

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of a new product line consisting of (7) new air emission sources to be associated with the "FMS" process.

Construction shall be in accordance with the attached permit application unless otherwise stated in the General and Specific Conditions herein.

Attachments:

1. Application to Construct an Air Pollution Source, DER Form 17-1.202(1).
2. C. H. Fancy's letter dated January 7, 1987.
3. Armstrong World Inc.'s letter dated February 24, 1987.

PERMITTEE:
Armstrong World Industries, Inc.

Permit Number: AC 17-128287
Expiration Date: June 30, 1989

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforceable action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:
Armstrong World Industries, Inc.

Permit Number: AC 17-128287
Expiration Date: June 30, 1989

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and system of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by the Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
Armstrong World Industries, Inc.

Permit Number: AC 17-128287
Expiration Date: June 30, 1989

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
13. This permit also constitutes:
 - (x) Determination of Best Available Control Technology (BACT)
 - (x) Determination of Prevention of Significant Deterioration (PSD)
 - () Compliance with New Source Performance Standards.
14. The Permittee shall comply with the following monitoring and record keeping requirements:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
Armstrong World Industries, Inc.

Permit Number: AC 17-128287
Expiration Date: June 30, 1989

GENERAL CONDITIONS:

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
- the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The maximum outlet particulate matter (PM) grain loading shall not exceed 0.015 gr/acf from the feeder/machining cell baghouse exhaust, as determined by EPA Method 5 (FAC Rule 17-2.700).
2. Northwest District shall be notified in writing 15 days in advance of any compliance test to be conducted on this source.
3. Compliance tests shall be performed at 90-100% of the maximum proposed process rate of 44,217 lbs/hr.

PERMITTEE:
Armstrong World Industries, Inc.

Permit Number: AC 17-128287
Expiration Date: June 30, 1989

SPECIFIC CONDITIONS:

4. Compliance tests, in accordance with rule 17-2.700, FAC, shall be submitted to DER's NW District within 45 days after completion of the test.
5. After satisfactory completion of the initial compliance test, a visible emission tests indicating no visible emission (5% opacity) may be substituted in lieu of a particulate stack test, where the source is equipped with a baghouse (FAC 17-2.700)(1)(d)(6.)).
6. Ninety (90) days before the expiration of this permit, a complete application for an operating permit shall be submitted to the NW District office. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date or the issuance of an operating permit. The Department may extend the expiration date of this permit as authorized by Rule 17-2.210, FAC.
7. All applicable rules of the Department, including design limitations specified in the application, shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction (Section 17-4.07(1), FAC).
8. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in section 17-2.610(3), FAC.
9. Visible emissions from any part of the process shall not be greater than 5% opacity as demonstrated in accordance with DER Method 9, (Rule 17-2.700(6)(a)9., FAC).
10. Particulate matter emission rate shall not exceed 9.33 lbs/hr.
11. Total process input rate shall not exceed 44,217 lbs/hr.
12. The maximum natural gas consumption shall not exceed 4,000 scf/hr.
13. This source shall be allowed to operate up to 8064 hr/year.

PERMITTEE:
Armstrong World Industries, Inc.

Permit Number: AC 17-128287
Expiration Date: June 30, 1989

SPECIFIC CONDITIONS:

Issued this 6th day of July, 1987

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary

___ pages attached

Best Available Control Technology (BACT) Determination
Armstrong World Industries, Inc.
Escambia County

The applicant plans to construct a new production line at their existing facility in Pensacola. The facility manufactures various types of ceiling tile. The new product line, referred to as "FMS", will process four types of mineral wool ceiling boards which have been formed, rough cut, and prime painted during prior operations at the plant.

The existing Armstrong facility is a major stationary facility since its potential to emit is greater than 250 tons per year. The installation of the FMS line will add seven (7) new air emission sources to the facility. In conjunction with the start-up of the FMS process line, two existing paint lines (#4 and #5) will be shutdown.

The net particulate emissions increase from the FMS process line and the existing paint lines shutdown will be 31.89 tons per year. This annual increase exceeds the 25 tons per year significant emission increase defined in 17-2.500(2)(e)(2) FAC; thus requiring a PSD review and hence a BACT determination for the requested action.

The particulate emissions will be generated primarily by a feeding and machining process in which the unfinished ceiling boards are fed from a stack by a vacuum feeder into a machining cell where they will be cut to finished size, and the surfaces and edges will be profiled to the desired shape and contour. A lesser amount of particulate emissions will be attributed to the paint booths and dryers. The particulate emissions associated with the dryers are due to the combustion of natural gas. These emissions are minimal and will not be considered in the BACT analysis.

Review Group Members:

This determination was based upon comments received from the applicant and the Stationary Source Control Section.

BACT Determined by DER:

Source	Emission Limitation/Strategy
Feeder/machining cell	Fabric filter (baghouse) with maximum emissions rate not to exceed 0.015 gr/acf.
Paint booths	Water wash spray and 5 percent opacity

BACT Determination Rationale:


The BACT determined by DER is consistent with the BACT proposed by the applicant. The BACT proposed by the applicant represents the best available control available for the feeder/machining cell and the best practical control for the painting operations, which contribute minimally to the total particulate emissions.

The air quality impact of the proposed allowable emissions has been analyzed. Atmospheric dispersion modeling has been completed and used in conjunction with an analysis of existing air quality data to determine maximum ground-level ambient concentrations. Based on these analyses, the Department has reasonable assurance that the proposed FMS process line, subject to these BACT limitations, will not cause or contribute to a violation of any PSD increment or ambient air quality standard.

Details of the Analysis May be Obtained by Contacting:

Barry Andrews, P.E. BACT Coordinator
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Recommended by:

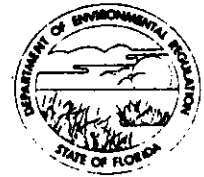

C. H. Fancy, P.E.
Deputy Bureau Chief, BAQM

July 2, 1987
Date

Approved by:


Dale Twachtman, Secretary

6 July 87
Date



Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

TO: _____ LOCTN: _____
TO: _____ LOCTN: _____
TO: _____ LOCTN: _____
FROM: _____ DATE: _____

TO: Dale Twachtmann
THRU: Howard Rhodes *HR*
FROM: Clair Fancy *CHF*
DATE: July 2, 1987
SUBJ: Approval of Construction Permit No. AC 17-128287
and PSD-FL-117
Armstrong World Industries, Inc.

Attached for your approval and signature is a construction permit and BACT determination for the construction of a FMS manufacturing line at their existing facility. There have been no comments regarding this permit.

Day 90 after which this permit will be issued by default is July 9, 1987.

The Bureau recommends approval and signature.

CHF/BM/s

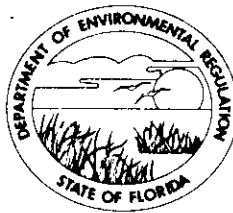
attachment

R. Hale:
Please sign
Last page of
this
Thanks
Ki

file

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

July 9, 1987

Mr. Wayne Aronson
Chief
Program Support Section
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Dear Mr. Aronson:

RE: Armstrong World Industries, Inc.
State Construction Permit: AC 17-128287
PSD Permit: PSD-FL-117

Enclosed is the final determination for Armstrong World Industries, Inc. If you have any comments or questions, please contact Bill Thomas or Tom Rogers at the above address or at (904)488-1344.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/mj

enclosure

cc. file
Tom Rogers
Sack Price