

## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

February 22, 1989

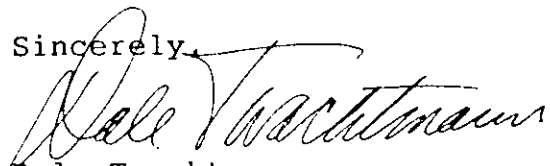
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Herr:

This is in response to Armstrong World Industries' December 7, 1988, letter requesting that permit No. AC 17-128287 be amended to add an "air knife" to remove small amounts of dust from the surface of ceiling panels. The request is acceptable, and the Department has replaced Figure 2 of Attachment No. 4 with new Figure 2 submitted December 7, 1988.

Sincerely,

  
Dale Twachtmann  
Secretary

DT/ks

cc: J. Preece, NW District  
W. Aronson, EPA Region IV  
T. Frey, Armstrong World Ind.

**SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.**  
**Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this 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 fees and check box(es) for additional service(s) requested.**

1  Show to whom delivered, date, and addressee's address (Extra charge)  
 2  Restricted Delivery (Extra charge)

3 Article Addressed to:  
 Mr. R. D. Herr  
 Production Manager  
 Armstrong World Industries, Inc.  
 P.O. Box 1991  
 Pensacola, FL 32589

4 Article Number:  
 P 274 007 598

Type of Service:  
 Registered  Insured  
 Certified  COD  
 Express Mail  Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED

5 Signature of Addressee:  
 X

6 Signature of Agent:  
 X *R. D. Herr*

7 Date of Delivery:  
 3-1-89

8 Addressee's Address ONLY if requested and fee paid  
 (Circular postmark: PENSACOLA MAR 2 1989 USPO)

PS Form 3811, Mar. 1988 U.S. P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P 274 007 598

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL

(See Reverse)

\* U.S.G.P.O. 1985-480-794

Sent to	
Mr. R. D. Herr, Armstrong	
Street and No P.O. Box 1991 World Ind.	
P.O., State and ZIP Code Pensacola, FL 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: 3-1-89 Permit: AC 17-128287	

PS Form 3800, June 1985



State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

# Interoffice Memorandum

**RECEIVED**

FEB 23 1989

TO: Dale Twachtmann

*fw* FROM: Steve Smallwood *[Signature]*

SUBJ: Modification of Permit

DATE: February 22, 1989

Office of the Secretary

Attached for your approval and signature is a letter that will amend permitted equipment without increasing emission limits for Armstrong World Industries' ceiling tile manufacturing plant in Pensacola.

I recommend that the modification be approved.

SS/JR/s

attachment

*Please call  
Patty Adams  
when signed  
8-1344*

*Shanks*

# Armstrong

PATTY ADAMS - COPY OF LETTER  
SENT TO YOUR DEPT 12/8/88

T. L. FREY  
1/4/89

## RECEIVED

JAN 06 1989

December 7, 1988

DER-BAQM

*Received from Patty*

*1-10-89*

*Done*

*1/19*

Mr. Clair Fancy  
Deputy Chief  
Bureau of Air Quality Management  
Twin Towers Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

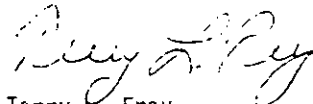
Dear Mr. Fancy:

On July 18, your department issued revisions to our construction permit #AC17-128287. We are progressing with the engineering and design for this project and wish to add an "air knife" between our "machine cell" and the first paint booth (see Figure #2). The purpose of the air knife is to remove any small dust particles that fall on the surface of the ceiling panels during our "machine cell" operation.

The scrubber input calculations in Appendix #3 of my June 13 letter (attached), are based on the assumption that all dust that is generated is conveyed to the scrubbers. Actual practice shows that a small amount of dust falls onto the surface of the board. This is the dust that will be picked up by the air knife. Therefore, no additional dust is being conveyed to the scrubbers than originally stated, and the particulate emission rate will not change.

Summarizing, we wish to revise our construction permit to add an air knife to our #4 scrubber. This will not increase the particulate matter generated in the process and will not increase our emissions rate from this operation.

Very truly yours,



Terry E. Frey  
Plant Engineering Manager

VMS

Enclosure

*copied*

*John Reynolds  
John Powell, NW Dist.  
CHF/137*

Armstrong World Industries, Inc.  
P.O. Box 1991, Pensacola, FL 32589

**Armstrong**

**CERTIFIED**  
**No. 113948**  
**MAIL**



PATTY ADAMS  
BUREAU OF AIR QUALITY MANAGEMENT  
TWIN TOWERS BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FL 32399-2400

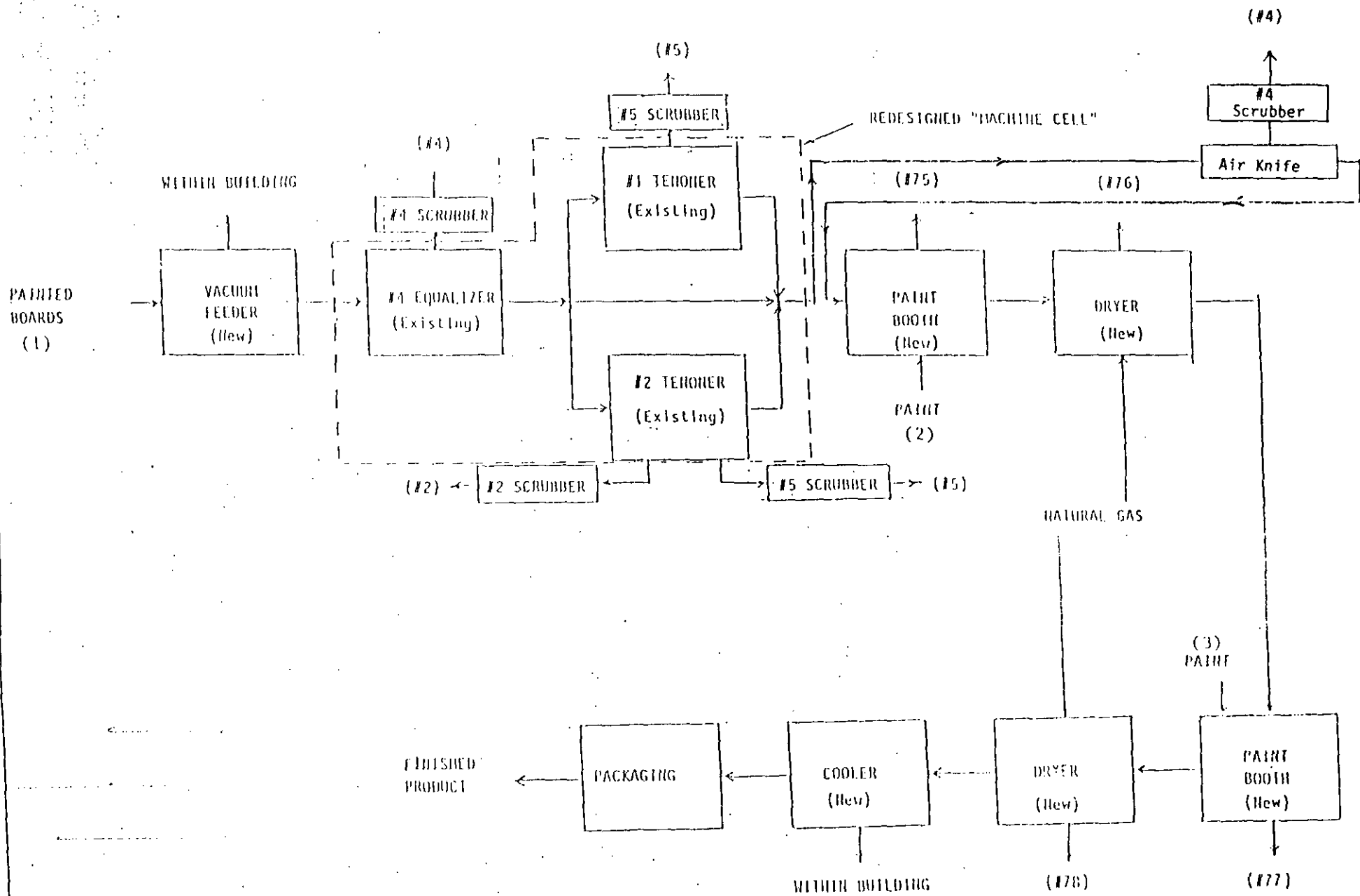


Figure 2

Input to scrubbers on Crossgate product  
(FMS operation)

Density:

- 1.7 #/board ft (raw board)
  - 14 grms bottom paint @ 50% solids per ft<sup>2</sup> of board = 7 gms/ft<sup>2</sup>
  - 19 grms top paint @ 48% solids per ft<sup>2</sup> of board = 9.1 gms/ft<sup>2</sup>
- = 1.7 #/board ft + 16.1 grms / 454 =  
= 1.735 #/board ft  
= 20.8 #/ft<sup>3</sup>

Maximum production:

- six(6) 4' x 6' boards through equalizer
- thirty-five(35) 2' x 2' pieces through tenoner

Equalizer dust generation:

- removes 0.0778 ft<sup>3</sup>/board
- = 0.0778 ft<sup>3</sup>/board x 6 boards x 20.8 #/ft<sup>3</sup>  
x 60 min/hr
- = 582.6 #/hr

Tenoner dust generation:

- removes 0.036 ft<sup>3</sup>/piece
- = 0.036 ft<sup>3</sup>/piece x 35 pieces x 20.8 #/ft<sup>3</sup>  
x 60 min/hr
- = 1572.5 #/hr

TOTAL INPUT TO SCRUBBERS FROM FMS = 2,155.1 #/HR

OVERALL SCRUBBER EFFICIENCY = (2155.1 - 7.89) / 2155.1  
= 99.6%