

P 938 762 868

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

PS Form 3800, June 1985

Sent to	William R. Beaker
Street and No.	Sikes Corp - FTD
P.O. State and ZIP Code	P.O. Box 447 - Lakeland, FL
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	\$

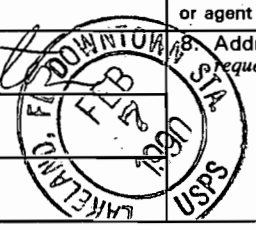
Postmark or Date: **AL 53-167123**
2-5-90

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: William R. Beaker, UP Sikes Corp. Fla. Tile Div. P.O. Box 447 Lakeland, FL 33802	4. Article Number P 938 762 868
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X J. Wetherington	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery	





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

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMIT

Mr. William R. Boakes, Vice President
Sikes Corporation - Florida Tile Division
Post Office Box 447
Lakeland, Florida 33802

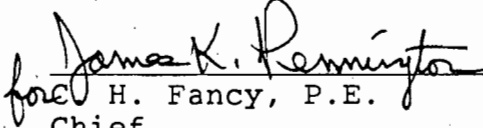
February 2, 1990

Enclosed is construction permit No. AC 53-167123 for Sikes Corporation - Florida Tile Division to construct a monoporosa roller kiln at your ceramic tile manufacturing plant located in Lakeland, Polk County, Florida. 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


for H. Fancy, P.E.
Chief
Bureau of Air Regulation

Copy furnished to:

B. Thomas, SW District
R. Reynolds, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 2-5-90.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Kim W. J. [Signature]
Clerk

2-5-90
Date

Final Determination

Sikes Corporation
Florida Tile Division
Lakeland, Polk County, Florida

Permit No. AC 53-167123
Monoporosa Roller Kiln

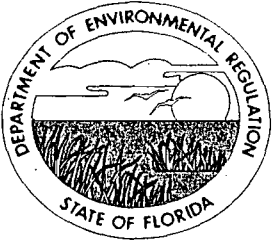
Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

January 29, 1990

Final Determination

The Technical Evaluation and Preliminary Determination for the permit to construct a monoporosa roller kiln at Sikes Corporation - Florida Tile Division's ceramic tile manufacturing plant in Lakeland, Polk County, Florida, was distributed on November 30, 1989. The Notice of Intent to Issue was published in The Ledger on December 8, 1989. Copies of the evaluation were available for public inspection at the public library in Lakeland and the Department's offices in Tampa and Tallahassee.

No comments were submitted on the Department's Intent to Issue the permit. The final action of the Department will be to issue construction permit No. AC 53-167123 as proposed in the Technical Evaluation and Preliminary Determination.



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

PERMITTEE:
Sikes Corporation
P. O. Box 447
Lakeland, Florida 33802

Permit Number: AC 53-167123
Expiration Date: August 1, 1990
County: Polk
Latitude/Longitude: 28°02'45"N
81°57'45"W
Project: Monoporosa Roller Kiln

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct a 2.5 TPH green tile natural gas fired (4.76 MMBtu/hr) monoporosa roller kiln with a 38.5 ft. high, 24.8 inch diameter stack that discharges approximately 4,120 DSCFM of gas at 482°F. Air pollution is controlled by the use of clean fuel (natural gas).

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received July 6, 1989
2. DER letter dated August 31, 1989
3. Lake Eng. letter dated October 31, 1989

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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:
Sikes Corporation.

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems 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 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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor 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 provide the Department with the following information:

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

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a 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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

GENERAL CONDITIONS:

- b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained 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 dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

14. 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 corrected promptly.

SPECIFIC CONDITIONS:

1. This kiln shall not process more than 2.5 TPH green tiles.
2. This kiln shall not operate more than 24 hrs/day, 7 days/wk, and 49 weeks/year or 8,232 hours/year.
3. The permittee shall maintain logs that can be used to determine the production and operation time of the kiln.
4. All reasonable precautions shall be taken to minimize generation of unconfined emissions of particulate matter in accordance with the provisions in F.A.C. Rule 17-2.610(3). These

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

SPECIFIC CONDITIONS:

provisions are applicable to any source including, but not limited to vehicular movement, transportation of materials, construction, demolition or wrecking, or industrial related activities such as loading, unloading, storing, handling, and processing of materials. Reasonable precautions shall include, but are not limited to, wetting or cleaning of areas generating unconfined emissions.

5. Pursuant to F.A.C. Rule 17-2.620(2), the permittee shall not allow the discharge of air pollutants which cause or contribute to an objectionable odor.

6. Emissions from this kiln shall not exceed 3.0 lbs/hr fluoride and 5% opacity.

7. This source shall be tested for fluoride and visible emissions by EPA Methods 13A or 13B and 9 as described in 40 CFR 60, Appendix A, (July 1, 1988). A sample of the green tiles being processed during the tests shall be analyzed for its fluoride content and the results included in the stack test report.

8. Tile kilns Nos. 1, 2, 3, 4, 5, 8, and 14 (AO 53-90968) shall not be operated after the monoporosa roller kiln is placed in service.

9. The Department's Southwest District office in Tampa shall be notified at least 15 days prior to any compliance tests.

10. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

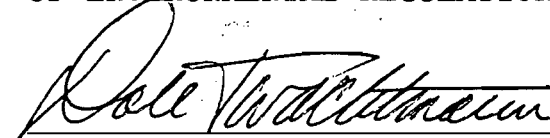
11. An application for an operation permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

Issued this 1 day
of February, 1990

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Dale Twachtmann, Secretary



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

Interoffice Memorandum

TO: Dale Twachtmann

for FROM: Steve Smallwood *SS*

DATE: January 29, 1990

SUBJ: Approval of Construction Permit No. AC 53-167123
Sikes Corporation - Florida Tile Division

Attached for your approval and signature is a permit prepared by the Bureau of Air Regulation for the above mentioned company to construct a monoporosa roller kiln at their ceramic tile manufacturing plant in Lakeland, Polk County, Florida.

No comments were received during the public notice period.

Day 90, after which this permit will be issued by default, is March 13, 1990.

I recommend your approval and signature.

SS/WH/plm

Attachment

RECEIVED
JAN 30 1990

Office of the Secretary

*Please call
Patty Adams
when signed
8-1344*

→ P 5/20

Check Sheet

Company Name: Fla Tile Div. of Sikes Co.
Permit Number: AC 53-167 121
PSD Number:
County: 22
Permit Engineer: 23
Others involved:

Application:

- Initial Application
- Incompleteness Letters
- Responses
- Final Application (if applicable)
- Waiver of Department Action
- Department Response
- Other

Intent:

- Intent to Issue
- Notice to Public
- Technical Evaluation ~~-122, 12b~~
- BACT Determination
- Unsigned Permit ~~-122, -12b~~
- Correspondence with:
 - EPA
 - Park Services
 - County
 - Other
- Proof of Publication
- Petitions - (Related to extensions, hearings, etc.)
- Other

Final Determination:

- Final Determination
- Signed Permit
- BACT Determination
- Other

Post Permit Correspondence:

- Extensions
- Amendments/Modifications
- Response from EPA
- Response from County
- Response from Park Services
- Other

In the folder labeled as follows there are documents, listed below, which were not reproduced in this electronic file. That folder can be found in the supplementary documents file drawer. Folders in that drawer are arranged alphabetically, then by permit number.

Folder Name: Florida Tile Division of Sikes Corporation

Permit(s) Numbered:

AC	53	-167121
AC	53	-167122
AC	53	-167123

Documents:

Period during Detailed Description
which
document was
received

- | | |
|---|---|
| Application
AC53-167121,
-167122
6 July 1989 | 1. 24"×36" Blueprint: FLORIDA TILE Lakeland, Fl. DUST
COLLECTION SYSTEM FOR TRIM PRESS
OPERATIONS(DWG No.: M-2821-D) |
| Application
AC53-167123
6 July 1989 | 2. 24"×36" Blueprint: FLORIDA TILE DIV./SIKES CORP.
LAKELAND FLORIDA - MONOPOROSA PLANT SITE
PLAN |
| Application
AC53-167123
6 July 1989 | 24"×36" Blueprint(Two sheets): FLORIDA TILE
DIV./SIKES CORP. LAKELAND FLORIDA -
MONOPOROSA PLANT GENERAL LAYOUT |

P 938 762 777

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

PS Form 3800, June 1985

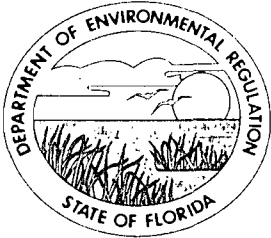
Sent to Mr. Wm. R. Boakes, Sikes Corp.	
Street and No. P. O. Box 447	
P.O. State and ZIP Code Lakeland, FL 33802	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: 12-11-89 Permit: AC 53-167121, -122	

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. 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Mr. William R. Boakes Vice President Sikes Corp.-Fla. Tile Division P. O. Box 447 Lakeland, Florida 33802	4. Article Number 938 762 777
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Address X <i>J. W. Wadlington</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery	

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



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

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMITS

Mr. William R. Boakes, Vice President
Sikes Corporation - Florida Tile Division
Post Office Box 447
Lakeland, Florida 33802


December 11, 1989

Enclosed are construction permit Nos. AC 53-167121 and AC 53-167122 for Sikes Corporation to construct System 1 (2 presses, dryers and a filter) and System 2 (10 presses and a filter) at your ceramic tile plant in Lakeland, Polk County, Florida. These permits are issued pursuant to Section 403, Florida Statutes.

Any party to these permits has the right to seek judicial review of these permits 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 these permits are filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

Copy furnished to:

B. Thomas, SW District
R. Reynolds, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 12-11-89.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Kim D. Jakes
Clerk

12-11-89
Date

Final Determination

Sikes Corporation
Florida Tile Division
Lakeland, Polk County, Florida

Permit Numbers:
AC 53-167121, System 1
AC 53-167122, System 2

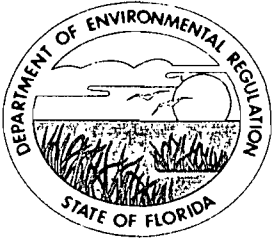
Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

December 6, 1989

Final Determination

The Technical Evaluation and Preliminary Determination for the permits to construct System 1 (2 presses, 2 dryers, and a filter) and System 2 (10 presses and a filter) at Sikes Corporation - Florida Tile Division's ceramic tile plant located in Lakeland, Polk County, Florida, was distributed on October 10, 1989. The Notice of Intent to Issue was published in the Ledger on October 21, 1989. Copies of the evaluation were available for public inspection at the Public Library in Lakeland and the Department's offices in Tampa and Tallahassee.

No comments were submitted on the Department's Intent to Issue the permits. The final action of the Department will be to issue construction permits Nos. AC 53-167121 and AC 53-167122 as proposed in the Technical Evaluation and Preliminary Determination.



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

PERMITTEE:

Sikes Corporation
P. O. Box 447
Lakeland, Florida 33802

Permit Number: AC 53-167122
Expiration Date: December 31, 1990
County: Polk
Latitude/Longitude: 28°02'45"N
81°57'45"W

Project: System 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct System 2 which consists of 6 Dorst presses and 4 experimental trim presses (Sacmi PH 400 press, Martinelli HPS-350 press, 40 ton angle press, and a typical friction press) with particulate matter emissions controlled by a Pneumafil Straight Fire Filter, Model 13.5-456-12, that discharges to a 20 ft. high, 4.25 ft. diameter stack. Dust collected by the filter is transported by a Cycloloc conveyor to an enclosed storage tank equipped with a bin vent filter for recycling to the process.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received July 6, 1989.
2. DER's letter dated July 14, 1989.
3. Lake Engineering letter dated August 2, 1989.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167122
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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:
Sikes Corporation

Permit Number: AC 53-167122
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems 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 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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor 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 provide the Department with the following information:

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

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167122
Expiration Date: December 31, 1990

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a 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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167122
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

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 dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. 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 corrected promptly.

SPECIFIC CONDITIONS:

1. This review is based on the 6 Dorst presses operating at a maximum production rate of 1.9 TPH each and an average monthly rate of 3.9 TPH total for all 6 presses. Each experimental trim press will operate at a maximum production rate of 1 TPH and for a total of 4 TPH for 4 presses. Particulate matter emissions from this equipment is discharged to a Pneumafil Straight Fire Filter. The addition of other process equipment will require new applications for permits to construct.

2. The Dorst and trim presses may operate 24 hrs/day, 7 days/week, and 49 weeks/year or 8,232 hrs/year.

3. The permittee shall maintain logs that can be used to determine the production and hours of operation of each press/dryer system.

4. All reasonable precautions shall be taken to minimize generation of unconfined emissions of particulate matter in accordance with the provisions in F.A.C. Rule 17-2.610(3). These provisions are applicable to any source including, but not limited to, vehicular movement, transportation of materials, construction, demolition or wrecking, or industrial related activities such as loading, unloading, storing, handling, and processing of materials. Reasonable precautions shall include, but are not limited to, wetting or cleaning of areas generating unconfined emissions.

PERMITTEE:
Sikes Corporation

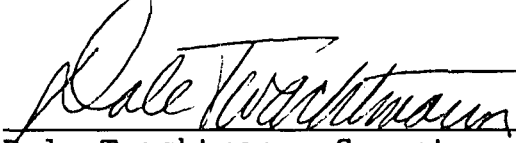
Permit Number: AC 53-167122
Expiration Date: December 31, 1990

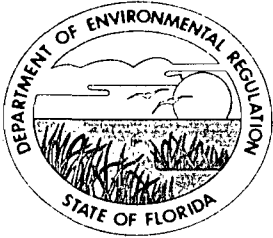
SPECIFIC CONDITIONS:

5. Pursuant to F.A.C. Rule 17-2.620(2), the permittee shall not allow the discharge of air pollutants which cause or contribute to an objectionable odor.
6. Particulate matter emissions from the Pneumafil filter controlling System 2 shall not exceed 1.3 lbs/hr or 5% opacity.
7. This source shall be tested for particulate matter emissions, while it is operating at its permitted capacity, by EPA Methods 1, 2, 4, and 5 if visible emissions, as determined by EPA Method 9, exceed 5% opacity. Specifications for the referenced test methods are listed in F.A.C. Rule 17-2.700(6)(b); (Dec. 5, 1988).
8. The Department's Southwest District office in Tampa shall be notified at least 15 days prior to any compliance tests.
9. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
10. An application for an permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this 8 day
of Dec, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary



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

PERMITTEE:
Sikes Corporation
P. O. Box 447
Lakeland, Florida 33802

Permit Number: AC 53-167121
Expiration Date: December 31, 1990
County: Polk
Latitude/Longitude: 28°02'45"N
81°57'45"W
Project: System 1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct System 1 which consists of two 2 TPH Sacmi presses and two 2.4 MMBtu/hr natural gas fired Sacmi vertical dryers with particulate matter emissions controlled by a Pneumafil Straight Fire Filter, Model No. 13.5-456-12, that discharges through a 20 ft. high, 4.25 ft. diameter stack. Dust collected by the filter is transported by a Cycloloc conveyor to an enclosed storage tank equipped with a bin vent filter for recycling to the process.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received July 6, 1989.
2. DER's letter dated July 14, 1989.
3. Lake Engineering letter dated August 2, 1989.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems 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 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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor 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 provide the Department with the following information:

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

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a 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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

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 dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. 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 corrected promptly.

SPECIFIC CONDITIONS:

1. This review is based on the two Sacmi presses and two Sacmi vertical dryers processing a total of 8,200 lbs/hr of prill while burning 4,648 CF/hr of natural gas and discharging the pollutants to a Pneumafil Straight Fire Filter. The additional of other process equipment will require new applications for permits to construct.

2. The two presses/dryers may operate 20 hrs/day, 7 days/week, and 49 weeks/year or 6,860 hrs/year.

3. The permittee shall maintain logs that can be used to determine the production and hours of operation of each press/dryer system.

4. All reasonable precautions shall be taken to minimize generation of unconfined emissions of particulate matter in accordance with the provisions in F.A.C. Rule 17-2.610(3). These provisions are applicable to any source including, but not limited to, vehicular movement, transportation of materials, construction, demolition or wrecking, or industrial related activities such as loading, unloading, storing, handling, and processing of materials. Reasonable precautions shall include, but are not limited to, wetting or cleaning of areas generating unconfined emissions.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

SPECIFIC CONDITIONS:

5. Pursuant to F.A.C. Rule 17-2.620(2), the permittee shall not allow the discharge of air pollutants which cause or contribute to an objectionable odor.

6. Particulate matter emissions from the Pneumafil filter controlling System 1 shall not exceed 0.4 lbs/hr or 5% opacity.

7. This source shall be tested for particulate matter emissions, while it is operating at its permitted capacity, by EPA Methods 1, 2, 3, 4, and 5 if visible emissions, as determined by EPA Method 9, exceed 5% opacity. Specifications for the referenced test methods are listed in F.A.C. Rule 17-2.700(6)(b), (Dec. 5, 1988).

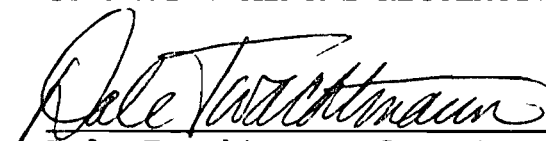
8. The Department's Southwest District office in Tampa shall be notified at least 15 days prior to any compliance tests.

9. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

10. An application for an permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this 8 day
of Dec, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

Interoffice Memorandum

TO: Dale Twachtmann

FROM: Steve Smallwood *[Signature]*

DATE: December 6, 1989

SUBJ: Approval of Sikes Corporation Permit Applications
AC 53-167121 and AC 53-167122

Attached for your approval and signature are two permits prepared by Central Air Permitting for the above mentioned company to construct System 1 (2 presses, 2 dryers, and a filter) and System 2 (10 presses and a filter) at their ceramic tile plant located in Lakeland, Polk County, Florida.

No comments were received during the public notice period. Day 90, after which these permits will be issued by default, is December 28, 1989.

I recommend your approval and signature.

Attachments

SS/plm

*Please call
Patty Adams
when signed
8-1344*

RECEIVED

DEC 6 1989

Office of the Secretary



LAKE
ENGINEERING, INC.

December 26, 1989

RECEIVED
DEC 28 1989
DER - BAQVI

Mr. C.H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy:

Enclosed is an original and two copies of the Affidavit of Publication for Florida Tile Div./Sikes Corp., DER File No. AC53-167123. These items are submitted according to your letter to Florida Tile dated November 28, 1989.

If you need additional information, please contact me at your convenience.

Sincerely,

LAKE ENGINEERING, INC.

Randal M. Reynolds, P.E.
Project Manager

RMR:mhm

cc: Mr. Bill Thomas (w/enclosures)
FDER - Tampa Office

Ms. Sharon Bolling (w/enclosure)
Florida Tile

St. Hanks
328.2.3.5

328-89\1226FANC.11L

AFFIDAVIT OF PUBLICATION

THE LEDGER Lakeland, Polk County, Florida

Case No.....

STATE OF FLORIDA)
COUNTY OF POLK)

Before the undersigned authority personally appeared Stephen DeWitt, who on oath says that he is Controller of The Ledger, a daily newspaper published at Lakeland in Polk County, Florida; that the attached copy of advertisement, being a

Notice of Intent

in the matter of

Roller Kiln

in the

Court, was published in said newspaper in the issues of

December 8; 1989

Affiant further says that said The Ledger is a newspaper published at Lakeland, in said Polk County, Florida, and that the said newspaper has heretofore been continuously published in said Polk County, Florida, daily, and has been entered as second class matter at the post office in Lakeland, in said Polk County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Signed

Stephen DeWitt
Controller

Sworn to and subscribed before me this..... 13th

December 89
A.D. 19



Barbara Thigpen
Notary Public

NOTARY PUBLIC, STATE OF FLORIDA.
My Commission Expires NOV. 11, 1991.
BONDED THRU NOTARY PUBLIC UNDERWRITERS.

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Sikes Corporation — Florida Tile Division, P.O. Box 447, Lakeland, Florida 33802, to construct a monoporous roller kiln at their ceramic tile plant at 1 Sikes Blvd., Lakeland, Polk County, Florida. The total emissions from the kiln will be 12.3 TPY fluorides and traces of the products of combustion of natural gas fuel. These emissions will not cause a violation of any ambient air quality standard. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this intent to issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 285.207, F.A.C.

The application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Southwest District
4520 Oak Fair Blvd.
Tampa, Florida 33610-7347

Lakeland Public Library
100 Lake Morton Drive
Lakeland, Florida 33802

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

K-680 — 12-8; 1989



December 6, 1989

RECEIVED

DEC 08 1989

DER-BAQM

Mr. Bill Thomas
Department of Environmental Regulation
Southwest District
4520 Oak Fair Boulevard
Tampa, FL 33610-7347

Dear Mr. Thomas:

As a result of on-going plant renovation and in conjunction with recent air permitting activity, Florida Tile requests that the permits listed below be formally closed by the Department because these emission sources have been eliminated or no longer discharge directly to the atmosphere:

<u>Permit No.</u>	<u>Description</u>	<u>Reduction in Emissions (tpy)</u>
A053-90976	Simpson Clay Mixers Baghouses	3.6
A053-148909	Earthstone Bisque Grinding	0.2
A053-148910	Earthstone Dryer	0.01
A053-148913	White Body Mixer #2	0.7
A053-148914	LR-28 Material Handling System	0.2
A053-148917	Bulk Batching Facility	2.0
A053-148918	Miscellaneous Operations System - Pangborn Baghouse	23.6
	Total	30.31

Air permit A053-90976 covers three Simpson Clay Mixer Baghouses. Mixers #1 and #3 and their associated baghouses have been dismantled; Mixer #2 is still operating, however its baghouse now discharges into the System #2 dust collector (draft permit AC53-167122).

The company has ceased the manufacture of the product called Earthstone in Lakeland and has dismantled the Earthstone Bisque Grinding Station, the Earthstone Dryer and the LR-28 Material Handling System. Likewise, the White Body Mixer #2 baghouse, permit A053-148913, has been removed.

The old Bulk Batching Facility (A053-148917) has been replaced with a new Body Preparation Plant (AC53-158856).

Department of Environmental Regulation
Page Two
December 6, 1989

Finally, those miscellaneous operations once covered under permit A053-148918 are now serviced by other dust collection systems and the Pangborn baghouse has been dismantled.

Current air permitting is being handled by the Department's Bureau of Air Regulation in Tallahassee. If you have any questions which cannot be answered by Tallahassee personnel, please feel free to call me at (813) 687-7171, extension 207.

Sincerely,

Sharon Bolling

Sharon Bolling
Environmentalist
Development & Engineering

kw

cc: Mr. Willard Hanks
Mr. Randy Reynolds



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

November 30, 1989

Lakeland Public Library
100 Lake Morton Drive
Lakeland, Florida 33802

Re: Sikes Corporation
Florida Tile Division
Air Construction Permit Application

The Bureau of Air Regulation needs to make the enclosed information available for public inspection pursuant to Chapter 17-2, Florida Administrative Code. A notice directing people to your office will be published in a local newspaper in the near future. The information should be available upon request for a period of at least 14 days from the notice date.

We appreciate your help in providing this valuable public service, and your assistance does not necessarily constitute an endorsement of the project. Should you have any questions, please call me at (904)488-1344.

Sincerely,

Patricia G. Adams
Planner
Bureau of Air Regulation

PA/kt

enclosure

P 938 762 767

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Wm. R. Boakes, FL Tile	
Street and No. P.O. Box 447	
P.O., State and ZIP Code Lakeland, FL 33802	
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: 11-30-89 Permit: AC 53-167123	

PS Form 3800, June 1985



Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

November 28, 1989

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. William R. Boakes, Vice President
Sikes Corporation - Florida Tile Division
Post Office Box 447
Lakeland, Florida 33802

Dear Mr. Boakes:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for Sikes Corporation to construct a monoporosa roller kiln at your ceramic tile plant in Lakeland, Polk County, Florida.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Regulation.

Sincerely,

C. H. Fancy, P.E.
Chief

Bureau of Air Regulation

CHF/WH/plm

Attachments

cc: B. Thomas, SW District
R. Reynolds, P.E.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

Sikes Corporation
Florida Tile Division
P. O. Box 447
Lakeland, Florida 33802

DER File No. AC 53-167123

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Sikes Corporation - Florida Tile Division, applied on July 6, 1989, to the Department of Environmental Regulation for a permit to construct a monoporosa roller kiln at the ceramic tile plant in Lakeland, Polk County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

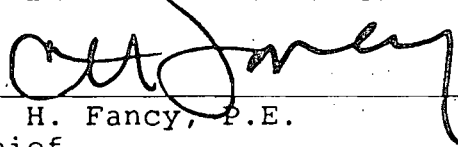
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such

person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

Copies furnished to:

B. Thomas, SW District
R. Reynolds, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 11-30-89.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Kym Daker
Clerk

11-30-89
Date

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Sikes Corporation - Florida Tile Division, P. O. Box 447, Lakeland, Florida 33802, to construct a monoporous roller kiln at their ceramic tile plant at 1 Sikes Blvd., Lakeland, Polk County, Florida. The total emissions from the kiln will be 12.3 TPY fluorides and traces of the products of combustion of natural gas fuel. These emissions will not cause a violation of any ambient air quality standard. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Southwest District
4520 Oak Fair Blvd.
Tampa, Florida 33610-7347

Lakeland Public Library
100 Lake Morton Drive
Lakeland, Florida 33802

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation
and
Preliminary Determination

Sikes Corporation
Florida Tile Division
Lakeland, Polk County, Florida

File No. AC 53-167123
Monoporosa Roller Kiln

Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

November 28, 1989

I. General Information

A. Applicant

Sikes Corporation
Florida Tile Division
Post Office Box 447
Lakeland, Florida 33802

B. Request

On July 6, 1989, Sikes Corporation submitted an application for permit to construct a monoporosa roller kiln at their existing ceramic tile manufacturing facility. The application was considered complete on November 2, 1989, when additional information on the project (Lake Engineering, Inc. letter dated October 31, 1989) was received.

C. Projects and Location

Sikes Corporation is modernizing their ceramic tile manufacturing facility (SIC 3253) located at 1 Sikes Blvd., Lakeland, Polk County, Florida. The UTM coordinates of this facility are Zone 17, 405.2 km E and 3,102.4 km N. This evaluation addresses the installation of a new 4.76 MMBtu/hr natural gas fired 2.5 TPH green tile monoporosa roller kiln. No air pollution control equipment is proposed for this kiln.

D. Process and Emissions

Up to 2.5 TPH of green tile will be fired using 4.76 MMBtu/hr of natural gas in the proposed monoporosa roller kiln. Emissions from this uncontrolled source will be primarily fluorides (F-) and the products of combustion of the natural gas. The estimated emissions, based on test data for fluorides emissions from a similar plant and emission factors for natural gas fired boilers from AP-42, are shown below.

Monoporosa Roller Kiln Emissions

Pollutant	F-	PM	SO ₂	NO _x	CO	THC
lbs/hr	2.98	0.02	0.003	0.46	0.09	0.04
TPY	12.3	0.10	0.01	1.90	0.38	0.15

The applicant has been operating 15 natural gas fired kilns at this facility under the authority of permit No. AO 53-90968. Seven of the 15 kilns (Nos. 1, 2, 3, 4, 5, 8, and 14) have ceased operation during 1988 and 1989. The fluoride emissions from these kilns was estimated to be 4.22 lbs/hr and 17.37 TPY. Thus the net fluorides emissions from the plant, including the proposed kiln, will decrease.

II. Rule Applicability

The proposed project, construction of a monoporosa roller kiln, is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code.

The plant is located in an area designated attainment for all criteria pollutants (F.A.C. Rule 17-2.420).

The project is at a major facility whose allowable particulate matter (PM) emissions exceed 100 TPY (F.A.C. Rule 17-2.100). Tile manufacturing plants are not on the list of major facility categories, Table 500-1. The increase in emissions from the proposed project is less than the significant emissions rates listed in Table 500-2.

The project is not subject to the prevention of significant deterioration (PSD) regulations (F.A.C. Rule 17-2.500) because it does not cause a significant emissions increase of any criteria pollutant.

The project is subject to F.A.C. Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements. The allowable emissions will be set at the rates requested by the applicant. Higher emissions could subject this project to different regulations.

III. Technical Evaluation

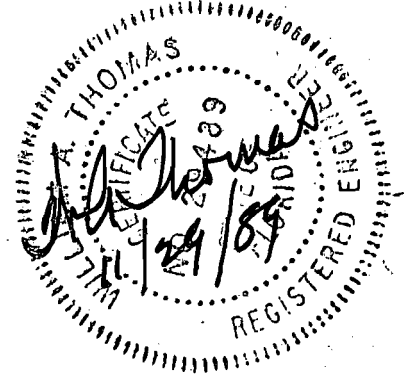
The curing of green tiles in a natural gas fired kiln should not generate significant emissions of particulate matter or the products of combustion. For this project, fluorides are the primary pollutant the Department is concerned with. The applicant has estimated that ceasing operation of seven existing kilns along with operating the proposed monoporosa roller kiln will result in a 5 TPY decrease in fluoride emissions. The Department has reservations on what the actual fluoride emissions from the proposed kiln will be. Because of the shutdown of the 7 existing kilns and the plans to shut down two other kilns (Nos. 6 and 7) in the future, the Department does have reasonable assurance that this project will not result in a significant net emissions increase of fluoride emissions (3 TPY) that would trigger the PSD regulations and require fluoride emissions to be controlled to meet BACT. As a condition of any construction permit issued for this project, the Department will require the applicant to test the emissions for fluorides to confirm the emission factor used in the application.

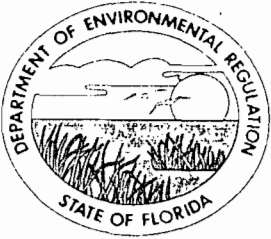
IV. Air Quality Analysis

It is the judgement of the Department that the estimated emissions from the proposed kiln will not violate any ambient air quality standard.

V. Conclusion

Based on the information provided by Sikes Corporation - Florida Tile Division, the Department has reasonable assurance that the proposed kiln, as described in this evaluation and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.





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

PERMITTEE:

Sikes Corporation
P. O. Box 447
Lakeland, Florida 33802

Permit Number: AC 53-167123

Expiration Date: August 1, 1990

County: Polk

Latitude/Longitude: 28°02'45"N
81°57'45"W

Project: Monoporosa Roller Kiln

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct a 2.5 TPH green tile natural gas fired (4.76 MMBtu/hr) monoporosa roller kiln with a 38.5 ft. high, 24.8 inch diameter stack that discharges approximately 4,120 DSCFM of gas at 482°F. Air pollution is controlled by the use of clean fuel (natural gas).

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received July 6, 1989
2. DER letter dated August 31, 1989
3. Lake Eng. letter dated October 31, 1989

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems 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 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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor 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 provide the Department with the following information:

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

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a 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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

GENERAL CONDITIONS:

b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained 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 dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. 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 corrected promptly.

SPECIFIC CONDITIONS:

1. This kiln shall not process more than 2.5 TPH green tiles.
2. This kiln shall not operate more than 24 hrs/day, 7 days/wk, and 49 weeks/year or 8,232 hours/year.
3. The permittee shall maintain logs that can be used to determine the production and operation time of the kiln.
4. All reasonable precautions shall be taken to minimize generation of unconfined emissions of particulate matter in accordance with the provisions in F.A.C. Rule 17-2.610(3). These

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

SPECIFIC CONDITIONS:

provisions are applicable to any source including, but not limited to vehicular movement, transportation of materials, construction, demolition or wrecking, or industrial related activities such as loading, unloading, storing, handling, and processing of materials. Reasonable precautions shall include, but are not limited to, wetting or cleaning of areas generating unconfined emissions.

5. Pursuant to F.A.C. Rule 17-2.620(2), the permittee shall not allow the discharge of air pollutants which cause or contribute to an objectionable odor.

6. Emissions from this kiln shall not exceed 3.0 lbs/hr fluoride and 5% opacity.

7. This source shall be tested for fluoride and visible emissions by EPA Methods 13A or 13B and 9 as described in 40 CFR 60, Appendix A, (July 1, 1988). A sample of the green tiles being processed during the tests shall be analyzed for its fluoride content and the results included in the stack test report.

8. Tile kilns Nos. 1, 2, 3, 4, 5, 8, and 14 (AO 53-90968) shall not be operated after the monoporosa roller kiln is placed in service.

9. The Department's Southwest District office in Tampa shall be notified at least 15 days prior to any compliance tests.

10. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

11. An application for an operation permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167123
Expiration Date: August 1, 1990

Issued this _____ day
of _____, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary



November 15, 1989

RECEIVED
NOV 20 1989
DER-BAQM

Mr. Willard Hanks
Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Willard:

Per your request, enclosed is an affidavit of publication for Systems 1 and 2 at Florida Tile Division, Lakeland, Florida. The 14-day public notice period has expired. Please inform us if any public comments were received.

I talked to Florida Tile personnel concerning the notice publication for the Mikro-Pulsaire and W.W. Sly baghouses. They were under the impression that no publication was needed because these are existing baghouses. I have clarified the issue and a notice will be published as soon as possible.

If you have any questions, please contact me at your convenience.

Sincerely,

LAKE ENGINEERING, INC.

A handwritten signature in cursive script that reads "Randy Reynolds".

Randal M. Reynolds, P.E.
Project Manager

RMR:kdf

Enclosure

cc: Ms. Sharon Bolling
Mr. Bill Gandy

328.2.3

\\328-89\1115HANK.111

cc: *A. Hanks*
B. Thomas, SW Dist

6000 LAKE FORREST DR. SUITE 350
ATLANTA, GEORGIA 30328
(404) 257-9634 FAX: (404) 847-9496

AFFIDAVIT OF PUBLICATION

THE LEDGER Lakeland, Polk County, Florida

Case No.....

STATE OF FLORIDA)
COUNTY OF POLK)

Before the undersigned authority personally appeared Stephen DeWitt, who on oath says that he is Controller of The Ledger, a daily newspaper published at Lakeland in Polk County, Florida; that the attached copy of advertisement, being a.....

..... Notice of Intent.....

..... in the matter of

..... Construct System 1 & 2.....

..... in the

..... Court, was published in said newspaper in the issues of

..... October 21, 1989.....

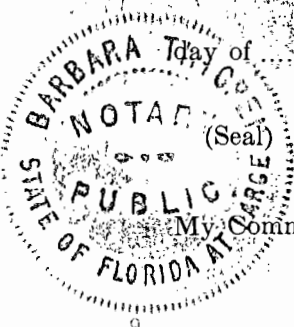
Affiant further says that said The Ledger is a newspaper published at Lakeland, in said Polk County, Florida, and that the said newspaper has heretofore been continuously published in said Polk County, Florida, daily, and has been entered as second class matter at the post office in Lakeland, in said Polk County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Signed.....

Stephen DeWitt
Controller
Stephen DeWitt

Sworn to and subscribed before me this..... 2nd

..... November..... A.D. 19 89



Barbara Shegrier
Notary Public

NOTARY PUBLIC, STATE OF FLORIDA;
MY COMMISSION EXPIRES: NOV. 11, 1990.
BORNED THEN NOTARY PUBLIC UNDERWRITERS

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue permits to Sikes Corporation/Florida Tile Division, P.O. Box 447, Lakeland, Florida 33802, to construct System 1 (2 Monoporosa Sacmi tile presses and 2 Monoporosa Sacmi dryers with emissions controlled by a Pneumafil Straight Fire filter) and System 2 (6 Dorst presses, 1 Sacmi press, 1 Martinelli press, 1 angle press, and 1 friction press with emissions controlled by a Pneumafil Straight Fire filter) at their ceramic tile plant at 1 Sikes Blvd., Lakeland, Polk County, Florida. The total emissions from these projects of 6.3 TPY particulate matter will not cause a violation of any ambient air quality standard. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this intent to issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by Petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 285.207, F.A.C.

The applications are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Southwest District
4520 Oak Fair Blvd.
Tampa, Florida 33610-7347

Lakeland Public Library
100 Lake Morton Drive
Lakeland, Florida 33802

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.
K-532 - 10-21, 1989



RECEIVED

NOV 2 1989

October 31, 1989

DER - BAQM

Mr. C. H. Fancy, P.E.
Bureau of Air Quality Management
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

Your letter dated August 31, 1989 requested additional information on the estimated fluoride emissions from the proposed monoporosa kiln at Florida Tile, Lakeland, Florida. This letter serves as a response to your letter and as an update for the status of the existing tile kiln (15 each).

Several existing kiln have been removed from the facility or have been placed out of service. Enclosed is a copy of the permit renewal application (AO53-90968) for the existing tile kiln. This renewal application shows that seven kiln have been removed from the plant or placed out of service. These modifications have reduced fluoride emissions by approximately 17.4 tons per year. This reduction in fluoride emissions is significant and directly affects the addition of the monoporosa kiln.

Florida Tile performed fluoride analyses on the tile body at its Lakeland, Florida and Lawrenceburg, Kentucky plants. The results are shown in Table 1 (attached hereto). The monoporosa material contains thirty percent (30%) less fluoride that the tile body material at Lawrenceburg, Kentucky. Using actual stack test data from the Lawrenceburg plant and the differences in production rates, the revised estimated fluoride estimates were calculated. These calculations are also shown in Table 1.

Mr. C. H. Fancy, P.E.
October 31, 1989
Page Two

The revised estimated fluoride emissions from the monoporosa kiln are approximately 12.3 tons per year. However, the decrease in fluoride emissions of 17.4 tons per year from the removal or shutdown of seven existing kiln at the same plant offsets the monoporosa kiln fluoride emissions. There will remain a net decrease in fluoride emissions of approximately five tons per year even after the installation of the monoporosa kiln. Therefore, no significant emissions increase has occurred and PSD does not apply.

If you have any questions or need additional information, please contact me at your convenience.

Sincerely,

LAKE ENGINEERING, INC.



Randal M. Reynolds, P.E.
Project Manager

RMR:css

cc: Mr. Bill Boakes, (w/enclosure)

Enclosure

328.2.3

*copied: A. Hanks
B. Thomas, SW Dist.
CIT/BT*

TABLE 1

REVISED FLUORIDE EMISSION ESTIMATES

Lawrenceburg, Kentucky

Fluoride content (as F):383 mg/kg

Lakeland, Florida - conventional tile body

Fluoride content (as F):332.5 mg/kg (average)

Lakeland, Florida - monoporosa tile body

Fluoride content (as F):267 mg/kg

Lawrenceburg, Kentucky - stack test data

Production rate: 31,762.50 sq. ft. tile/day

Average fluoride emission rate: 3.63 lbs./hr.

Lakeland, Florida - calculation data - monoporosa

Production rate: 37,500 sq. ft. tile/day

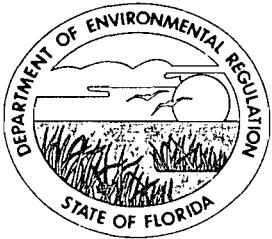
Operating schedule: 24 hrs./day, 7 days/wk., 49 wks./yr.

$$\frac{37,500}{31,762.5} \times \frac{267}{383} \times 3.63 = 2.98 \text{ lbs./hr.} = 0.0015 \text{ tons/hr.}$$

$$0.0015 \frac{\text{tons}}{\text{hr.}} \times 24 \times 7 \times 49 = 12.3 \text{ tons/yr.}$$

RMR:css

328.2.3



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

October 10, 1989

Lakeland Public Library
100 Lake Morton Drive
Lakeland, Florida 33802

Re: Sikes Corporation
Florida Tile Division
Air Construction Permit Application

The Bureau of Air Regulation needs to make the enclosed information available for public inspection pursuant to Chapter 17-2, Florida Administrative Code. A notice directing people to your office will be published in a local newspaper in the near future. The information should be available upon request for a period of at least 14 days from the notice date.

We appreciate your help in providing this valuable public service, and your assistance does not necessarily constitute an endorsement of the project. Should you have any questions, please call me at (904)488-1344.

Sincerely,

Patricia G. Adams

Patricia G. Adams
Planner
Bureau of Air Regulation

PA/kt

enclosure

P 938 762 713

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

PS Form 3800, June 1985

Sent to Mr., William R. Boakes, Fla. Street and No. P. O. Box 447 Lakeland, FL 33802 Tile	
P.O. State and ZIP Code Lakeland, FL 33802	
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: 10-10-89 Permit: AC 53-167121 AC 53-167122	

● **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. William R. Boakes, Vice Pres. Sikes Corp./Fla. Tile Div. P. O. Box 447 Lakeland, FL 33802	4. Article Number P 938 762 713 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Address X <i>William R. Boakes</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery	

Stamp: FL D. OCT 13 1989 STA USPS



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

October 9, 1989

CERTIFIED MAIL-RETURN RECEIPT REQUESTED


Mr. William R. Boakes, Vice President
Sikes Corporation - Florida Tile Division
Post Office Box 447
Lakeland, Florida 33802

Dear Mr. Boakes:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permits for Sikes Corporation to construct System 1 and System 2 at your ceramic tile plant in Lakeland, Polk County, Florida.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Regulation.

Sincerely,


C. H. Fancy, P.E.
Bureau of Air Regulation

CHF/WH/t

Attachments

cc: B. Thomas, SW District
R. Reynolds, P.E.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Applications for Permits by:

Sikes Corporation
Florida Tile Division
P. O. Box 447
Lakeland, FL 33802

DER File Nos. AC 53-167121
AC 53-167122

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue permits (copies attached) for the proposed project as detailed in the applications specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Sikes Corporation-Florida Tile Division, applied on July 6, 1989, to the Department of Environmental Regulation for permits to construct System 1 (2 Monoporosa Sacmi tile presses and 2 Monoporosa Sacmi dryers with emissions controlled by a Pneumafil Straight Fire filter) and System 2 (6 Dorst presses, 1 Sacmi press, 1 Martinelli press, 1 angle press, and 1 friction press with emissions controlled by a Pneumafil Straight Fire filter) at their ceramic tile plant in Lakeland, Polk County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permits are required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permits. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permits with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

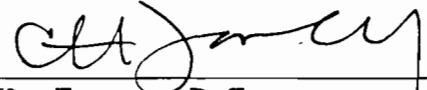
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such

person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.
Bureau of Air Regulation

Copies furnished to:

B. Thomas, SW District
R. Reynolds, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 10-10-89.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Kim J. J. J.
Clerk

10-10-89
Date

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue permits to Sikes Corporation-Florida Tile Division, P. O. Box 447, Lakeland, Florida 33802, to construct System 1 (2 Monoporosa Sacmi tile presses and 2 Monoporosa Sacmi dryers with emissions controlled by a Pneumafil Straight Fire filter) and System 2 (6 Dorst presses, 1 Sacmi press, 1 Martinelli press, 1 angle press, and 1 friction press with emissions controlled by a Pneumafil Straight Fire filter) at their ceramic tile plant at 1 Sikes Blvd., Lakeland, Polk County, Florida. The total emissions from these projects of 6.3 TPY particulate matter will not cause a violation of any ambient air quality standard. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The applications are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Southwest District
4520 Oak Fair Blvd.
Tampa, Florida 33610-7347

Lakeland Public Library
100 Lake Morton Drive
Lakeland, Florida 33802

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation
and
Preliminary Determination

Sikes Corporation
Florida Tile Division
Lakeland, Polk County, Florida

Sources

System 1
System 2

File Numbers:

AC 53-167121
AC 53-167122

Florida Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

October 9, 1989

I. General Information

A. Applicant

Sikes Corporation
Florida Tile Division
Post Office Box 447
Lakeland, Florida 33802

B. Request

On July 6, 1989, Sikes Corporation submitted two applications for permits to construct System 1 (2 presses, 2 dryers, and a filter) and System 2 (10 presses and a filter) at their existing ceramic tile manufacturing facility. The applications were considered complete on August 7, 1989, when additional information on the projects (Lake Engineering, Inc. letter dated August 2, 1989) was received.

C. Projects and Location

Sikes Corporation is modernizing their ceramic tile manufacturing facility (SIC 3253) located at 1 Sikes Blvd., Lakeland, Polk County, Florida. The UTM coordinates of this facility are Zone 17, 405.2 km E and 3,102.4 km N. This evaluation addresses applications for System 1 and System 2.

The applications for Systems 1 and 2 replaces the previous applications and the technical evaluation for Trim Press System No. 1 (DER File No. AC 53-160479) and Dorst Press System No. 2 (DER File No. AC 53-160859).

System No. 1 consists of two Sacmi presses that can process up to 4,100 lbs/hr of green tiles each (8,200 lbs/hr total) and two Sacmi vertical dryers each fired by 2,324 CFH natural gas (2.38 MMBtu/hr) for a total fuel consumption of 4,648 CFH (4.76 MMBtu/hr).

The particulate matter emissions from this process are controlled by a Pneumafil Model 13.5-456-12 Straight Fire Filter. Although this filter is designed to handle additional equipment planned for the future (3 trim straight lines and 5 trim presses), this evaluation does not address this equipment. New applications will be required before these processes can be installed at the plant.

System 1 will operate 20 hrs/day, 7 days/week, and 49 weeks/year or 6,860 hrs/year.

System 2 consists of 6 Dorst presses and 4 new trim presses. The trim presses are a Sacmi PH 400 press, a Martinelli HPS-350 press, a 40 ton angle press, and a friction press. The

trim presses will be operated on an experimental basis to determine which design works best in this service. After about one year of testing, one design will be selected and installed for a total of 10 presses. Later, four additional presses will be installed. These changes will require new applications for permits to construct.

The particulate matter emissions from this process are controlled by a Pneumafil Model 13.5-456-12 Straight Fire filter. Although this filter is designed to handle the future trim presses, this evaluation does not address the future equipment. As stated earlier, new applications will be required before the future presses can be installed at the plant.

System 2 will operate 24 hrs/day, 7 days/week, and 49 weeks/year or 8,232 hrs/year.

D. Process and Emissions

The presses take prill from the body preparation plant and compress it into a variety of tile shapes. The clay product is heated in a dryer to produce greenware.

System 1 will process a total of 8,200 lbs/hr of prills and use a total of 4,648 CF/hr of natural gas (4.76 MMBtu/hr). Pollutants generated by this process are particulate matter during the handling of the prills and the products of combustion from the burning of the natural gas. A total of 10,400 ACFM of contaminated air from the 2 presses and 2 dryers will pass through a Pneumafil Straight Fire Filter, Model 13.5-456-12, before being discharged through a 20 ft high, 4.25 ft. diameter stack to the atmosphere. An additional 42,400 ACFM of clean air will also flow through this filter. The applicant plans to use this air to control future process equipment (8 trim presses). Particulate matter emissions from the 2 presses and 2 vertical dryers is estimated to be 0.36 lbs/hr and, based on 6,860 hrs/year operation of System 1, 1.23 TPY. Dust collected by the filter is pneumatically transported to an enclosed storage tank equipped with a bin vent filter and then recycled to the process. The products of combustion emitted from the dryers are considered insignificant.

System 2 will process an average of 3.9 TPH of prill in the 6 Dorst presses. Only 4 presses will be in operation at any one time. Two of these presses (line No. 1) have a capacity of 1.7 TPH each and the other two (line No. 2) have a capacity of 1.9 TPH each. The 4 trim presses will be operated on an experimental basis at a capacity of up to 1 TPH per trim press.

Particulate matter is generated during the handling of the prills and green tile. A design flow of 20,400 ACFM of contaminated air from the 6 Dorst presses, 16,000 ACFM of

contaminated air from the 4 trim presses, along with 13,600 ACFM of clean air (to control future equipment) is sent to a Pneumafil Straight Fire Filter, Model No. 13.5-456-12, before being discharged through a 20 ft high, 4.25 ft. diameter stack to the atmosphere. Particulate matter emissions from the filter are estimated at 1.3 lbs/hr and, based on 8,232 hrs/yr of operation of System 2, 5.1 TPY. Dust collected by the filter is pneumatically transported to an enclosed storage tank equipped with a bin vent filter and then recycled to the process.

In summary, the estimated emission from these projects is a follows:

Project	PM Emissions		NOx Emissions	
	lbs/hr	TPY	lbs/hr	TPY
System 1	0.4	1.23	0.5	1.6
System 2	1.3	5.1	-	-
Total	1.7	6.3	0.5	1.6

II. Rule Applicability

The proposed projects (System 1 and System 2) are subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code.

The plant is in an area designated attainment for all criteria pollutants (F.A.C. Rule 17-2.420).

The projects are at a major facility whose allowable particulate matter (PM) emissions exceed 100 TPY (F.A.C. Rule 17-2.100). Tile manufacturing plants are not on the list of major facility categories, Table 500-1. The increase in emissions from the proposed projects are less than the significant emissions rates listed in Table 500-2.

The projects are not subject to the prevention of significant deterioration (PSD) regulations (F.A.C. Rule 17-2.500) because they do not cause a significant emissions increase of any criteria pollutant.

The projects are subject to F.A.C. Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements. The allowable emissions will be set at the rates requested by the applicant. Higher emissions could subject this project to different regulations.

III. Technical Evaluation

Particulate matter and the products of combustion are generated by the 2 projects. Particulate matter from the presses

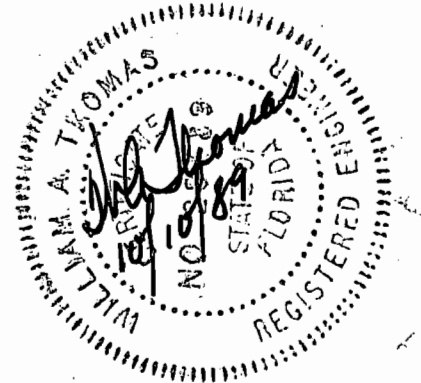
is controlled by filters estimated to be over 99.6% efficient. Dust collected by the filter is returned to an enclosed storage tank with a bin vent filter. Use of properly designed, operated, and maintained filters on these processes will comply with the Department's air pollution control regulations. The emissions from burning natural gas fuel in the dryers are considered insignificant. System 1 uses natural gas fuel only. Natural gas is considered a clean fuel and additional controls to remove the products of combustion are not justified for this equipment.

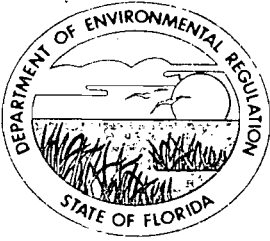
IV. Air Quality Analysis

It is the judgement of the Department that the estimated emissions from the two projects will not violate any ambient air quality standard.

V. Conclusion

Based on the information provided by Sikes Corporation-Florida Tile Division, the Department has reasonable assurance that the proposed construction/installation of the emissions from System 1 and System 2, as described in this evaluation and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.





Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
Sikes Corporation
P. O. Box 447
Lakeland, Florida 33802

Permit Number: AC 53-167121
Expiration Date: December 31, 1990
County: Polk
Latitude/Longitude: 28°02'45"N
81°57'45"W
Project: System 1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct System 1 which consists of two 2 TPH Sacmi presses and two 2.4 MMBtu/hr natural gas fired Sacmi vertical dryers with particulate matter emissions controlled by a Pneumafil Straight Fire Filter, Model No. 13.5-456-12, that discharges through a 20 ft. high, 4.25 ft. diameter stack. Dust collected by the filter is transported by a Cycloloc conveyor to an enclosed storage tank equipped with a bin vent filter for recycling to the process.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received July 6, 1989.
2. DER's letter dated July 14, 1989.
3. Lake Engineering letter dated August 2, 1989.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems 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 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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor 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 provide the Department with the following information:

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

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a 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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

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 dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. 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 corrected promptly.

SPECIFIC CONDITIONS:

1. This review is based on the two Sacmi presses and two Sacmi vertical dryers processing a total of 8,200 lbs/hr of prill while burning 4,648 CF/hr of natural gas and discharging the pollutants to a Pneumafil Straight Fire Filter. The additional of other process equipment will require new applications for permits to construct.
2. The two presses/dryers may operate 20 hrs/day, 7 days/week, and 49 weeks/year or 6,860 hrs/year.
3. The permittee shall maintain logs that can be used to determine the production and hours of operation of each press/dryer system.
4. All reasonable precautions shall be taken to minimize generation of unconfined emissions of particulate matter in accordance with the provisions in F.A.C. Rule 17-2.610(3). These provisions are applicable to any source including, but not limited to, vehicular movement, transportation of materials, construction, demolition or wrecking, or industrial related activities such as loading, unloading, storing, handling, and processing of materials. Reasonable precautions shall include, but are not limited to, wetting or cleaning of areas generating unconfined emissions.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167121
Expiration Date: December 31, 1990

SPECIFIC CONDITIONS:

5. Pursuant to F.A.C. Rule 17-2.620(2), the permittee shall not allow the discharge of air pollutants which cause or contribute to an objectionable odor.
6. Particulate matter emissions from the Pneumafil filter controlling System 1 shall not exceed 0.4 lbs/hr or 5% opacity.
7. This source shall be tested for particulate matter emissions, while it is operating at its permitted capacity, by EPA Methods 1, 2, 3, 4, and 5 if visible emissions, as determined by EPA Method 9, exceed 5% opacity. Specifications for the referenced test methods are listed in F.A.C. Rule 17-2.700(6)(b), (Dec. 5, 1988).
8. The Department's Southwest District office in Tampa shall be notified at least 15 days prior to any compliance tests.
9. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
10. An application for an permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this _____ day
of _____, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary



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

PERMITTEE:
Sikes Corporation
P. O. Box 447
Lakeland, Florida 33802

Permit Number: AC 53-167122
Expiration Date: December 31, 1990
County: Polk
Latitude/Longitude: 28°02'45"N
81°57'45"W

Project: System 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct System 2 which consists of 6 Dorst presses and 4 experimental trim presses (Sacmi PH 400 press, Martinelli HPS-350 press, 40 ton angle press, and a typical friction press) with particulate matter emissions controlled by a Pneumafil Straight Fire Filter, Model 13.5-456-12, that discharges to a 20 ft. high, 4.25 ft. diameter stack. Dust collected by the filter is transported by a Cycloloc conveyor to an enclosed storage tank equipped with a bin vent filter for recycling to the process.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received July 6, 1989.
2. DER's letter dated July 14, 1989.
3. Lake Engineering letter dated August 2, 1989.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167122
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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:
Sikes Corporation

Permit Number: AC 53-167122
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems 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 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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor 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 provide the Department with the following information:

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

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167122
Expiration Date: December 31, 1990

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a 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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167122
Expiration Date: December 31, 1990

GENERAL CONDITIONS:

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 dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. 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 corrected promptly.

SPECIFIC CONDITIONS:

1. This review is based on the 6 Dorst presses operating at a maximum production rate of 1.9 TPH each and an average monthly rate of 3.9 TPH total for all 6 presses. Each experimental trim press will operate at a maximum production rate of 1 TPH and for a total of 4 TPH for 4 presses. Particulate matter emissions from this equipment is discharged to a Pneumafil Straight Fire Filter. The addition of other process equipment will require new applications for permits to construct.

2. The Dorst and trim presses may operate 24 hrs/day, 7 days/week, and 49 weeks/year or 8,232 hrs/year.

3. The permittee shall maintain logs that can be used to determine the production and hours of operation of each press/dryer system.

4. All reasonable precautions shall be taken to minimize generation of unconfined emissions of particulate matter in accordance with the provisions in F.A.C. Rule 17-2.610(3). These provisions are applicable to any source including, but not limited to, vehicular movement, transportation of materials, construction, demolition or wrecking, or industrial related activities such as loading, unloading, storing, handling, and processing of materials. Reasonable precautions shall include, but are not limited to, wetting or cleaning of areas generating unconfined emissions.

PERMITTEE:
Sikes Corporation

Permit Number: AC 53-167122
Expiration Date: December 31, 1990

SPECIFIC CONDITIONS:

5. Pursuant to F.A.C. Rule 17-2.620(2), the permittee shall not allow the discharge of air pollutants which cause or contribute to an objectionable odor.
6. Particulate matter emissions from the Pneumafil filter controlling System 2 shall not exceed 1.3 lbs/hr or 5% opacity.
7. This source shall be tested for particulate matter emissions, while it is operating at its permitted capacity, by EPA Methods 1, 2, 4, and 5 if visible emissions, as determined by EPA Method 9, exceed 5% opacity. Specifications for the referenced test methods are listed in F.A.C. Rule 17-2.700(6)(b), (Dec. 5, 1988).
8. The Department's Southwest District office in Tampa shall be notified at least 15 days prior to any compliance tests.
9. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
10. An application for an permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this _____ day
of _____, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary

P 938 762 668

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, June 1985

William R. Boakes, V.P.	
Sikes Corp. - FL Tile Div.	
P.O. Box 447	
Lakeland, FL 33802	
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	

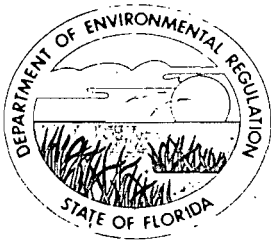
mailed: 9/1/89
AC 53-167123

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)

<p>3. Article Addressed to:</p> <p>Mr. William R. Boakes, V.P. Sikes Corporation Florida Tile Division P.O. Box 447 Lakeland, FL 33802</p>	<p>4. Article Number</p> <p>P 938 762 668</p> <p>Type of Service:</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise</p> <p>Always obtain signature of addressee or agent and DATE DELIVERED.</p>
<p>5. Signature - Address</p> <p>X</p>	<p>8. Addressee's Address (ONLY if requested and fee paid)</p>
<p>6. Signature - Agent</p> <p><i>[Signature]</i></p>	
<p>7. Date of Delivery</p>	





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

August 31, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. William R. Boakes, Vice President
Sikes Corporation
Florida Tile Division
Post Office Box 447
Lakeland, Florida 33802

Dear Mr. Boakes:

Re: File No. AC 53-167123, Monoporosa Roller Kiln

The Department has reviewed your engineer's response to our July 14 letter asking for additional information on the application for a permit to construct a Monoporosa roller kiln. We request you supply the Department with additional information on the potential fluoride emissions from this kiln. Include the fluoride content of the prill and glaze materials used to produce the tiles, any fluoride emission test results on similar operations available to you, and propose a strategy that will provide the Department with reasonable assurance that the estimated fluoride emissions will not be exceeded. We will resume processing this application after receipt of the requested information.

Sincerely,

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

CHF/WH/t

cc: B. Thomas, SW District
R. Reynolds, P.E.

Reading File }
Willard.Hanks } 9-1-89 RM



RECEIVED
AUG 7 1989
DER-BAQM

August 2, 1989

Mr. C.H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy:

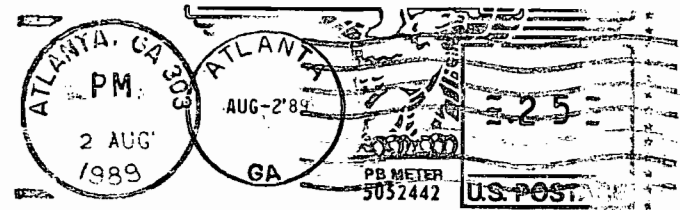
Florida Tile and Lake Engineering have received your letter dated July 14, 1989, concerning System 1 and 2 and the Monoporosa roller kiln. The following responses should provide you with the required additional information.

File No. AC 53-167121, System 1

1. Processing the application for only the two Sacmi presses and two Sacmi vertical dryers at this time will be adequate.
2. The values of 4,100 lbs./hr. and 2.38×10^6 Btu/hr. for each Sacmi press/dryer system are correct.
3. The particulate matter emission value of 1.23 tpy is correct.
4. The dust collected by the System No. 1 Pneumafil baghouse will be pneumatically transported by a "Cycloloc", an enclosed powder transport system manufactured by the Cyclonaire Conveying Company. The transported dust will be received by an enclosed storage tank equipped with a bin vent filter. The dust will be returned into the manufacturing process as a raw material.
5. The balance of the flow (42,400 ACFM) is simply not being used at this time. However, the ductwork trunk lines will be in place and clean air will be flowing through them.

File No. AC 53-167122, System 2

6. For Line No. 1, two Dorst presses will be operated at a time with a maximum production rate of 1.7 tons per hour per press. For Line No. 2 two Dorst presses will be operated at a time with a maximum production rate of 1.9 tons per hour per press.



Mr. C.H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

6000 LAKE FORREST DR. SUITE 350
ATLANTA, GEORGIA 30328



Mr. C.H. Fancy, P.E., Chief Deputy
August 2, 1989
Page Two

For the four new trim presses it is not possible to estimate the production rate due to the experimental nature of their operation. Also employees will be trained on these presses which will affect the production rate. However, for purposes of the air quality permit, it can be assumed that all four presses may be operating at the same time at an operating rate not to exceed 1.0 ton per hour per press.

7. The non-dust air should be 18,800 ACFM rather than 13,600 ACFM.

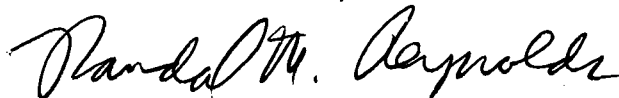
File No. AC 53-167123, Monoporosa Roller Kiln

8. The gaseous fluoride emissions (and the corresponding total fluoride emissions) were incorrectly estimated in the application using test data from another Florida Tile plant. The tile body for the Monoporosa plant does not include any talc which is the source of fluoride emissions. Therefore please delete the gaseous fluoride emission estimate and replace it with a total fluoride estimate of <0.01 lbs./hr. and <0.1 tons per year.
9. The allowable particulate matter emissions from this source is 6.34 lbs./hr. based on a process weight rate of 2.5 tons per hour.
10. The estimated NO_x emissions from this source are 0.46 lbs./hr. and 1.9 tpy based on an emission factor of 100 lbs. NO_x/10⁶ CF natural gas fired and 4,644 CF/hr. natural fired in the roller kiln.

If you have any further questions, call me at your convenience.

Sincerely,

LAKE ENGINEERING, INC.



Randal M. Reynolds, P.E.
Project Manager

RMR:mhm

cc: Mr. Bill Boakes
Mr. Bill Gandy

328.2.3

*copied: St. Johns
N. Kerns, SW Dist.
CHP/BT*

P 938 762 622

RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

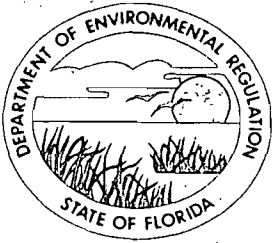
PS Form 3800, June 1985

Sent to	Mr. Wm. R. Boakes, Sikes Corp.
Street and No.	P.O. Box 447
P.O. State and ZIP Code	Lakeland, FL 33802
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: 7-17-89 Permit: AC 53-167121, -22, -23

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. William R. Boakes, Vice Pres. Sikes Corp./Fla. Tile Division P.O. Box 447 Lakeland, FL 33802	4. Article Number P 938 762 622
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
5. Signature - (Address) <i>William R. Boakes</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery 7-19-89	



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

July 14, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. William R. Boakes, Vice President
Sikes Corporation
Florida Tile Division
Post Office Box 447
Lakeland, Florida 338-2

Dear Mr. Boakes:

Re: File No. AC 53-167121, System 1
File No. AC 53-167122, System 2
File No. AC 53-167123, Monoporosa Roller Kiln

The Department has made a preliminary review of your applications for permits to construct System 1, System 2, and Monoporosa roller kiln at your tile manufacturing plant in Lakeland, Polk County, Florida. Before these applications can be processed, we need the following additional information:

File No. AC 53-167121, System 1

1. If it is your intent that any construction permit issued by the Department at this time include the future three trim straight line presses and five trim presses, we will need the specifications of this equipment, production and emissions evaluations, and a more detailed construction schedule. Otherwise, this application will be processed for the two Sacmi presses and two Sacmi vertical dryers only.
2. Please clarify the production and heat input if it is different from 4,100 lbs/hr production and 2.38 MMBtu/hr heat input for each Sacmi press/dryer system for a total of 8,200 lbs/hr production and 4.76 MMBtu/hr heat input for both systems.
3. Is the 1.47 TPY emission listed in Section III C. of the application correct? A particulate matter emission of 0.36 lbs/hr is equivalent to 1.23 TPY.
4. Describe how the dust collected by the baghouse is recycled and to what process equipment it is discharged to.

Mr. William R. Boakes
Page Two
July 14, 1989

5. The flow for each Sacmi press/dryer system is listed at 5,200 acfm for a total of 10,400 acfm. Section III H. of the application list the flow from the process at 52,800 acfm. Please explain the difference in flows.

File No. AC 53-167122, System 2

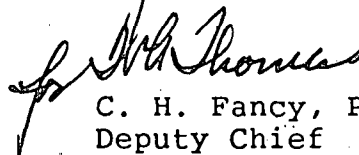
6. The process rate calculations were based on average production. What is the design capacity of each Dorst and trim press, the maximum rate they will be operated at, and the maximum number of presses that will be in operation at the same time?
7. Emission calculations listed flows of 16,000 acfm for the trim presses, 13,600 acfm non-dust air (assume extra flow is to control future process equipment), and 20,400 acfm for six Dorst presses or a total of 50,000 acfm. Section III H. of the application list a flow of 55,200 acfm. Why are these flows different?

File No. AC 53-167123 Monoporosa Roller Kiln

8. What are the total fluoride emissions from this plant?
9. What is the total allowable particulate matter emissions from this plant?
10. Please estimate the NOx emissions from this source and the plant.

We will resume processing the applications after the requested information is received. If you have any questions on this matter, please write to me or call Willard Hanks at (904)488-1344.

Sincerely,



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

CHF/WH/t

cc: B. Thomas, SW District
R. Reynolds, P.E.



RECEIVED
DER - MAIL ROOM
1989 JUL -6 AM 9:38

July 5, 1989

VIA FEDERAL EXPRESS

Mr. C.H. Fancy, P.E.
Bureau of Air Quality Management
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

JUL 6 1989

DER-BAQM

Dear Mr. Fancy:

Enclosed is an original and three copies of permit application forms for the monoporosa roller kiln, System 1 and 2 at Florida Tile's Lakeland facility. The roller kiln application is new while the forms for System 1 and 2 are revisions to earlier applications.

An application fee of \$200.00 was previously submitted for System 1 and 2 as a single permit. Please apply that fee to System 1 as a separate permit. Enclosed is a check for \$400.00 to cover System 2 and the roller kiln.

If you have any questions, please give me a call.

Sincerely,

LAKE ENGINEERING, INC.

A handwritten signature in cursive script that reads 'Randal M. Reynolds'.

Randal M. Reynolds, P.E.
Project Manager

RMR:mhm

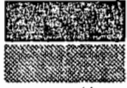
Enclosures

cc: Mr. Bill Boakes
Mr. Al Burgess

328.2.1

Best Available Copy

FEDERAL EXPRESS		AIRBILL		PACKAGE TRACKING NUMBER															
USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII. USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO. QUESTIONS? CALL 800-230-5355 TOLL FREE.		3997098781		3997098781															
Date: 7-5-89		RECIPIENT'S COPY																	
From (Your Name) Please Print: Andy Reynolds		Your Phone Number (Very Important): (404) 257-9634		To (Recipient's Name) Please Print: Mr. C.H. Fancy															
Company: ENGINEERING INC		Department/Floor No:		Company: Bureau of Air Quality Management															
Street Address: 10 LAKE FOREST DR STE 350		Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes): Twin Towers Office Bldg. 2600 Blair Stone Road		City: Tallahassee FL															
City: ANTA State: GA ZIP Required: 30328		City: Tallahassee State: FL ZIP Required: 32309-2260																	
YOUR BILLING REFERENCE INFORMATION (FIRST 24 CHARACTERS WILL APPEAR ON INVOICE): 328.2.1			IF HOLD FOR PICK-UP, Print FEDEX Address Here																
PAYMENT: <input type="checkbox"/> Bill Sender <input type="checkbox"/> Bill Recipient's FedEx Acct. No. <input type="checkbox"/> Bill 3rd Party FedEx Acct. No. <input type="checkbox"/> Bill Credit Card <input type="checkbox"/> Cash			Street Address: City: State: ZIP Required:																
SERVICES 1 <input type="checkbox"/> PRIORITY 1 Overnight Delivery 2 <input checked="" type="checkbox"/> COURIER-PAR OVERNIGHT ENVELOPE 3 <input type="checkbox"/> OVERNIGHT BOX 4 <input type="checkbox"/> OVERNIGHT TUBE 5 <input type="checkbox"/> STANDARD AIR Delivery not later than second business day *Declared Value Limit \$100.		DELIVERY AND SPECIAL HANDLING 1 <input type="checkbox"/> HOLD FOR PICK-UP (Fill in Box 1) 2 <input type="checkbox"/> DELIVER WEEKDAY 3 <input type="checkbox"/> DELIVER SATURDAY (Extra charge) 4 <input type="checkbox"/> DANGEROUS GOODS (Extra charge) 5 <input type="checkbox"/> CONSTANT SURVEILLANCE SERVICE (CSS) (Extra charge) (Release Signature Not Applicable) 6 <input type="checkbox"/> DRY ICE Lbs. 7 <input type="checkbox"/> OTHER SPECIAL SERVICE 8 9 <input type="checkbox"/> SATURDAY PICK-UP (Extra charge) 10 11 12 <input type="checkbox"/> HOLIDAY DELIVERY (if offered) (Extra charge)		<table border="1"> <tr> <th>PACKAGES</th> <th>WEIGHT IN POUNDS ONLY</th> <th>YOUR DECLARED VALUE</th> <th>OVER SIZE</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>Total</td> <td>Total</td> <td></td> </tr> </table> Received At: 1 <input type="checkbox"/> Regular Stop 2 <input type="checkbox"/> On-Call Stop 3 <input type="checkbox"/> Drop Box 4 <input type="checkbox"/> B.S.C. 5 <input type="checkbox"/> Station FEDEX Corp. Employee No.: Date/Time for FEDEX Use:		PACKAGES	WEIGHT IN POUNDS ONLY	YOUR DECLARED VALUE	OVER SIZE					Total	Total	Total		Emp. No.: Date: <input type="checkbox"/> Cash Received <input type="checkbox"/> Return Shipment <input type="checkbox"/> Third Party <input type="checkbox"/> Chg. To Del. <input type="checkbox"/> Chg. To Hold Street Address: City: State: Zip: Received By: X Date/Time Received: FedEx Employee Number: Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom. Release Signature:	
PACKAGES	WEIGHT IN POUNDS ONLY	YOUR DECLARED VALUE	OVER SIZE																
Total	Total	Total																	
				Federal Express Use: Base Charges: Declared Value Charge: Other 1: Other 2: Total Charges: PART #111800 REVISION DATE 10/88 PRINTED IN U.S.A. FXEM 009 © 1988 F.E.C.															



Sikes

SIKES CORPORATION • P. O. BOX 447 • LAKELAND, FLORIDA 33802

No. 011888

631 988

SUN FIRST NATIONAL BANK OF POLK COUNTY
LAKELAND, FLORIDA

DATE June 30, 1989

\$ *400.00*

PAY

SIKES CORP. 400 DOLS 00 CTS

DOLLARS

TO
THE
ORDER
OF

FLORIDA DEPARTMENT OF ENVIRONMENTAL
REGULATION

SIKES CORPORATION

David M. Sikes
AUTHORIZED SIGNATURE



DETACH AND RETAIN THIS STATEMENT

The Attached Check Is In Payment of Items Described Below
If Not Correct Please Notify Us Promptly. No Receipt Desired

DESCRIPTION

Air permit application fees for monoprososa kiln
and system #2

6-30-89 400.00 11-534-061

SIKES CORPORATION

No. 011888



\$ 200 pd.
2-8-89
Receipt # 117599

AC53-167121

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
APPLICATION TO OPERATE/CONSTRUCT
AIR POLLUTION SOURCES

RECEIVED

JUL 6 1989

SOURCE TYPE: Stationary, industrial New¹ Existing¹

APPLICATION TYPE: Construction Operation Modification

DER-BAQM

COMPANY NAME: Florida Tile Div./Sikes Corp.

COUNTY: Polk

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) (see list page 2) with pneumafil baghouse (System 1)

SOURCE LOCATION: Street 1 Sikes Blvd. City Lakeland

UTM: East 405,200 North 3,102,400

Latitude 28 ° 02 ' 45 " N Longitude 81 ° 57 ' 45 " W

APPLICANT NAME AND TITLE: William R. Boakes, Vice President, Devel. & Engineering

APPLICANT ADDRESS: P.O. Box 447, Lakeland, Florida 33802

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Florida Tile Div./Sikes Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: William R. Boakes
William R. Boakes V.P. Devel. & Eng

Name and Title (Please Type)

Date: 6/29/89 Telephone No. (813) 687-7171

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been ~~examined~~/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department.

Signed: Randal M. Reynolds
Randal M. Reynolds, P.E.

Name (Please Type)

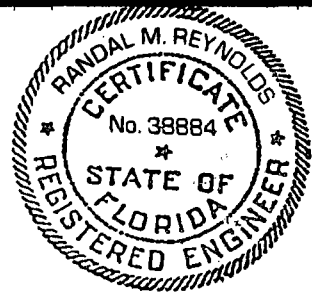
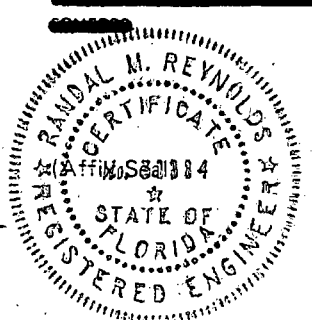
Lake Engineering, Inc.

Company Name (Please Type)

6000 Lake Forrest Dr., Suite 350

Atlanta, Ga. 30328

Date: 6/28/89 Telephone No. (404) 257-9634



Florida Registration No. 38884

¹See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Initially two Sacmi presses and two ^{Monoporosa} Sacmi vertical dryers will be included in System 1. In the future three trim straight lines and five trim presses will be included.

B. Schedule of project covered in this application (Construction Permit Application Only)
 Start of Construction (see table 1) Completion of Construction (see table 1)

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Equipment & installation	\$ 163,000
Electrical	25,000
Foundations	10,000
	198,000

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

AC 53-160479

System 1 Equipment List

- 2 ea. Monoporosa tile presses, Sacmi Model 680.
- 2 ea. Monoporosa Sacmi dryers
- 3 ea. Future trim straight lines.
- 5 ea. Future trim presses.

TABLE 1
Project Schedule

	Begin Construction	Complete Constructi
Monoporosa systems	August 1989	November 1989
Trim straight lines (3)	1990	1990
Trim presses (5)	1990	1991

(Monoporosa presses and dryers)

E. Requested permitted equipment operating time: hrs/day 20; days/wk 7; wks/yr 49;
if power plant, hrs/yr NA; if seasonal, describe: NA

F. If this is a new source or major modification, answer the following questions.
(Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? NO
 - a. If yes, has "offset" been applied? NA
 - b. If yes, has "Lowest Achievable Emission Rate" been applied? NA
 - c. If yes, list non-attainment pollutants. NA
 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. NO
 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. No
 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? NO
 5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? NO
- H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? NO
- a. If yes, for what pollutants? NA
 - b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-
cation for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Monoporosa Tile Body	particulates	< 0.5	8,200	NA

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 8,200 (Monoporosa tile body)

2. Product Weight (lbs/hr): 8,200 (Monoporosa green tile)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	0.36	1.47	NA	NA	89	NA	NA

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Pneumafil 13-5-456-12	Particulates	99.6	10 to 100	mfg's data

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas	4,648 CF/hr.	4,648 CF/hr.	4.76

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: NA Percent Ash: NA
 Density: NA lbs/gal Typical Percent Nitrogen: NA
 Heat Capacity: BTU/CF 1,025 BTU/gal
 Other Fuel Contaminants (which may cause air pollution): NA

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average NA Maximum NA

G. Indicate liquid or solid wastes generated and method of disposal.

collected dust is recycled to process.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 20 ft. Stack Diameter: 51 inches ~~XX~~
 Gas Flow Rate: 52,800 ACFM 52,800 DSCFM Gas Exit Temperature: (ambient) °F.
 Water Vapor Content: (ambient) % Velocity: 62.0 FPS

SECTION IV: INCINERATOR INFORMATION
 (Not Applicable)

Type of Waste	Type D (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: Cyclone Wet Scrubber Afterburner
 Other (specify) _____

Brief description of operating characteristics of control devices: _____

(NA)

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

(NA)

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

Section V: Supplemental Requirements

Total process input rate and product weight

The estimated production feed rate to two Monoporosa presses will be 8,200 lbs. per hour based on projections by Florida Tile personnel.

Basis of potential discharge

Monoporosa presses and dryers:

5200 ACFM each: 10,400 ACFM

Dust laden air at 1.0 gr/ACF

$(10,400 \times 1.0 \times 60) / 7,000 = 89 \text{ lbs./hr.}$

Basis of emission estimate

Inlet dust loading, lbs./hr.	- 89
Collection efficiency, %	- 99.6
Exit dust loading, lbs./hr.	- 0.36
Exit dust loading, tpy	- 1.47

Air Emission Control Equipment

Name/Model No: Pneumafil Model 13.5-456-12

No. of bags: 456

Cloth area: 7,045 sq. ft.

Bag length: 12 ft.

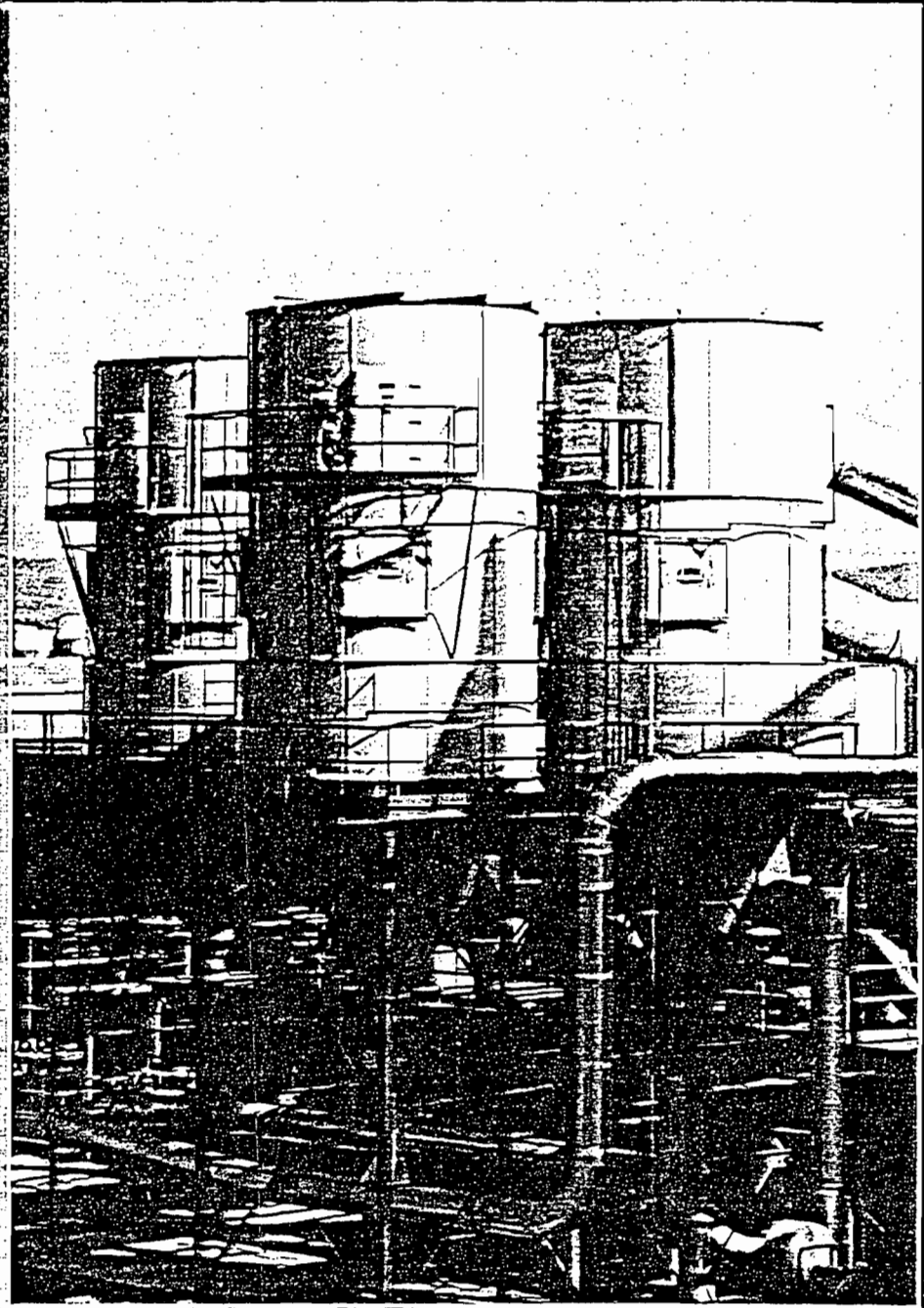
See attachment 1 for additional literature details.

Drawings

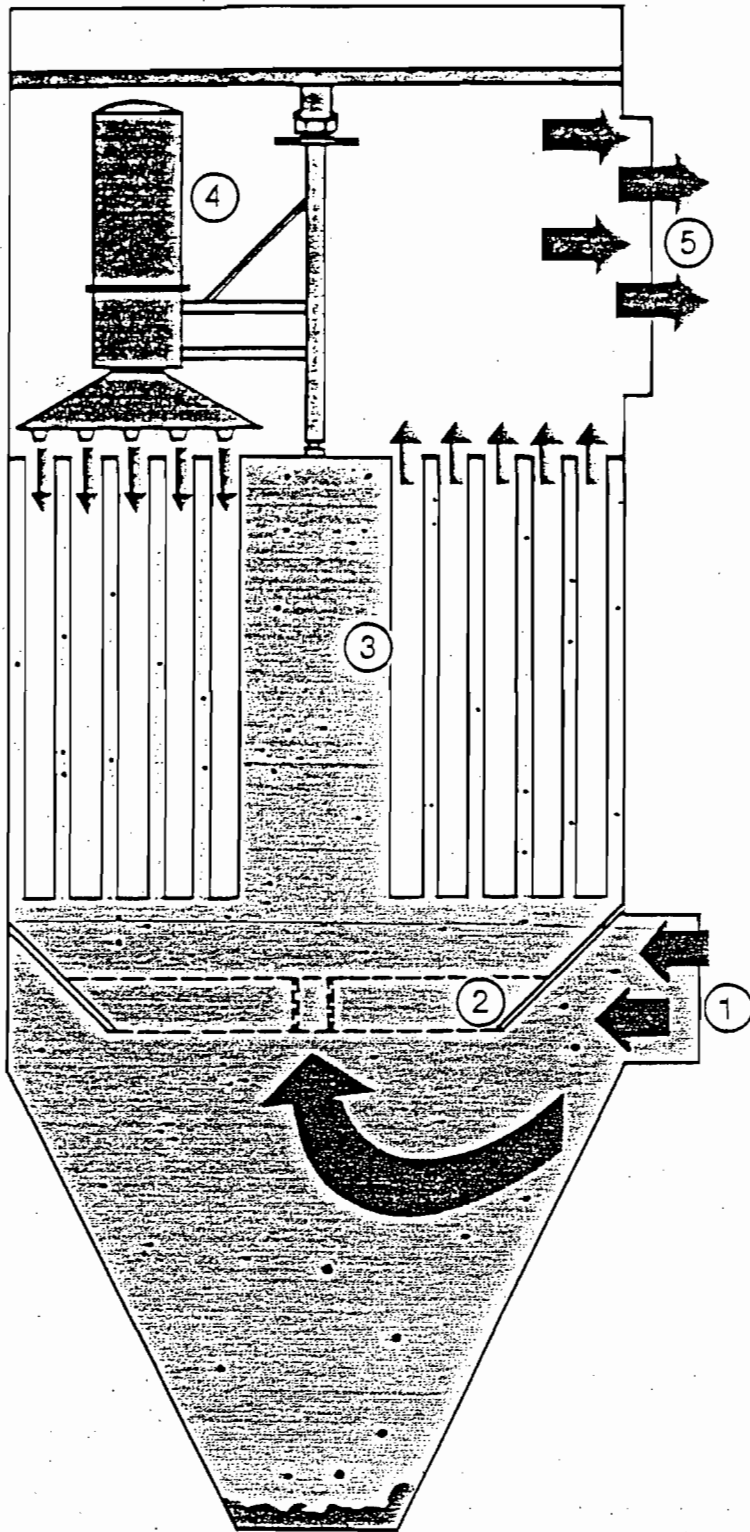
See attachment 2.

Attachment 1
Air Emission Control
Equipment Brochures

The Pneumafil Straight Fire Filter



How the filter works



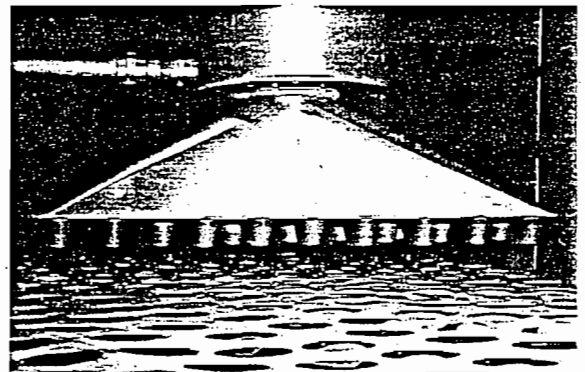
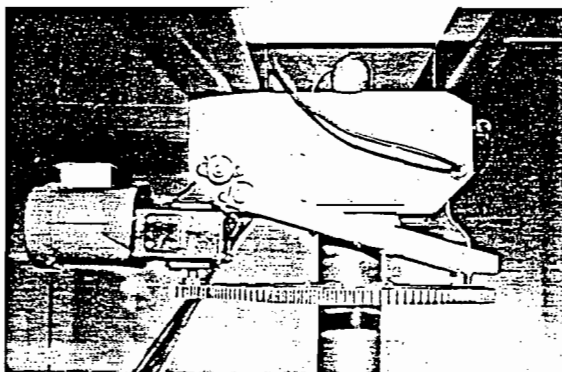
1. Contaminated air enters the Straight Fire Filter through a tangential air inlet. Its large size slows down the air stream, minimizes entrance pressure loss and reduces power requirements.

2. The combination of the tangential air inlet and deep particle deflection with a built-in vortex breaker results in the cyclonic downward deflection of the larger particles to the hopper. This allows heavier loading, less abrasion to the filter bags, higher collection efficiencies and less energy to remove the remaining particles from the air stream.

3. The filter bags remove dust particles from the air stream. Clean air passes upward through the filter bags and into the walk-in clean air plenum.

4. The Straight Fire Filter uses medium pressure (7 - 9 psig) air to clean collected dust from the filter bags. Air is stored in the accumulator tank that is rotated over the filter grid plate. An electronic sensor opens a diaphragm valve and releases the stored air into the cleaning manifold. The cleaning manifold is equipped with nozzles designed to maximize the pulse of cleaning air and induce additional cleaning air from the clean air plenum. There are no losses in cleaning pressure or energy because the accumulator tank is positioned directly atop the cleaning manifold. When the cleaning pulse is activated, dust is dislodged from the filter bags and is collected in the conical hopper. The Straight Fire pulses keep the filter bags clean, maintaining a constant porosity and low pressure drop across the filter, resulting in an extremely high collection efficiency with low energy usage.

5. The clean, dust-free air is exhausted through the large air outlet to be either vented to the atmosphere or recycled to the plant. Because of the short contact time required for the air to pass through the Straight Fire Filter, no additional energy is required to either heat or cool the air stream.



The Pneumafil Straight Fire Filter

How it compares in energy savings

A true evaluation of a dust control system should consider energy consumption as it applies to the complete filter system — and not merely to any one component. This is why all Pneumafil dust filters are designed to function as an integral part of the total system in combination with its other exceptional capabilities for reducing overall operating costs.

For example, our Straight Fire Filters are cleaned by either a 2, 5 or 7½ hp motor and cost very little to operate. But more important, each bag is cleaned once every 120 seconds in a precise sequence utilizing the medium pressure air (7 to 9 psig). This complete and systematic cleaning dramatically reduces the pressure drop across the media as well as the load demands on the complete dust collection system fan. The result is energy savings! Conversely, a system that employs a random air pump cleaning sequence may only require the same amount of horsepower in driving the air pump — however, this type of system *does not* clean the bags every 120 seconds. The cleaning air discharge is regulated by whenever and wherever the pressure build up activates the air jets. Because of this random firing, some bags could remain uncleaned indefinitely. This means higher pressure drops across the media, increased demands on the total fan system and ultimately higher energy costs.

Our low tangential air entry utilizes less overall energy than filters with a high air inlet. The low tangential entry with a built-in vortex breaker allows heavy dust particles to "drop out" into the filter hopper. This *cyclonic* action causes an initial sorting out of larger dust particles which results in greater energy savings and less wear and tear on filter bags. Each contributes to lower operating costs.

Additional energy savings are obtained by recycling plant air previously heated or cooled. With the short contact time of air passing through the filter, the cleaned air is not affected by outside temperatures — and no additional energy is expended to heat or cool make-up air.

... with filter maintenance

All filter bag inspection and removal operations were designed to simplify maintenance procedures and keep maintenance costs down.

With a Pneumafil dust filter, bag inspection can be accomplished without entering the walk-in, clean air plenum. A viewing port and lighted plenum allows the operator to visually inspect the bag cleaning mechanism from outside the filter.

Our walk-in plenum permits top bag removal from the clean air side. This operation simply requires extracting two screws before removing and inserting a new bag. Captive clips on the bag cage eliminate misplacing or clips dropping into the hopper section.

Pneumafil bags are designed and constructed to deliver maximum collection efficiency and a consistent high level of performance. Bags are made of 16 oz. polyester felt with a special scrim reinforcement, triple thickness of media at the top to seal the bags and a 2" wear strip at the bottom to protect against abrasion. All bags can be washed or dry cleaned.

... in special features

Wear against the tube sheet by the cleaning mechanism is non-existent. The cleaning manifold and air accumulator are suspended precisely above the tube sheet for a maximum burst of cleaning air.

The Pneumafil Straight Fire bag cleaning operation is accomplished by effectively using *all* of the cleaning power. When the cleaning manifold is positioned precisely over the filter bag centers, a burst of medium pressure air is pulsed. This air and induced air from the clean air plenum dislodges the dust from the filter bags which falls into the hopper for disposal.

Hopper Design

Our hopper design eliminates the need for any additional and expensive auger discharge. Any bridging of collected dust is prevented by the use of a conical hopper with a 60° slope. Each hopper is equipped with a large, bolted access door and flanged outlets.

... in general construction and painting

The filter is constructed of hot rolled, pickled and oiled mild steel. Our unique standing seam design provides considerable reinforcement and rigidity to the overall structural integrity, making the filter ideally suited for any environment. All filters are constructed to withstand ± 20 in. water gauge.

Each filter is equipped with relief panels in accordance with NFPA standards. The doors are secured with safety chains of uneven lengths to reduce the possibility of the door becoming a projectile. Another example of how Pneumafil pays attention to details.

Every unit is epoxy primed (2.0-2.5 mils) inside and outside and finished outside with polyester epoxy paint (2.0-3.5 mils). Pneumafil offers many standard colors to choose from. Special colors are available to meet customer specifications. Unlike units that have only a single coat of paint, Pneumafil's painting method means additional savings in maintenance costs over the life of the filter. Our paint surface preparation meet the SSPC-SP6 standard and passed a 500 hour salt spray test.

... with options

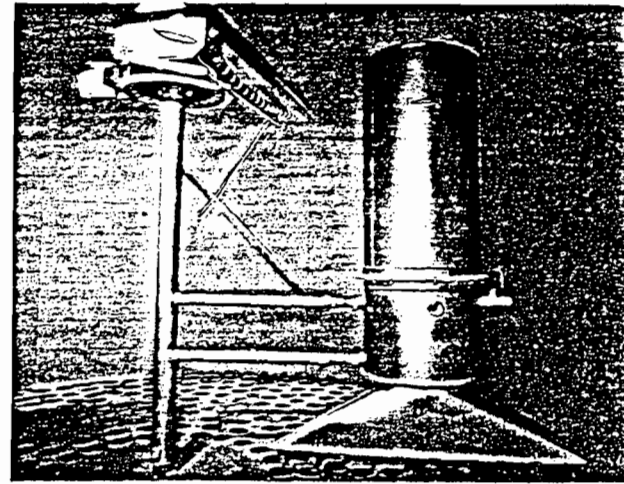
1. Support structure
2. Maintenance platform with OSHA approved handrails and access ladder
3. Customer color preference
4. Non-sparking air entry wear plates
5. 70° hopper
6. Sprinkler heads
7. Explosion proof motor for Class II-G and F applications
8. Additional bracing for higher pressures
9. Factory insulation
10. High level and high temperature sensors
11. Rotary air locks
12. Modified to customer specifications
13. Special media available

Specifications

Notes

1. Standard height from hopper to grade is 4'6". Optional heights are available upon request. Dimensions B, C, D and H change accordingly.
2. Entry section may be rotated 360° except where it would interfere with ladder.
3. Discharge section and ladder may be rotated together 360° in approximately 6" increments except where they would interfere with the entry elbow.
4. Counterclockwise shown, clockwise opposite.
5. Structural supports are designed for 25 P.S.I. when loading and 50 P.C.F. dust loading unless otherwise specified.
6. Filters are available as bin vents.
7. All units have a 360° mounting ring.
8. 4.5' and 5.5' units are not walk-in filters.

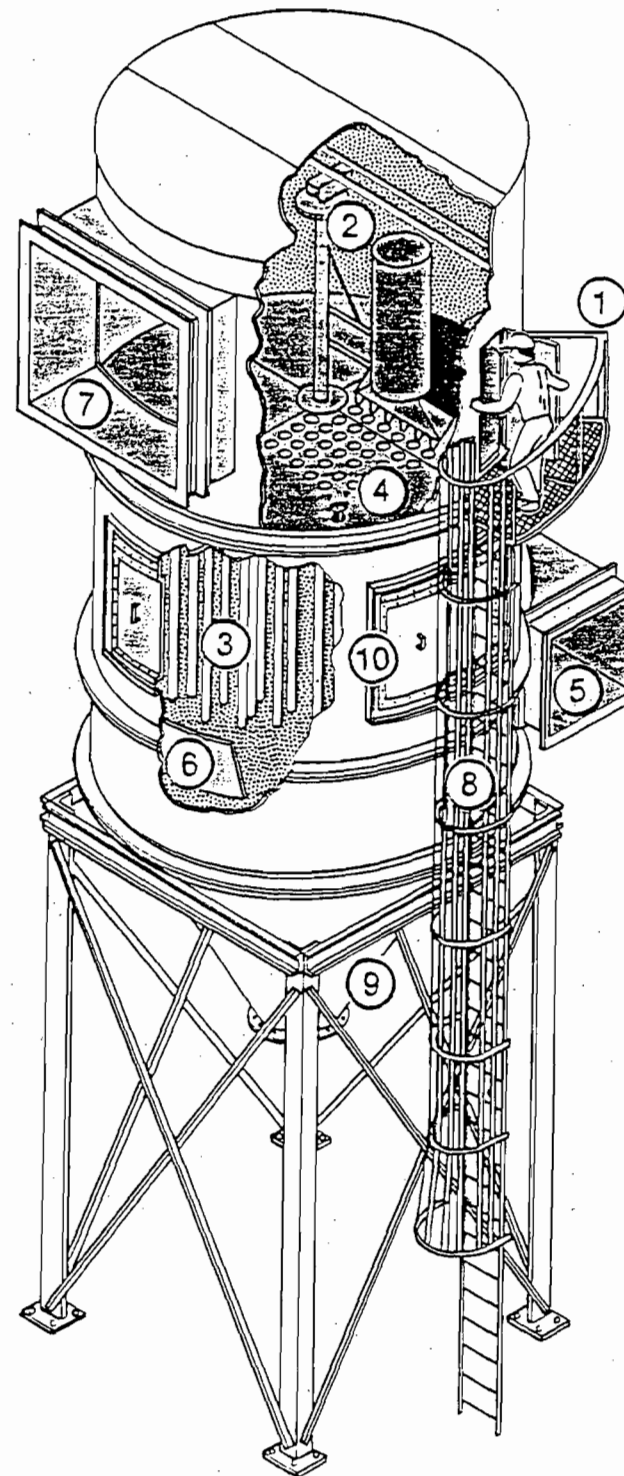
Pneumafil's unique construction features

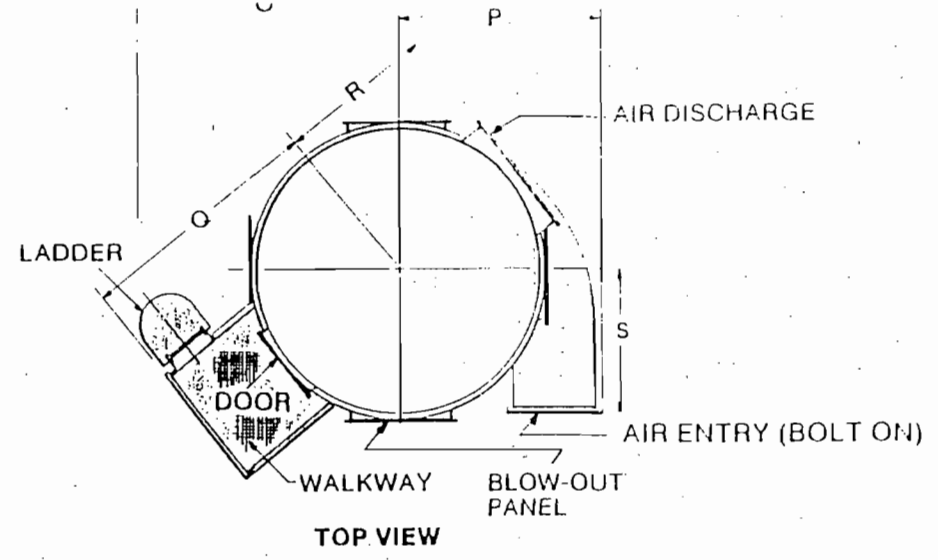
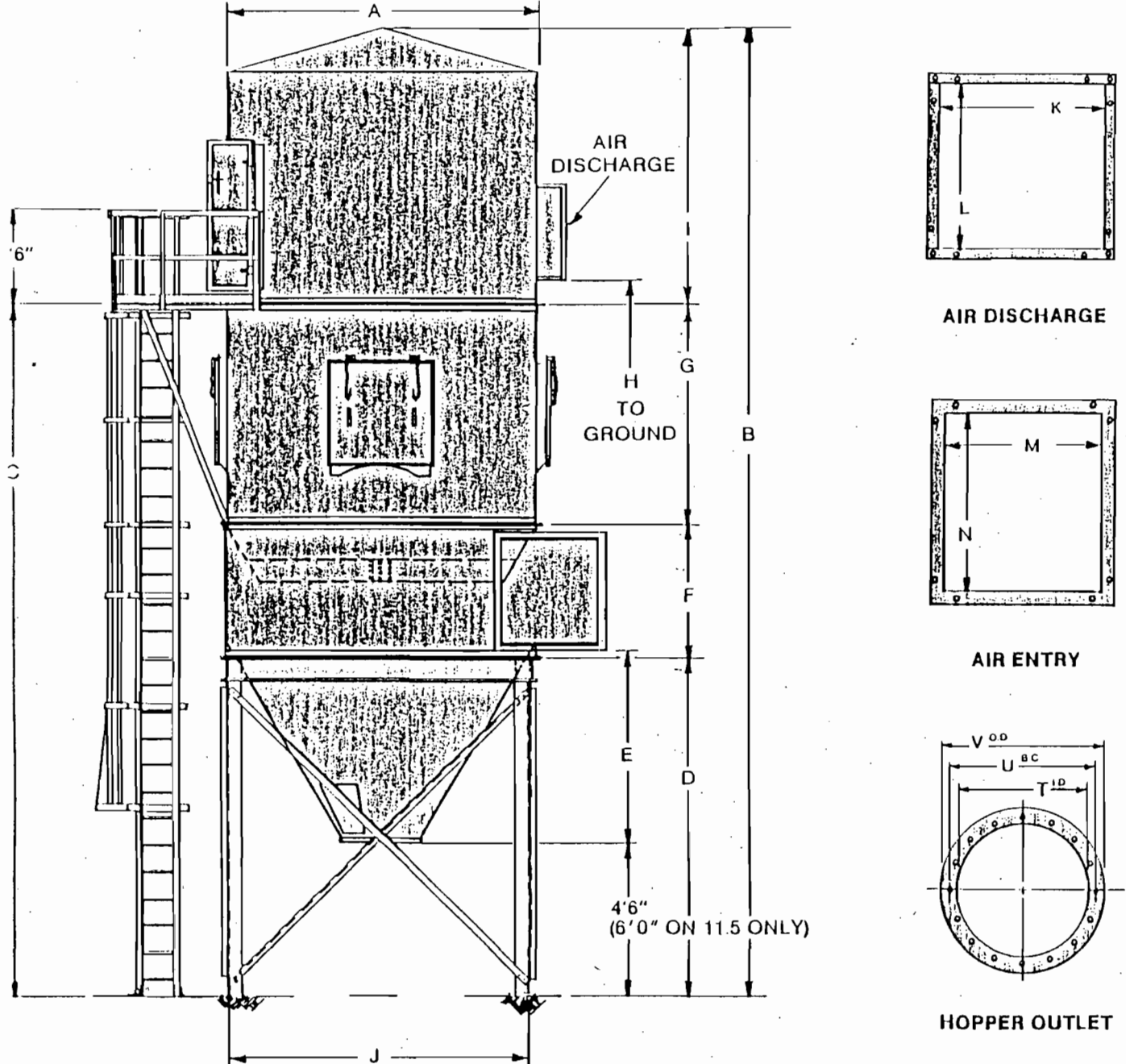


There are distinctive design features about a Pneumafil Straight Fire Filter that set it apart from other filters. These features translate to direct benefits making a strong case for selecting Pneumafil.

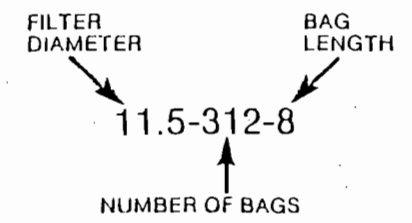
Pneumafil is dedicated to manufacturing a superior product for their customers by using the very best materials, exercising the highest standards in workmanship and employing the latest in applied technology. This dedication is reflected in the attention to details, simplicity of construction and economical cost of operation.

1. Walk-in clean air compartment for inspection, maintenance and filter bag cleaning. Top removal filter bags eliminates personnel from entering the dirty side of the filter.
2. Straight Fire Filter bag cleaning mechanism consists of a rotating cleaning manifold with an air accumulator that is mounted atop to eliminate pressure loss resulting in stronger cleaning pulses.
3. Fabric filter bags — 16 oz. polyester felt, nylon scrim reinforcement with 2" wear strips on bottom for long life and abrasion resistance. Other filter media available upon request.
4. Sectional tube sheet for precision alignment of cleaning manifold for cleaning of filter bags.
5. Large, low tangential air inlet for lower pressure drop and cyclonic cleaning action.
6. Built-in particle deflector with vortex breakers for abrasion protection of filter bags; thus longer bag life and lower maintenance.
7. Large clean air outlet for lower pressure drop resulting in energy savings.
8. Support steel, ladder and access platform conforms to all applicable building codes.
9. 60° conical hopper for dust collection.
10. Explosion relief panels for safety.
11. Hot rolled, pickled and oiled mild steel with a unique surface preparation for superior corrosion resistant finish, insuring longer filter life and substantial maintenance savings. (Meets SSPC-SP6 Standard)
12. Epoxy primed interior and exterior (2.0 - 2.5 mils), polyester epoxy exterior (2.0 - 2.5 mils). Total paint finish of 3.5 - 5.5 mils passed 500 hour salt spray test.
13. Filters constructed to withstand $\pm 20''$ W.G.
14. Components factory assembled and tested.
15. Highest quality control standards in the industry.
16. All filters meet EPA and OSHA regulations.





Filter Nomenclature



Note:
Initial specifications can call for less than the maximum number of bags; however, filter dimensions remain unchanged. Additional bags may be added as filtering demands increase.

MODEL	MEDIA AREA (SQ. FT.)	BLOWER MOTOR (H.P.)	DRIVE MOTOR (H.P.)	5:1 CFM	10:1 CFM	15:1 CFM
4.5-40-8	412	1 1/2	1/4	2060	4120	6180
4.5-40-10	515	1 1/2	1/4	2575	5150	7725
5.5-60-8	618	1 1/2	1/4	3090	6180	9270
5.5-60-10	772	1 1/2	1/4	3860	7720	11580
6.5-96-8	989	2	1/4	4740	9480	14220
6.5-96-10	1236	2	1/4	5920	11840	17760
8.5-162-8	1699	3	1/4	8035	16070	24105
8.5-162-10	2085	3	1/4	10040	20080	30120
8.5-162-12	2503	3	1/4	12048	24096	36144
10.5-270-8	2781	5	1/4	13905	27810	41715
10.5-270-10	3475	5	1/4	17375	34750	52125
10.5-270-12	4172	5	1/4	20860	41720	62580
11.5-312-8	3214	5	1/4	16070	32140	48210
11.5-312-10	4015	5	1/4	20075	40150	60225
11.5-312-12	4820	5	1/4	24100	48200	72300
13.5-456-8	4697	7 1/2	1/4	23485	46970	70455
13.5-456-10	5869	7 1/2	1/4	29345	58690	88035
13.5-456-12	7045	7 1/2	1/4	35225	70450	105675

MODEL	DIMENSIONS																			TOTAL WEIGHT				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	FILTER UNIT	COMPLETE STRUCTURE
4.5-40-8	4'8"	20'5 1/2"	16'3 1/4"	6'3 3/8"	2'1 1/8"	2'1"	7'11"	7'31 1/2"	4'2 1/4"	4'4 1/4"	1'6"	1'6"	1'4"	1'4"	10'0"	3'8"	6'5"	2'6"	2'3"	2'0"	2'1 1/4"	2'3 1/4"	2842	3837
4.5-40-10	4'6"	22'5 1/2"	18'3 1/4"	6'3 3/8"	2'1 1/8"	2'1"	9'11"	19'31 1/2"	4'2 1/4"	4'4 1/4"	1'6"	1'6"	1'4"	1'4"	10'0"	3'8"	6'5"	2'6"	2'3"	2'0"	2'1 1/4"	2'3 1/4"	3126	4220
5.5-60-8	5'6"	28'1"	19'6 3/4"	8'0"	3'4 1/4"	3'6"	8'0"	20'5 1/2"	8'7"	5'6"	2'8"	2'8"	2'6"	2'6"	13'4"	5'8"	7'8"	3'8"	3'3"	2'0"	2'1 1/4"	2'3 1/4"	5859	7594
5.5-60-10	5'6"	32'0"	21'6 3/4"	8'0"	3'4 1/4"	3'6"	10'0"	22'5 1/2"	10'7"	5'6"	2'8"	2'8"	2'6"	2'6"	13'4"	5'8"	7'8"	3'8"	3'3"	2'0"	2'1 1/4"	2'3 1/4"	6738	8733
6.5-96-8	6'6"	30'0"	19'6 3/4"	8'0"	3'9 1/4"	3'6"	8'0"	20'5 1/2"	10'6"	8'4"	3'6"	3'6"	2'6"	2'6"	13'4"	5'8"	7'8"	3'5 1/4"	3'3"	2'0"	2'1 1/4"	2'3 1/4"	5859	7594
6.5-96-10	6'6"	32'0"	21'6 3/4"	8'0"	3'9 1/4"	3'6"	10'0"	22'5 1/2"	10'6"	8'4"	3'6"	3'6"	2'6"	2'6"	13'4"	5'8"	7'8"	3'5 1/4"	3'3"	2'0"	2'1 1/4"	2'3 1/4"	6738	8733
8.5-162-8	8'6"	31'8 1/2"	21'3 1/4"	9'8"	5'6"	3'6"	8'0"	22'1 1/2"	10'6"	8'3 1/2"	3'6"	3'6"	3'0"	2'6"	15'4"	6'8"	8'8"	4'6"	4'3"	2'0"	2'1 1/4"	2'3 1/4"	7992	10217
8.5-162-10	8'6"	33'8 1/2"	23'3 1/4"	9'8"	5'6"	3'6"	10'0"	24'1 1/2"	10'6"	8'3 1/2"	3'6"	3'6"	3'0"	2'6"	15'4"	6'8"	8'8"	4'6"	4'3"	2'0"	2'1 1/4"	2'3 1/4"	9190	11750
8.5-162-12	8'6"	37'8 1/2"	25'3 1/4"	9'8"	5'6"	3'6"	12'0"	26'1 1/2"	12'6"	8'3 1/2"	3'6"	3'6"	3'0"	2'6"	15'4"	6'8"	8'8"	4'6"	4'3"	2'0"	2'1 1/4"	2'3 1/4"	10388	13283
10.5-270-8	10'6"	37'0"	26'6 3/4"	11'6"	7'3 1/4"	5'0"	10'0"	28'11 1/2"	10'6"	10'3"	4'0"	4'1"	3'6"	3'6"	17'4"	7'8"	9'8"	5'5 1/4"	5'3"	2'0"	2'2"	2'4"	11250	15150
10.5-270-10	10'6"	37'0"	26'6 3/4"	11'6"	7'3 1/4"	5'0"	10'0"	26'11 1/2"	10'6"	10'3"	4'0"	4'1"	3'6"	3'6"	17'4"	7'8"	9'8"	5'5 1/4"	5'3"	2'0"	2'2"	2'4"	13100	17585
10.5-270-12	10'6"	41'0"	28'6 3/4"	11'6"	7'3 1/4"	5'0"	12'0"	28'11 1/2"	12'6"	10'3"	4'0"	4'1"	3'6"	3'6"	17'4"	7'8"	9'8"	5'5 1/4"	5'3"	2'0"	2'2"	2'4"	14925	19995
11.5-312-8	11'6"	38'6"	28'0 3/4"	13'0"	7'3 1/4"	5'0"	10'0"	28'5 1/2"	10'6"	11'3"	4'0"	4'1"	3'6"	3'6"	18'4"	8'2"	10'2"	5'11 1/4"	5'9"	3'0"	3'2"	3'4"	12521	16421
11.5-312-10	11'6"	38'6"	28'0 3/4"	13'0"	7'3 1/4"	5'0"	10'0"	28'5 1/2"	10'6"	11'3"	4'0"	4'1"	3'6"	3'6"	18'4"	8'2"	10'2"	5'11 1/4"	5'9"	3'0"	3'2"	3'4"	14399	18884
11.5-312-12	11'6"	42'8"	30'0 3/4"	13'0"	7'3 1/4"	5'0"	12'0"	30'5 1/2"	12'6"	11'3"	4'0"	4'1"	3'6"	3'6"	18'4"	8'2"	10'2"	5'11 1/4"	5'9"	3'0"	3'2"	3'4"	16277	21347
13.5-456-8	13'6"	40'11 3/4"	30'5 1/2"	14'5 3/4"	8'0 1/4"	6'0"	10'0"	30'10 3/4"	10'6"	13'2 1/4"	5'2"	4'1"	5'0"	5'0"	21'4"	10'2"	11'2"	6'11 1/4"	6'9"	2'0"	2'2"	2'4"	16811	20686
13.5-456-10	13'6"	40'11 3/4"	30'5 1/2"	14'5 3/4"	8'0 1/4"	6'0"	10'0"	30'10 3/4"	10'6"	13'2 1/4"	5'2"	4'1"	5'0"	5'0"	21'4"	10'2"	11'2"	6'11 1/4"	6'9"	2'0"	2'2"	2'4"	19333	23789
13.5-456-12	13'6"	44'11 3/4"	32'5 1/2"	14'5 3/4"	8'0 1/4"	6'0"	12'0"	32'10 3/4"	12'6"	13'2 1/4"	5'2"	4'1"	5'0"	5'0"	21'4"	10'2"	11'2"	6'11 1/4"	6'9"	2'0"	2'2"	2'4"	20672	26758

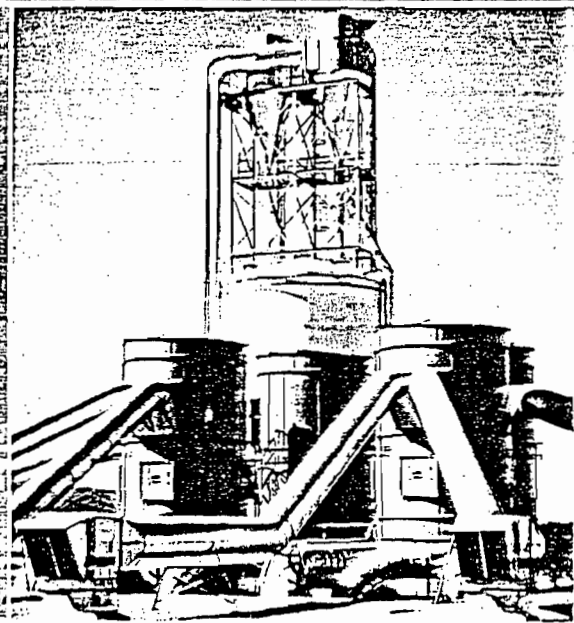
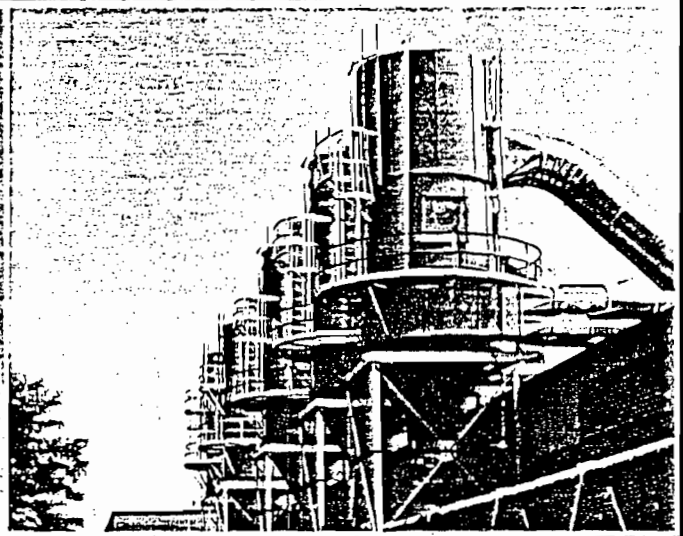
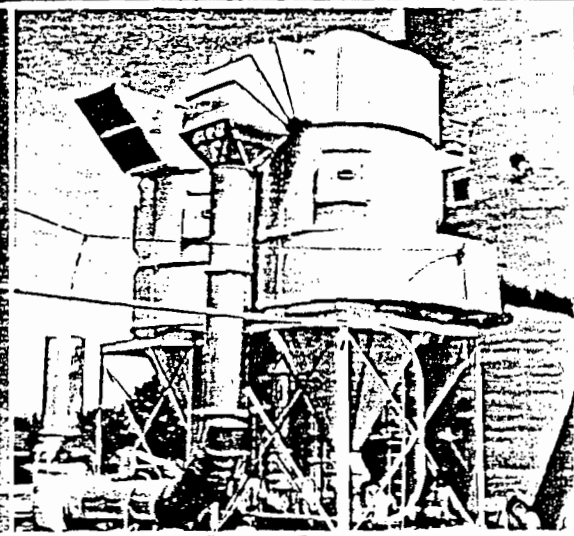
Model dimensions are nominal only. Please consult factory, if exact specifications are required.

Best Available Copy

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- | | |
|------------------------|-----------------------|
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| Broyhill Industries | International Paper |
| Burlington Furniture | Kingsford Charcoal |
| Carolina Power & Light | Northern States Power |
| Cargill | Pillsbury Company |
| Continental Grain | St. Regis Paper |
| General Electric | |

PNEUMAFIL

PNEUMAFIL CORPORATION
Industrial Air Filters Division
P.O. Box 16348
Charlotte, NC 28227-6348
704/399-7441
Telex 810621 N525

Associated in Air Systems Development with The Lunda Group

Attachment 2

Drawings



200 pd
7-6-89
Receipt # 117635

RECEIVED

AC 53-167122

JUL 6 1989
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
**APPLICATION TO OPERATE/CONSTRUCT
DER-BAQM AIR POLLUTION SOURCES**

SOURCE TYPE: Stationary industrial New¹ Existing¹
APPLICATION TYPE: Construction Operation Modification
COMPANY NAME: Florida Tile Div./Sikes Corporation COUNTY: Polk

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Press areas including six existing Dorst presses, four replacement trim presses and one pneumafil baghouse. (System 2)
SOURCE LOCATION: Street 1 Sikes Blvd City Lakeland

UTM: East 405,200 North 3,102,400
Latitude 28 ° 02.45 "N Longitude 81 ° 57.45 "W

APPLICANT NAME AND TITLE: William R. Boakes, Vice President, Devel. & Engineering
APPLICANT ADDRESS: P.O. Box 447, Lakeland, FL 33802

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Florida Tile Div./Sikes Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

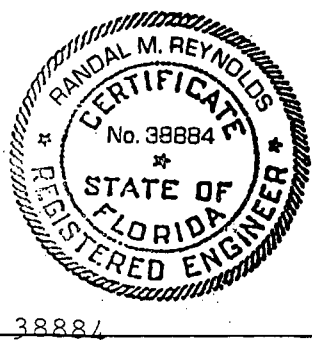
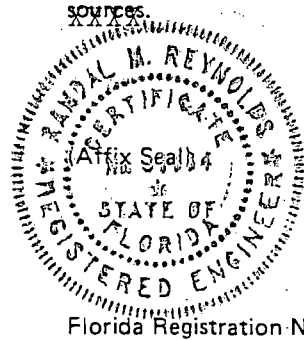
*Attach letter of authorization

Signed: William R. Boakes
William R. Boakes, Vice President
Name and Title (Please Type)
Development and Engineering
Date: 6/29/89 Telephone No. 813/687-7171

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been ~~designed~~/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. ~~It is also noted that the information which I am providing is based on the data and information furnished to me by the applicant and is not intended to be a guarantee of the proper maintenance and operation of the pollution control facilities and applicable pollution sources.~~

Signed: Randal M. Reynolds
Randal M. Reynolds, P.E.
Name (Please Type)
Lake Engineering, Inc.
Company Name (Please Type)
6000 Lake Forrest Dr., Suite 350
Mailing Address (Please Type)
Atlanta, GA 30328
Date: 6/29/89 Telephone No. 404-257-9634



¹See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

(See attached sheet)

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction Feb. 1989 Completion of Construction Aug. 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Equipment installation	\$163,000
Electrical	25,000
Foundations	10,000
	\$198,000

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

AC 53 - 160859

System 2 Equipment List

- 6 ea. Dorst presses
- 1 ea. Sacmi PH 400 press
- 1 ea. Martinelli HPS - 350 press
- 1 ea. 40 ton angle press
- 1 ea. Typical friction press

SECTION II. GENERAL PROJECT INFORMATION

This project is a continuation of a general program of upgrading and modifying the production equipment at the Lakeland facility. Initially six existing Dorst presses and four replacement trim presses will be included in the press area renovations included in this application. In the future, additional trim presses will be added. The permit will be modified at the time that these additional sources are installed.

The four replacement trim presses will initially be operated only as experimental units with varying operating schedules producing varying types of ceramic tile trim pieces. After about twelve months of trial usage, one type of press will be selected and installed for a total of ten presses. At some time in the future, four other presses will be installed.

For the six existing Dorst presses and the trim presses, a Pneumafil fabric filter will be used for dust collection. The existing Mikropulsaire baghouse permit (A053148916) will be modified to delete the Dorst presses. The proposed Pneumafil filter will be designated as press area System No. 2.

Substantial improvements are expected in the press area as a result of this project. The Pneumafil filter is more than capable of handling the proposed and future presses. Also, the Mikropulsaire baghouse will be required to service significantly less sources as a result of this project. It is expected that this project will be in full compliance when properly installed, maintained and operated.

E. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wks/yr 49;
if power plant, hrs/yr NA; if seasonal, describe: NA

F. If this is a new source or major modification, answer the following questions.
(Yes or No)

- | | |
|---|-----------|
| 1. Is this source in a non-attainment area for a particular pollutant? | <u>NO</u> |
| a. If yes, has "offset" been applied? | <u>NA</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>NA</u> |
| c. If yes, list non-attainment pollutants. _____ | <u>NA</u> |
| 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. | <u>NO</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. | <u>NO</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? | <u>NO</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? | <u>NO</u> |

- H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? _____
- a. If yes, for what pollutants? NA
- b. If yes, in addition to the information required in this form,
 any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-
cation for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Tile body prills	Particulates	<0.5	7,722	NA

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 7,722
2. Product Weight (lbs/hr): 7,722

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/xx hr.	T/yr	
Particulates	1.25	5.14	NA	NA	312	NA	NA

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Pneumafil 13.5-456-12	Particulates	99.6	10 to 100	mfg.'s data

E. Fuels (NA)

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: NA Percent Ash: _____
 Density: _____ lbs/gal Typical Percent Nitrogen: _____
 Heat Capacity: _____ BTU/lb _____ BTU/gal
 Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

Collected dust is recycled to process.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 20 ft. Stack Diameter: 51 inches ft.
 Gas Flow Rate: 55,200 ACFM 55,200 DSCFM Gas Exit Temperature: ambient °F.
 Water Vapor Content: ambient % Velocity: 64.8 FPS

SECTION IV: INCINERATOR INFORMATION
 (Not Applicable)

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: Cyclone Wet Scrubber Afterburner
 Other (specify) _____

Brief description of operating characteristics of control devices: NA

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

NA

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Total process input rate and product weight

Only two presses at a time operate on Line No. 1 and Line No. 2 for a total of four presses. On the average, 697 batches per month are processed at 3,200 lbs. per batch. The total operating hours for four presses is 1,733 hours per month.

$$\frac{697 \times 3200 \times 6}{1733} = 7,722 \text{ lbs./hr.}$$

Basis of Potential Discharge

System No. 2: four replacement trim presses at
4,000 ACFM each: 16,000 ACFM (dust laden)

Non-dust laden air: 13,600 ACFM
Subtotal: 29,600 ACFM

Dust Laden air at 1.0 gr/ACFM:
(16,000 x 1.0 x 60)/7,000 = 137 lbs./hr.

Six Dorst presses at
3,400 ACFM each: 20,400 ACFM

Subtotal 20,400 ACFM

Dust laden air at 1.0 gr/ACF:
(20,400 x 1.0 x 60)/7,000 = 175 lbs./hr.

Basis of Emission Estimates

Inlet dust loading, lbs./hr.	312
Collection efficiency, %	99.6
Exit dust loading, lbs./hr.	1.25
Exit dust loading, tpy	5.14

Air Emission Control Equipment

Name/Model No.: Pneumafil Model 13.5-456-12

No. of bags: 456

Cloth area: 7,045 sq. ft.

Bag length: 12 ft.

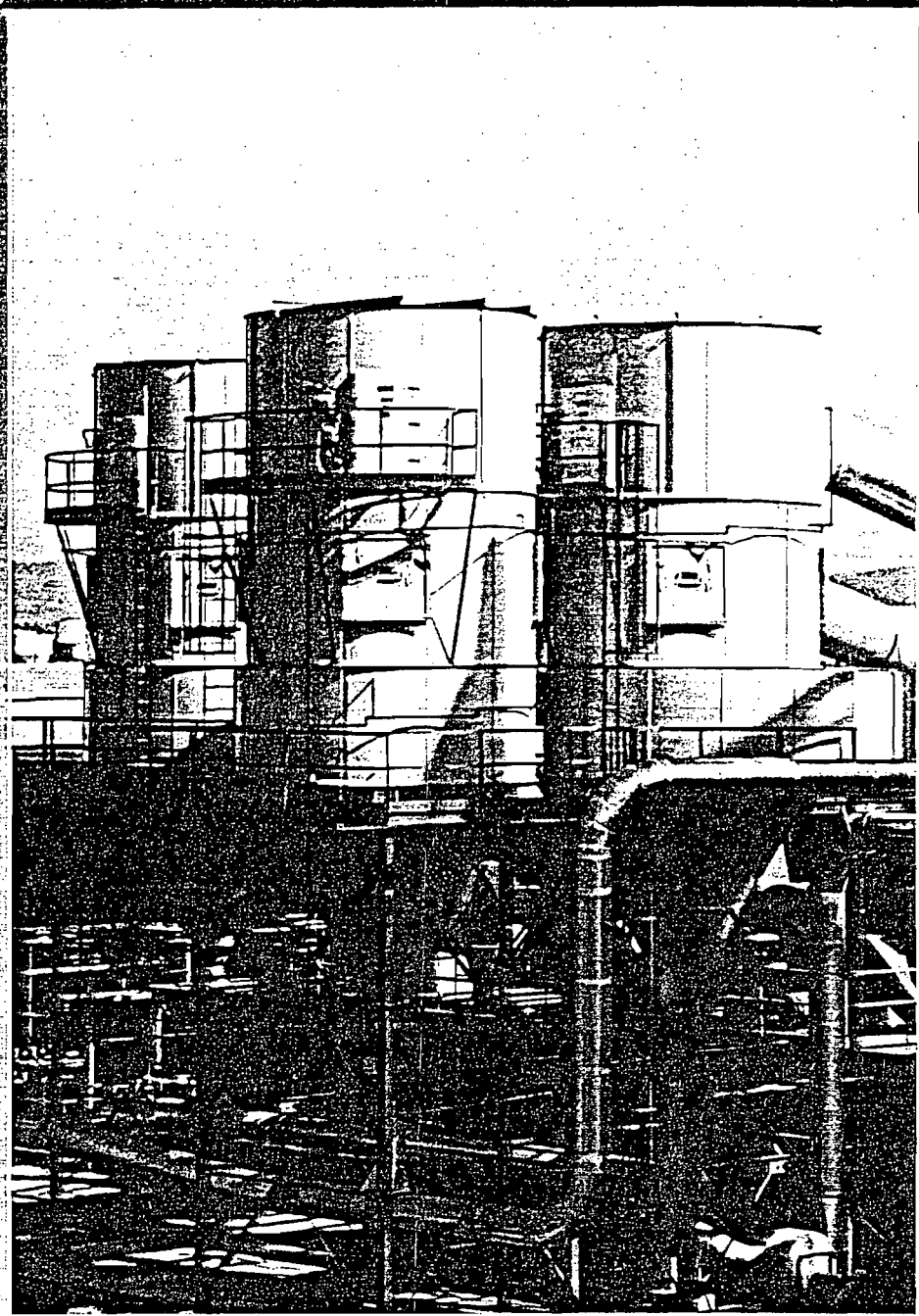
See attachment 1 for additional literature details

Drawings

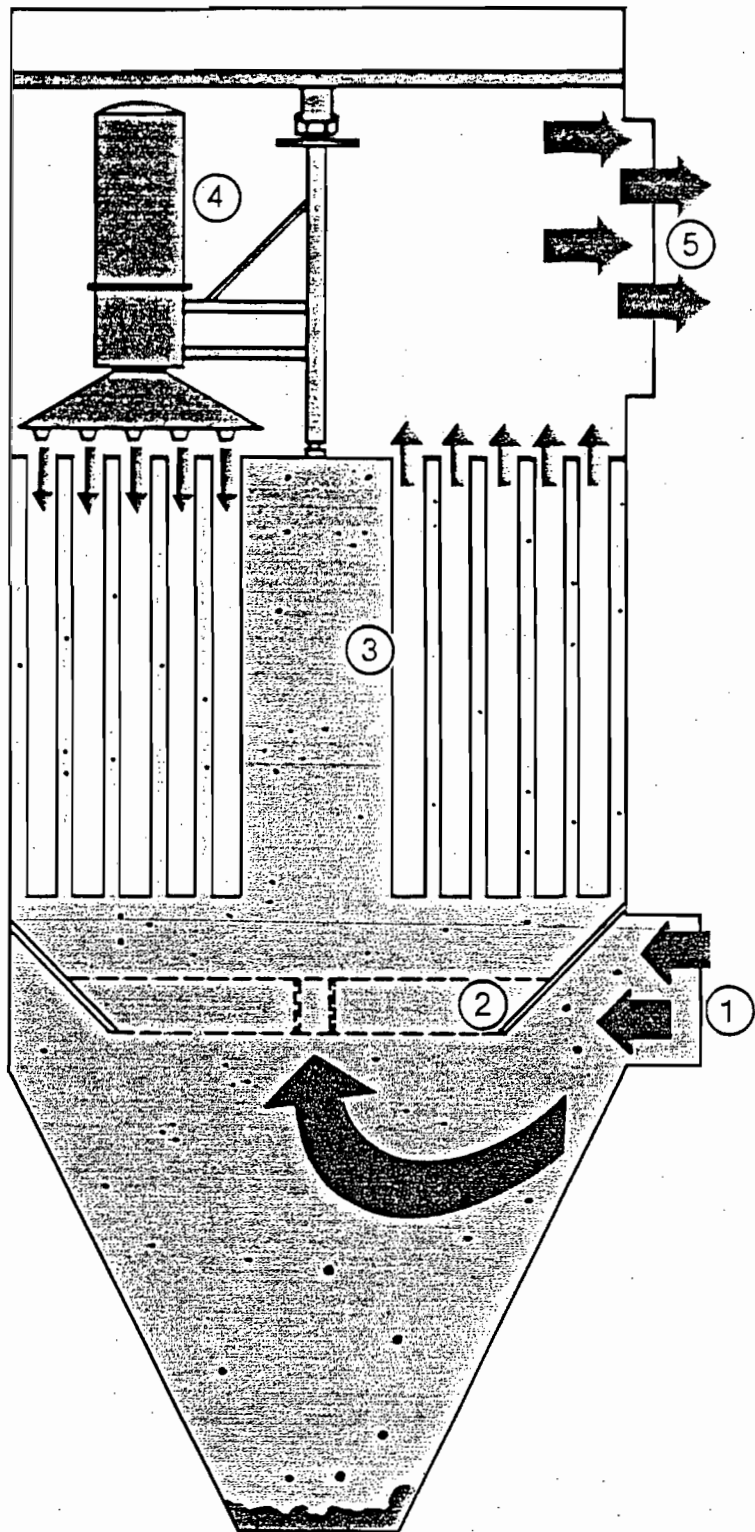
See Attachment 2

Attachment 1
Air Emission Control
Equipment Brochures

The Pneumafil Straight Fire Filter



How the filter works



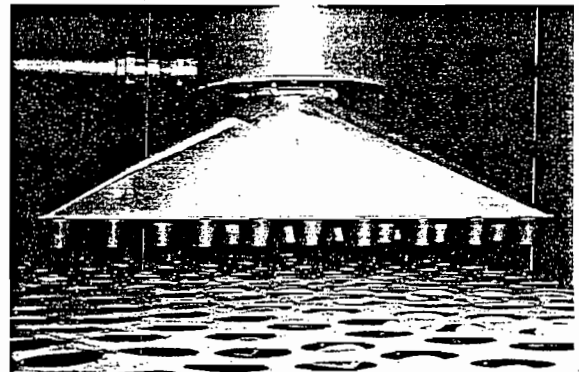
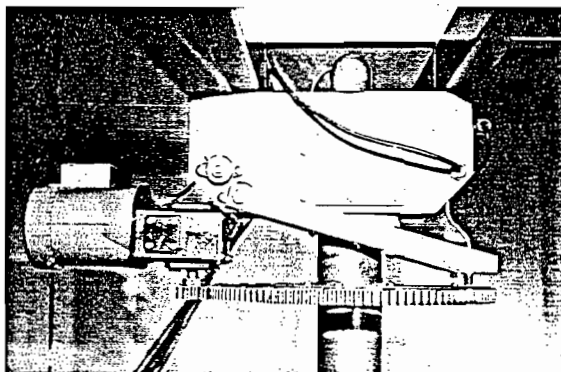
1. Contaminated air enters the Straight Fire Filter through a tangential air inlet. Its large size slows down the air stream, minimizes entrance pressure loss and reduces power requirements.

2. The combination of the tangential air inlet and deep particle deflection with a built-in vortex breaker results in the cyclonic downward deflection of the larger particles to the hopper. This allows heavier loading, less abrasion to the filter bags, higher collection efficiencies and less energy to remove the remaining particles from the air stream.

3. The filter bags remove dust particles from the air stream. Clean air passes upward through the filter bags and into the walk-in clean air plenum.

4. The Straight Fire Filter uses medium pressure (7 - 9 psig) air to clean collected dust from the filter bags. Air is stored in the accumulator tank that is rotated over the filter grid plate. An electronic sensor opens a diaphragm valve and releases the stored air into the cleaning manifold. The cleaning manifold is equipped with nozzles designed to maximize the pulse of cleaning air and induce additional cleaning air from the clean air plenum. There are no losses in cleaning pressure or energy because the accumulator tank is positioned directly atop the cleaning manifold. When the cleaning pulse is activated, dust is dislodged from the filter bags and is collected in the conical hopper. The Straight Fire pulses keep the filter bags clean, maintaining a constant porosity and low pressure drop across the filter, resulting in an extremely high collection efficiency with low energy usage.

5. The clean, dust-free air is exhausted through the large air outlet to be either vented to the atmosphere or recycled to the plant. Because of the short contact time required for the air to pass through the Straight Fire Filter, no additional energy is required to either heat or cool the air stream.



The Pneumafil Straight Fire Filter

How it compares ...

... in energy savings

A true evaluation of a dust control system should consider energy consumption as it applies to the complete filter system — and not merely to any one component. This is why all Pneumafil dust filters are designed to function as an integral part of the total system in combination with its other exceptional capabilities for reducing overall operating costs.

For example, our Straight Fire Filters are cleaned by either a 2, 5 or 7½ hp motor and cost very little to operate. But more important, each bag is cleaned once every 120 seconds in a precise sequence utilizing the medium pressure air (7 to 9 psig). This complete and systematic cleaning dramatically reduces the pressure drop across the media as well as the load demands on the complete dust collection system fan. The result is energy savings! Conversely, a system that employs a random air pump cleaning sequence may only require the same amount of horsepower in driving the air pump — however, this type of system *does not* clean the bags every 120 seconds. The cleaning air discharge is regulated by whenever and wherever the pressure build up activates the air jets. Because of this random firing, some bags could remain uncleaned indefinitely. This means higher pressure drops across the media, increased demands on the total fan system and ultimately higher energy costs.

Our low tangential air entry utilizes less overall energy than filters with a high air inlet. The low tangential entry with a built-in vortex breaker allows heavy dust particles to "drop out" into the filter hopper. This *cyclonic* action causes an initial sorting out of larger dust particles which results in greater energy savings and less wear and tear on filter bags. Each contributes to lower operating costs.

Additional energy savings are obtained by recycling plant air previously heated or cooled. With the short contact time of air passing through the filter, the cleaned air is not affected by outside temperatures — and no additional energy is expended to heat or cool make-up air.

... with filter maintenance

All filter bag inspection and removal operations were designed to simplify maintenance procedures and keep maintenance costs down.

With a Pneumafil dust filter, bag inspection can be accomplished without entering the walk-in, clean air plenum. A viewing port and lighted plenum allows the operator to visually inspect the bag cleaning mechanism from outside the filter.

Our walk-in plenum permits top bag removal from the clean air side. This operation simply requires extracting two screws before removing and inserting a new bag. Captive clips on the bag cage eliminate misplacing or clips dropping into the hopper section.

Pneumafil bags are designed and constructed to deliver maximum collection efficiency and a consistent high level of performance. Bags are made of 16 oz. polyester felt with a special scrim reinforcement, triple thickness of media at the top to seal the bags and a 2" wear strip at the bottom to protect against abrasion. All bags can be washed or dry cleaned.

... in special features

Wear against the tube sheet by the cleaning mechanism is non-existent. The cleaning manifold and air accumulator are suspended precisely above the tube sheet for a maximum burst of cleaning air.

The Pneumafil Straight Fire bag cleaning operation is accomplished by effectively using *all* of the cleaning power. When the cleaning manifold is positioned precisely over the filter bag centers, a burst of medium pressure air is pulsed. This air and induced air from the clean air plenum dislodges the dust from the filter bags which falls into the hopper for disposal.

Hopper Design

Our hopper design eliminates the need for any additional and expensive auger discharge. Any bridging of collected dust is prevented by the use of a conical hopper with a 60° slope. Each hopper is equipped with a large, bolted access door and flanged outlets.

... in general construction and painting

The filter is constructed of hot rolled, pickled and oiled mild steel. Our unique standing seam design provides considerable reinforcement and rigidity to the overall structural integrity, making the filter ideally suited for any environment. All filters are constructed to withstand ± 20 in. water gauge.

Each filter is equipped with relief panels in accordance with NFPA standards. The doors are secured with safety chains of uneven lengths to reduce the possibility of the door becoming a projectile. Another example of how Pneumafil pays attention to details.

Every unit is epoxy primed (2.0-2.5 mils) inside and outside and finished outside with polyester epoxy paint (2.0-3.5 mils). Pneumafil offers many standard colors to choose from. Special colors are available to meet customer specifications. Unlike units that have only a single coat of paint, Pneumafil's painting method means additional savings in maintenance costs over the life of the filter. Our paint surface preparation meet the SSPC-SP6 standard and passed a 500 hour salt spray test.

... with options

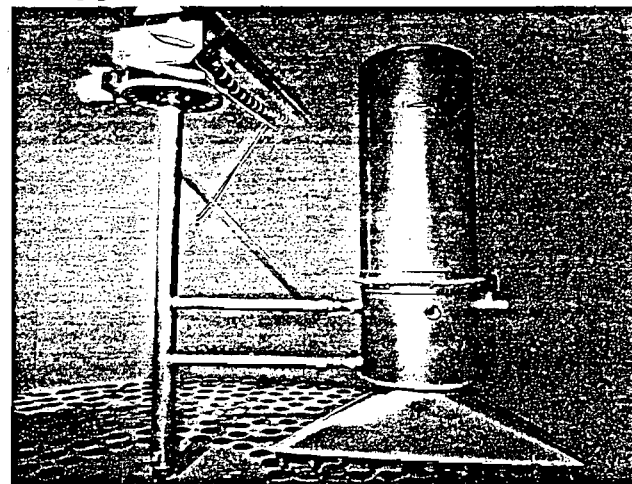
1. Support structure
2. Maintenance platform with OSHA approved handrails and access ladder
3. Customer color preference
4. Non-sparking air entry wear plates
5. 70° hopper
6. Sprinkler heads
7. Explosion proof motor for Class II-G and F applications
8. Additional bracing for higher pressures
9. Factory insulation
10. High level and high temperature sensors
11. Rotary air locks
12. Modified to customer specifications
13. Special media available

Specifications

Notes

1. Standard height from hopper to grade is 4' 6". Optional heights are available upon request. Dimensions B, C, D and H change accordingly.
2. Entry section may be rotated 360° except where it would interfere with ladder.
3. Discharge section and ladder may be rotated together 360° in approximately 6" increments except where they would interfere with the entry elbow.
4. Counterclockwise shown, clockwise opposite.
5. Structural supports are designed for 25 P.S.I. when loading and 50 P.C.F. dust loading unless otherwise specified.
6. Filters are available as bin vents.
7. All units have a 360° mounting ring.
8. 4.5' and 5.5' units are not walk-in filters.

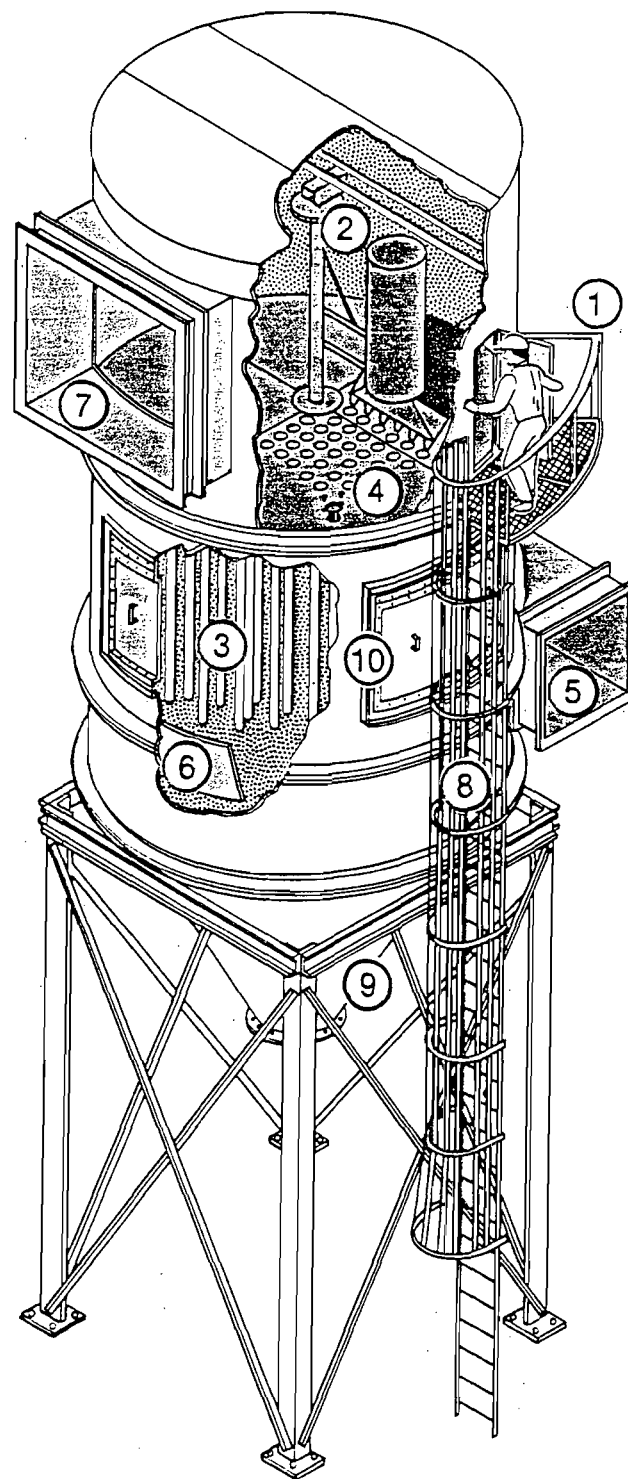
Pneumafil's unique construction features

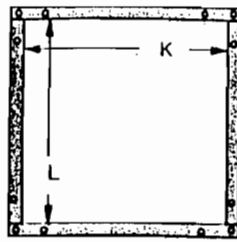
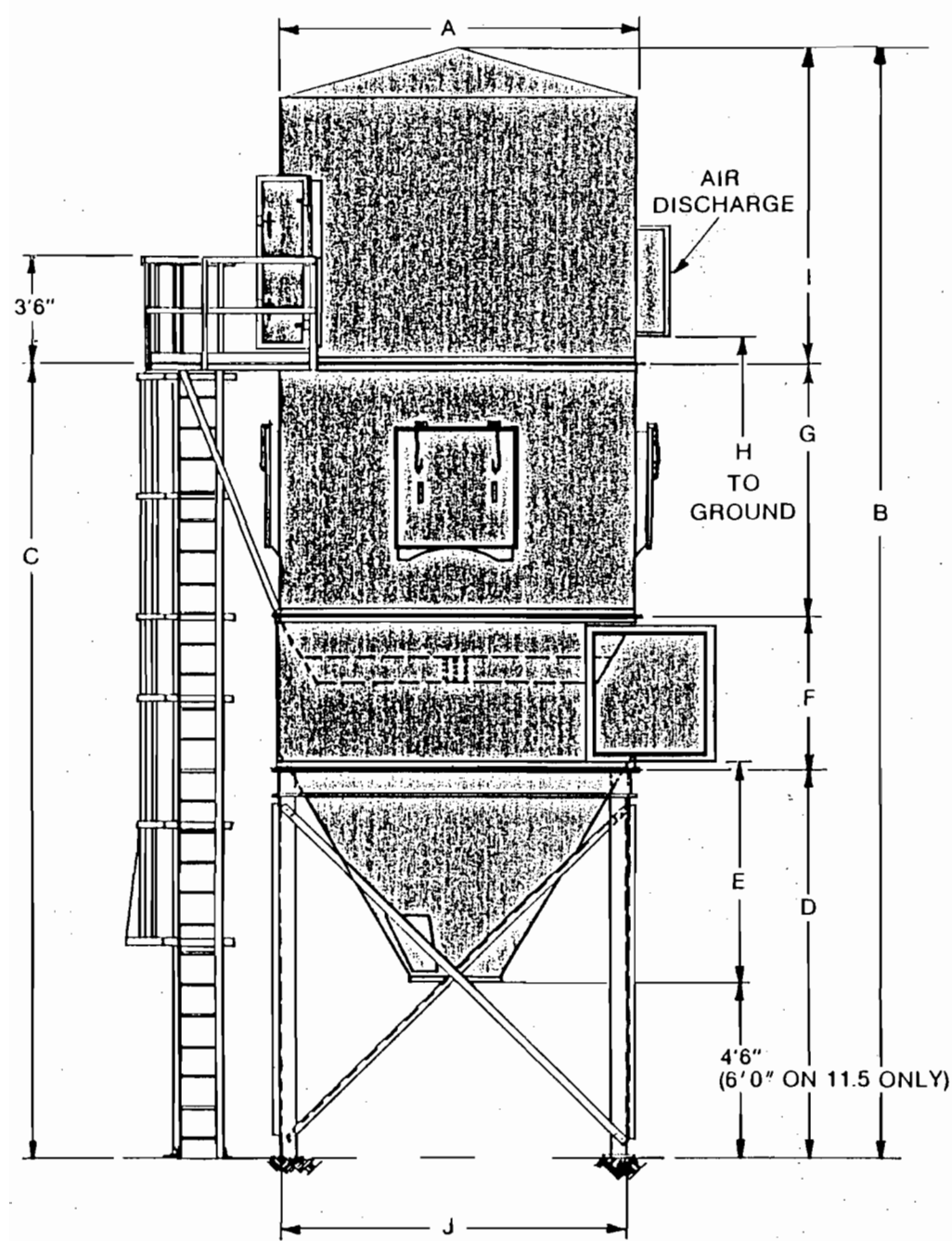


There are distinctive design features about a Pneumafil Straight Fire Filter that set it apart from other filters. These features translate to direct benefits making a strong case for selecting Pneumafil.

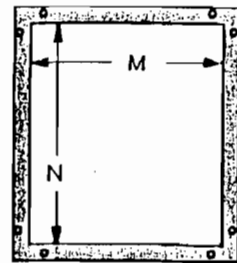
Pneumafil is dedicated to manufacturing a superior product for their customers by using the very best materials, exercising the highest standards in workmanship and employing the latest in applied technology. This dedication is reflected in the attention to details, simplicity of construction and economical cost of operation.

1. Walk-in clean air compartment for inspection, maintenance and filter bag cleaning. Top removal filter bags eliminates personnel from entering the dirty side of the filter.
2. Straight Fire Filter bag cleaning mechanism consists of a rotating cleaning manifold with an air accumulator that is mounted atop to eliminate pressure loss resulting in stronger cleaning pulses.
3. Fabric filter bags — 16 oz. polyester felt, nylon scrim reinforcement with 2" wear strips on bottom for long life and abrasion resistance. Other filter media available upon request.
4. Sectional tube sheet for precision alignment of cleaning manifold for cleaning of filter bags.
5. Large, low tangential air inlet for lower pressure drop and cyclonic cleaning action.
6. Built-in particle deflector with vortex breakers for abrasion protection of filter bags; thus longer bag life and lower maintenance.
7. Large clean air outlet for lower pressure drop resulting in energy savings.
8. Support steel, ladder and access platform conforms to all applicable building codes.
9. 60° conical hopper for dust collection.
10. Explosion relief panels for safety.
11. Hot rolled, pickled and oiled mild steel with a unique surface preparation for superior corrosion resistant finish, insuring longer filter life and substantial maintenance savings. (Meets SSPC-SP6 Standard)
12. Epoxy primed interior and exterior (2.0 - 2.5 mils), polyester epoxy exterior (2.0 - 2.5 mils). Total paint finish of 3.5 - 5.5 mils passed 500 hour salt spray test.
13. Filters constructed to withstand $\pm 20"$ W.G.
14. Components factory assembled and tested.
15. Highest quality control standards in the industry.
16. All filters meet EPA and OSHA regulations.

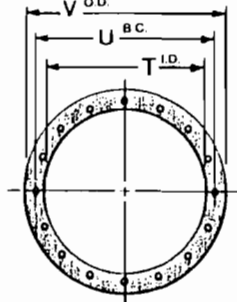




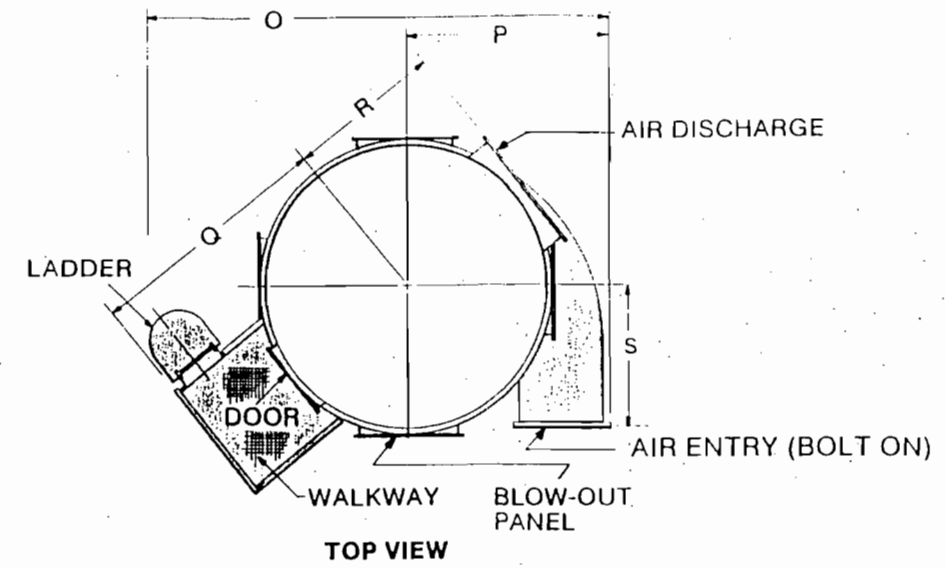
AIR DISCHARGE



AIR ENTRY

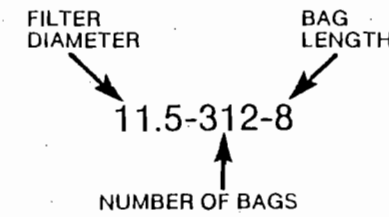


HOPPER OUTLET



TOP VIEW

Filter Nomenclature



Note:
Initial specifications can call for less than the maximum number of bags; however, filter dimensions remain unchanged. Additional bags may be added as filtering demands increase.

MODEL	MEDIA AREA (SQ. FT.)	BLOWER MOTOR (H.P.)	DRIVE MOTOR (H.P.)	5:1 CFM	10:1 CFM	15:1 CFM
4.5-40-8	412	1/4	1/4	2060	4120	6180
4.5-40-10	515	1/4	1/4	2575	5150	7725
5.5-60-8	618	1/4	1/4	3090	6180	9270
5.5-60-10	772	1/4	1/4	3860	7720	11580
6.5-96-8	989	2	1/4	4740	9480	14220
6.5-96-10	1236	2	1/4	5920	11840	17760
8.5-162-8	1699	3	1/4	8035	16070	24105
8.5-162-10	2085	3	1/4	10040	20080	30120
8.5-162-12	2503	3	1/4	12048	24096	36144
10.5-270-8	2781	5	1/4	13905	27810	41715
10.5-270-10	3475	5	1/4	17375	34750	52125
10.5-270-12	4172	5	1/4	20860	41720	62580
11.5-312-8	3214	5	1/4	16070	32140	48210
11.5-312-10	4015	5	1/4	20075	40150	60225
11.5-312-12	4820	5	1/4	24100	48200	72300
13.5-456-8	4697	7 1/2	1/4	23485	46970	70455
13.5-456-10	5869	7 1/2	1/4	29345	58690	88035
13.5-456-12	7045	7 1/2	1/4	35225	70450	105675

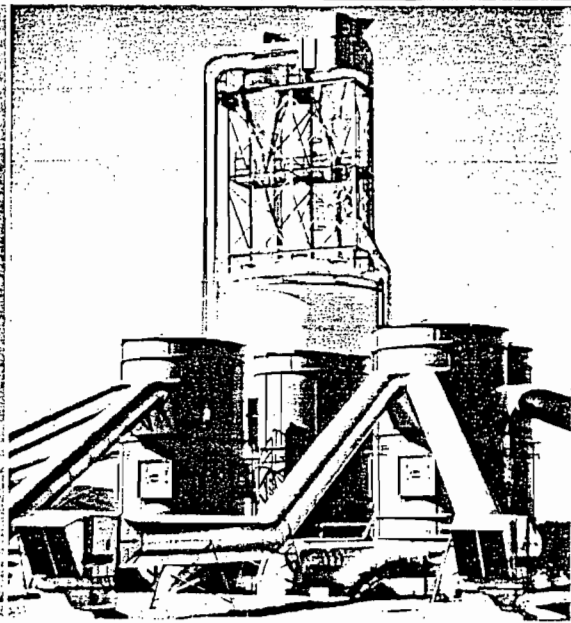
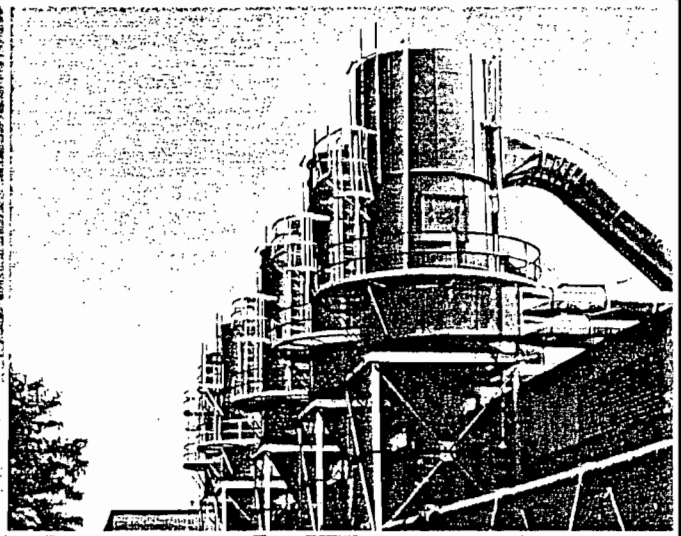
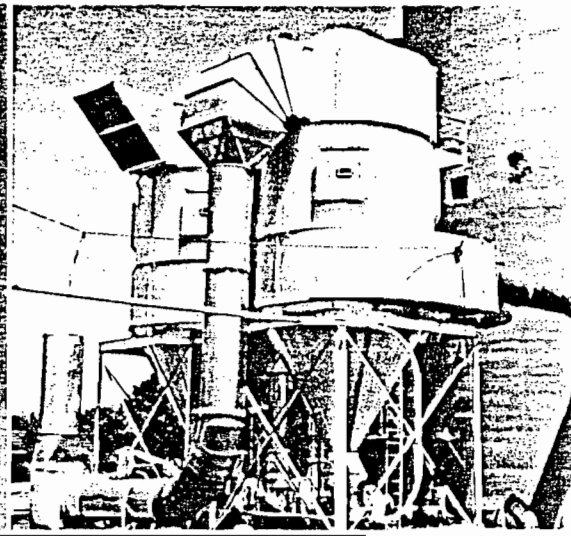
MODEL	DIMENSIONS													TOTAL WEIGHT										
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	FILTER UNIT	COMPLETE STRUCTURE
4.5-40-8	4'6"	20'5 7/8"	16'3 1/8"	6'3 3/8"	2'1 1/8"	2'1"	7'11"	7'3 1/8"	4'2 1/4"	4'4 1/4"	1'6"	1'6"	1'4"	1'4"	10'0"	3'8"	6'5"	2'6"	2'3"	2'0"	2'1"	2'3"	2842	3837
4.5-40-10	4'6"	22'5 7/8"	18'3 1/8"	6'3 3/8"	2'1 1/8"	2'1"	9'11"	19'3 1/8"	4'2 1/4"	4'4 1/4"	1'6"	1'6"	1'4"	1'4"	10'0"	3'8"	6'5"	2'6"	2'3"	2'0"	2'1"	2'3"	3126	4220
5.5-60-8	5'6"	28'1"	19'6 3/8"	8'0"	3'4 1/4"	3'6"	8'0"	20'5 1/8"	8'7"	5'6"	2'8"	2'8"	2'6"	2'6"	13'4"	5'8"	7'8"	3'8"	3'3"	2'0"	2'1"	2'3"	5859	7594
5.5-60-10	5'6"	32'0"	21'6 3/8"	8'0"	3'4 1/4"	3'6"	10'0"	22'5 1/8"	10'7"	5'6"	2'8"	2'8"	2'6"	2'6"	13'4"	5'8"	7'8"	3'8"	3'3"	2'0"	2'1"	2'3"	6738	8733
6.5-96-8	6'6"	30'0"	19'6 3/8"	8'0"	3'9 3/8"	3'6"	8'0"	20'5 1/8"	10'6"	6'4"	3'6"	3'6"	2'6"	2'6"	13'4"	5'8"	7'8"	3'5 1/2"	3'3"	2'0"	2'1"	2'3"	5859	7594
6.5-96-10	6'6"	32'0"	21'6 3/8"	8'0"	3'9 3/8"	3'6"	10'0"	22'5 1/8"	10'6"	6'4"	3'6"	3'6"	2'6"	2'6"	13'4"	5'8"	7'8"	3'5 1/2"	3'3"	2'0"	2'1"	2'3"	6738	8733
8.5-162-8	8'6"	31'8 3/4"	21'3 3/4"	9'8 3/4"	5'6"	3'6"	8'0"	22'1 3/4"	10'6"	8'3 3/4"	3'6"	3'6"	3'0"	2'6"	15'4"	6'8"	8'8"	4'6"	4'3"	2'0"	2'1"	2'3"	7992	10217
8.5-162-10	8'6"	33'8 3/4"	23'3 3/4"	9'8 3/4"	5'6"	3'6"	10'0"	24'1 3/4"	10'6"	8'3 3/4"	3'6"	3'6"	3'0"	2'8"	15'4"	6'8"	8'8"	4'6"	4'3"	2'0"	2'1"	2'3"	9190	11750
8.5-162-12	8'6"	37'8 3/4"	25'3 3/4"	9'8 3/4"	5'6"	3'6"	12'0"	26'1 3/4"	12'6"	8'3 3/4"	3'6"	3'6"	3'0"	2'8"	15'4"	6'8"	8'8"	4'6"	4'3"	2'0"	2'1"	2'3"	10388	13283
10.5-270-8	10'6"	37'0"	26'6 3/4"	11'6"	7'3 3/4"	5'0"	10'0"	26'1 1/4"	10'6"	10'3"	4'0"	4'1"	3'6"	4'0"	17'4"	7'8"	9'8"	5'5 1/2"	5'3"	2'0"	2'2"	2'4"	11250	15150
10.5-270-10	10'6"	37'0"	26'6 3/4"	11'6"	7'3 3/4"	5'0"	10'0"	26'1 1/4"	10'6"	10'3"	4'0"	4'1"	3'6"	4'0"	17'4"	7'8"	9'8"	5'5 1/2"	5'3"	2'0"	2'2"	2'4"	13100	17585
10.5-270-12	10'6"	41'0"	28'6 3/4"	11'6"	7'3 3/4"	5'0"	12'0"	28'1 1/4"	12'6"	10'3"	4'0"	4'1"	3'6"	4'0"	17'4"	7'8"	9'8"	5'5 1/2"	5'3"	2'0"	2'2"	2'4"	14925	19995
11.5-312-8	11'6"	38'6"	28'0 3/4"	13'0"	7'3 3/4"	5'0"	10'0"	28'5 1/4"	10'6"	11'3"	4'0"	4'1"	3'6"	4'0"	18'4"	8'2"	10'2 1/2"	5'11 1/4"	5'9"	3'0"	3'2"	3'4"	12521	16421
11.5-312-10	11'6"	38'6"	28'0 3/4"	13'0"	7'3 3/4"	5'0"	10'0"	28'5 1/4"	10'6"	11'3"	4'0"	4'1"	3'6"	4'0"	18'4"	8'2"	10'2 1/2"	5'11 1/4"	5'9"	3'0"	3'2"	3'4"	14399	18884
11.5-312-12	11'6"	42'6"	30'0 3/4"	13'0"	7'3 3/4"	5'0"	12'0"	30'5 1/4"	12'6"	11'3"	4'0"	4'1"	3'6"	4'0"	18'4"	8'2"	10'2 1/2"	5'11 1/4"	5'9"	3'0"	3'2"	3'4"	16277	21347
13.5-456-8	13'6"	40'11 3/4"	30'5 7/8"	14'5 3/8"	6'0 1/2"	6'0"	10'0"	30'10 3/4"	10'6"	13'2 1/4"	5'2"	4'1"	5'0"	5'0"	21'4"	10'2 1/2"	11'2"	6'11 1/4"	6'9"	2'0"	2'2"	2'4"	16811	20686
13.5-456-10	13'6"	40'11 3/4"	30'5 7/8"	14'5 3/8"	6'0 1/2"	6'0"	10'0"	30'10 3/4"	10'6"	13'2 1/4"	5'2"	4'1"	5'0"	5'0"	21'4"	10'2 1/2"	11'2"	6'11 1/4"	6'9"	2'0"	2'2"	2'4"	18333	23789
13.5-456-12	13'6"	44'11 3/4"	32'5 7/8"	14'5 3/8"	6'0 1/2"	6'0"	12'0"	32'10 3/4"	12'6"	13'2 1/4"	5'2"	4'1"	5'0"	5'0"	21'4"	10'2 1/2"	11'2"	6'11 1/4"	6'9"	2'0"	2'2"	2'4"	20672	26758

Model dimensions are nominal only. Please consult factory, if exact specifications are required.

Best Available Copy

ROG EQUIPMENT SALES
Manufacturers' Agent
Post Office Box 18575
Memphis, TN 38181-0575

* Dust Collectors
* Filters & Cyclones
* Blowers & Fans
* Feeders & Airlocks
"NUMBER TO CALL" (901) 362-1823



Users of Pneumafil Filters

AMAX Coal Co.	General Mills
Archer Daniels Midland	Georgia Pacific
Broyhill Industries	International Paper
Burlington Furniture	Kingsford Charcoal
Carolina Power & Light	Northern States Power
Cargill	Pillsbury Company
Continental Grain	St. Regis Paper
General Electric	

PNEUMAFIL

PNEUMAFIL CORPORATION
Industrial Air Filters Division
P.O. Box 16348
Charlotte, NC 28227-6348
704/399-7441
Telex: B10621 PF525

Associated in Air Systems Development with The Lura Group

Attachment 2

Drawings



\$ 300 pd,
7-6-89
Receipt # 117635

RECEIVED

JUL 6 1989

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

AC 53-167123

DER-BAQM

APPLICATION TO OPERATE/CONSTRUCT
AIR POLLUTION SOURCES

SOURCE TYPE: Stationary, Industrial New¹ Existing¹

APPLICATION TYPE: Construction Operation Modification

COMPANY NAME: Florida Tile Div./Sikes Corp. COUNTY: Polk

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Monoporosa roller kiln

SOURCE LOCATION: Street 1 Sikes Blvd. City Lakeland

UTM: East 405,200 North 3,102,400

Latitude 28° 02' 45" N Longitude 81° 57' 45" W

APPLICANT NAME AND TITLE: W.R. Boakes, Vice President, Devel. & Engineering

APPLICANT ADDRESS: P.O. Box 447, Lakeland, FL 33802

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Florida Tile Div./ Sikes Corp.

I certify that the statements made in this application for a Construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: William R. Boakes
William R. Boakes, Vice President

Name and Title (Please Type)

Date: June 29, 1989 Telephone No. 813/ 687-7171

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been ~~examined~~ examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. ~~I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.~~

Signed: Randal M. Reynolds
Randal M. Reynolds, P.E.

Name (Please Type)

Lake Engineering, Inc.

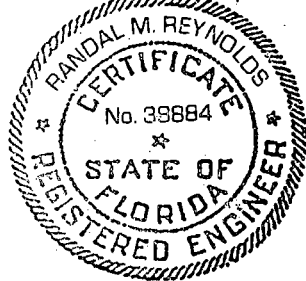
Company Name (Please Type)

6000 Lake Forrest Drive, Suite 350

Atlanta, Georgia 30328

Mailing Address (Please Type)

Date: 6/28/89 Telephone No. 404/ 257-9634



Florida Registration No. 38884

¹See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

- A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Florida Tile intends to install a new roller kiln (Sacmi) for the Monoporosa system. The roller kiln is gas fired and is expected to be in full compliance.

- B. Schedule of project covered in this application (Construction Permit Application Only)
Start of Construction August 1989 Completion of Construction November 1989

- C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

(NA)

- D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

(NA)

(Monoporosa roller kiln)

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 49 ;
if power plant, hrs/yr NA ; if seasonal, describe: (NA)

F. If this is a new source or major modification, answer the following questions.
(Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? NO
a. If yes, has "offset" been applied? (NA)
b. If yes, has "Lowest Achievable Emission Rate" been applied? (NA)
c. If yes, list non-attainment pollutants. (NA)

2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. NO

3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. NO

4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? NO

5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? NO

H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? NO

a. If yes, for what pollutants? NA

b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-
cation for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Green Tile	Particulates	<0.5	5,000	NA

B. Process Rate, if applicable: (See Section V, Item 1)

- Total Process Input Rate (lbs/hr): 5,000
- Product Weight (lbs/hr): 5,000

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Particulates	0.005	0.02	NA	NA	NA	NA	NA
SO ₂	0.003	0.01	NA	NA	NA	NA	NA
Fluorides *	4.27	17.6	NA	NA	NA	NA	NA

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

* gaseous fluorides only

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
(NA)				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural gas	4,644 CF/hr.	4,644 CF/hr.	4.76

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: (NA) Percent Ash: (NA)
 Density: (NA) lbs/gal Typical Percent Nitrogen: (NA)
 Heat Capacity: BTU/CF 1,025 BTU/gal
 Other Fuel Contaminants (which may cause air pollution): (NA)

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average (NA) Maximum (NA)

G. Indicate liquid or solid wastes generated and method of disposal.

(NA)

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 38.5 ft. Stack Diameter: 24.8 inches ~~ft.~~
 Gas Flow Rate: ACFM 4,120 DSCFM Gas Exit Temperature: 482 °F.
 Water Vapor Content: (neglig.) % Velocity: 36.5 FPS

SECTION IV: INCINERATOR INFORMATION
 (Not Applicable)

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____
 Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____
 Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____
 Manufacturer _____
 Date Constructed _____ Model No. _____

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter: _____ Stack Temp. _____
 Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: Cyclone Wet Scrubber Afterburner
 Other (specify) _____

Brief description of operating characteristics of control devices: (NA)

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

(NA)

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Total process input rate and product weight

Based on data supplied by Florida Tile personnel, the Sacmi roller kiln will fire 5,000 lbs. per hour of tile.

Basis of emissions estimate

AP-42, Table 1.4-1

	Emission Factor (lb./10 ⁶ CF)	Fuel Consumption (CF/hr.)	Estimated Emissions (lbs./hr.)	Estimated Emissions (tpy)
Particulates	1.0	4,644	0.005	0.02
SO ₂	0.6	4,644	0.003	0.01

Fluoride emissions are based on a recent stack test completed at another Florida Tile facility. In that test, approximately 1.71 lbs. gaseous fluoride per ton tile fired were emitted.

1.71 lbs. gaseous F/ton tile x 2.5 tph tile =
4.27 lbs./hr. gaseous fluoride

(4.27 x 24 x 7 x 49) / 2,000 = 17.6 tpy gaseous fluoride