

Check Sheet

Company Name: Monsanto Chemical Company
Permit Number: AC 17-159577
PSD Number: _____
Permit Engineer: _____

Application:

- Initial Application
 - Incompleteness Letters
 - Responses
 - Waiver of Department Action
 - Department Response
 - Other

Cross References:

-
-
-

Intent:

- Intent to Issue
- Notice of Intent to Issue
- Technical Evaluation
- BACT or LAER Determination
- Unsigned Permit

increase production of
the Santoprene (thermo plastic rubber)
plant

Correspondence with:

- EPA
- Park Services
- Other
- Proof of Publication
 - Petitions - (Related to extensions, hearings, etc.)
 - Waiver of Department Action
 - Other

Final

Determination:

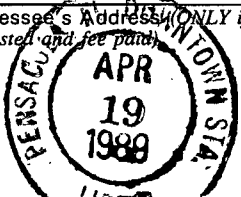
- Final Determination
- Signed Permit
- BACT or LAER Determination
- Other

Post Permit Correspondence:

- Extensions/Amendments/Modifications
- Other

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. W. J. Board Monsanto Company P. O. Box 12830 Pensacola, FL 32575	4. Article Number P 274 010 405 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	8. Addressee's Address (ONLY if requested and fee paid) 
6. Signature — Agent X <i>Bob Putney</i>	
7. Date of Delivery	

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

P 274 010 405

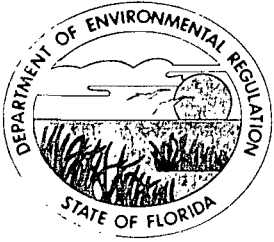
RECEIPT FOR CERTIFIED MAIL

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

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

Sent to	
Mr. W. J. Board, Monsanto Co.	
Street and No.	
P.O. Box 12830	
P.O., State and ZIP Code	
Pensacola, FL 32575	
Postage	S
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	S
Postmark or Date	
Mailed: 4-18-89	
Permit: AC 17-159577	

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 Twachtmann, Secretary

John Shearer, Assistant Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMIT

Mr. W. J. Board
General Superintendent
Government Affairs/Environmental
and Health and Safety
Monsanto Company
Post Office Box 12830
Pensacola, Florida 32575

April 18, 1989

Enclosed is construction permit No. AC 17-159577 for Monsanto Company to construct (modify) their Santoprene® compounding facility at the chemical plant north of Pensacola, Escambia 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

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

Copy furnished to:

- E. Middleswart, NW District
- B. McLeod, Monsanto Company

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 4-18-89.

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.

Martha Wise 4-18-89
Clerk Date

Final Determination

The Technical Evaluation and Preliminary Determination for the construction permit to modify the existing Santoprene® Compounding facility at Monsanto Company's chemical plant located north of Pensacola in Escambia County, Florida, was distributed on March 21, 1989. The Notice of Proposed Agency Action was published in the Pensacola News Journal on March 25, 1989.

No comments were submitted on the Department's proposed action. The final action of the Department will be to issue construction permit No. AC 17-159577 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 Twachmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
Monsanto Company
P. O. Box 12830
Pensacola, FL 32575

Permit Number: AC 17-159577
Expiration Date: May 1, 1991
County: Escambia
Latitude/Longitude: 30°35'10"N
87°14'40"W

Project: Santoprene®
(Thermoplastic Rubber)
Compounding Facility Modifica-
tion

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 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:

Modification to the Santoprene® (thermoplastic rubber) compounding facility (SIC 2821) including the addition of process equipment for drying, transfer, and storage of the thermoplastic rubber pellets. Particulate matter emissions from this plant are controlled with a dust collector and cloth filters. Formaldehyde emissions are controlled by process design. This facility is located in the permittee's chemical plant at 3000 Old Chemstrand Road, Gonzalez, Florida. The UTM coordinates for the plant are Zone 16, 475.7 km E and 3384.2 km N.

The source shall be 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 January 20, 1989.
2. Monsanto's letter dated February 2, 1989.

PERMITT :
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

GENERAL CONDITIONS:

6. The permittee shall at all times 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

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

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

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

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

PERMITTEE:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

GENERAL CONDITIONS:

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after 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 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

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

SPECIFIC CONDITIONS:

1. Raw material input and thermoplastic production shall not exceed the quantities listed in the confidential attachments 4 and 5 of the application. These attachments are not published under the provisions of Section 403.111, F. S., but are maintained on file by the Department as a legal condition of this permit. The permittee shall maintain records that can be used to determine compliance with this condition.

2. The Santoprene® plant may operate continuously, 8760 hours/year.

PERMIT E:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

SPECIFIC CONDITIONS:

3. Additional air pollution control systems or reasonable precautions may be required if visible emissions from any uncontrolled part of the pelletized material handling operation at this plant exceeds 5 percent opacity (6 minute average) as determined by DER Method 9 (F.A.C. 17-2.700(6)(a)9., 12/05/88).

4. The plant shall not allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

5. Particulate matter emissions from the blend preparation dust collector No. 350 shall not exceed 3.0 lbs/hr as determined by EPA Method 5 (F.A.C. 17-2.700(6)(b)5., 12/05/88).

6. This review is based on formaldehyde emissions from the thermoplastic rubber compounding facility being:

Stream	A	B	C*	D*	E*
Description	Bin Vent Filter (215)	Blend Preparation Dust Collect. (350)	Pellet Drier Vents	Pellet Transfer Vents	Storage Bin Vents
Formaldehyde Emissions	0 lbs/hr (0 TPY)	0.012 lbs/hr (0.05 TPY)	0.002 lbs/hr (0.01 TPY)	0.018 lbs/hr (0.08 TPY)	0.05 lbs/hr (0.20 TPY)

*Emission standard is for each vent.

The permittee shall report any increase in these emissions to the Department.

7. A visible emissions test using DER Method 9, as described in F.A.C. 17-2.700 (12/05/88), shall be conducted on the discharges from all blowers, air pumps, fume and dust hoods, and raw material unloading operations when they are operating near the maximum permitted capacity. These tests shall be conducted prior to the expiration of this construction permit. The Northwest District shall be given at least 15 days prior notice before the scheduled compliance test.

8. If the visible emissions from the bin vent bag filter (No. 215), the blend preparation dust collector (No. 350), the drier (stream C), the pellet transfer vents (stream D) or the storage bin vents (stream E) exceed 5 percent opacity, the permittee shall measure the particulate matter and formaldehyde emissions from any stack that exceeds 5 percent opacity using methods approved by the Department while the facility is operated near its permitted capacity. The Northwest District shall be given at least 15 days prior notice before a scheduled compliance test.

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

PERMITTEE
Monsanto Company

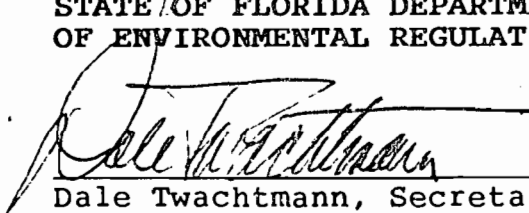
Permit Number: AC 17-159577
Expiration Date: May 1, 1991

SPECIFIC CONDITIONS:

10. An application for an operation permit must be submitted to the Northwest 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 ¹³ day
of April, 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

RECEIVED

APR 13 1989

TO: Dale Twachtmann

FROM: Steve Smallwood *[Signature]*

DATE: April 14, 1989

SUBJ: Approval of Construction Permit No. AC 17-159577
Monsanto Company

Office of the Secretary

Attached for your approval and signature is a permit prepared by Central Air Permitting for the above mentioned company to modify their existing thermoplastic rubber compounding facility.

No comments were received during the public notice period.

Day 90, after which this permit will be issued by default, is May 26, 1989.

I recommend your approval and signature.

SS/WH/s

attachments

file copy

Monsanto

MONSANTO CHEMICAL COMPANY
P. O. Box 12830
Pensacola, Florida 32575-2830
Phone: (904) 968-7000

VIA OVERNIGHT MAIL

March 30, 1989

RECEIVED

MAR 31 1989

DER-BAQM

Mr. C. H. Fancy, P. E.
Deputy Chief
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301-8141

Dear Mr. Fancy:

Attached is proof of publication of the public notice for construction permit AC17-159577, Santoprene[®] Expansion.

Please issue this construction permit as soon as possible.

Sincerely,



Bruce P. McLeod
Senior Specialist
Environmental Control

*copied: St. Hanks
J. Price, NW Dist.*

1520.BPM

PENSACOLA
**News
Journal**

RECEIVED

MAR 31 1989

DER - BAQM

PUBLISHED DAILY
PENSACOLA, ESCAMBIA COUNTY, FLORIDA

State of Florida,
County of Escambia.

Before the undersigned authority personally appeared

J. Diane Deal

who on oath says that she is Legal Advertising Supervisor
of the Pensacola News Journal, a daily newspaper published at Pensacola in
Escambia County, Florida; with general circulation in Escambia, Santa
Rosa, Okaloosa and Walton Counties that the attached copy of
advertisement, being a NOTICE in the matter of

Notice of Intent

_____ in the _____ Court,

was published in said newspaper in the issues of _____

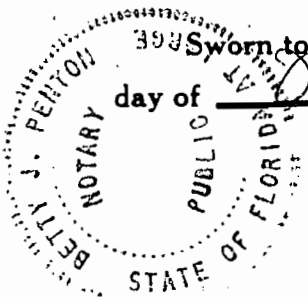
March 25, 1989

Affiant further say that the said The Pensacola News
Journal is a newspaper published at Pensacola, in said Escam-
bia County, Florida, and that the said newspaper has heretofore
been continuously published in said Escambia County, Florida,
each day and has been entered as second class mail matter at
the post office in Pensacola, in said Escambia 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 cor-
poration any discount, rebate, commission or refund for the
purpose of securing this advertisement for publication in the
said newspaper.

J. Diane Deal

Sworn to and subscribed before me this 29th
day of March, A.D., 1989

Betty J. Penton
NOTARY PUBLIC.



My Commission Expires October 26, 1991

The Department of Environmental Regulations hereby gives notice of its intent to issue a permit to Monsanto Company, Post Office Box 12830, Pensacola, Florida 32575, to construct (modify) their Santoprene (thermoplastic rubber) compounding facility at the chemical plant at 3000 Old Chemstrand Road, Gonzalez, Escambia County, Florida, by adding new process equipment needed to increase production. This modification, which will increase particulate matter emissions by 0.72 TPY and formaldehyde emissions by 0.34 TPY, will not cause a violation of any ambient air quality standards. 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 normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

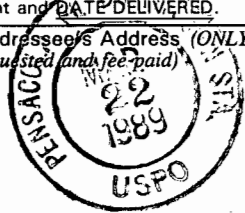
Department of Environmental
Regulation
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida
32399-2400

Dept. of Environmental
Regulation
Northwest District Office
160 Governmental Center
Pensacola, FL
32501-5794

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.

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. W. J. Board General Superintendent Government Affairs Monsanto Company P. O. Box 12830 Pensacola, FL 32575	4. Article Number P 274 007 608 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	8. Addressee's Address (ONLY if requested and fee paid) 
6. Signature — Agent X <i>Bob Putney</i>	
7. Date of Delivery <i>3-22-89</i>	

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

P 274 007 608

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

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

Sent to Mr. W. J. Board, Monsanto Co.	
Street and No. P.O. Box 12830	
P.O., State and ZIP Code Pensacola, FL 32575	
Postage	S
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	S
Postmark or Date Mailed: 3-21-89 Permit: AC 17-159577	

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

March 13, 1989

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

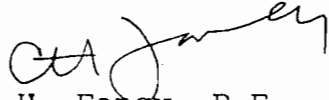
Mr. W. J. Board
General Superintendent
Government Affairs/Env. Health & Safety
Monsanto Company
Post Office Box 12830
Pensacola, FL 32575

Dear Mr. Board:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for the Santoprene® Compounding facility modification.

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 Quality Management.

Sincerely,


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

CHF/ks

Attachments

cc: Bruce McLeod, Monsanto Co.
Ed Middleswart, NW District

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

Monsanto Company
Post Office Box 12830
Pensacola, FL 32575

DER File No. AC 17-159577

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, Monsanto Company, applied on January 20, 1989, to the Department of Environmental Regulation for a permit to construct (modify) their existing Santoprene® (thermoplastic rubber) compounding facility by the addition of process equipment to increase production capacity of this plant.

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

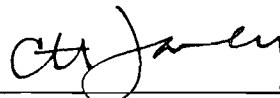
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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 applicant 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.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

Bruce McLeod, Monsanto Co.
Ed Middleswart, NW District

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 3-21-89.

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.

Martha Alice
Clerk

3-21-89
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 Monsanto Company, Post Office Box 12830, Pensacola, Florida 32575, to construct (modify) their Santoprene® (thermoplastic rubber) compounding facility at the chemical plant at 3000 Old Chemstrand Road, Gonzalez, Escambia County, Florida, by adding new process equipment needed to increase production. This modification, which will increase particulate matter emissions by 0.72 TPY and formaldehyde emissions by 0.34 TPY, will not cause a violation of any ambient air quality standards. 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 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 Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dept. of Environmental Regulation
Northwest District Office
160 Governmental Center
Pensacola, FL 32501-5794

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

Monsanto Company
Escambia County
Pensacola, Florida

Santoprene® (Thermoplastic Rubber) Compounding
Facility Modification

File Number: AC 17-159577

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

March 13, 1989

I. General Information

A. Applicant

Monsanto Company
Post Office Box 12830
Pensacola, Florida 32575

B. Project and Location

Monsanto Company proposes to make another modification to their existing Santoprene® (thermoplastic rubber) compounding facility (SIC 2821) that is located at their chemical plant at 3000 Old Chemstrand Road, Gonzalez, Escambia County, Florida. The modification includes construction of a second line for the existing plant to increase production. Additional drying, transfer, and storage equipment will be added. The UTM coordinates of this site are Zone 16, 475.7 km E and 3384.2 km N. The application, submitted on January 20, 1989, was considered complete on February 3, 1989.

C. Process

A general description of this plant is contained in the August 17, 1984, Technical Evaluation and Preliminary Determination for Monsanto Company's Thermoplastic Rubber Compounding Facility (AC 17-87408). This document is on file at the Department's offices in Tallahassee and Pensacola.

D. Emissions

The proposed modification will result in a small increase in particulate matter and formaldehyde emissions from the Santoprene® plant. A summary of the emissions, after modification, is shown below:

Santoprene® Plant Emissions

Source	Particulate Matter		Formaldehyde	
	lbs/hr	TPY	lbs/hr	TPY
Bin Vent Filter #215	0.21	0.60		
Dust Col. #350	0.15*	0.66	0.012	0.05
Pellet Dryer Vents			0.004	0.02
Pellet Transfer Vents			0.036	0.16
Storage Bin Vents			0.100	0.40
Total	0.36	1.26	0.152	0.63

*Instantaneous max. PM emission from source is 0.03 gr/ft³ (3.0 lbs/hr).

II. Rule Applicability

A. State Regulations

The proposed project, adding new process equipment to increase production of the rubber compounding facility (SIC 2821) at an existing chemical plant, is subject to preconstruction review under the provisions of Chapter 403, F.S., and Chapter 17-2, F.A.C.

The plant site is in an area designated unclassifiable for sulfur dioxide (Rule 17-2.430, F.A.C.) and attainment for all other criteria pollutants (Rule 17-2.420, F.A.C.).

The facility is a major source of volatile organic compounds (Rule 17-2.100, F.A.C.) because total emissions exceed 100 TPY. The proposed modification will emit less than the significant emission rate of any criteria pollutant listed in Table 500-2, F.A.C.

The facility is exempt from the Prevention of Significant Deterioration regulations because the modification to the plant will not result in a significant net emissions increase of any criteria pollutant (Rule 17-2.500(2)(d)4.a.(ii), F.A.C.).

The area that the facility is located in is designated attainment for particulate matter and volatile organic and, thus, the modification is not subject to new source review for nonattainment areas (Rule 17-2.510(2)(a)1., F.A.C.).

The facility is subject to Rule 17-2.520, F.A.C., Sources not subject to PSD or nonattainment requirements. Control of emissions shall be based on Rules 17-2.610, 17-2.620, and 17-2.700(3), F.A.C.

B. Federal Regulations

This project is not subject to federal PSD regulations, Section 52.21 of Title 40 of the Code of Federal Regulations (40 CFR 52.21), because the modification to the plant will not cause a significant emission rate increase of any criteria pollutant.

III. Technical Evaluation

The August 17, 1984, Technical Evaluation and Preliminary Determination describes the air pollution control systems employed for particulate matter and formaldehyde emissions from the originally proposed plant. The 160 dscfm dust control system for the blend preparation tank shown in the original application was not installed when the plant was built. The February 18, 1988, Technical Evaluation and Preliminary Determination for construction permit No. AC 17-143973 authorized a modification to this plant by the installation of a

1600 dscfm compressed air system for the pelletized rubber storage bin. Both documents are on file in the Department offices in Pensacola (Northwest District) and Tallahassee (Bureau of Air Quality Management).

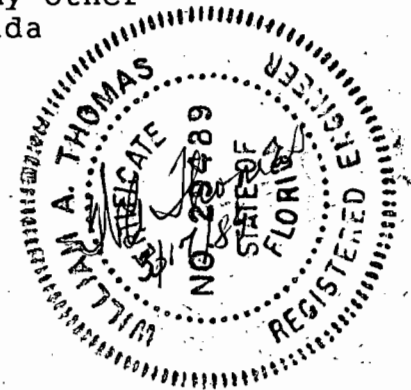
The modification being requested in the current application is permission to add similar process equipment to the plant to increase production. The higher production rate will increase particulate matter emission from the existing filters by 0.72 TPY and formaldehyde emissions from the existing and new process equipment by 0.34 TPY. The Department will not require upgrading of existing air pollution control equipment or the installation of new air pollution control equipment to handle this small increase in emissions.

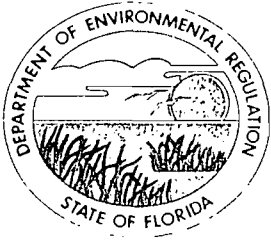
IV. Air Quality Analysis

The plant emits particulate matter and formaldehyde. The estimated particulate matter emissions will not have a significant impact on the ambient air quality. The impact of the estimated formaldehyde emissions will not exceed the acceptable ambient concentration for this pollutant. Therefore, the ambient air impact of formaldehyde should not endanger health or welfare.

V. Conclusion

Based on the information provided by Monsanto Company the Department has reasonable assurance that the proposed modification to the Santoprene® plant as described in this evaluation and subject to the conditions proposed within, will not cause or contribute to a violation of any ambient air quality standard or PSD increment, or violate 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:

Monsanto Company

P. O. Box 12830

Pensacola, FL 32575

Permit Number: AC 17-159577

Expiration Date: May 1, 1991

County: Escambia

Latitude/Longitude: 30°35'10"N
87°14'40"W

Project: Santoprene®

(Thermoplastic Rubber)

Compounding Facility Modifica-
tion

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 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:

Modification to the Santoprene® (thermoplastic rubber) compounding facility (SIC 2821) including the addition of process equipment for drying, transfer, and storage of the thermoplastic rubber pellets. Particulate matter emissions from this plant are controlled with a dust collector and cloth filters. Formaldehyde emissions are controlled by process design. This facility is located in the permittee's chemical plant at 3000 Old Chemstrand Road, Gonzalez, Florida. The UTM coordinates for the plant are Zone 16, 475.7 km E and 3384.2 km N.

The source shall be 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 January 20, 1989.
2. Monsanto's letter dated February 2, 1989.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

GENERAL CONDITIONS:

6. The permittee shall at all times 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

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

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

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

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

PERMITTEE:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

GENERAL CONDITIONS:

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after 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 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

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

SPECIFIC CONDITIONS:

1. Raw material input and thermoplastic production shall not exceed the quantities listed in the confidential attachments 4 and 5 of the application. These attachments are not published under the provisions of Section 403.111, F. S., but are maintained on file by the Department as a legal condition of this permit. The permittee shall maintain records that can be used to determine compliance with this condition.

2. The Santoprene® plant may operate continuously, 8760 hours/year.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

SPECIFIC CONDITIONS:

3. Additional air pollution control systems or reasonable precautions may be required if visible emissions from any uncontrolled part of the pelletized material handling operation at this plant exceeds 5 percent opacity (6 minute average) as determined by Method 9 (F.A.C. 17-2.700(6)(a)9., 12/05/88).

4. The plant shall not allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

5. Particulate matter emissions from the blend preparation dust collector No. 350 shall not exceed 3.0 lbs/hr as determined by Method 5 (F.A.C. 17-2.700(6)(b)5., 12/05/88).

6. This review is based on formaldehyde emissions from the thermoplastic rubber compounding facility being:

Stream	A	B	C*	D*	E*
Description	Bin Vent Filter (215)	Blend Preparation Dust Collect. (350)	Pellet Drier Vents	Pellet Transfer Vents	Storage Bin Vents
Formaldehyde Emissions	0 lbs/hr (0 TPY)	0.012 lb/hr (0.05 TPY)	0.002 lbs/hr (0.01 TPY)	0.018 lbs/hr (0.08 TPY)	0.05 lbs/hr (0.20 TPY)

*Emission standard is for each vent.

The permittee shall report any increase in these emissions to the Department.

7. A visible emissions test by DER Method 9, as described in F.A.C. 17-2.700, shall be conducted on the discharges from all blowers, air pumps, etc. in the plant, all fume and dust hoods, and raw material unloading operations when they are operating near the maximum permitted capacity, prior to the expiration of this construction permit. The Northwest District shall be given at least 15 days prior notice before the scheduled compliance test.

8. If the visible emissions from the Bin vent bag filter (No. 215), the blend preparation dust collector (No. 350), the drier (stream C), the pellet transfer vents (stream D) or the storage bin vents (stream E) exceed 5 percent opacity, the permittee shall measure the particulate matter and formaldehyde emissions from any stack that exceeds 5 percent opacity using methods approved by the Department while the facility is operated near its permitted capacity. The Northwest District shall be given at least 15 days prior notice before a scheduled compliance test.

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

PERMITTEE:
Monsanto Company

Permit Number: AC 17-159577
Expiration Date: May 1, 1991

SPECIFIC CONDITIONS:

10. An application for an operation permit must be submitted to the Northwest 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

ATTACHMENTS AVAILABLE UPON REQUEST

PM
2-2-89
Gonzalez, FL

Exp. Mail:
B 338 028 22Y

Main File Copy
AC17-159577

Monsanto

MONSANTO CHEMICAL COMPANY
P. O. Box 12830
Pensacola, Florida 32575-2830
Phone: (904) 968-7000

RECEIVED

FEB 3 1989

DER-BAQM

VIA OVERNIGHT MAIL

February 2, 1989

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

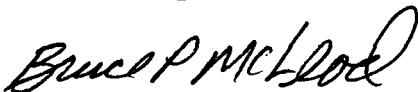
Dear Mr. Hanks:

Enclosed is the information you requested in your January 27, 1989 telephone call to me.

1. Confirmation of the information in the table "Emission Stack Geometry and Flow Characteristics." Some discrepancies have been corrected and a revised table is attached.
2. A non-confidential process flow schematic is needed. This is attached.
3. Minor adjustments to the "Emissions Summary" table were needed. These have been made and a revised table is attached.

Thank you for your prompt review of this application. If I can be of assistance, please call me at 904-968-8725.

Sincerely,



Bruce P. McLeod
Senior Specialist
Environmental Control

Attachments

Willard Hanks } 2-3-89 RAM
CHF/BT
E. Middleswart, (Monsanto)
1464.BPM

MONSANTO PENSACOLA
 SANTOPRENE^R THERMOPLASTIC RUBBER
 COMPOUNDING FACILITY

EMISSION STACK GEOMETRY AND FLOW CHARACTERISTICS

STREAM	A	B	C1	C2	D1	D2	E1	E2
DESCRIPTION	#215 Bag Filter	#350 Dust Collector	Dryer Exhaust	Dryer Exhaust	Transfer Vent	Transfer Vent	Storage Bin Vent	Storage Bin Vent
Stack height (ft) (above grade)	53	42	47	47	52	52	53	53
Gas flow rate (DSCFM)	800	11,650	2000	2000	600	600	1600	1600
Water vapor content (%)	ambient	ambient	5%	5%	ambient	ambient	ambient	ambient
Stack diameter (ft) (inside diameter)	0.5 x 1.33	1.833	1.0	1.0	0.83	0.83	2.0	2.0
Gas exit temp. (°F)	ambient	ambient	122° ^o F	122° ^o F	ambient +10° ^o F	ambient +10° ^o F	ambient + 10° ^o F	ambient + 10° ^o F
Velocity (FPS)	20	74	42	42	18	18	N/A ^a	N/A ^a

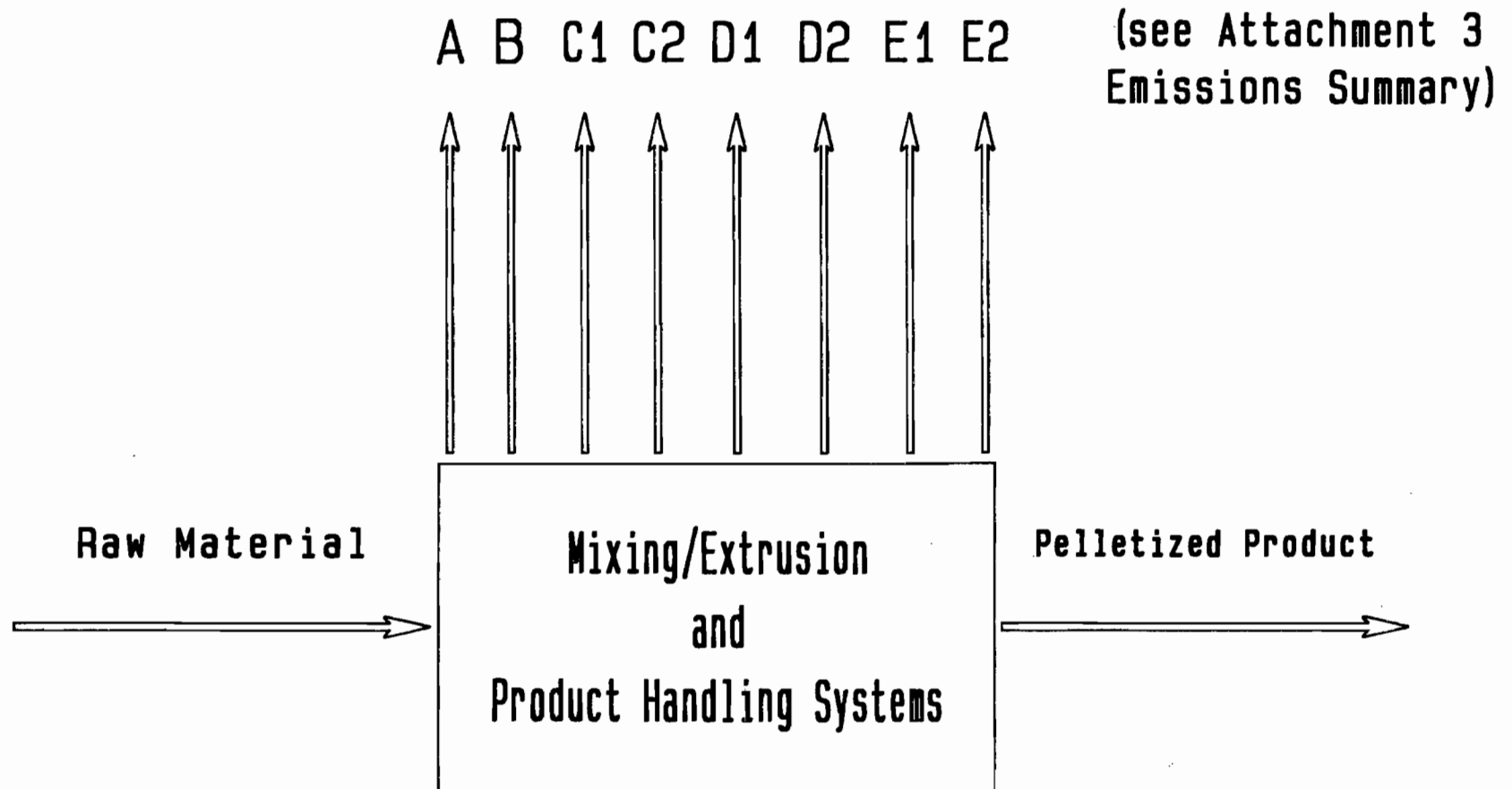
NOTE:

Actual stack parameters and flow characteristics may vary slightly from nominal values.

^aNo applicable - flow is discharged horizontally, so no velocity plume rise effects.

1425.BPM-15 Revised 1/30/89

MONSANTO - PENSACOLA SANTOPRENE[®] FACILITY - NON CONFIDENTIAL FLOW DIAGRAM



ATTACHMENT 3

EMISSIONS SUMMARY

<u>Description</u>	<u>BinVnt Filter #215</u>	<u>Dust Col. #350</u>	<u>Pellet Dryer Vents</u>	<u>Pellet Dryer Vents (new)</u>	<u>Pellet Trnsfr Vents</u>	<u>Pellet Trnsfr Vents (new)</u>	<u>Strge. Bin Vents</u>	<u>Strge. Bin Vents (new)</u>	<u>Total</u>
STREAM	A	B	C1	C2	D1	D2	E1	E2	
Particulate (t/y) (Before) (lb/hr)	0.05 (.15)	0.49 (2.2)	N/A	N/A	N/A	N/A	N/A	N/A	
Particulate (t/y) (After) (lb/yr)	0.60 (.21)	0.66 (3.0)	N/A	N/A	N/A	N/A	N/A	N/A	
Net Change (t/y)	0.55	0.17	--	--	--	--	--	--	<u>Particulates +0.72 tons/yr</u>

*Formaldehyde (t/y) (Before) (lb/hr)	N/A	0.04 (0.0009)	0.01 (0.0028)	N/A	0.04 (0.0009)	N/A	0.20 (0.05)	N/A	
Formaldehyde (t/y) (After) (lb/yr)	N/A	0.05 (0.012)	0.01 (0.002)	0.01 (0.002)	0.08 (0.018)	0.08 (0.018)	0.20 (0.05)	0.20 (0.05)	
Net Change (t/y)	N/A	0.01	0	0.01	0.04	0.08	0	0.20	<u>Formaldehyde +0.34 tons/yr</u>

NOTE: All emission estimates have been rounded to two significant figures

*Basis: Emission estimate calculations submitted with the 12/5/85 Certification of Completion

Revised 1/30/89
1425.BPM-2

Monsanto
2-2-89 upstate data

*** TITLE OF SOURCE & 7 ***

*** TEST OF MATPLU ***

>>>INPUT PARAMETERS<<<

OPTIONS

IF = 1, USE OPTION
IF = 0, IGNORE OPTION
IOPT(1) = 0 (GRAD PLUME RISE)
IOPT(2) = 0 (STACK DOWNWASH)
IOPT(3) = 0 (BUOY. INDUCED DISP.)
IOPT(4) = 1 (EXTRAPOLATED WIND)

METEOROLOGY

AMBIENT AIR TEMPERATURE = 293.00 (K)
MIXING HEIGHT = 2000.00 (M)
ANEMOMETER HEIGHT = 10.00 (M)
WIND EXTRAPOLATION EXPONENTS = A: .10, B: .15, C: .20
D: .25, E: .30, F: .30

RECEPTOR HEIGHT = .00 (M)

SOURCE

EMISSION RATE = 6.30E-03 (G/SEC)
STACK HEIGHT = 16.15 (M)
EXIT TEMP. = 299.67 (K)
EXIT VELOCITY = .00 (M/SEC)
STACK DIAM. = .61 (M)
VOLUME FLOW = 4.72E-04 (M**3/SEC)

>>>CALCULATED PARAMETERS<<<

VOLUMETRIC FLOW = 4.72E-04 (M**3/SEC)
BUOYANCY FLUX PARAMETER = .00 (M**4/SEC**3)

*** MAXIMUM CONCENTRATION FOR SOURCE & 7 ***

**** STACK TOP WINDS EXTRAPOLATED FROM 10.0 METERS ****

*** WIND SPEED AT 10.0 METER HEIGHT IS GIVEN HERE ***

STABILITY	WIND SPEED (M/SEC)	MAX CONC (UG/CU M)	DIST OF MAX (KM)	PLUME HT (M)
3	1.00	3.0521E+00	.160	16.2

**** CORRESPONDING SPATIAL DISTRIBUTION ****

DISTANCE (KM) CONCENTRATION (UG/M**3)

.1	1.8576E+00
.2	2.8313E+00
.3	1.9054E+00
.5	9.0586E-01
.7	5.1836E-01
1.0	2.7907E-01
1.5	1.3569E-01
2.0	8.0916E-02
3.0	3.8919E-02
5.0	1.5453E-02
7.0	8.4133E-03
10.0	4.4202E-03
15.0	2.1298E-03
20.0	1.2705E-03

30.0 6.3170E-04
50.0 3.4031E-04

** OVERALL MAXIMUM CONCENTRATION IS FOUND IN SOURCE & 6 ***

*** WIND SPEED AT 10.0 METER HEIGHT IS GIVEN HERE ***

STABILITY	WIND SPEED (M/SEC)	MAX CONC (UG/CU M)	DIST OF MAX (KM)	PLUME HT (M)
3	1.00	3.0521E+00	.160	16.2

(1) THE DISTANCE TO THE POINT OF MAXIMUM CONCENTRATION IS SO GREAT THAT THE SAME STABILITY IS NOT LIKELY TO PERSIST LONG ENOUGH FOR THE PLUME TO TRAVEL THIS FAR.

(2) THE PLUME IS CALCULATED TO BE AT A HEIGHT WHERE CARE SHOULD BE USED IN INTERPRETING THE COMPUTATION.

(3) NO COMPUTATION WAS ATTEMPTED FOR THIS HEIGHT AS THE POINT OF MAXIMUM CONCENTRATION IS GREATER THAN 50 KILOMETERS FROM THE SOURCE.

*** SPATIAL DISTRIBUTION OF WORST CONDITIONS ***
(CUMULATED FOR THE LAST 7 SOURCE(S))

DISTANCE (KM)	MAX CONC (UG/M**3)	STABILITY	WIND (M/S)
	<u>6.9277E+00</u>	2	1.00
.2	7.2459E+00	3	1.00
.3	6.6615E+00	4	1.00
.5	4.8478E+00	4	1.00
.7	4.6051E+00	6	1.00
1.0	4.4350E+00	6	1.00
1.5	3.3913E+00	6	1.00
2.0	2.5782E+00	6	1.00
3.0	1.6491E+00	6	1.00
5.0	9.0524E-01	6	1.00
7.0	5.9815E-01	6	1.00
10.0	3.8685E-01	6	1.00
15.0	2.3396E-01	6	1.00
20.0	1.6697E-01	6	1.00
30.0	1.0357E-01	6	1.00
50.0	5.8289E-02	6	1.00

Stop - Program terminated.

AAC for HCOH = $3.6 \mu\text{g}/\text{m}^3$ (24 hr/d operation)

HCOH impact (24 hr) = $6.93 \times 0.4 = 2.8 \mu\text{g}/\text{m}^3$

\therefore AAC not exceeded

February 2, 1989 UPDATE

MONSANTO PENSACOLA
 SANTOPRENE^R THERMOPLASTIC RUBBER
 COMPOUNDING FACILITY

EMISSION STACK GEOMETRY AND FLOW CHARACTERISTICS

STREAM	A	B	C1	C2	D1	D2	E1	E2
DESCRIPTION	#215 Bag Filter	#350 Dust Collector	Dryer Exhaust	Dryer Exhaust	Transfer Vent	Transfer Vent	Storage Bin Vent	Storage Bin Vent
Stack height (ft) <i>x.3048 = m</i> (above grade)	53 <i>16.2m</i>	42 <i>12.8</i>	47 <i>14.3</i>	47 <i>14.3</i>	52 <i>15.8</i>	52 <i>15.8</i>	53 <i>16.2</i>	53 <i>16.2</i>
Gas flow rate (DSCFM)	800	11,650	2000	2000	600	600	1600	1600
Water vapor content (%)	ambient	ambient	5%	5%	ambient	ambient	ambient	ambient
Stack diameter (ft) <i>x.3048</i> (inside diameter)	0.5 x 1.33 <i>0.28</i>	1.833 <i>0.56</i>	1.0 <i>0.3</i>	1.0 <i>0.3</i>	0.83 <i>0.25</i>	0.83 <i>0.25</i>	2.0 <i>0.61</i>	2.0 <i>0.61</i>
Gas exit temp. (°F)	ambient <i>294</i>	ambient <i>294</i>	122° <i>323</i>	122° <i>323</i>	ambient +10° <i>300</i>	ambient +10° <i>300</i>	ambient + 10° <i>300</i>	ambient + 10° <i>300</i>
Velocity (FPS) <i>x.3048</i>	20 <i>0.61</i>	74 <i>22.6</i>	42 <i>12.8</i>	42 <i>12.8</i>	18 <i>5.5</i>	18 <i>5.5</i>	N/A ^a <i>0</i>	N/A ^a <i>0</i>

E HCOH

NOTE:

Actual stack parameters and flow characteristics may vary slightly from nominal values.

^aNo applicable - flow is discharged horizontally, so no velocity plume rise effects.
 1425.BPM-15 Revised 1/30/89

$$0.5 \times 1.33 = \frac{\pi D^2}{4}$$

$$D^2 = \sqrt{\frac{4(0.5 \times 1.33)}{\pi}}$$

$$.3048 = 0.28 \text{ m}$$

Express mail

B 215 24455

1-19-89

Gonzalez, FL

Monsanto

file copy
RECEIVED
DER - MAIL ROOM

1989 JAN 20 AM 10:25

MONSANTO CHEMICAL COMPANY
P. O. Box 12830
Pensacola, Florida 32575-2830
Phone: (904) 968-7000

RECEIVED

JAN 20 1989

DER - BAQM

January 13, 1989

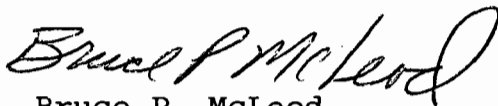
Mr. Clair Fancy
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32301

Dear Mr. Fancy:

Enclosed are four copies of an air pollution construction permit application for a Modification to the Santoprene^R Facility at the Monsanto Pensacola plant.

Also included is a check for \$200 to cover the application fee. I can be reached at (904) 968-8725 if desired.

Sincerely,



Bruce P. McLeod
Senior Specialist
Environmental Control

cc: J. G. Wiley - Monsanto

*copied: W. Hanks
E. Middleswart*

1442.BPM

Monsanto

WORKING FUND ACCOUNT
MONSANTO COMPANY
PENSACOLA, FLORIDA

72011079

62-20
311

01-18-89

\$200.00

EXACTLY 200.00 DOLLARS

PAY
TO THE
ORDER
OF

DEPARTMENT OF ENVIRONMENTAL REGULATION

Citibank (Delaware)

[Signature]
Maria A. Sabellano

MONSANTO COMPANY, PENSACOLA, FLORIDA

01-18-89

THE ATTACHED CHECK IS IN PAYMENT OF THE FOLLOWING:

72011079

DEPARTMENT OF ENVIRONMENTAL REGULATION

MEMO	DATE	INVOICE NO.	AMOUNT	DEDUCTIONS & DISCOUNT	NET
Santoprene Construction Permit - B. P. McLeod	01-18-89		\$200.00		\$200.00

DETACH BEFORE DEPOSITING

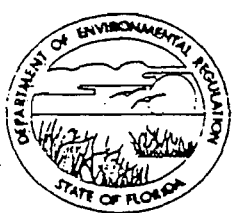
CH 142

\$200 pd
1-20-89

AC 17-159577

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
RECEIVED

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

JAN 20 1989

DER-BAQM

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Pollution [] New¹ [X] Existing¹
APPLICATION TYPE: [] Construction [] Operation [X] Modification
COMPANY NAME: Monsanto Company COUNTY: Escambia

Identify the specific emission point source(s) addressed in this application (i.e. Line
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Santo prene[®]
Thermoplastic Rubber Compounding Facility
SOURCE LOCATION: Street 3000 Old Chemstrand Rd city Gonzalez, FL 32560

UTM: East Zone 16,475.7 km North 3384.2 km

(corrected lat & long) Latitude 30° 35' 10" N Longitude 87° 14' 40" W

APPLICANT NAME AND TITLE: W. J. Board, Genl. Supt., Gov. Affairs/env Health & Safety
APPLICANT ADDRESS: P. O. Box 12830, Pensacola, FL 32575

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Monsanto Company

I certify that the statements made in this application for a modification 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 40J, 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: [Signature]
W. J. Board, Genl. Supt., Gov. Affairs/Env.
Name and Title (Please Type) Health & Safety
Date: 1/17/89 Telephone No. (904) 968-7350

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

See Florida Administrative Code Rule 17-2.100(57) and (104)

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 agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed

Bruce P. McLeod, P. E.
Bruce P. McLeod, P. E.

Name (Please Type)

Monsanto Company
Company Name (Please Type)

Company Name (Please Type)

P. O. Box 12830, Pensacola, FL 32575
Mailing Address (Please Type)

Mailing Address (Please Type)

Florida Registration No. 26956

Date: 1/17/89

Telephone No. (904) 968-8725

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.

Expansion of production capacity and capabilities.

- B. Schedule of project covered in this application (Construction Permit Application Only)
Start of Construction upon permit receipt Completion of Construction 24 months after permit receipt

- 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.)

Not applicable - no additional pollution controls required.

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

AC17-87408

AQ17-113404

AC17-143973

E. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wks/yr 52; if power plant, hrs/yr _____; if seasonal, describe: _____

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>N/A</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>N/A</u> |
| c. If yes, list non-attainment pollutants. _____ | <u>N/A</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? | <u>no</u> |
| a. If yes, for what pollutants? _____ | <u>N/A</u> |
| 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 justification 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		
SEE CONFIDENTIAL	ATTACHMENT 4			

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

1. Total Process Input Rate (lbs/hr): _____

2. Product Weight (lbs/hr): SEE CONFIDENTIAL ATTACHMENT 5

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	
SEE ATTACHMENT # 1							

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)
SEE ATTACHMENT 2				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not applicable			

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

Fuel Analysis:

Percent Sulfur: _____ 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.

SEE ATTACHMENT 3

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

Stack Height: _____ ft. Stack Diameter: _____ ft.
 Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.
 Water Vapor Content: _____ % Velocity: _____ 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: _____

NOT APPLICABLE

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

NOT APPLICABLE

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.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

NOT
APPLICABLE

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

- A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes No

Contaminant	Rate or Concentration

- B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

Yes No

Contaminant	Rate or Concentration

- C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

- D. Describe the existing control and treatment technology (if any).

- | | |
|---------------------------|--------------------------|
| 1. Control Device/System: | 2. Operating Principles: |
| 3. Efficiency:* | 4. Capital Costs: |

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height:

ft.

b. Diameter:

ft.

c. Flow Rate:

ACFM

d. Temperature:

°F.

e. Velocity:

FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Costs:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

- 1. Control Device:
- 2. Efficiency:¹
- 3. Capital Cost:
- 4. Useful Life:
- 5. Operating Cost:
- 6. Energy:²
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:
- a. (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

¹ Explain method of determining efficiency.

Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂ _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

Specify bubbler (B) or continuous (C).

MONSANTO PENSACOLA
SANTOPRENE[®] FACILITY
EMISSIONS SUMMARY

Attachment 1

ATTACHMENT 3

<u>Description</u>	<u>BinVnt Filter #215</u>	<u>Dust Col. #350</u>	<u>Pellet Dryer Vents</u>	<u>Pellet Dryer Vents (new)</u>	<u>Pellet Trnsfr Vents</u>	<u>Pellet Trnsfr Vents (new)</u>	<u>Strge. Bin Vents</u>	<u>Strge. Bin Vents (new)</u>	
STREAM	A	B	C1	C2	D1	D2	E1	E2	Total
Particulate (t/y) (Before) (lb/hr)	0.05 (.15)	0.49 (2.2)	N/A	N/A	N/A	N/A	N/A	N/A	
Particulate (t/y) (After) (lb/yr)	0.60 (.21)	0.66 (3.0)	N/A	N/A	N/A	N/A	N/A	N/A	
Net Change (t/y)	0.55	0.06	--	--	--	--	--	--	<u>Particulates +0.61 tons/yr</u>

*Formaldehyde (t/y) (Before) (lb/hr)	N/A	0.04 (0.0009)	0.01 (0.0028)	N/A	0.04 (0.0009)	N/A	0.20 (0.05)	N/A	
Formaldehyde (t/y) (After) (lb/yr)	N/A	0.05 (0.012)	0.01 (0.002)	0.01 (0.002)	0.08 (0.018)	0.08 (0.018)	0.20 (0.05)	0.20 (0.05)	
Net Change (t/y)	N/A	0	0	0.01	0.04	0.08	0	0.20	<u>Formaldehyde +0.33 tons/yr</u>

NOTE: All emission estimates have been rounded to two significant figures

*Basis: Emission estimate calculations submitted with the 12/5/85 Certification of Completion

SANTOPRENE[®] THERMOPLASTIC RUBBER
COMPOUNDING FACILITY

DUST COLLECTOR #215 - PARTICULATES

Abated Emissions

Actual Average Emissions

$$.02 \text{ grain/SCF} \times 1 \text{ lb/7000 grain} \times 800 \text{ ft}^3/\text{min} \times 60 \text{ min/hr} \times 8760 \text{ hr/year} = 1201 \text{ lb/yr} =$$

.60 tons/year

Actual Maximum (instantaneous)

$$.03 \text{ grain/ft}^3 \times 1 \text{ lb/7000 grains} \times 800 \text{ ft}^3/\text{min} \times 60 \text{ min/hr} =$$

0.21 lb/hr

Revised 1/6/89

MONSANTO PENSACOLA
SANTOPRENE[®] THERMOPLASTIC RUBBER
COMPOUNDING FACILITY

VENT STREAM B - FORMALDEHYDE

DUST COLLECTOR #350

Expected formaldehyde concentration = 0.2 ppm (vol)

Calculation of formaldehyde emissions

$11,650 \text{ SCFM} \times 0.2 \text{ ft}^3 \text{ HCHO}/10^6 \text{ ft}^3 \times 60 \text{ min.hr.} \times$
 $1 \text{ lb mole}/359 \text{ ft}^3 \text{ HCHO} \times 30 \text{ lbs HCHO}/1 \text{ lb mole} =$
0.012 lbs/hr HCHO $\times 24 \text{ hrs/day} \times 356 \text{ days/yr} \times$
 $1 \text{ ton}/2000 \text{ lbs} = \underline{0.05 \text{ ton HCHO/yr.}}$

Revised 1/6/89

SANTOPRENE[®] THERMOPLASTIC RUBBER
COMPOUNDING FACILITY

VENT STREAM B - PARTICULATES

BAG FILTER #350

Abated Emissions

Instantaneous maximum

$$1 \text{ lb}/7000 \text{ gr} \times .03 \text{ gr}/\text{ft}^3 \times 11,650 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} =$$

3.0 lbs hr.

Actual yearly emissions

$$*.0015 \text{ gr}/\text{ft}^3 \times 1 \text{ lb}/7000 \text{ gr} \times 11,650 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} \times \\ 24 \text{ hrs}/\text{day} \times 365 \text{ days}/\text{yr} \times 1 \text{ ton}/2000 \text{ lbs} = \underline{0.66 \text{ tons}/\text{year}}$$

*This bag filter services independent batch systems. The actual particulate emissions is an estimated long term average.

Revised 1/6/89

MONSANTO PENSACOLA
SANTOPRENE[®] THERMOPLASTIC RUBBER
COMPOUNDING FACILITY

VENT STREAM C1 - FORMALDEHYDE

PELLET DRYER VENT

Expected formaldehyde concentration = 0.2 ppm (vol)

Calculation of formaldehyde emissions

$2000 \text{ ft}^3 \text{ air/min} \times 0.2 \text{ ft}^3 \text{ HCHO}/10^6 \text{ ft}^3 \text{ air} \times$

$60 \text{ min/hr} \times 1 \text{ lb mole HCHO}/359 \text{ ft}^3 \text{ HCHO} \times$
 $30 \text{ lbs HCHO}/1 \text{ lb mole} =$

0.002 pph HCHO $\times 24 \text{ hrs/day} \times 365 \text{ days/year} \times$

$1 \text{ ton}/2000 \text{ lbs} = \underline{0.009 \text{ tons/yr HCHO}}$

Revised 1/6/89

MONSANTO PENSACOLA
SANTOPRENE[®] THERMOPLASTIC RUBBER
COMPOUNDING FACILITY

VENT STREAM C2 - FORMALDEHYDE

PELLET DRYER VENT

Expected formaldehyde concentration = 0.2 ppm (vol)

Calculation of formaldehyde emissions

$2000 \text{ ft}^3 \text{ air/min} \times 0.2 \text{ ft}^3 \text{ HCHO}/10^6 \text{ ft}^3 \text{ air} \times$

$60 \text{ min/hr} \times 1 \text{ lb mole HCHO}/359 \text{ ft}^3 \text{ HCHO} \times 1 \text{ lb mole HCHO} \times$
 $30 \text{ lbs HCHO}/1 \text{ lb mole} =$

0.002 pph HCHO $\times 24 \text{ hrs/day} \times 365 \text{ days/year} \times$

$1 \text{ ton}/2000 \text{ lbs} = \underline{0.009 \text{ tons/yr HCHO}}$

Revised 1/6/89

MONSANTO PENSACOLA
SANTOPRENE[®] THERMOPLASTIC RUBBER
COMPOUNDING FACILITY

VENT STREAM D1 - FORMALDEHYDE

PELLET TRANSFER VENT

Expected formaldehyde concentration = 6.0 ppm (vol)

Calculation formaldehyde emissions

$600 \text{ ft}^3/\text{min} \times 6 \text{ ft}^3 \text{ HCHO}/10^6 \text{ ft}^3 \text{ air} \times 60 \text{ min/hr} \times$

$1 \text{ lb mole}/359 \text{ ft}^3 \text{ HCHO} \times 30 \text{ lbs HCHO}/1 \text{ lb mole} =$

0.018 lb/hr $\times 24 \text{ hrs/day} \times 365 \text{ days/yr} \times 1 \text{ ton}/2000 \text{ lb} =$

0.08 ton/year

MONSANTO PENSACOLA
SANTOPRENE[®] THERMOPLASTIC RUBBER
COMPOUNDING FACILITY

VENT STREAM D2 - FORMALDEHYDE

PELLET TRANSFER VENT

Expected formaldehyde concentration = 6.0 ppm (vol)

Calculation formaldehyde emissions

$600 \text{ ft}^3/\text{min} \times 6 \text{ ft}^3 \text{ HCHO}/10^6 \text{ ft}^3 \text{ air} \times 60 \text{ min/hr} \times$

$1 \text{ lb mole}/359 \text{ ft}^3 \text{ HCHO} \times 30 \text{ lbs HCHO}/1 \text{ lb mole} =$

0.018 lb/hr $\times 24 \text{ hrs/day} \times 365 \text{ days/yr} \times 1 \text{ ton}/2000 \text{ lb} =$

0.08 ton/year

MONSANTO PENSACOLA
SANTOPRENE[®] THERMOPLASTIC RUBBER

VENT STREAM E1 - FORMALDEHYDE

STORAGE BIN VENT

Average flow rate 1600 CFM

Estimated formaldehyde concentration = 6 ppm (u)

$$1600 \frac{\text{ft}^3 \text{ air}}{\text{min}} \times \frac{60 \text{ min}}{\text{hr}} \times \frac{6 \text{ ft}^3 \text{ form}}{10^6 \text{ ft}^3 \text{ form}} \times \frac{1 \text{ lb mole form}}{359 \text{ ft}^3 \text{ form}}$$

$$\times \frac{30 \text{ lb form}}{1 \text{ lb mole}} = \underline{\underline{0.05 \text{ lb formaldehyde}}}$$

$$= \underline{\underline{0.2 \text{ tons formaldehyde}}}$$

year

MONSANTO PENSACOLA
SANTOPRENE[®] THERMOPLASTIC RUBBER
VENT STREAM E2 - FORMALDEHYDE

STORAGE BIN VENT

Average flow rate 1600 CFM

Estimated formaldehyde concentration = 6 ppm (u)

$$1600 \frac{\text{ft}^3 \text{ air}}{\text{min}} \times \frac{60 \text{ min}}{\text{hr}} \times \frac{6 \text{ ft}^3 \text{ form}}{10^6 \text{ ft}^3 \text{ form}} \times \frac{1 \text{ lb mole form}}{359 \text{ ft}^3 \text{ form}}$$

$$\times \frac{30 \text{ lb form}}{1 \text{ lb mole}} = \underline{\underline{0.05 \text{ lb formaldehyde}}}$$

$$= \underline{\underline{0.2 \text{ tons formaldehyde}}}$$

year

ATTACHMENT 2
CONTROL DEVICE DESCRIPTIONS
SANTOPRENE[®] MANUFACTURING

ATTACHMENT 2
CONTROL DEVICE DESCRIPTIONS
SANTOPRENE[®] MANUFACTURING

Dust Collector #215

Young Industries

Mfg. Part No. 706963

Filter Area 163 sq. ft.

Dust Collector #350

Micro-pulsair Inc.

Mfg. Part No. 17426

Filter Area 603 sq. ft.

ATTACHMENT 3
EMISSION STACK GEOMETRY
AND
FLOW CHARACTERISTICS

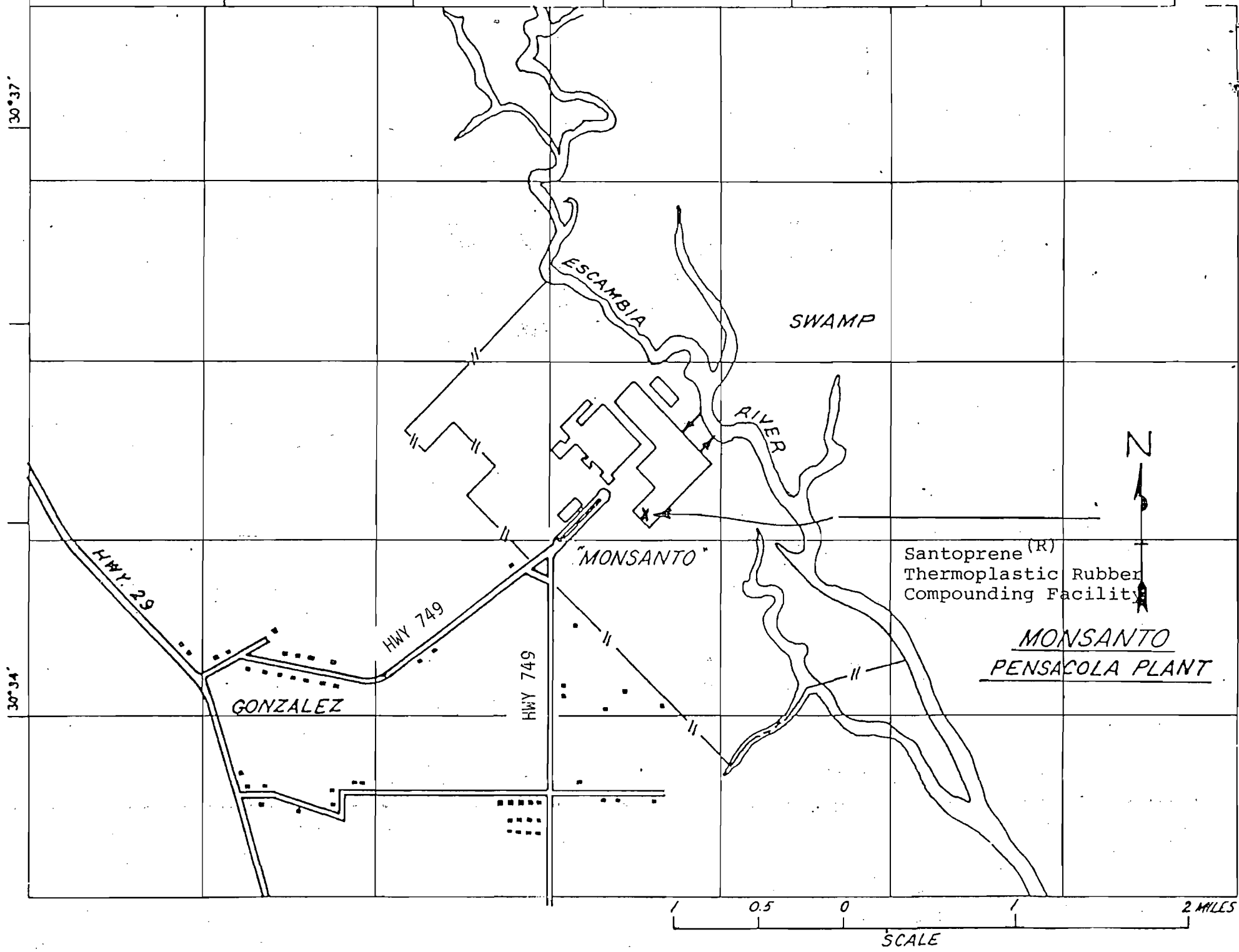
MONSANTO PENSACOLA
 SANTOPRENE[®] THERMOPLASTIC RUBBER
 COMPOUNDING FACILITY

EMISSION STACK GEOMETRY AND FLOW CHARACTERISTICS

STREAM	A	B	C1	C2	D1	D2	E1	E2
DESCRIPTION	#215 Bag Filter	#350 Dust Collector	Dryer Exhaust	Dryer Exhaust	Transfer Vent	Transfer Vent	Storage Bin Vent	Storage Bin Vent
Stack height (ft)	40	40	40	40	40	40	40	40
Gas flow rate (DSCFM)	800	11,650	2000	2000	600	600	1600	1600
Water vapor content (%)	ambient	ambient	5%	5%	ambient	ambient	ambient	ambient
Stack diameter (ft)	.42	1.5	.83	.83	.33	.33	2 ft	2 ft
Gas exit temp. (°F)	ambient	ambient	122°F	122°F	ambient +10°F	ambient +10°F	ambient +10°F	ambient +10°F
Velocity (FPS)	73	81	83	83	117	117	94	94

NOTE:

Actual stack parameters and flow characteristics may vary slightly from nominal values.



30°37'

30°34'

HWY 29

GONZALEZ

HWY 749

HWY 749

ESCAMBIA

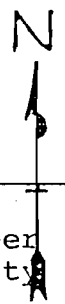
"MONSANTO"

RIVER

SWAMP

Santoprene^(R)
Thermoplastic Rubber
Compounding Facility

MONSANTO
PENSACOLA PLANT



1 0.5 0 1 2 MILES
SCALE

MONSANTO COMPANY
REGIONAL LOCATION
MAP

DIST. BY
CHAMPION MAP ENTERPRISES, INC.
6220 South Orange Blossom Trail
Suite 117
Orlando, Florida 32819
(305) 855-5500

