

Check Sheet

Company Name: Monsanto Chemical Company
Permit Number: AC 17-143973
PSD Number: _____
Permit Engineer: _____

Application:

- | | |
|--|--------------------------|
| <input type="checkbox"/> Initial Application | Cross References: |
| <input type="checkbox"/> Incompleteness Letters | <input type="checkbox"/> |
| <input type="checkbox"/> Responses | <input type="checkbox"/> |
| <input type="checkbox"/> Waiver of Department Action | <input type="checkbox"/> |
| <input type="checkbox"/> Department Response | |
| <input type="checkbox"/> Other | |

Intent:

- Intent to Issue
 - Notice of Intent to Issue
 - Technical Evaluation
 - BACT or LAER Determination
 - Unsigned Permit
- Correspondence with:
- EPA
 - Park Services
 - Other
- Proof of Publication
 - Petitions - (Related to extensions, hearings, etc.)
 - Waiver of Department Action
 - Other

*modification to
thermoplastic rubber compound facility*

Final

Determination:

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

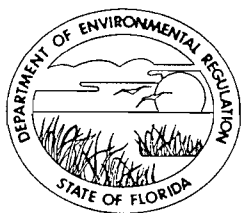
Post Permit Correspondence:

- Extensions/Amendments/Modifications
- Other

file

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. W. J. Board
General Superintendent
Monsanto Chemical Company
Post Office Box 12830
Pensacola, Florida 32575

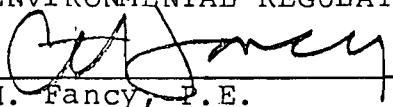
April 8, 1988

Enclosed is permit No. AC 17-143973, for Monsanto Chemical Company to modify the Santoprene plant located at their chemical facility near Gonzalez in 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:

Jack Preece, NW Dist.
Bruce McLeod, P.E.

Final Determination

Monsanto Company
Escambia County
Pensacola, Florida

Thermoplastic Rubber Compounding Facility Modification
Permit No. AC 17-143973

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

March 31, 1988

Final Determination

The Technical Evaluation and Preliminary Determination for the modification to Monsanto Chemical Company's Santoprene® plant (File No. AC 17-143973) which is located near Gonzalez, Escambia County, Florida, was distributed on February 23, 1988.

Copies of the evaluation were available for public inspection at the Department's offices in Pensacola and Tallahassee. The Notice of Proposed Agency Action for this permit was published in the Pensacola News Journal on March 1, 1988.

The applicant submitted comments on the evaluation in a letter dated February 29, 1988. No other comments were received. Following is a summary of the applicant's comments and the Department's response.

1. Comment: The applicant said the compressed air system is not being installed to cool the products as stated in the Technical Evaluation and Preliminary Determination. Its actual purpose was proprietary information.

Response: The Department accepts the applicant's statement that the compressed air system is not used to cool the product and has reworded the description of the proposed modification on the first page of the permit.

2. Comment: Delete Specific Condition No. 1 which limits production of this plant because emission limits are not based on the product throughput rate.

Response: The Department believes that emissions are a function of the product throughput rate and has retained the rate originally proposed in the application for this plant that was submitted to the Department on May 22, 1984. If the permittee can document that emissions are not a function of production, the Department will revise this construction permit. The Department will need to know and regulate the plant parameters that do affect emissions. If the applicant desires to operate the plant at a higher emission rate, a new application needs to be submitted to the Department for processing.

3. Comment: The applicant stated that the visible emission standard authorized by the regulations for the material handling operation is 20 percent opacity instead of the 5 percent opacity listed in Specific Condition No. 3 of the proposed permit. They are willing to test emissions if the opacity exceeds 5 percent opacity.

Response: Specific Condition No. 3 has been reworded to clarify our intent that air pollution controls (reasonable precautions) may be required for any uncontrolled part of a material handling system that has visible emissions (emissions in excess of 5 percent opacity). The Department believes that visible emissions above 5 percent opacity may indicate the operation of a source of unconfined emissions and is reserving the right to require the applicant to apply reasonable precautions to such a source.

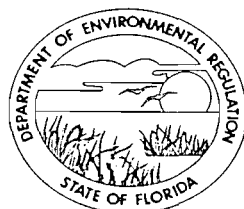
4. Comment: The applicant requested that Specific Condition No. 6 be reworded to limit formaldehyde emissions from the plant instead of specifying an ambient air concentration for formaldehyde.

Response: The Department has changed Specific Condition No. 6 as requested by the applicant.

The final action of the Department will be to issue the permit to construct as proposed in the Technical Evaluation and Preliminary Determination except for the changes discussed above.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

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

Permit Number: AC 17-143973
Expiration Date: March 1, 1990
County: Escambia
Latitude/Longitude: 30° 35' 28" N
87° 14' 25" W
Project: Thermoplastic Rubber
Compounding Facility
Modification

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 a 3 TPH thermoplastic rubber compounding facility by adding a 1600 dscfm compressed air system to the pelletized rubber storage bin. The plant consists of raw material (rubber, plastic resin, inorganic filler, hydrocarbon oil, organic additives, and inorganic additives) receiving, unloading, storage, and transfer facilities; a blend preparation section having independent batch systems; one extruder line; an unheated pellet dryer; and a pellet handling and packaging section. Particulate matter emissions are controlled with a dust collector and cloth filters. Formaldehyde emissions are controlled by process design. The UTM coordinates of this plant are Zone 16, 475.7 km E and 3384.2 km N.

Construction shall be in accordance with the permit application and plan, documents, amendments, and drawings submitted, except as noted in the Preliminary Determination or in the General and Specific Conditions.

Attachments are as follows:

1. Application dated January 5, 1988.
2. DER letter dated January 15, 1988.
3. Monsanto letter dated January 29, 1988.
4. Monsanto letter dated February 29, 1988.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-143973
Expiration Date: March 1, 1990

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 17-142980
Expiration Date: January 1, 1989

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 noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-143973
Expiration Date: March 1, 1990

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or 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 17-143973
Expiration Date: March 1, 1990

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. Thermoplastic rubber production shall not exceed 6,000 lbs/hr.
2. The facility may be operated continuously, 8,760 hrs/year.
3. Additional air pollution control systems or reasonable precautions may be required if visible emissions from any uncontrolled part of the pelletized material handling operations at this facility exceed 5 percent opacity (6 minute average).
4. The facility shall not allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-143973
Expiration Date: March 1, 1990

SPECIFIC CONDITIONS:

5. Particulate matter emissions from the blend preparation dust collector No. 350 shall not exceed 2.2 lbs/hr.

6. Formaldehyde emissions from the thermoplastic rubber compounding facility shall not exceed the following:

Stream	A	B	C	D	E
Description	Bin Vent Filter (215)	Blend Preparation Dust Collector (350)	Pellet Drier Blower	Pellet Transfer Blower	Storage Bin Vent (proposed)
Formaldehyde Emissions	0 lbs/hr (0 TPY)	0.09 lb/hr (0.38 TPY)	0.028 lbs/hr (0.12 TPY)	0.1 lbs/hr (0.39 TPY)	0.05 lbs/hr (0.02 TPY)

7. A visible emissions test by DER Method 9, as described in Rule 17-2.700, FAC, 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 or design capacity, whichever is lower, prior to the expiration of this construction permit. The Northwest District shall be given at least 15 days prior notice before the scheduled compliance tests.

8. If the visible emissions from the bin vent bag filter (No. 215), the blend preparation dust collector (No. 350), the drier blower (stream C), the pellet transfer blower (stream D) or the compressed air system (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. Prior to the expiration of this construction permit, formaldehyde emissions for the compressed air system (Stream E) shall be measured while the plant is operating near its permitted capacity.

10. The applicant will demonstrate compliance with the conditions of this construction permit and submit a complete application for an operating permit to the Northwest District at least 90 days prior to the expiration date of this permit, or 45 days after placing the compressed air system in service, whichever date occurs first. The applicant may continue to operate in compliance with all terms of this construction permit until its expiration or until issuance of an operating permit.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-143973
Expiration Date: March 1, 1990

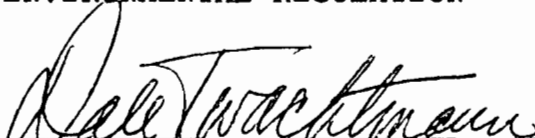
SPECIFIC CONDITIONS:

11. Any permit to operate issued for this facility shall require Monsanto Company to submit to the Northwest District office, as a minimum, the following:

- a. A description of any physical or operational changes to the facility that may affect the emissions of any air pollutant from it.
- b. A recent visible emissions tests report on streams A through E as shown in the application.

Issued this 6 day of April, 1988

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION


Dale Twachtman, Secretary



Interoffice Memorandum

For Routing To Other Than The Addressee

To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

TO: Dale Twachtmann
FROM: Howard L. Rhodes *HLR*
SUBJ: Approval of Monsanto Chemical Company's Santoprene® Plant Modification.
State Construction Permit Number: AC 17-143973
DATE: March 31, 1988

Attached for your approval and signature is a permit prepared by Central Air Permitting for the above mentioned company to modify the Santoprene® plant located at their chemical facility near Gonzalez in Escambia County, Florida. The applicant submitted comments during the comment period that were addressed in the Final Determination. Note that the Bureau was not in agreement with some of the applicant's comments.

Day 90, after which this permit will be issued by default, is April 13, 1988.

I recommend your approval and signature.

HLR/aqm/wh
attachments

RECEIVED
APR 6 1988

Office of the Secretary

RECEIVED

APR 06 1988

DER-BAQM

Monsanto

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

VIA OVERNIGHT MAIL

March 7, 1988

RECEIVED

MAR 8 1988

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 AC17-143973, Santoprene^R Manufacturing.

Please issue this construction permit as soon as possible.

Sincerely,



B. P. McLeod, Specialist
Environmental Control

Attachment

cc: J. G. Wiley, Monsanto, Pensacola

Copied: Willard Namba } 3-11-88 (mg)
Ed Middleman }

140C.BPM

B3376113

PM
March 7, 1988
Gonzalez, JH

State of Florida
Department of
Environmental
Regulation

File Copy

PENSACOLA News Journal

PUBLISHED DAILY
PENSACOLA, ESCAMBIA COUNTY, FLORIDA

RECEIVED

State of Florida,
County of Escambia.

MAR 8 1988

DER-BAQM

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

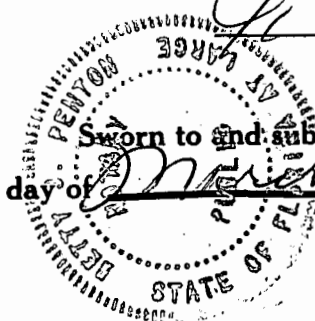
Intent

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

March 1, 1988

Affiant further say that the said The Pensacola News Journal is a newspaper published at Pensacola, in said Escambia 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 corporation 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 2nd day of March, A.D., 1988

Betty J. Henton
NOTARY PUBLIC.

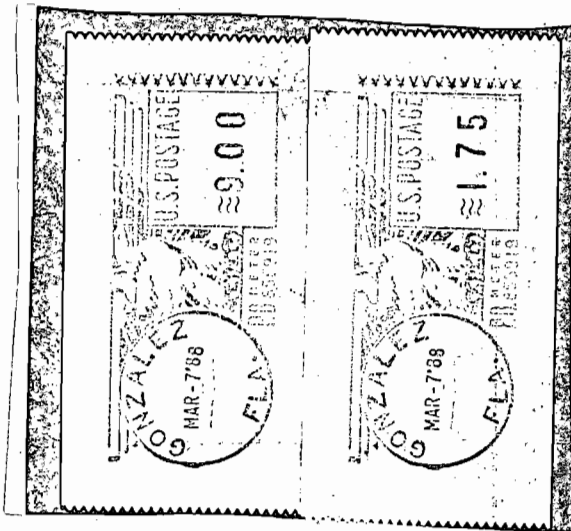
My Commission Expires October 26, 1997

Notice of Intent

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Monsanto Company to install/construct a compressed air system to be used in conjunction with their existing thermoplastic rubber (Santoprene) compounding facility located at Monsanto's chemical plant that is near State Road 749, Gonzalez, Escambia County, Florida. The increased emissions from this modification are insignificant. A best available control technology determination was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapter 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to any administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.



POST OFFICE TO ADDRESSEE

EXPRESS MAIL
NEXT DAY SERVICE



B 33761113

For Postal Use

ORIGIN	Date In: 3/7/88	Postage: \$10.75
Post Office ZIP Code: 32560	Time In: 11:00 A.M.	Return Receipt Fee: \$
Initials of Receiving Clerk: M.F.	Weight: 2 lbs. oz.	Total Postage & Fees: \$10.75
<input checked="" type="checkbox"/> Accepted for next day delivery. <input type="checkbox"/> Accepted for this destination after deposit deadline for next day delivery therefore, for delivery by second day. <small>(Consult your local Express Mail Next Day Service directory for deposit deadlines for different destinations.)</small>		
<input type="checkbox"/> International On Demand: Country Code _____		

ACCEPTANCE

Account Number
(Using an authorized number indicates postage and fees paid.)
Express Mail Corporate Account No.: _____
Federal Agency Control No.: _____

For Customer Use

FROM:

B P MCLEOD
MONSANTO
P O BOX 12830
PENSACOLA FL 32575

DESTINATION	Date of Delivery: 3/8/88	Time of Delivery: 11:54 A.M.
<input checked="" type="checkbox"/> Signature of Addressee or Agent: L. L. Man		
DELIVERY WAS ATTEMPTED	Date: _____	Time: _____ A.M. / P.M.
Signature of Delivery Employee: [Signature]		
WAIVER OF SIGNATURE AND INDEMNITY	I wish delivery to be made without obtaining the signature of the addressee or the addressee's agent and I authorize the delivery employee to sign that the shipment was delivered and understand that the signature of the delivery employee will constitute valid proof of delivery. SIGNED: _____	

ADDRESSEE'S COPY

TO: Telephone Number: _____

MR C H FANCY P E DEPUTY CHIEF
BUREAU OF AIR QUALITY MANAGEMENT
DPT OF ENVIRONMENTAL REGULATION
2600 BLAIR STONE ROAD
TALLAHASSEE FL 32301-8141

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

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

Dept. of Environmental
Regulation
160 Governmental Center
Pensacola Florida
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.

LEGAL NO. 334060 1T
MAR. 1, 1988

To: File

From: Willard Harbo

Date: 3/2/88

SUBJ: Monsanto Santoprene Public Notice

Change in wording of the public notice requested in Monsanto's 2/29/88 letter as noted below was approved. Left message for Bruce McLeod that it was approved on 3/2/88.

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Monsanto Company to install/construct a compressed air system to ~~cool the product at~~ ^{be used in conjunction with} their existing thermoplastic rubber (Santoprene®) compounding facility located at Monsanto's chemical plant that is near State Road 749, Gonzalez, Escambia County, Florida. The increased emissions from this modification are insignificant. A best available control technology determination was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

PM
Express Mail
333761116
Gonzalez, FL
29 Feb. 1988

Monsanto

File Copy

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

RECEIVED

MAR 1 1988

DER-BAQM

VIA OVERNITE MAIL

February 29, 1988

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Thomas:

The following comments pertain to the Santoprene^R proposed permit modification, DER file No. AC17-143973, transmitted to Monsanto via the cover letter from C. H. Fancy to W. J. Board, dated February 22, 1988.

1. Several places in the technical evaluation preliminary determination and proposed permit the proposed compressed air system is described as used for cooling purposes. This is incorrect. The purpose of the compressed air system is proprietary information. The actual purpose of the air has no bearing upon the information contained in the construction permit application.

With your permission, I will modify the notice of intent so that the first paragraph reads as follows:

"The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Monsanto Company to install/construct a compressed air system to be used in conjunction with their existing thermoplastic rubber (Santoprene^R) compounding facility located at Monsanto's chemical plant that is near State Road 749, Gonzalez, Escambia, Florida."

If this sentence is not sufficiently descriptive for purposes of the public notice, please call me.

2. Specific Condition 1 specifies a maximum production rate of 6,000 pounds per hour. It is requested that this condition be deleted because emission limitations are not based on product throughput rate. Particulate and formaldehyde emission limitations are addressed in Specific

1099.BPM

POST OFFICE TO ADDRESSEE

EXPRESS MAIL
NEXT DAY SERVICE



B 33761116

For Postal Use

ORIGIN	Date In: 3/1/88	Postage \$10.75
Post Office ZIP Code: 32502	Time In: 7:45 P.M.	Return Receipt Fee \$
Initials of Receiving Clerk: [Signature]	Weight: 2 lbs. 0 oz.	Total Postage & Fees \$20.75

Accepted for next day delivery.

ACCEPTANCE

Accepted for this destination after deposit deadline for next day delivery therefore, for delivery by second day.

(Consult your local Express Mail Next Day Service directory for deposit deadlines for different destinations.)

International On Demand: Country Code

For Customer Use

Account Number
(Using an authorized number indicates postage and fees paid.)

Express Mail Corporate Account No.: [Redacted]

Federal Agency Control No.: [Redacted]

FROM:

B P MCLEOD
MONSANTO
P O BOX 12830
PENSACOLA FL 32575

DESTINATION	Date of Delivery: 3/1	Time of Delivery: 11:20 A.M.
X Signature of Addressee or Agent: [Signature]		
DELIVERY WAS ATTEMPTED	Date:	Time: A.M. P.M.
Signature of Delivery Employee: [Signature]		
WAIVER OF SIGNATURE AND INDEMNITY	I wish delivery to be made without obtaining the signature of the addressee or the addressee's agent and I authorize the delivery employee to sign that the shipment was delivered and understand that the signature of the delivery employee will constitute valid proof of delivery.	
SIGNED: [Signature]		

ADDRESSEE'S COPY

TO: Telephone Number: _____

MR. BILL THOMAS
BUREAU OF AIR QUALITY MFT
DPT OF ENVIRONMENTAL REGULATION
2600 BLAIR STONE ROAD
TALLAHASSEE FL 32301

Label 11-B (Jan. 1987) ★ U.S.G.P.O.-1987-158-386; 164-824; 164-825



3-1-88

~~CH~~ → FYI

(4)

Conditions 5 and 6. Reporting of physical or operation changes that may affect emissions of air pollutants is required in Specific Condition 11. Additionally, the definition of modification, for which a construction permit application is required, does not prohibit increases in production rates as long as actual emissions do not increase. Even though the current permit contains a production rate limitation, based upon the preceding comments, it is believed that a production limitation in the Specific Conditions is not necessary and is not appropriate and would confine the operations of the Santoprene^R facility beyond the intent of the current regulations. Therefore, it is requested that Specific Condition 1 be deleted.

3. Specific Condition 3 establishes five percent opacity as a visible emissions standard. The applicable visible emissions limit in Florida Chapter 17-2 is twenty percent opacity. Use of a five percent opacity condition as a waiver from particulates or formaldehyde emissions testing as described in Specific Condition 8 would be a reasonable limitation.
4. Specific Condition 6 establishes a ground level ambient air standard for formaldehyde based on DER guideline calculations. There is no current ambient air standard for formaldehyde and applying DER's internal guidance calculation values as ambient limits is inappropriate. A more appropriate limitation for formaldehyde would be a pounds per hour limitation at the storage bin vent. Since DER has evaluated the emissions proposed by Monsanto and has determined that they would not exceed DER's guidance level ambient air concentrations, limiting emissions at the bin discharge would assure compliance with DER's ground level guidance concentrations. Therefore, it is requested that Specific Condition 6 be rewritten to address pounds per hour emissions of formaldehyde rather than a plant property boundary ambient air concentration.

Thank you for your consideration of these comments. If you would like to discuss them further, I can be reached at 904/968-8725.

Sincerely,



Bruce P. McLeod
Senior Specialist
Environmental Control

c: J. G. Wiley, Monsanto, Pensacola

Copied: Willard Hanks }
CHFIBT } 3-1-88 mm
Ed Middleswart }

Express Mail
333761116
Gonzalez, FL
29 Feb. 1988

Monsanto

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

RECEIVED

MAR 1 1988

DER-BAQM

VIA OVERNITE MAIL

February 29, 1988

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Thomas:

The following comments pertain to the Santoprene^R proposed permit modification, DER file No. AC17-143973, transmitted to Monsanto via the cover letter from C. H. Fancy to W. J. Board, dated February 22, 1988.

1. Several places in the technical evaluation preliminary determination and proposed permit the proposed compressed air system is described as used for cooling purposes. This is incorrect. The purpose of the compressed air system is proprietary information. The actual purpose of the air has no bearing upon the information contained in the construction permit application.

With your permission, I will modify the notice of intent so that the first paragraph reads as follows:

"The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Monsanto Company to install/construct a compressed air system to be used in conjunction with their existing thermoplastic rubber (Santoprene[®]) compounding facility located at Monsanto's chemical plant that is near State Road 749, Gonzalez, Escambia, Florida."


If this sentence is not sufficiently descriptive for purposes of the public notice, please call me.

- NOV*
2. Specific Condition 1 specifies a maximum production rate of 6,000 pounds per hour. It is requested that this condition be deleted because emission limitations are not based on product throughput rate. Particulate and formaldehyde emission limitations are addressed in Specific

1099.BPM

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)↑ ↑(Extra charge)↑

<p>3. Article Addressed to:</p> <p>Mr. W. J. Board General Superintendent Monsanto Chemical Company P.O. Box 12830 Pensacola, FL 32575</p>	<p>4. Article Number</p> <p>P 274 010 371</p> <p>Type of Service:</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail</p> <p>Always obtain signature of addressee or agent and DATE DELIVERED.</p>
<p>5. Signature - Addressee</p> <p>X</p>	<p>8. Addressee's address (ONLY if requested and fee paid)</p> 
<p>6. Signature - Agent</p> <p>X <i>Deliver Favorite</i></p>	
<p>7. Date of Delivery</p>	

Form 3811, Mar. 1987

★ U.S.G.P.O. 1987-178-268

DOMESTIC RETURN RECEIPT

P 274 010 371
RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

★ U.S.G.P.O. 1985-480-794

Mr. W.J. Board, Gen. Supt. Monsanto Chemical Company <small>Street and No.</small> P.O. Box 12830 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: 4/11/88 Permit: AC 17-143973	

PS Form 3800, June 1985

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.

3. Article Addressed to: Mr. W.J. Board General Superintendent Monsanto Company P.O. Box 12830 Pensacola, FL 32575	4. Article Number P 274 010 114 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 Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>Delia Favorite</i>	
7. Date of Delivery FEB 24 1988	

PS Form 3811, Feb. 1986

DOMESTIC RETURN RECEIPT

P 274 010 114

RECEIPT FOR CERTIFIED MAIL

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

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

PS Form 3800, June 1985

Write Board, Gen. Supt.	
Monsanto Company	
Street and No. P.O. Box 12830	
P.O., State and ZIP Code Pensacola, FL 32575	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
Mailed: 02/23/88	
Permit: AC 17-143973	

File Copy

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

February 22, 1988

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

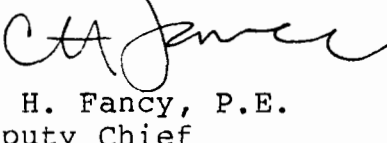
Mr. W. J. Board
General Superintendent
Monsanto Company
Post Office Box 12830
Pensacola, Florida 32575

Dear Mr. Board:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for Monsanto Company to modify the existing Santoprene® plant by installing a compressed air system to cool the product.

Please submit, in writing, any comments which 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/bm

Attachments

cc: Jack Preece, NW District
Bruce McLeod, P.E., Monsanto

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Applications for Permits by:

Monsanto Company
Post Office Box 12830
Pensacola, Florida 32575

DER File No. AC 17-143973

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 applications specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Monsanto Company, applied on January 6, 1988, to the Department of Environmental Regulation for a permit to construct a compressed air system to cool the product at their existing thermoplastic rubber (Santoprene®) compounding facility. This facility is located in Monsanto's existing chemical plant that is near State Road 749, Gonzalez, Escambia County, Florida.

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

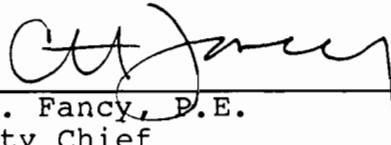
Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit applications. The notice must be published one time only in a section of a major local newspaper of general circulation in the county in which the project is located and within thirty (30) days from receipt of this intent. Proof of publication must be provided to the Department within seven days of publication of the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permits with the attached conditions unless 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. Petitions must comply with the requirement of Florida Administrative Code Rules 17-103.155 and

28-5.201 (copy enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. 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, concerning the subject permit application. Petitions which are not filed in accordance with the above provisions will be dismissed.

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:

Jack Preece, NW District
Bruce McLeod, P.E., Monsanto

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

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 2-23-88.

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 J. Weir
Clerk

2-23-88
Date

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Monsanto Company to install/construct a compressed air system to cool the product at their existing thermoplastic rubber (Santoprene®) compounding facility located at Monsanto's chemical plant that is near State Road 749, Gonzalez, Escambia County, Florida. The increased emissions from this modification are insignificant. A best available control technology determination was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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:

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

Dept. of Environmental Regulation
Northwest District
160 Governmental Center
Pensacola, Florida 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

Thermoplastic Rubber Compounding Facility Modification

File No. AC 17-143973

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

February 18, 1988

I. General Information

A. Applicant

Monsanto Chemical Company
P. O. Box 12830
Pensacola, Florida 32575

B. Project and Location

Monsanto Company proposed to modify their thermoplastic rubber (Santoprene®) compounding facility (SIC 2821) that is located near State Road 749, Gonzalez, Escambia County, Florida. The modification involves installing a system to blow compressed air through the pelletized rubber storage bin to cool the product. The UTM coordinates of this site are Zone 16, 475.7 km E and 3384.2 km N. The application was considered complete on receipt of Monsanto's January 29, 1988, letter (February 2, 1988).

C. Process

A description of the 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.

The proposed modification being addressed in this evaluation is the installation of a system to blow 1600 dscfm of compressed air through the pelletized rubber storage bin. The air will remove heat and traces of moisture and formaldehyde from the product. No air pollution control equipment will be installed on the new vent. Emissions from this new system are estimated to be 0.05 lbs/hr (0.2 TPY) formaldehyde.

II. Rule Applicability

A. State Regulations

The proposed project, installation of a compressed air blower system to a storage bin in a rubber compounding facility (SIC 2821) at an existing plant, is subject to preconstruction review under the provisions of Chapter 403, FS, and Chapter 17-2, FAC.

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

The facility is a major source of volatile organic compounds (Rule 17-2.100, FAC) 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.

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

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

The facility is subject to Rule 17-2.520, FAC, Sources not subject to PSD or nonattainment requirements. Control of emissions shall be based on Rule 17-2.610(1)(a), FAC.

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 install when the plant was built.

This application proposes to pass 1600 dscfm of compressed air through the pelletized rubber storage bin to cool the product. Based on formaldehyde test results obtained on the original plant, the applicant believes the proposed air stream discharged from this operation will contain 6 ppm formaldehyde resulting in an emission of 0.05 lbs/hr (0.2 TPY).

A summary of the permitted emissions for the total plant, including the proposed compressed air cooling vent (E), is shown in Table 1. Emission test results for the original plant show the formaldehyde emissions to be lower than the listed emissions.

IV. Ambient Air Quality

The plant emits particulate matter and formaldehyde. The permitted particulate matter emissions from the plant will not have a significant impact on the ambient air quality.

Formaldehyde is classified as a toxic air pollutant. It has been determined that the public health will not be endangered if the concentration of a toxic pollutant in the air does not exceed an acceptable ambient concentration (AAC) determined by the following formula.

$$AAC = \frac{40}{X} \frac{1}{Y} \quad (\text{TWA-TLV})$$

where,

AAC = acceptable ambient air concentration

X = 40 or the hours per week the plant operates, whichever is larger

Y = 100 for Cat-A substances (acutely toxic) and,
50 for Cat-B substances

TWA-TLV = threshold limit values

For formaldehyde emissions from a continuous operation,

$$AAC = \frac{40}{168} \frac{1}{100} 1.5 \text{ mg/m}^3 = 3.6 \times 10^{-3} \text{ mg/m}^3$$

Calculating the impact of the formaldehyde emissions with the data furnished in this application shows the ambient air concentration resulting from operation of the modified plant will be less than the AAC.

V. Conclusion

Based on the information contained in the application, the Department has concluded that the applicant can modify the existing thermoplastic rubber compounding facility as proposed and operate in compliance with all applicable air pollution control regulations. The Department proposes to issue a construction permit to modify the Santoprene® plant as proposed by the applicant. The General and Specific Conditions listed in the proposed permit (attached) will assume compliance of the plant with the Department's air pollution control regulations.

Table 1

Thermoplastic Rubber Compounding Facility

Stream	A	B	C	D	E
Description	Bin Vent Filter (215)	Blend Preparation Dust Collector (350)	Pellet Drier Blower	Pellet Transfer Blower	Storage Bin Vent (proposed)
Particulate Matter Emissions	0.15 lbs/hr (0.05 TPY)	2.2 lbs/hr (0.49 TPY)			
Formaldehyde Emissions		0.09 lbs/hr (0.38 TPY)	0.028 lbs/hr (0.12 TPY)	0.1 lbs/hr (0.39 TPY)	0.05 lbs/hr (0.2 TPY)

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

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

Permit Number: AC 17-143973
Expiration Date: March 1, 1990
County: Escambia
Latitude/Longitude: 30° 35' 28" N
87° 14' 25" W
Project: Thermoplastic Rubber
Compounding Facility
Modification

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 a 3 TPH thermoplastic rubber compounding facility by adding a 1600 dscfm compressed air cooling system to the pelletized rubber storage bin. The plant consists of raw material (rubber, plastic resin, inorganic filler, hydrocarbon oil, organic additives, and inorganic additives) receiving, unloading, storage, and transfer facilities; a blend preparation section having independent batch systems; one extruder line; and unheated pellet dryer; and a pellet handling and packaging section. Particulate matter emissions are controlled with a dust collector and cloth filters. Formaldehyde emissions are controlled by process design. The UTM coordinates for this plant are Zone 16, 475.7 km E and 3384.2 km N.

Construction shall be in accordance with the permit application and plan, documents, amendments, and drawings submitted, except as noted in the Preliminary Determination or the Specific Conditions.

Attachments are as follows:

1. Application dated January 5, 1988.
2. DER letter dated January 15, 1988.
3. Monsanto letter dated January 29, 1988.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-143973
Expiration Date: March 1, 1990

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 17-142980
Expiration Date: January 1, 1989

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 noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-143973
Expiration Date: March 1, 1990

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or 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 17-143973
Expiration Date: March 1, 1990

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. Thermoplastic rubber production shall not exceed 6,000 lbs/hr.
2. The facility may be operated continuously, 8,760 hrs/year.
3. There shall be no visible emissions from pelletized material handling operations at this facility that exceeds 5 percent opacity (6 minute average).
4. The facility shall not allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

PERMITTEE:
Monsanto Company

Permit Number: AC 17-143973
Expiration Date: March 1, 1990

SPECIFIC CONDITIONS:

5. Particulate matter emissions from the blend preparation dust collector No. 350 shall not exceed 2.2 lbs/hr.

6. Ground level ambient air formaldehyde concentration off the plant property should not exceed 3.6×10^{-3} mg/m³ (24 hr avg.).

7. A visible emissions test by DER Method 9, as described in rule 17-2.700, FAC, 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 or design capacity, whichever is lower, prior to the expiration of this construction permit. The District shall be given at least 15 days prior notice before the schedule compliance tests.

8. If the visible emissions from the bin vent bag filter (No. 215), the blend preparation dust collector (No. 350), drier blower (stream C), pellet transfer blower (stream D) or compressed air system (stream E) exceeds 5 percent opacity, the permittee shall measure the particulate matter and formaldehyde emissions from the stacks that exceeds 5 percent opacity in a manner approved by the Department while the facility is operated at maximum capacity. The District shall be given at least 15 days prior notice before a scheduled compliance test.

9. Prior to the expiration of this construction permit, formaldehyde emissions for the compressed air system shall be measured while the plant is operating near its permitted capacity.

10. The applicant will demonstrate compliance with the conditions of this construction permit and submit a complete application for an operating permit to the NW District at least 90 days prior to the expiration date of this permit or 45 days after putting the compressed air system in service, whichever date occurs first. The applicant may continue to operate in compliance with all terms of this construction permit until its expiration or until issuance of an operating permit.

11. Any permit to operate issued for this facility shall require Monsanto Company to submit to the NW District office, as a minimum, the following:

PERMITTEE:
Monsanto Company

Permit Number: AC 17-143973
Expiration Date: March 1, 1990

SPECIFIC CONDITIONS:

- a. A description of any physical or operating changes to the facility that may affect the emissions of any air pollutant from it.
- b. A recent visible emissions tests report on streams A through E as shown in the application and any other potential emission source if directed by the Department.

Issued this _____ day of _____, 19__

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary

Write fault error writing device PRN
Abort, Retry, Ignore? 77

PRESENT SOURCE CHARACTERISTICS ARE:

- 1 SOURCE STRENGTH (G/SEC): 1.13E-02 ✓
- 2 PHYSICAL HEIGHT OF STACK (M): 12.20 ✓
- 3 STACK GAS TEMPERATURE (K): 293.10 ✓
- 4 STACK GAS VELOCITY (M/SEC): 24.70 * ✓
- 5 INSIDE STACK DIAMETER (M): .46 ✓
- 6 VOLUME FLOW (M**3/SEC): 4.06E+00 * ✓

* MODEL REQUIRES INPUT OF EITHER VELOCITY OR FLOW

CHANGE WHICH CHARACTERISTIC? (7 TO DISPLAY; 8 TO RETURN)

8

INPUT MENU OF SOURCE & 1 :

- 1 CHANGE OPTIONS
- 2 CHANGE METEOROLOGY
- 3 CHANGE RECEPTOR ELEVATION
- 4 CHANGE SOURCE CHARACTERISTICS
- 5 CHANGE TITLE
- 6 DISPLAY INPUT DATA
- 7 RUN
- 8 END

ENTER SELECTION (1, 2, 3, 4, 5, 6, 7 OR 8)

7

MPTPLU

-- MODEL FOR SCREENING MAXIMUM CONCENTRATIONS FOR MULTIPLE SOURCES
MODIFIED FROM PTPLU

*** TITLE OF SOURCE & 1 ***

monsanto santoprene modification 2/9/88

>>>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)

*Lowered
because
Vol fol @ std, dry*

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 = 1.13E-02 (G/SEC) ✓
- STACK HEIGHT = 12.20 (M) ✓
- EXIT TEMP. = 293.10 (K) ✓
- EXIT VELOCITY = 24.43 (M/SEC) ✓

STACK DIAM. = .46 (M)
VOLUME FLOW = 4.06E+00 (M**3/SEC)

②
/9

>>>CALCULATED PARAMETERS<<<

VOLUMETRIC FLOW = 4.06E+00 (M**3/SEC)
BUOYANCY FLUX PARAMETER = .00 (M**4/SEC**3)

*** MAXIMUM CONCENTRATION FOR SOURCE # 1 ***

**** 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 (MG/CU M)	DIST OF MAX (KM)	PLUME HT (M)
6	1.00	1.3161E-03	1.363	26.5

**** CORRESPONDING SPATIAL DISTRIBUTION ****

DISTANCE (KM)	CONCENTRATION (MG/M**3)
.1	.0000E+00
.2	8.3185E-11
.3	8.0632E-07
.5	1.5401E-04
.7	6.7119E-04
1.0	1.1827E-03
1.5	1.3049E-03
2.0	1.1648E-03
3.0	8.4606E-04
5.0	5.0539E-04
7.0	3.4645E-04
10.0	2.2984E-04
15.0	1.4195E-04
20.0	1.0221E-04
30.0	6.4101E-05
50.0	3.6334E-05

$AAC = 3.6 \times 10^{-3} \text{ mg/m}^3$

All inputs ok

*** SPATIAL DISTRIBUTION OF WORST CONDITIONS ***
(CUMULATED FOR THE LAST 1 SOURCE(S))

DISTANCE (KM)	MAX CONC (MG/M**3)	STABILITY	WIND (M/S)
.1	7.8860E-04	1	3.00
.2	9.1867E-04	3	4.00
.3	9.3766E-04	3	2.00
.5	8.1483E-04	4	2.50
.7	9.1729E-04	5	2.00
1.0	1.1827E-03	6	1.00
1.5	1.3049E-03	6	1.00
2.0	1.1648E-03	6	1.00
3.0	8.4606E-04	6	1.00
5.0	5.0539E-04	6	1.00
7.0	3.4645E-04	6	1.00
10.0	2.2984E-04	6	1.00
15.0	1.4195E-04	6	1.00
20.0	1.0221E-04	6	1.00
30.0	6.4101E-05	6	1.00
50.0	3.6334E-05	6	1.00

Why different?

ENTER POLLUTANT FLAG FOR THE NEXT SOURCE
0 NEW POLLUTANT
1 SAME POLLUTANT

7

PRESENT SOURCE CHARACTERISTICS ARE:
1 SOURCE STRENGTH (G/SEC): 3.53E-03 ✓

3/9

2 PHYSICAL HEIGHT OF STACK (M): 12.20 ✓
 3 STACK GAS TEMPERATURE (K): 323.00 ✓
 4 STACK GAS VELOCITY (M/SEC): 25.30 * ✓
 5 INSIDE STACK DIAMETER (M): .25 ✓
 6 VOLUME FLOW (M**3/SEC): 1.30E+00 * ✓

* MODEL REQUIRES INPUT OF EITHER VELOCITY OR FLOW

CHANGE WHICH CHARACTERISTIC? (7 TO DISPLAY; 8 TO RETURN)
8

INPUT MENU OF SOURCE & 2 :
 1 CHANGE OPTIONS
 2 CHANGE METEOROLOGY
 3 CHANGE RECEPTOR ELEVATION
 4 CHANGE SOURCE CHARACTERISTICS
 5 CHANGE TITLE
 6 DISPLAY INPUT DATA
 7 RUN
 8 END

ENTER SELECTION (1,2,3,4,5,6,7 OR 8)
7

*** TITLE OF SOURCE & 2 ***
 monsanto santoprene modification 2/9/88

>>>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)

Velocity increased
?
(close)

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 = 3.53E-03 (G/SEC)
 STACK HEIGHT = 12.20 (M)
 EXIT TEMP. = 323.00 (K)
 EXIT VELOCITY = 26.48 (M/SEC)
 STACK DIAM. = .25 (M)
 VOLUME FLOW = 1.30E+00 (M**3/SEC)

>>>CALCULATED PARAMETERS<<<

VOLUMETRIC FLOW = 1.30E+00 (M**3/SEC)
 BUOYANCY FLUX PARAMETER = .38 (M**4/SEC**3)

*** MAXIMUM CONCENTRATION FOR SOURCE & 2 ***

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

4/9

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

STABILITY	WIND SPEED (M/SEC)	MAX CONC (MG/CU M)	DIST OF MAX (KM)	PLUME HT (M)
3	1.50	5.0569E-04	.256	24.9

**** CORRESPONDING SPATIAL DISTRIBUTION ****

DISTANCE (KM)	CONCENTRATION (MG/M**3)
.1	2.8444E-05
.2	4.4820E-04
.3	4.8697E-04
.5	3.0163E-04
.7	1.8672E-04
1.0	1.0508E-04
1.5	5.2400E-05
2.0	3.1541E-05
3.0	1.5279E-05
5.0	6.0905E-06
7.0	3.3197E-06
10.0	1.7453E-06
15.0	8.4125E-07
20.0	5.0190E-07
30.0	2.4958E-07
50.0	1.3446E-07

no input problem from this one (#2) same as

*** SPATIAL DISTRIBUTION OF WORST CONDITIONS ***

(CUMULATED FOR THE LAST 2 SOURCE(S))

DISTANCE (KM)	MAX CONC (MG/M**3)	STABILITY	WIND (M/S)
.1	1.1881E-03	1	3.00
.2	1.3628E-03	3	3.00
.3	1.3748E-03	3	2.00
.5	1.1905E-03	4	2.00
.7	1.1057E-03	5	2.00
1.0	1.4163E-03	6	1.00
1.5	1.6142E-03	6	1.00
2.0	1.4649E-03	6	1.00
3.0	1.0793E-03	6	1.00
5.0	6.5124E-04	6	1.00
7.0	4.4849E-04	6	1.00
10.0	2.9850E-04	6	1.00
15.0	1.8485E-04	6	1.00
20.0	1.3326E-04	6	1.00
30.0	8.3685E-05	6	1.00
50.0	4.7486E-05	6	1.00

ATC = 3.5 x 10^-3

no problem with carbon's impacts at stack 1+2



ENTER POLLUTANT FLAG FOR THE NEXT SOURCE

- 0 NEW POLLUTANT
- 1 SAME POLLUTANT

7

PRESENT SOURCE CHARACTERISTICS ARE:

- 1 SOURCE STRENGTH (G/SEC): 1.26E-02
- 2 PHYSICAL HEIGHT OF STACK (M): 12.20
- 3 STACK GAS TEMPERATURE (K): 293.10
- 4 STACK GAS VELOCITY (M/SEC): 17.40 *
- 5 INSIDE STACK DIAMETER (M): .10
- 6 VOLUME FLOW (M**3/SEC): 1.42E-01 *

* MODEL REQUIRES INPUT OF EITHER VELOCITY OR FLOW

CHANGE WHICH CHARACTERISTIC? (7 TO DISPLAY; 8 TO RETURN)

8

INPUT MENU OF SOURCE # 3 :

- 1 CHANGE OPTIONS

- 2 CHANGE METEOROLOGY
- 3 CHANGE RECEPTOR ELEVATION
- 4 CHANGE SOURCE CHARACTERISTICS
- 5 CHANGE TITLE
- 6 DISPLAY INPUT DATA
- 7 RUN
- 8 END

5/9

ENTER SELECTION (1,2,3,4,5,6,7 OR 8)
7

*** TITLE OF SOURCE & 3 ***

monsanto santoprene modification 2/9/88

>>>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 = 1.26E-02 (G/SEC)
 STACK HEIGHT = 12.20 (M)
 EXIT TEMP. = 293.10 (K)
 EXIT VELOCITY = 18.08 (M/SEC) — raised by computer?
 STACK DIAM. = .10 (M)
 VOLUME FLOW = 1.42E-01 (M**3/SEC)

>>>CALCULATED PARAMETERS<<<

VOLUMETRIC FLOW = 1.42E-01 (M**3/SEC)
 BUOYANCY FLUX PARAMETER = .00 (M**4/SEC**3)

*** MAXIMUM CONCENTRATION FOR SOURCE & 3 ***

**** 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 (MG/CU M)	DIST OF MAX (KM)	PLUME HT (M)
3	1.00	5.5602E-03	.173	17.4

**** CORRESPONDING SPATIAL DISTRIBUTION ****

DISTANCE (KM)	CONCENTRATION (MG/M**3)
.1	2.6906E-03
.2	5.3841E-03 $\times 0.7 = 3.77 \times 10^{-3}$ (8hr)
.3	3.8313E-03
.5	1.8785E-03
.7 — Property line	1.0848E-03
1.0	5.8707E-04

AAC = 3.5×10^{-3}

Time limit at 1000+ but on

1.5	2.8630E-04
2.0	1.7091E-04
3.0	8.2272E-05
5.0	3.2682E-05
7.0	1.7796E-05
10.0	9.3502E-06
15.0	4.5055E-06
20.0	2.6877E-06
30.0	1.3364E-06
50.0	7.1994E-07

*Company output for this
one source alone*

6/9

BEST AVAILABLE COPY

*** SPATIAL DISTRIBUTION OF WORST CONDITIONS ***
(CUMULATED FOR THE LAST 3 SOURCE(S))

DISTANCE (KM)	MAX CONC (MG/M**3)	STABILITY	WIND (M/S)
.1	5.0444E-03	8 Hr Avg 1	24 Hr 1.00
.2	5.7219E-03	4 x 10 ⁻³ 3	2.29 x 10 ⁻³ mg/m ³ 1.00
.3	5.1386E-03	- EXCEED 4	1.00
.5	4.3376E-03	4	1.00
.7	5.3352E-03	- EXCEED 6	1.00
1.0	5.4104E-03	3.79 x 10 ⁻² 6	2.16 x 10 ⁻² 1.00
1.5	4.4355E-03	6	1.00
2.0	3.5206E-03	6	1.00
3.0	2.3449E-03	6	1.00
5.0	1.3269E-03	6	1.00
7.0	8.8919E-04	6	1.00
10.0	5.8091E-04	6	1.00
15.0	3.5432E-04	6	1.00
20.0	2.5380E-04	6	1.00
30.0	1.5824E-04	6	1.00
50.0	8.9275E-05	6	1.00

Property line
 One cumulative reading exceed
 AAC(24) OFF P14
 Property of 1st 3

ENTER POLLUTANT FLAG FOR THE NEXT SOURCE
 0 NEW POLLUTANT
 1 SAME POLLUTANT

7

PRESENT SOURCE CHARACTERISTICS ARE:

- 1 SOURCE STRENGTH (G/SEC): 6.30E-03 ✓
- 2 PHYSICAL HEIGHT OF STACK (M): 12.20 ✓
- 3 STACK GAS TEMPERATURE (K): 293.10 ✓
- 4 STACK GAS VELOCITY (M/SEC): 28.70 * ✓
- 5 INSIDE STACK DIAMETER (M): .61 ✓
- 6 VOLUME FLOW (M**3/SEC): 7.55E-01 * ✓

* MODEL REQUIRES INPUT OF EITHER VELOCITY OR FLOW

CHANGE WHICH CHARACTERISTIC? (7 TO DISPLAY; 8 TO RETURN)
 8

INPUT MENU OF SOURCE & 4 :

- 1 CHANGE OPTIONS
- 2 CHANGE METEOROLOGY
- 3 CHANGE RECEPTOR ELEVATION
- 4 CHANGE SOURCE CHARACTERISTICS
- 5 CHANGE TITLE
- 6 DISPLAY INPUT DATA
- 7 RUN
- 8 END

ENTER SELECTION (1,2,3,4,5,6,7 OR 8)
 7

*** TITLE OF SOURCE & 4 ***

7/9

>>>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 = 12.20 (M)
EXIT TEMP. = 293.10 (K)
EXIT VELOCITY = 2.58 (M/SEC)
STACK DIAM. = .61 (M)
VOLUME FLOW = 7.55E-01 (M**3/SEC)

much lower than stated. Error in application. No. 1 is correct

>>>CALCULATED PARAMETERS<<<

VOLUMETRIC FLOW = 7.55E-01 (M**3/SEC)
BUOYANCY FLUX PARAMETER = .00 (M**4/SEC**3)

*** MAXIMUM CONCENTRATION FOR SOURCE # 4 ***

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

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

Table with 5 columns: STABILITY, WIND SPEED (M/SEC), MAX CONC (MG/CU M), DIST OF MAX (KM), PLUME HT (M). Row 3: 3, 1.00, 3.0076E-03, .166, 16.7

**** CORRESPONDING SPATIAL DISTRIBUTION ****

Table with 2 columns: DISTANCE (KM), CONCENTRATION (MG/M**3). Rows from .1 to 50.0 km.

No problem impact 1 source (4th)

3.5 x 10^-3 mg/m^3 = 0.0035

** OVERALL MAXIMUM CONCENTRATION IS FOUND IN SOURCE # 3 **

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

STABILITY	WIND SPEED (M/SEC)	MAX CONC (MG/CU M)	DIST OF MAX (KM)	PLUME HT (M)
3	1.00	5.5602E-03	.173	17.4

- (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 4 SOURCE(S))

DISTANCE (KM)	MAX CONC (MG/M**3)	STABILITY	WIND (M/S)
.1	7.6978E-03	2	1.00
.2	8.5749E-03	3	1.00
.3	7.8283E-03	4	1.00
.5	6.2400E-03	4	1.00
.7	7.7355E-03	6	1.00
1.0	7.4702E-03	6	1.00
1.5	5.8725E-03	6	1.00
2.0	4.5617E-03	6	1.00
3.0	2.9830E-03	6	1.00
5.0	1.6664E-03	6	1.00
7.0	1.1104E-03	6	1.00
10.0	7.2251E-04	6	1.00
15.0	4.3923E-04	6	1.00
20.0	3.1416E-04	6	1.00
30.0	1.9556E-04	6	1.00
50.0	1.1019E-04	6	1.00

Stop - Program terminated.

MODELED
IMPACT OK FOR!
Continuous (actual operations)
8 hr impact ok
1 hr impact ok
24 hr impact ok

TLV = 1.5 mg/m²
Cont.
AAC = $\frac{40}{168 \times 100} (1.5)$
= 3.6×10^{-3} mg/m²
(continuous)
8 HR AAC
AAC = $\frac{1}{100} (1.5) = 1.5 \times 10^{-2}$ (8 hr)
1 hr
1 hr = $\frac{1}{100} (1.5)$
= 3×10^{-2} (1 hr)
24 HR
AAC = $\frac{1}{300} (1.5) = 0.5 \times 10^{-2} = 5 \times 10^{-3}$ (24 hr)

is exposed up to

What time period does the AAC apply to, for a continuous operation?

TLV - 8hr / 40 hr / wk - total

max plus gives max 1 hr impact

1 hr over x	.9	=	max	3hr	impact
"	.7	=	max	8hr	"
"	.4	=	max	24hr	"

$$AAC = \frac{40}{x} \cdot \frac{1}{100 \text{ or } 50} (TLV)$$

Is AAC any period a function of x ?

U.S. Postal Service
B 3 3761107
Mailed 2.1.88
Pensacola, FL

File Copy

Monsanto

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

VIA OVERNIGHT MAIL

January 29, 1988

DER
FEB 2 1988
BAQM

Mr. Clair Fancy
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Fancy:

Enclosed is the additional information you requested concerning Permit AC17-143973, Santoprene[®] Plant Modification.

The following response items match the information request items in your January 15, 1988 letter to Mr. W. J. Board.

1. The UTM coordinates for the Santoprene[®] Plant are:
4 75 700M East 33 84 230M North
2. A letter of authorization for W. J. Board is attached.
3. Attached is an updated map showing the roads in the vicinity of the Monsanto Pensacola plant.
4. The basis for emissions estimate for the proposed vent stream "E" is from the November 20, 1985, test report attached. The measured concentration of 6 ppm in stream "D" was used as the basis for this emissions estimate. The material handled at Streams "D" and "E" are similar.
5. Vent stack "E" on the flow diagram (revised 12/1/87) is the proposed stack.
6. Attached are tables showing the stack data parameters in emissions estimates for all the discharges from the Santoprene[®] Plant.
7. Formaldehyde test results reported to DER on November 20, 1985, are attached or Department information.

1062.BPM

POST OFFICE TO ADDRESSEE

**EXPRESS MAIL
NEXT DAY SERVICE**



B 33761107

For Postal Use

ORIGIN	Date In:	Postage
Post Office ZIP Code	Time In: A.M. P.M.	\$
Initials of Receiving Clerk	Weight lbs. oz.	Return Receipt Fee \$
<input type="checkbox"/> Accepted for next day delivery. <input type="checkbox"/> Accepted for this destination after deposit deadline for next day delivery therefore for delivery by second day. <small>(Consult your local Express Mail Next Day Service directory for deposit deadlines for different destinations.)</small>		Total Postage & Fees \$
<input type="checkbox"/> International On Demand: Country Code		

For Customer Use

Account Number _____
(Using an authorized number indicates postage and fees paid.)
 Express Mail Corporate Account No.: _____
 Federal Agency Control No.: _____

FROM:

B P MCLEOD
 MONSANTO
 P O BOX 12830
 PENSACOLA FL 32575

DESTINATION	Date of Delivery: 2/2	Time of Delivery: 11:50	A.M. P.M.
<input checked="" type="checkbox"/> Signature of Addressee or Agent _____			
DELIVERY WAS ATTEMPTED	Date:	Time:	A.M. P.M.
Signature of Delivery Employee _____			
WAIVER OF SIGNATURE AND INDEMNITY		I wish delivery to be made without obtaining the signature of the addressee or the addressee's agent and I authorize the delivery employee to sign that the shipment was delivered and understand that the signature of the delivery employee will constitute valid proof of delivery.	
		SIGNED: _____	

ADDRESSEE'S COPY

TO: Telephone Number: _____

MR CLAIR FANCY
 DEPART. OF ENVIRONMENTAL REC.
 2600 BLAIR STONE RD
 TALLAHASSEE FL 32301

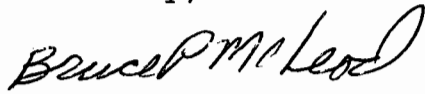
Label B (Jan. 1987) U.S.G.P.O. 1987 158 386 164 824 164 825



2-2-88
~~CHP~~
~~BR~~ > FBI
 (4)

If there any further questions concerning this permit application, please contact me at 904/968-8725.

Sincerely,



Bruce P. McLeod
Senior Specialist
Environmental Control

Attachments

Copied: Willard Hanks }
CHF/BT } 2.2.88 (m)
Jack Preece }

MONSANTO P.O. BOX 12830
PENSACOLA, FLORIDA 32575



REFERENCE:

TO MR CLAIR FANCY
DEPARTMENT OF ENV REGULATION
2600 BLAIR STONE ROAD
TALLAHASSEE FL 32301

YN - 4402.04.67-2

RETURN POSTAGE GUARANTEED

Monsanto

MONSANTO FIBERS & INTERMEDIATES COMPANY

P. O. Box 12830

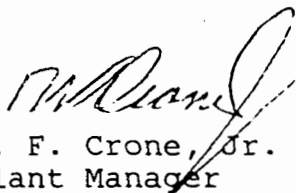
Pensacola, Florida 32575

Phone: (904) 968-7000

May 29, 1986

SIGNATURE AUTHORIZATION FOR ENVIRONMENTAL PERMIT PROGRAM FORMS

The Southeast Regional Director, Governmental Affairs, of Monsanto's Pensacola Plant, is hereby authorized to sign permit applications, reports, and other documents required or requested by government environmental authorities.


R. F. Crone, Jr.
Plant Manager

RFC10

Monsanto

MONSANTO FIBERS & INTERMEDIATES CO.
800 N. Lindbergh Boulevard
St. Louis, Missouri 63167
Phone: (314) 694-1000

SIGNATORY AUTHORIZATION TO
PERMIT PROGRAM REPORT FORMS

Pursuant to the requirements of the United States Environmental Protection Agency or the appropriate states, the Plant Managers of the following Monsanto Fibers & Intermediates Company plants are hereby authorized to sign all permit applications, reports, and other documents required or requested by governmental environmental authorities:

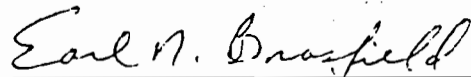
Chocolate Bayou Plant
Alvin, Texas 77511

Decatur Plant
Decatur, Alabama 35602

Greenwood Plant
Greenwood, South Carolina 29646

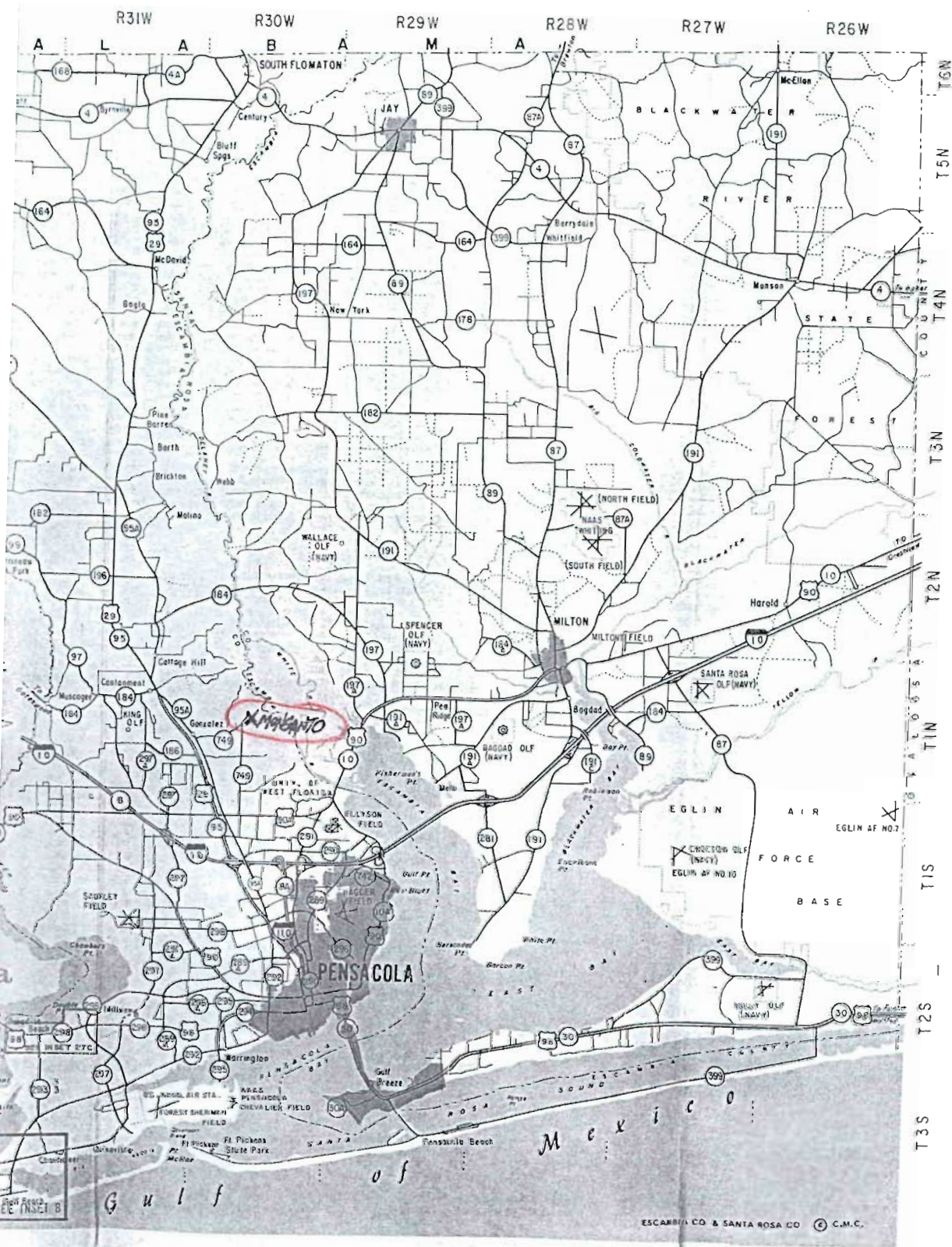
Pensacola Plant
Pensacola, Florida 32575

Texas City Plant
Texas City, Texas 77590

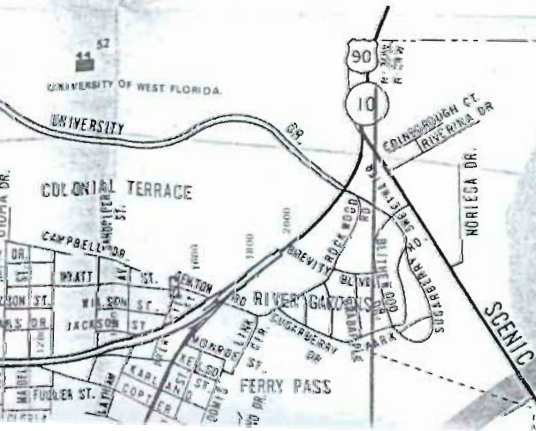


Earl N. Brasfield
Managing Director
Vice President

DISTRIBUTED BY
CHAMPION MAP ENTERPRISES, INC.
6220 South Orange Blossom Trail
Suite 507
Orlando, Florida 32809
(305) 855-9010



ESCAMBA CO & SANTA ROSA CO © C.M.C.

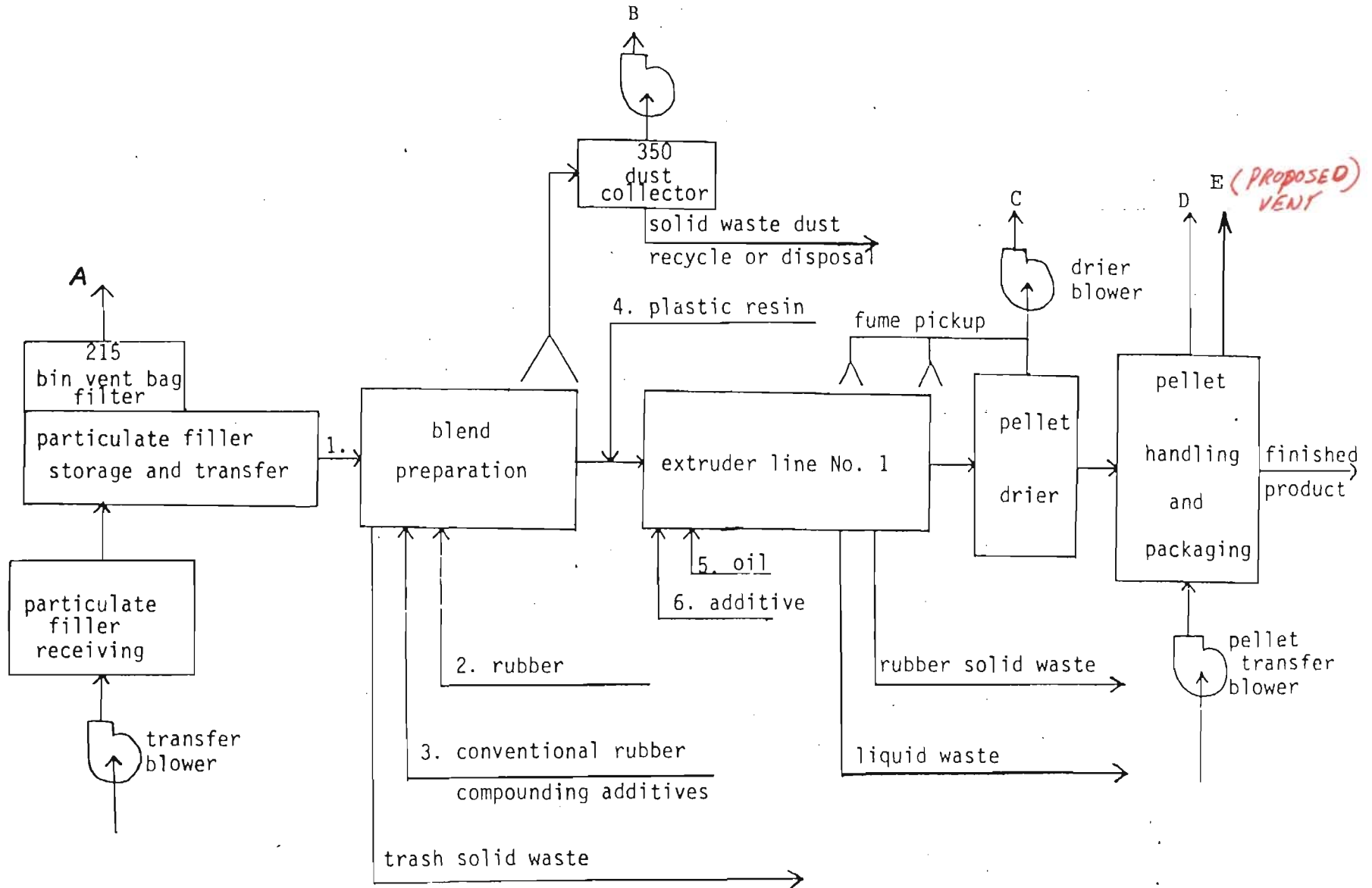


T-1-N
T-1-S

First Mutual
LAWYERS & LOAN ASSOCIATION
University Man's Office

MONSANTO PENSACOLA
SANTOPRENE[®] THERMOPLASTIC RUBBER COMPOUNDING FACILITY

FLOW DIAGRAM



Revised 12/1/87

Revised 11/20/85

MONSANTO PENSACOLA
 SANTOPRENE^R THERMOPLASTIC RUBBER
 COMPOUNDING FACILITY

PROJECT DESCRIPTION

ADDENDUM #2

S T R E A M

	A	B	C	D	E
Stack height (ft.)	40	40	40	40	40
Gas flow rate (DSCFM)	600	8600	2750	300	1600
Water vapor content (%)	ambient	ambient	5%	ambient	ambient
Stack diameter (ft.)	.42	1.5	.83	.33	2 ft
Gas exit temp. (°F)	ambient	ambient	122°F	ambient + 10°C	ambient + 10°F
Velocity (FPS)	73	81	83	57	94

REVISED 1/29/88

BEST AVAILABLE COPY

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Rubber	not applicable		0-2500	stream 2
Plastic Resin	"	"	0-2200	stream 4
Inorganic Filler	"	"	0-0600	stream 1
Hydrocarbon Oil	"	"	0-0600	stream 5
Organic Additives	"	"	0-0200	stream 6
Inorganic Additives	"	"	0-0200	stream 3

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

1. Total Process Input Rate (lbs/hr): 0 - 6000

2. Product Weight (lbs/hr): _____

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

Name of Contaminant	Emission ¹ (A)		Allowed Emission Rate per Rule 17-2	Allowable Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	l/yr	
Particulates	.15	.05	see note	.15		34	A
Formaldehyde	0.1	.39	Not Applicable			0.39	D
Particulates	2.2	.49	see note			48.8	B
Formaldehyde	0.09	0.38	Not Applicable			0.38	B
Formaldehyde	0.028	0.12	Not Applicable			0.12	C

See Section V, Item 2.

Reference 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)

Calculated from operating rate and applicable standard.

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

Note: 17-2.612 (1) and (2) apply (i.e., process weight table and 20% opacity).

Permittee suggested permit limits are .03 grains/cu. ft. for suspended particulate discharge and a waiver of particulate testing with operation at 5% opacity or less.

(A) Maximum emissions estimates based on 11/20/85 emissions test.

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		
Air	N/A	N/A	1600 CFM	E

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

- Total Process Input Rate (lbs/hr): N/A
- Product Weight (lbs/hr): N/A

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 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	
Formaldehyde	0.05	0.2	(see note below)		0.05	0.2 ⁽¹⁾	E

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).

NOTE: 17-2.620 would likely apply

(1) No control applied so actual = potential emissions

MONSANTO PENSACOLA

PERMIT AC17-87408

SANTOPRENE[®] THERMOPLASTIC RUBBER COMPOUNDING FACILITY

EMISSIONS COMPLIANCE TEST 11/20/85

231.BPM

SANTOPRENE^R COMPLIANCE TEST
SUMMARY OF RESULTS

<u>STREAM</u>	<u>NAME</u>	<u>FORMALDEHYDE</u> ⁽¹⁾	<u>VISIBLE EMISSIONS (%)</u>
A	Filter #215	N/A	0
B	Dust Collector \$350	.038 tons/year	0
C	Pellet Dryer	.0121 tons/year	0
D	Pellet Handling	.039 tons/year	0
	Building Ventilator	N/A	0
	Property Boundary	0	N/A

(1) Drager tube analysis

SANTOPRENE COMPLIANCE TEST 11/20/85

SUMMARY OF TESTS PERFORMED

- 1. Production rate = 3921 pph
- 2. Measure formaldehyde reused at

<u>Stream</u>	<u>Name</u>
B	350 dust collector
C	Pellet dryer blower
D	Pellet handling and packaging

and

at plant fenceline.

- 3. VE tests at

<u>Stream</u>	<u>Name</u>
A	Bin vent filter #215 top of silo
B	Blend preparation dust collector #350
C	Dryer blower
D	Pellet transfer blower (handling & packaging)

and

building ventilators

3 east wall vents

MONSANTO PENSACOLA
SANTOPRENE^R THERMOPLASTIC RUBBER
COMPOUNDING FACILITY

11/20/85 EMISSIONS COMPLIANCE TEST

VENT STREAM B

DUST COLLECTOR #350

Measured formaldehyde concentration = 0.2 ppm (vol) (see attachment)

Calculation of formaldehyde emissions

$8600 \text{ SCFM} \times 0.2 \text{ ft.}^3 \text{ HCHO}/10^6 \text{ ft.}^3 \times 60 \text{ min.} \times \text{hr.} \times$

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

$0.0086 \text{ lbs./hr. HCHO}$ $\times 24 \text{ hrs./day} \times 356 \text{ days/yr.} \times$

$1 \text{ ton}/2000 \text{ lbs.} = \underline{0.038 \text{ ton HCHO/yr.}}$

MONSANTO PENSACOLA
SANTOPRENE^R THERMOPLASTIC RUBBER
COMPOUNDING FACILITY

11/20/85 EMISSIONS COMPLIANCE TEST

VENT STREAM C

DRYER EXHAUST

Measured formaldehyde concentration = 0.2 ppm (vol) (see attachment)

Calculation of formaldehyde emissions

$2750 \text{ ft.}^3 \text{ air/min.} \times 0.2 \text{ ft.}^3 \text{ HCHO}/10^6 \text{ ft.}^3 \text{ air} \times$
 $60 \text{ min/hr.} \times$

$1 \text{ lb. mole HCHO} \times 30 \text{ lbs. HCHO}/1 \text{ lb. mole} =$

$\underline{.00276 \text{ pph HCHO}} \times 24 \text{ hrs./day} \times 365 \text{ days/year} \times$

$1 \text{ ton}/2000 \text{ lbs.} = \underline{.0121 \text{ tons/yr. HCHO}}$

MONSANTO PENSACOLA
SANTOPRENE^R THERMOPLASTIC RUBBER.
COMPOUNDING FACILITY

11/20/85 EMISSIONS COMPLIANCE TEST

VENT STREAM D

PELLET EXHAUST

Measured formaldehyde concentration = 6.0 ppm (vol) (see attachment)

Calculation of formaldehyde emissions

$300 \text{ ft.}^3/\text{min.} \times 6 \text{ ft.}^3 \text{ HCHO}/10^6 \text{ ft.}^3 \text{ air} \times 60 \text{ min./hr.} \times$

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

$\underline{.009 \text{ lb./hr}} \times 24 \text{ hrs./day} \times 365 \text{ days/yr.} \times 1 \text{ ton}/2000 \text{ lb.} =$

.039 ton/year

ATTACHMENT 1
MONSANTO TEXTILES COMPANY

Pensacola Plant

LAB USE ONLY

Charge to Bldg. 800
Analytical Time _____
Sample Count _____
Determinations _____

TN 236.01.76-1

REQUEST FOR SPECIAL ANALYSIS

Date: 11/20/85 Priority; (Days) _____ (As Time Permits) _____

Initials for Approval: Author _____ Lab Supervisor _____

Sample Source: Santoprene

Analyses Requested: ~~Styrene~~ Formaldehyde

Helpful Information Pertaining To Sample: _____

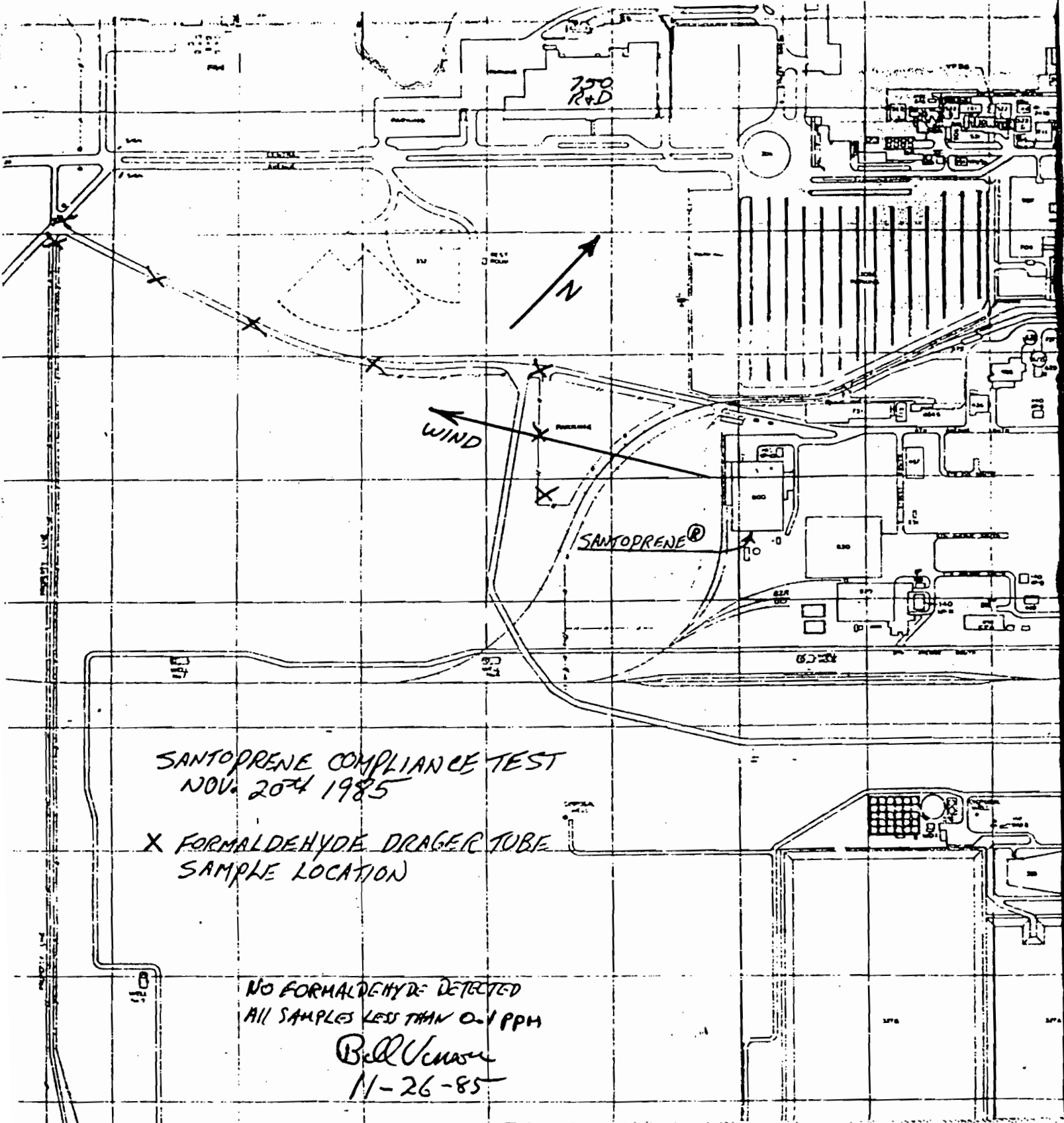
Ran with trap

Send Results To: _____ Via; IBM _____ Mail _____ Phone _____

Results: HCHO

<u>350 Dust Collector</u>	<u>0.2 PPM</u>
<u>Pellet Dryer Blower</u>	<u>0.2 PPM</u>
<u>Pellet handling & packaging</u>	<u>6.0 PPM</u>
<u>Fence Line</u>	<u>0.10 PPM</u>

Performed by
Bell Vinson



SOURCE NAME
Monsanto Fibers and Intermediates Co.

ADDRESS
P.O. Box 12830

CITY Pensacola **STATE** FL **ZIP** 32575

PHONE (904) 968-8475 **SOURCE ID NUMBER** A 017 87408

PROCESS EQUIPMENT Bm vent Filter **OPERATING MODE** "A"

CONTROL EQUIPMENT **OPERATING MODE**

DESCRIBE EMISSION POINT

HEIGHT ABOVE GROUND LEVEL 60 ft **HEIGHT RELATIVE TO OBSERVER** 55 ft

DISTANCE FROM OBSERVER 60 ft **DIRECTION FROM OBSERVER** W

DESCRIBE EMISSIONS
Rectangle vent on side of housing

EMISSION COLOR Clear **PLUME TYPE:** CONTINUOUS FUGITIVE INTERMITTENT

WATER DROPLETS PRESENT NO YES **IS WATER DROPLET PLUME ATTACHED** DETACHED

AT WHAT POINT IN THE PLUME WAS OPACITY DETERMINED

DESCRIBE BACKGROUND
Blue Housing

BACKGROUND COLOR Blue **SKY CONDITIONS** PC 60%

WIND SPEED 6 **WIND DIRECTION** NE

AMBIENT TEMP. 80°F **WET BULB TEMP.** **RELATIVE HUMIDITY**

SOURCE LAYOUT SKETCH **DRAW NORTH ARROW**

OBSERVATION DATE				START TIME		STOP TIME					
11/20/85				1015		1044					
M	%			M	%			M	%		
	0	15	30		0	15	30		45		
1	0	0	0	31							
2	0	0	0	32							
3	0	0	0	33							
4	0	0	0	34							
5	0	0	0	35							
6	0	0	0	36							
7	0	0	0	37							
8	0	0	0	38							
9	0	0	0	39							
10	0	0	0	40							
11	0	0	0	41							
12	0	0	0	42							
13	0	0	0	43							
14	0	0	0	44							
15	0	0	0	45							
16	0	0	0	46							
17	0	0	0	47							
18	0	0	0	48							
19	0	0	0	49							
20	0	0	0	50							
21	0	0	0	51							
22	0	0	0	52							
23	0	0	0	53							
24	0	0	0	54							
25	0	0	0	55							
26	0	0	0	56							
27	0	0	0	57							
28	0	0	0	58							
29	0	0	0	59							
30	0	0	0	60							

AVERAGE OPACITY FOR HIGHEST PERIOD 0 **NUMBER OF READINGS ABOVE 0 % WERE** 0

COMMENTS

RANGE OF OPACITY READINGS
0 MINIMUM 0 MAXIMUM

OBSERVER'S NAME (PRINT)
Doyle Hetzel

OBSERVER'S SIGNATURE
Doyle Hetzel

ORGANIZATION
Monsanto Co.

I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS

SIGNATURE **DATE**

CERTIFIED BY
EPA + State of FL

DATE
Sept 15, 1985

VERIFIED BY **DATE**

SOURCE NAME				OBSERVATION DATE				START TIME				STOP TIME			
Monsanto Fibers and Intermediates Co.				11/20/85				1115				1144			
ADDRESS				M				M				M			
P.O. Box 12830				0				0				0			
				15				15				15			
				30				30				30			
				45				45				45			
CITY		STATE		ZIP		31		31		31		31		31	
Pensacola		FL		32575		32		32		32		32		32	
PHONE		SOURCE ID NUMBER		33		33		33		33		33		33	
(904) 968-8475		A 017 87408		34		34		34		34		34		34	
PROCESS EQUIPMENT		OPERATING MODE		35		35		35		35		35		35	
Pellet Transfer Blower		VE?		36		36		36		36		36		36	
CONTROL EQUIPMENT		OPERATING MODE		37		37		37		37		37		37	
				38		38		38		38		38		38	
DESCRIBE EMISSION POINT				39				39				39			
Hooded vent on top of BIN				40				40				40			
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER		41		41		41		41		41		41	
30 ft		25 ft		42		42		42		42		42		42	
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER		43		43		43		43		43		43	
50 ft		NW		44		44		44		44		44		44	
DESCRIBE EMISSIONS				45				45				45			
Clear				46				46				46			
EMISSION COLOR		PLUME TYPE: CONTINUOUS <input type="checkbox"/>		47		47		47		47		47		47	
Clear		FUGITIVE <input type="checkbox"/> INTERMITTENT <input type="checkbox"/>		48		48		48		48		48		48	
WATER DROPLETS PRESENT		IS WATER DROPLET PLUME ATTACHED <input type="checkbox"/> DETACHED <input type="checkbox"/>		49		49		49		49		49		49	
NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>				50		50		50		50		50		50	
AT WHAT POINT IN THE PLUME WAS OPACITY DETERMINED				51				51				51			
Source				52				52				52			
DESCRIBE BACKGROUND				53				53				53			
Gray sky				54				54				54			
BACKGROUND COLOR		SKY CONDITIONS		55		55		55		55		55		55	
Gray sky		PC		56		56		56		56		56		56	
WIND SPEED		WIND DIRECTION		57		57		57		57		57		57	
6		NE		58		58		58		58		58		58	
AMBIENT TEMP.		WET BULB TEMP.		59		59		59		59		59		59	
80°F				60		60		60		60		60		60	
SOURCE LAYOUT SKETCH				61				61				61			
DRAW NORTH ARROW				62				62				62			
				63				63				63			
COMMENTS				64				64				64			
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				226				226				226			
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				238				238				238			
				239				239				239			
				240				240				240			
				241				241				241			
				242											

SOURCE NAME
Monsanto Fibers and Intermediates Co.

ADDRESS
P.O. Box 12830

CITY
Pensacola

STATE
FL

ZIP
32575

PHONE
(904) 968-8475

SOURCE ID NUMBER
A 017-87408

PROCESS EQUIPMENT
350 Dust Collector

CONTROL EQUIPMENT

DESCRIBE EMISSION POINT
14-16" round steel stack w/ribbed sides

HEIGHT ABOVE GROUND LEVEL
35 ft

HEIGHT RELATIVE TO OBSERVER
30 ft

DISTANCE FROM OBSERVER
40 ft

DIRECTION FROM OBSERVER
WNW

DESCRIBE EMISSIONS
Clear

EMISSION COLOR
Clear

PLUME TYPE: CONTINUOUS FUGITIVE INTERMITTENT

WATER DROPLETS PRESENT
NO YES

IS WATER DROPLET PLUME ATTACHED DETACHED

AT WHAT POINT IN THE PLUME WAS OPACITY DETERMINED
Source

DESCRIBE BACKGROUND
Blue sky

BACKGROUND COLOR
Blue

SKY CONDITIONS
PC 40%

WIND SPEED
6

WIND DIRECTION
NE

AMBIENT TEMP.
80°F

WET BULB TEMP.

RELATIVE HUMIDITY

SOURCE LAYOUT SKETCH

OBSERVATION DATE		START TIME				STOP TIME				
11/20/85		0940				1009				
M	DOC				M	DOC				
	0	15	30	45		0	15	30	45	
1	0	0	0	0	01					
2	0	0	0	0	02					
3	0	0	0	0	03					
4	0	0	0	0	04					
5	0	0	0	0	05					
6	0	0	0	0	06					
7	0	0	0	0	07					
8	0	0	0	0	08					
9	0	0	0	0	09					
10	0	0	0	0	10					
11	0	0	0	0	11					
12	0	0	0	0	12					
13	0	0	0	0	13					
14	0	0	0	0	14					
15	0	0	0	0	15					
16	0	0	0	0	16					
17	0	0	0	0	17					
18	0	0	0	0	18					
19	0	0	0	0	19					
20	0	0	0	0	20					
21	0	0	0	0	21					
22	0	0	0	0	22					
23	0	0	0	0	23					
24	0	0	0	0	24					
25	0	0	0	0	25					
26	0	0	0	0	26					
27	0	0	0	0	27					
28	0	0	0	0	28					
29	0	0	0	0	29					
30	0	0	0	0	30					

AVERAGE OPACITY FOR HIGHEST PERIOD: 0

NUMBER OF READINGS ABOVE 0% WERE 0

RANGE OF OPACITY READINGS: 0 MINIMUM 0 MAXIMUM

OBSERVER'S NAME (PRINT)
Doyle Hetzel

OBSERVER'S SIGNATURE
Doyle Hetzel

DATE
11/20/85

ORGANIZATION
Monsanto Co.

I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS

CERTIFIED BY
EPA & State of FL

DATE
Sept 15, 1985

SIGNATURE

TITLE

DATE

VERIFIED BY

DATE

SOURCE NAME
Monsanto Fibers and Intermediates Co.

ADDRESS
P.O. Box 12830

CITY Pensacola **STATE** FL **ZIP** 32575

PHONE (904) 968-8475 **SOURCE ID NUMBER** A 017-87408

PROCESS EQUIPMENT Pellet dryer blower **OPERATING MODE** "D"

CONTROL EQUIPMENT **OPERATING MODE**

DESCRIBE EMISSION POINT
10" round Steel Stack

HEIGHT ABOVE GROUND LEVEL 50 Ft **HEIGHT RELATIVE TO OBSERVER** 45 Ft

DISTANCE FROM OBSERVER 75 Ft **DIRECTION FROM OBSERVER** WNW

DESCRIBE EMISSIONS
Water vapor dissipating 25 Ft from Stack

EMISSION COLOR Clear **PLUME TYPE:** CONTINUOUS FUGITIVE INTERMITTENT

WATER DROPLETS PRESENT NO YES **IS WATER DROPLET PLUME ATTACHED** DETACHED

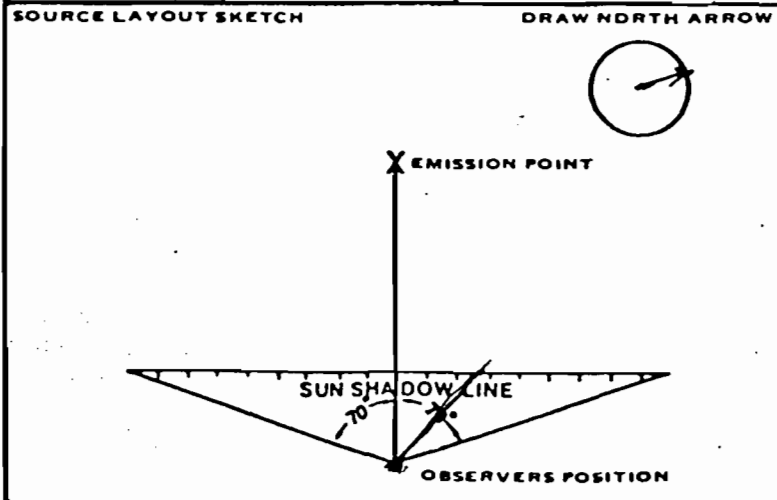
AT WHAT POINT IN THE PLUME WAS OPACITY DETERMINED
25 Ft from Stack.

DESCRIBE BACKGROUND
Gray & Blue Sky

BACKGROUND COLOR Gray & Blue **SKY CONDITIONS** PC 60%

WIND SPEED 6 **WIND DIRECTION** NE

AMBIENT TEMP. 80°F **WET BULB TEMP.** **RELATIVE HUMIDITY**



OBSERVATION DATE		START TIME				STOP TIME			
11/20/85		0900				0929			
M	MC				M	MC			
	0	15	30	45		0	15	30	45
1	0	0	0	0	31				
2	0	0	0	0	32				
3	0	0	0	0	33				
4	0	0	0	0	34				
5	0	0	0	0	35				
6	0	0	0	0	36				
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19	0	0	0	0	49				
20	0	0	0	0	50				
21	0	0	0	0	51				
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23	0	0	0	0	53				
24	0	0	0	0	54				
25	0	0	0	0	55				
26	0	0	0	0	56				
27	0	0	0	0	57				
28	0	0	0	0	58				
29	0	0	0	0	59				
30	0	0	0	0	60				

COMMENTS

I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS

SIGNATURE **TITLE** **DATE**

AVERAGE OPACITY FOR HIGHEST PERIOD 0 **NUMBER OF READINGS ABOVE 0 % WERE** 0

RANGE OF OPACITY READINGS
0 MINIMUM 0 MAXIMUM

OBSERVER'S NAME (PRINT) Doyle Hetzel

OBSERVER'S SIGNATURE *Doyle Hetzel* **DATE** 11/20/85

ORGANIZATION Monsanto Co.

CERTIFIED BY EPA & State of FL. **DATE** Sept. 15, 1985

VERIFIED BY **DATE**

BEST AVAILABLE COPY

SOURCE NAME
Monsanto Fibers and Intermediates Co.

ADDRESS
P.O. Box 12830

CITY Pensacola **STATE** FL **ZIP** 32575

PHONE (904) 968-8475 **SOURCE ID NUMBER** A 017-87408

PROCESS EQUIPMENT Building Exhaust **OPERATING MODE**

CONTROL EQUIPMENT **OPERATING MODE**

DESCRIBE EMISSION POINT
Three Louvered Exhaust Fans.

HEIGHT ABOVE GROUND LEVEL 10 ft **HEIGHT RELATIVE TO OBSERVER** 10 ft

DISTANCE FROM OBSERVER 50 ft **DIRECTION FROM OBSERVER** West

DESCRIBE EMISSIONS
NONE

EMISSION COLOR NONE **PLUME TYPE:** CONTINUOUS FUGITIVE INTERMITTENT

WATER DROPLETS PRESENT NO YES **IS WATER DROPLET PLUME ATTACHED** **DETACHED**

AT WHAT POINT IN THE PLUME WAS OPACITY DETERMINED

DESCRIBE BACKGROUND
White side of Bldg.

BACKGROUND COLOR White **SKY CONDITIONS** ~~over~~ P.C. 60%
WIND SPEED 6 **WIND DIRECTION** NE

AMBIENT TEMP. 80°F **WET BULB TEMP.** **RELATIVE HUMIDITY**

SOURCE LAYOUT SKETCH **DRAW NORTH ARROW**

OBSERVATION DATE	START TIME					STOP TIME									
	M	0	15	30	45	M	0	15	30	45					
11/20/85						0815					0849				
1	0	0	0	0	0	31									
2	0	0	0	0	0	32									
3	0	0	0	0	0	33									
4	0	0	0	0	0	34									
5	0	0	0	0	0	35									
6	0	0	0	0	0	36									
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18	0	0	0	0	0	48									
19	0	0	0	0	0	49									
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25	0	0	0	0	0	55									
26	0	0	0	0	0	56									
27	0	0	0	0	0	57									
28	0	0	0	0	0	58									
29	0	0	0	0	0	59									
30	0	0	0	0	0	60									

AVERAGE OPACITY FOR HIGHEST PERIOD 0 **NUMBER OF READINGS ABOVE** 0 % WERE 0

RANGE OF OPACITY READINGS
0 MINIMUM 0 MAXIMUM

OBSERVER'S NAME (PRINT) Doyle Hetzel

OBSERVER'S SIGNATURE *Doyle Hetzel* **DATE** 11/20/85

ORGANIZATION Monsanto Co.

I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS

SIGNATURE **DATE** Sept 15, 1985

TITLE **DATE**

CERTIFIED BY EPA & State of FL. **DATE** Sept 15, 1985

VERIFIED BY **DATE**

PS Form 3817, July 1983 447-845

SENDER: Complete items 1, 2, 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 service(s) requested.

1. Show to whom, date and address of delivery.
 2. Restricted Delivery.

3. Article Addressed to: Mr. W. J. Board
 General Superintendent
 Monsanto Company
 P.O. Box 12830
 Pensacola, FL 32575

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P 274 010 474

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee
 X *[Signature]*

6. Signature - Agent
 X *[Signature]*

7. Date of Delivery
 1/21/88

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

DOMESTIC RETURN RECEIPT



P 274 010 474

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

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

Mr. to W. J. Board	
Monsanto Company	
Street and No. P.O. Box 12830	
P.O., State and ZIP Code Pensacola, FL 32575	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$

PS Form 3800, June 1985

Postmark or Date
 Mailed: 01/19/88
 Permit: AC 17-143973

JLL

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

January 15, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. J. Board
General Superintendent
Monsanto Company
Post Office Box 12830
Pensacola, Florida 32575

Dear Mr. Board:

Re: File No. AC 17-143973, Santoprene® Plant Modification

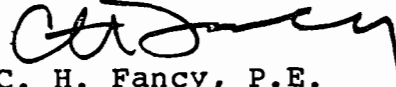
The Department has made a preliminary review of your application for permit to modify the Santoprene® plant at Monsanto Company's Escambia County facility. Before this application can be processed, we need the following information:

1. UTM coordinates for the Santoprene® plant.
2. Letter of authorization for the agent signing the application for Monsanto Company.
3. Updated map showing the roads in the vicinity of this plant.
4. Basis for the estimated 6 ppm formaldehyde concentration used to calculate the emissions from the proposed stack.
5. Which stack shown on the Flow Diagram (revised December 1, 1987) is the proposed stack?
6. Table showing the stack parameters (height, diameter, volumetric flow, velocity, temperature) and emissions of particulate matter and formaldehyde (lbs/hr and TPY) for all discharges from the Santoprene® plant.
7. Formaldehyde test results that were required for each stack in this plant by Specific Condition No. 9 of construction permit No. AC 17-85169.

Mr. W. J. Board
Page Two
January 15, 1988

We will resume processing the application after we receive the requested information. If you have any question on this matter, please call Willard Hanks at (904)488-1344.

Sincerely,



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

CHF/WH/s

cc: J. Preece
B. McLeod, P.E.

Monsanto

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

January 5, 1988

DER

JAN 6, 1988 (17)

BAQM


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 modification application for the Santoprene^(R) facility at the Monsanto Pensacola plant.

Also included is a check for \$100 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. Muddiswart - NW Dist } 1-13-88

RECEIVED
DER - MAIL ROOM
1988 JAN - 7 AM 10: 42

1032.BPM

1081

Monsanto

WORKING FUND ACCOUNT
MONSANTO COMPANY
PENSACOLA, FLORIDA 2180

720 09456

02-20
311

01-05-88

0

BEST AVAILABLE COPY

\$100.00

EXACTLY 100 CENTS

PAY
TO THE
ORDER
OF

DEPT. OF ENVIRONMENTAL REGULATION

Citibank (Delaware)

[Handwritten Signature]
Marie A. Labellara



P-01

MONSANTO COMPANY, PENSACOLA, FLORIDA

01-05-88

72009456

THE ATTACHED CHECK IS IN PAYMENT OF THE FOLLOWING:

DEPT. OF ENVIRONMENTAL REGULATION

MEMO	DATE	INVOICE NO.	AMOUNT	DEDUCTIONS & DISCOUNT	NET
Permit application for Santoprene Thermoplastic Rubber Compounding Facility	01-05-88		\$100.00		\$100.00

DETACH BEFORE DEPOSITING

CH 142

BRUCE P. MCLEOD
Senior Specialist
Environmental Control

cc: J. G. Wiley - Monsanto

RECEIVED
PER-MAIL ROOM
1988 JAN -7 AM 10:42

1032.BPM

1031

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHWEST DISTRICT

160 GOVERNMENTAL CENTER
PENSACOLA, FLORIDA 32501



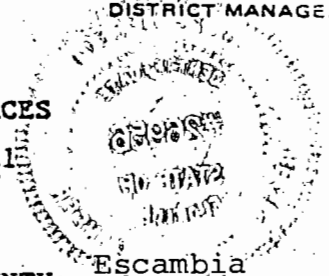
BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ROBERT V. KRIEDEL
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

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



Identify the specific emission point source(s) addressed in this application (i.e. Lime
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Santoprene^R
Thermoplastic Rubber Compounding Facility
SOURCE LOCATION: Street 3000 Old Chemstrand Rd City Cantonment Fl 325
33

UTM: East _____ North _____

(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 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: W. J. Board / J. P. Wiley
W. J. Board, Genl. Supt., Gov. Affairs/Env Health & Safety
Name and Title (Please Type)

Date: 1/5/88 Telephone No. 904/968-7350

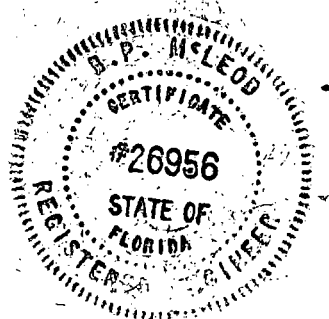
B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

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

¹ 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)

P. O. Box 12830, Pensacola, FL 32575

Mailing Address (Please Type)

Florida Registration No. 26956 Date: 1/4/88 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.

Addition of compressed air to the pelletized rubber storage bins. No pollution control equipment supplied because the pelletized material is not a source of suspended particulates. The level of formaldehyde concentration does not warrant abatement equipment.

B. Schedule of project covered in this application (Construction Permit Application Only)
Start of Construction upon permit receipt Completion of Construction 18 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

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

AC17-87408

AQ17-113404

E. Requested permitted equipment operating time: hrs/day²⁴____; days/wk⁷____; wks/yr⁵²____;
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? no
a. If yes, has "offset" been applied? N/A
b. If yes, has "Lowest Achievable Emission Rate" been applied? N/A
c. If yes, list non-attainment pollutants. N/A

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

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

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

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

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

a. If yes, for what pollutants? N/A

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

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

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Air	N/A	N/A	1600 CFM	E

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

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

2. Product Weight (lbs/hr): N/A

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 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	
Formaldehyde	0.05	0.2	(see note below)		0.05	0.2 ⁽¹⁾	E

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).

NOTE: 17-2.620 would likely apply

(1) No control applied so actual = potential emissions

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)
Not applicable				

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.

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

Stack Height: 40 (approx) ft. Stack Diameter: 2 (approx.) ft.
 approx.
 Gas Flow Rate: 1600 ACFM 1600 DSCFM Gas Exit Temperature: ambient °F.
 Water Vapor Content: ambient % Velocity: 7 (average) FPS

SECTION IV: INCINERATOR INFORMATION

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

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:

¹Explain method of determining efficiency.

²Energy 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).

2. Instrumentation, Field and Laboratory

- a. Was instrumentation EPA referenced or its equivalent? Yes No
- b. Was instrumentation calibrated in accordance with Department procedures?
 Yes No Unknown

B. Meteorological Data Used for Air Quality Modeling

- 1. _____ Year(s) of data from _____ / _____ / _____ to _____ / _____ / _____
month day year month day year
- 2. Surface data obtained from (location) _____
- 3. Upper air (mixing height) data obtained from (location) _____
- 4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

- 1. _____ Modified? If yes, attach description.
- 2. _____ Modified? If yes, attach description.
- 3. _____ Modified? If yes, attach description.
- 4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO ₂	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

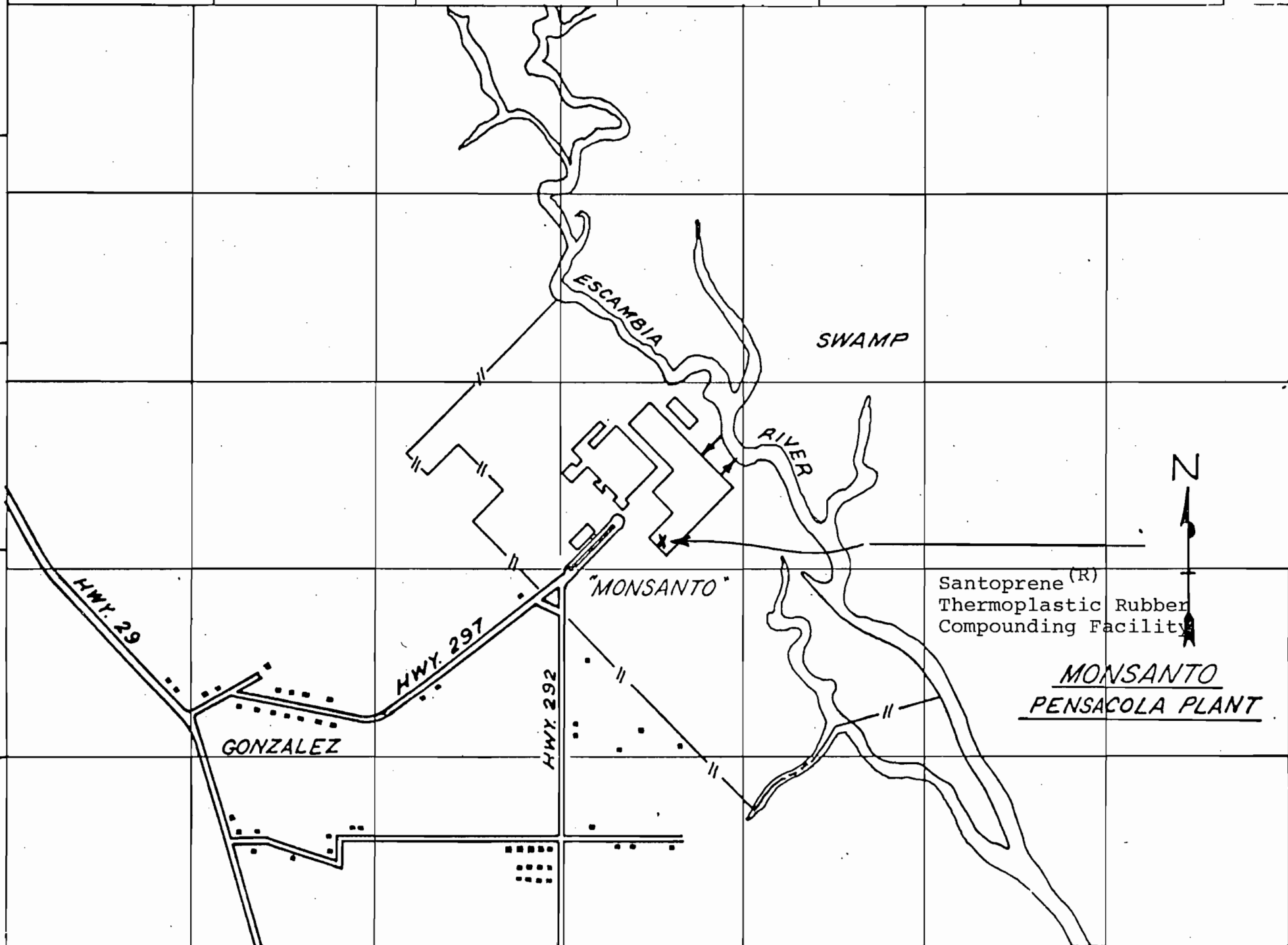
87°18'

87°15'

87°12'

30°37'

30°34'



MONSANTO PENSACOLA
SANTOPRENT^R THERMOPLASTIC RUBBER COMPOUNDING FACILITY

Calculation of Formaldehyde Emissions

Average flow rate 1600 CFM

Estimated formaldehyde concentration = 6 ppm (u)

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

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

$$= \frac{0.2 \text{ tons formaldehyde}}{\text{year}}$$