

Check Sheet  
CHEMICAL

Company Name: MONSANTO ^ COMPANY  
Permit Number: AC 17 - 85169  
PSD Number: \_\_\_\_\_  
Permit Engineer: \_\_\_\_\_

**Application:**

- |  |                          |
|--|--------------------------|
| <input checked="" type="checkbox"/> Initial Application    | Cross References:        |
| <input checked="" type="checkbox"/> Incompleteness Letters | <input type="checkbox"/> |
| <input checked="" 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

**Final**

**Determination:**

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

**Post Permit Correspondence:**

- Extensions/Amendments/Modifications
- Other

P 408 530 300

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. R. L. Monty	
Street and No.	
P.O., State and ZIP Code	
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 <del>9/24/84</del> 10/5/84	

PS Form 3800, Feb. 1982

PS Form 3811, Jan. 1978

**SENDER:** Complete items 1, 2, and 3.  
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)  
 Show to whom and date delivered.....  
 Show to whom, date and address of delivery.....  
 RESTRICTED DELIVERY  
 Show to whom and date delivered.....  
 RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery.....  
 (CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Mr. R. L. Monty  
 P. O. Box 12830  
 Pensacola, FL 32575

3. ARTICLE DESCRIPTION:  

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	P408530300	

 (Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE  Addressee  Authorized agent  
*Blanca Ferrigor (Secretary)*

4. DATE OF DELIVERY: 9/9/84 POSTMARK

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

October 3, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

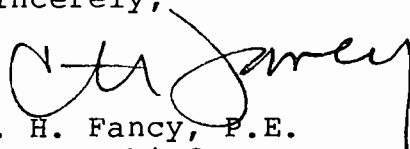
Mr. R. L. Monty  
Superintendent, Environmental Health  
and Safety  
Monsanto Company  
Post Office Box 12830  
Pensacola, Florida 32575

Dear Mr. Monty:

Enclosed is Permit Number AC 17-85169, dated October 2, 1984, to Monsanto Company, issued pursuant to Section 403, Florida Statutes.

Acceptance of this permit constitutes notice and agreement that the department will periodically review this permit for compliance, including site inspections where applicable, and may initiate enforcement actions for violation of the conditions and requirements thereof.

Sincerely,

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

CHF/pa

Enclosure

cc: Bruce P. McLeod, P.E., Monsanto Company  
Tom Moody, DER Northwest District

Final Determination

Monsanto Company  
Pensacola, Florida  
Escambia County

Barge Unloading Station  
State Permit Number  
AC 17-85169

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

September 28, 1984

## Final Determination

Monsanto Company's application for permit to construct a barge unloading station at their existing plant in Escambia County has been reviewed by the Bureau of Air Quality Management. Public notice of the department's intent to issue the permit was published in The Pensacola Journal on August 9, 1984.

No comments were received on the department's intent to issue the permit. The final action of the department will to be issue the permit as proposed in the July 25, 1984, Technical Evaluation and Preliminary Determination.

CHF/WH/agh

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

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

Permit Number: AC 17-85169  
Expiration Date: July 1, 1986  
County: Escambia  
Latitude/Longitude: 30° 35' 59" N/  
87° 14' 50" W  
Project: Butane Barge Unloading  
Station

This permit is issued under the provisions of Chapter(s) 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:

Construction of a butane barge unloading station consisting of two Chiksan marine unloading arms, piping connecting the station to the existing butane storage vessels and existing plant steam system, and a 20 foot high stack equipped with a vent silencer. This station is located near the intersection of State Roads 292 and 297 in Escambia County. The UTM coordinates of the site are 16-476.3E and 3385.1 N.

Construction shall be in accordance with the application for a permit to construct a Butane Barge Unloading Arm Vent Stack that was signed by Mr. R. L. Monty on March 29, 1984, and the additional information supplied by Monsanto Company in their letter dated May 7, 1984.

PERMITTEE:  
Monsanto Company

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

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

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

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

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

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

**I. D. Number:**  
**Permit Number:** AC 17-85169  
**Expiration Date:** July 1, 1986

**GENERAL CONDITIONS:**

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

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

**SPECIFIC CONDITIONS:**

1. The butane barge unloading station shall not be used to transfer other chemicals unless prior approval has been obtained from the department.
2. The station shall be used with the vent silencer unless Monsanto Company demonstrates to the department that its use, without the silencer, will not cause unreasonable noise or a nuisance.

PERMITTEE:  
Monsanto Company

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

SPECIFIC CONDITIONS:

3. Butane emissions from the barge unloading station shall not exceed 4.7 TPY. Compliance with this limit shall be determined by calculations based on the actual number of barges unloaded during the year and the estimated butane emissions each time the station is purged.
4. Monsanto Company shall maintain a log showing the date each butane barge is unloaded by this station.
5. Monsanto Company shall submit a complete application for permit to operate the butane barge unloading station to the Northwest District prior to 90 days before the expiration date of this construction permit.
6. Any permit to operate issued for the butane barge unloading station shall require Monsanto Company to submit an annual report to the Northwest District giving, as a minimum, a description of any modifications to the station that occurred during the preceding year and certification that volatile organic compound emissions from the station did not exceed 4.7 tons during the previous year.

Issued this 2<sup>nd</sup> day of Oct, 1984

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION

Terry Cole for  
VICTORIA J. TSCHINKEL, Secretary

\_\_\_\_\_ pages attached.

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

**INTEROFFICE MEMORANDUM**

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional [ ]	Reply Required [ ]	Info. Only [ ]
Date Due: _____	Date Due: _____	

TO: Victoria J. Tschinkel  
FROM: Clair Fancy *Clair Fancy*  
DATE: September 28, 1984  
SUBJECT: Approval of Attached Air Construction Permit

**RECEIVED**  
OCT 1 1984

Office of the Secretary

Attached for your approval is the Final Determination and Permit to Construct a barge unloading station at Monsanto Company's existing plant in Escambia County.

"Notice of Proposed Agency Action on Permit Application" was published in the Pensacola Journal on August 9, 1984. No comments were received on the department's intent to issue the permit. Day ninety, after which the permit would be issued by default, is October 27, 1984.

CHF/WH/agh

Attachments

# Monsanto

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

August 14, 1984

DER  
AUG 15 1984  
BAQM

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

Dear Mr. Thomas:

Enclosed is a copy of the public notice for Monsanto's Barge Unloading Facility Construction Permit AC-1785169.

If you have any questions concerning this public notice, please feel free to call me at 904/968-8725.

Sincerely,



Bruce P. McLeod, Specialist  
Environmental Control

enc.

# The Pensacola Journal

PUBLISHED DAILY EXCEPT SUNDAY

PENSACOLA, ESCAMBIA COUNTY, FLORIDA

State of Florida,  
County of Escambia.

Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

Legal No. 28840 1-T  
Aug. 9, 1984

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State of Florida  
Department of  
Environmental Regulation  
Notice of Proposed  
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on Permit Application

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The Department of Environmental Regulation gives notice of its intent to issue a permit to Monsanto Company to authorize construction of a barge unloading station at their existing plant in Escambia County. This plant is located near the intersections of State Roads 292 and 297.

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The station consists of the piping required to unload a hydrocarbon volatile organic compound from barges, a steam purge system, and a stack. Operation of the unloading facility will result in no more than 4.7 tons per year of volatile organic compound emissions, which will have a minimal effect on the ambient air quality near the plant. A Best Available Control Technology determination was not required for this project.

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Persons whose substantial interests are affected by the department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing 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.

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If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 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.

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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:

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Dept. of Environmental Regulation  
Northwest District  
106 Governmental Center  
Pensacola, Florida 32501

Dept. of Environmental Regulation  
Bureau of Air Quality Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

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Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's

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Before the undersigned authority personally appeared  
Mary Elizabeth Rost  
who on oath says that she is Legal Advertising Supervisor  
of the Pensacola Journal, a daily (except Sunday) newspaper published at  
Pensacola in Escambia County, Florida, with general circulation in Escam-  
bia, Santa Rosa, Okaloosa and Walton Counties that the attached copy of  
advertisement, being a NOTICE in the matter of

D. E. R. Regulation  
in the \_\_\_\_\_ Court,

was published in said newspaper in the issues of  
August 9, 1984

Affiant further say that the said The Pensacola 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 except Sunday, 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.

Mary Elizabeth Rost

*gta*

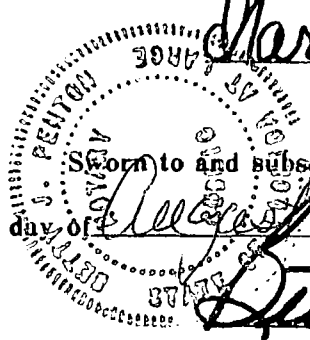
Sworn to and subscribed before me this

day of \_\_\_\_\_, A.D., 1984

Dolly J. Henton

NOTARY PUBLIC.

My Commission Expires Oct. 16, 1987.



No. 0156533

RECEIPT FOR CERTIFIED MAIL

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

SENT TO		Mr. R. L. Monty
STREET AND NO.		
P.O., STATE AND ZIP CODE		
POSTAGE		\$
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	¢
	SPECIAL DELIVERY	¢
	RESTRICTED DELIVERY	¢
	RETURN RECEIPT SERVICE	¢
	SHOW TO WHOM AND DATE DELIVERED	¢
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
OPTIONAL SERVICES		
RETURN RECEIPT SERVICE		
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
TOTAL POSTAGE AND FEES		\$
POSTMARK OR DATE		7/30/84

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1979

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● **SENDER:** Complete items 1, 2, and 3.  
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)  
 Show to whom and date delivered..... ¢  
 Show to whom, date and address of delivery..... ¢  
 RESTRICTED DELIVERY  
 Show to whom and date delivered..... ¢  
 RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery. \$ \_\_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. **ARTICLE ADDRESSED TO:**  
 Mr. R. L. Monty  
 Post Office Box 12830  
 Pensacola, Florida 32575

3. **ARTICLE DESCRIPTION:**

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0156533	

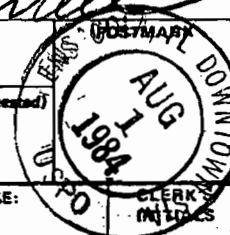
(Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE  Addressee  Authorized agent

4. *W. Burrell*  
 DATE OF DELIVERY

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:



☆EPO : 1979-300-459

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

July 27, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. R. L. Monty  
Superintendent, Environmental Health  
and Safety  
Monsanto Company  
Post Office Box 12830  
Pensacola, Florida 32575

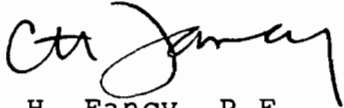
Dear Mr. Monty:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permits to construct a barge unloading station at Monsanto Company's existing plant in Escambia County, Florida.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Escambia County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

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/pa

Attachments

cc: Bruce P. McLeod, P.E.  
Robert V. Kriegel



BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter on an )  
Application for Permit by: )  
 )  
Monsanto Company ) DER File No. AC 17-85169  
Post Office Box 12830 )  
Pensacola, Florida 32575 )  
 )

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Monsanto Company, applied on March 30, 1984, to the Department of Environmental Regulation for a permit to construct a barge unloading station at their existing plant in 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 applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

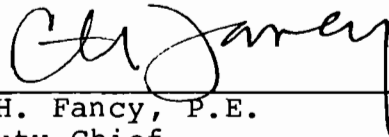
Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witness and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exception to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), 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 Model Rule 28-5.207 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, 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, Tallahase, 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 Statues.

Executed the 30 day of July, 1984, 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:

R. L. Monty  
Bruce P. McLeod, P.E.  
Robert V. Kriegel

Technical Evaluation  
and  
Preliminary Determination

Monsanto Company  
Pensacola, Florida  
Escambia County

Butane Barge Unloading Station  
Proposed State Permit Number  
AC 17-85169

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

July 25, 1984

State of Florida  
Department of Environmental Regulation  
Notice of Proposed Agency Action  
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Monsanto Company to authorize construction of a barge unloading station at their existing plant in Escambia County. This plant is located near the intersections of State Roads 292 and 297.

The station consists of the piping required to unload a hydrocarbon volatile organic compound from barges, a steam purge system, and a stack. Operation of the unloading facility will result in no more than 4.7 tons per year of volatile organic compound emissions, which will have a minimal effect on the ambient air quality near the plant. A Best Available Control Technology determination was not required for this project.

Persons whose substantial interests are affected by the department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing 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.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 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.

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  
Northwest District  
106 Governmental Center  
Pensacola, Florida 32501

Dept. of Environmental Regulation  
Bureau of Air Quality Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

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.

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- A. Application
- B. Draft State Permit



## I. Project Description

### A. Applicant

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

### B. Project and Location

Monsanto Company proposes to install a butane barge unloading station at their existing plant that is located near the intersection of State Roads 292 and 297 north of Pensacola, Escambia County, Florida.

The station will consist of the piping required to unload butane from barges, a purge system of steam pipes, and a stack equipped with a vent silencer. The station will have two unloading arms. Existing boilers will supply the steam needed to purge the station.

### C. Operation

Butane will be brought to this plant in barges. The butane in the barges will be transferred to the existing storage tanks using the proposed butane barge unloading station. After the barges are unloaded, steam will be allowed to flow through some of the butane pipes in the station and out of a 20 foot high stack for about 15 minutes. The steam sparging rate will be 1,200 lb/hr. The stack will be equipped with a vent silencer that will reduce the noise when it is used. The purging removes all the butane for the pipes and eliminates a potential fire/explosion hazard.

## II. Rule Applicability

### A. State Regulations

The proposed project, construction of a butane barge unloading station, 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(99), FAC) because total emissions exceed 100 TPY. The proposed source will emit less than the significant emission rate of 40 TPY VOC listed in Table 500-2.

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

As the area the proposed source will be located in is designated attainment for ozone, it is not subject to new source review for nonattainment areas (Rule 17-2.510(2)(a)1., FAC).

The project is subject to Rule 17-2.520, FAC, Sources not Subject to PSD or Nonattainment Requirements. Control of emissions shall be based on Rule 17-2.620, FAC, General Pollutant Emission Limiting Standards.

#### 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 will not cause a significant emission rate increase of any criteria pollutant.

### III. Technical Evaluation

#### A. Estimated Emissions

The butane barge unloading station will be used two or three times per week. After the butane is transferred from the barges to the existing butane storage tanks, the butane vapor contained within the loading arms will be vented prior to being disconnected from the barge. The arms and pipes vented hold approximately 60 pounds of butane vapors which will be discharged to the atmosphere each time the system is purged. If all 60 pounds of butane are emitted in the first minute of purging, the maximum short-term ground level concentration of butane will be 647 milligrams per cubic meter. The TLV-TWA (8 hour average) concentration for butane is 1900 milligrams per cubic meter.

The system will be purged for approximately 15 minutes to assure all the butane is removed. If the station is purged three times per week, 4.7 TPY of butane will be emitted to the atmosphere.

### IV. Conclusion

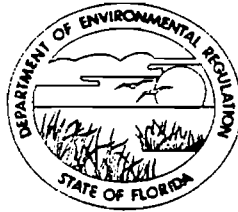
Based on a review of the data submitted by Monsanto Company, the department concludes that neither air pollution control equipment nor a higher stack is justified for this butane barge unloading station because of its infrequent use and small impact of the emissions on the ambient air quality. More frequent use of the equipment than that proposed in the application will require a reevaluation of the station and, if deemed necessary by

the department, air pollution control equipment. The department proposes to approve the barge unloading station and operations as requested by the Company. The General and Specific Conditions listed in proposed permit AC 17-85169 (attached) will assure compliance of the source with all applicable air pollution control regulations.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

**DRAFT**

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

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

Permit Number: AC 17-85169  
Expiration Date: July 1, 1986  
County: Escambia  
Latitude/Longitude: 30° 35' 59" N/  
87° 14' 50" W  
Project: Butane Barge Unloading  
Station

This permit is issued under the provisions of Chapter(s) 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:

Construction of a butane barge unloading station consisting of two Chiksan marine unloading arms, piping connecting the station to the existing butane storage vessels and existing plant steam system, and a 20 foot high stack equipped with a vent silencer. This station is located near the intersection of State Roads 292 and 297 in Escambia County. The UTM coordinates of the site are 16-476.3E and 3385.1 N.

Construction shall be in accordance with the application for a permit to construct a Butane Barge Unloading Arm Vent Stack that was signed by Mr. R. L. Monty on March 29, 1984, and the additional information supplied by Monsanto Company in their letter dated May 7, 1984.

**DRAFT**

PERMITTEE:  
Monsanto Company

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

**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.

**DRAFT**

PERMITTEE:  
Monsanto Company

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

**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.

**DRAFT**

PERMITTEE:  
Monsanto Company

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

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

**I. D. Number:**  
**Permit Number:** AC 17-85169  
**Expiration Date:** July 1, 1986

**GENERAL CONDITIONS:**

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

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

**SPECIFIC CONDITIONS:**

1. The butane barge unloading station shall not be used to transfer other chemicals unless prior approval has been obtained from the department.
2. The station shall be used with the vent silencer unless Monsanto Company demonstrates to the department that its use, without the silencer, will not cause unreasonable noise or a nuisance.



PERMITTEE:  
Monsanto Company

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

**SPECIFIC CONDITIONS:**

3. Butane emissions from the barge unloading station shall not exceed 4.7 TPY. Compliance with this limit shall be determined by calculations based on the actual number of barges unloaded during the year and the estimated butane emissions each time the station is purged.
4. Monsanto Company shall maintain a log showing the date each butane barge is unloaded by this station.
5. Monsanto Company shall submit a complete application for permit to operate the butane barge unloading station to the Northwest District prior to 90 days before the expiration date of this construction permit.
6. Any permit to operate issued for the butane barge unloading station shall require Monsanto Company to submit an annual report to the Northwest District giving, as a minimum, a description of any modifications to the station that occurred during the preceding year and certification that volatile organic compound emissions from the station did not exceed 4.7 tons during the previous year.

Issued this \_\_\_ day of \_\_\_\_\_, 1984

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION

---

VICTORIA J. TSCHINKEL, Secretary

\_\_\_ pages attached.

# Monsanto

---

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

DER  
JUL 3 1984  
BAQM

VIA EXPRESS MAIL

July 2, 1984

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

Mr. Thomas:

Thank you for the opportunity to submit comments on the Barge Unloading Station, Permit AC-1785169, and related matters.

Your consideration of and response to the following items is requested:

1. A modified "notice of Proposed Agency Action" has been submitted for Department review. It is felt that this proposed notice presents all the relevant environmental information, while avoiding publication of information which is considered primarily manufacturing or operations in nature.
2. It is requested that Specific Condition 2 be modified as follows:  
*The station shall not be used without the vent silencer, or Monsanto shall submit to the Department a demonstration that operation of the source will not result in unreasonable noise or nuisance.*
3. The actual number of barges unloaded and the actual amount of butane vented annually is considered *Company Confidential* information. Compliance with Specific Condition 6 can be accomplished if the Department can maintain this information as confidential. Can this be done?

Sincerely,



Bruce P. McLeod, Specialist  
Environmental Control

cc: Mr. Willard Hanks - DER - Tallahassee  
Mr. R. L. Monty - Monsanto - Pensacola  
Mr. Jack Preece - DER - Pensacola

## Notice of Proposed Agency Action

The Department of Environmental Regulation gives notice of its intent to issue a permit to construct to Monsanto Company that will allow the installation of a volatile organic compound barge unloading station at their existing plant in Escambia County. This plant is located near the intersections of State Roads 292 and 297.

The station consists of the piping required to unload barges, a steam purge system, and a stack. Operation of the unloading facility will result no more than 4.7 tons per year of volatile organic compound emissions, which will have a minimal effect on the ambient air quality near the plant.

A person who is substantially affected by the department's proposed permitting decision may request a hearing in accordance with Section 120.57, Florida Statutes, and Chapter 17-1 and 28-5, Florida Administrative Code. The request for hearing must be filed (received) in the Office of General Counsel of the department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

The Technical Evaluation and Preliminary Determination for the proposed project is available for public inspection during normal business hours at the following locations:

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

Department of Environmental Regulation  
Northwest District  
160 Governmental Center  
Pensacola, Florida 32501

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

PS Form 3811, Jan. 1978

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● SENDER: Complete items 1, 2, and 3.  
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)  
 Show to whom and date delivered.....¢  
 Show to whom, date and address of delivery.....¢  
 RESTRICTED DELIVERY  
 Show to whom and date delivered.....¢  
 RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery..\$ \_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Mr. R. L. Monty  
 P.O. Box 12830  
 Pensacola, FL 32575

3. ARTICLE DESCRIPTION:  

REGISTERED NO.	CERTIFIED NO. 0156514	INSURED NO.
----------------	--------------------------	-------------

 (Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE  Addressee  Authorized agent  
*W. B. ...*

4. DATE OF DELIVERY  
 6-12-84

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

POSTMARK: JUN 12 1984

☆GPO : 1979-300-489

No. 0156514

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

SENT TO		Mr. R. L. Monty	
STREET AND NO.			
P.O., STATE AND ZIP CODE			
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES	RETURN RECEIPT SERVICE	¢
		SHOW TO WHOM AND DATE DELIVERED	¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢	
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE		6/8/84	

PS Form 3800, Apr. 1976

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

May 25, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. R. L. Monty, Superintendent  
Monsanto Company  
P. O. Box 12830  
Pensacola, Florida 32575

Dear Mr. Monty:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit for the butane barge unloading station.


Before final action can be taken on your proposed permit, you are required by Florida Administrative Code Rule 17-1.62(3) to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Escambia County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

The Preliminary Determination and proposed permit constitutes a proposed action of the department and is subject to administrative hearing under the provisions of Chapter 120, Florida Statutes, if requested within fourteen days from receipt of this letter. Any petition for hearing must comply with the requirements of Florida Administrative Code Rule 28-5.201 and be filed with the Office of General Counsel, Florida Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to file a request for hearing within fourteen days shall constitute a waiver of your right to a hearing. Filing is deemed complete upon receipt by the Office of General Counsel.

Mr. R. L. Monty  
May 25, 1984  
Page Two

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/WH/pa

Attachments

cc: Mr. Tom Moody, Northwest District

Technical Evaluation  
and  
Preliminary Determination

Monsanto Company  
Pensacola, Florida  
Escambia County

Butane Barge Unloading Station  
Proposed State Permit Number  
AC 17-85169

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

May 25, 1984

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- A. Application
- B. Draft State Permit



## Notice of Proposed Agency Action

The Department of Environmental Regulation gives notice of its intent to issue a permit to construct to Monsanto Company that will allow the installation of a butane barge unloading station at their existing plant in Escambia County. This plant is located near the intersections of State Roads 292 and 297.

The station consist of the piping required to unload butane from barges, a steam purge system, and a stack. Each time a barge is unloaded, the system will be purged. Approximately 60 pounds of butane will be emitted to the atmosphere when the system is purged. The system will be used up to 3 times per week. The 4.7 tons per year of butane emitted by this system will have minimal effect on the ambient air quality near the plant.

A person who is substantially affected by the department's proposed permitting decision may request a hearing in accordance with Section 120.57, Florida Statutes, and Chapter 17-1 and 28-5, Florida Administrative Code. The request for hearing must be filed (received) in the Office of General Counsel of the department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

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2600 Blair Stone Road  
Tallahassee, Florida 32301

Department of Environmental Regulation  
Northwest District  
160 Governmental Center  
Pensacola, Florida 32501

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

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.

## I. Project Description

### A. Applicant

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

### B. Project and Location

Monsanto Company proposes to install a butane barge unloading station at their existing plant that is located near the intersection of State Roads 292 and 297 north of Pensacola, Escambia County, Florida.

The station will consist of the piping required to unload butane from barges, a purge system of steam pipes, and a stack equipped with a vent silencer. The station will have two unloading arms. Existing boilers will supply the steam needed to purge the station.

### C. Operation

Butane will be brought to this plant in barges. The butane in the barges will be transferred to the existing storage tanks using the proposed butane barge unloading station. After the barges are unloaded, steam will be allowed to flow through some of the butane pipes in the station and out of a 20 foot high stack for about 15 minutes. The steam sparging rate will be 1,200 lb/hr. The stack will be equipped with a vent silencer that will reduce the noise when it is used. The purging removes all the butane for the pipes and eliminates a potential fire/explosion hazard.

## II. Rule Applicability

### A. State Regulations

The proposed project, construction of a butane barge unloading station, 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(99), FAC) because total emissions exceed 100 TPY. The proposed source will emit less than the significant emission rate of 40 TPY VOC listed in Table 500-2.

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

As the area the proposed source will be located in is designated attainment for ozone, it is not subject to new source review for nonattainment areas (Rule 17-2.510(2)(a)1., FAC).

The project is subject to Rule 17-2.520, FAC, Sources not Subject to PSD or Nonattainment Requirements. Control of emissions shall be based on Rule 17-2.620, FAC, General Pollutant Emission Limiting Standards.

#### 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 will not cause a significant emission rate increase of any criteria pollutant.

### III. Technical Evaluation

#### A. Estimated Emissions

The butane barge unloading station will be used two or three times per week. After the butane is transferred from the barges to the existing butane storage tanks, the butane vapor contained within the loading arms will be vented prior to being disconnected from the barge. The arms and pipes vented hold approximately 60 pounds of butane vapors which will be discharged to the atmosphere each time the system is purged. If all 60 pounds of butane are emitted in the first minute of purging, the maximum short-term ground level concentration of butane will be 647 milligrams per cubic meter. The TLV-TWA (8 hour average) concentration for butane is 1900 milligrams per cubic meter.

The system will be purged for approximately 15 minutes to assure all the butane is removed. If the station is purged three times per week, 4.7 TPY of butane will be emitted to the atmosphere.

### IV. Conclusion

Based on a review of the data submitted by Monsanto Company, the department concludes that neither air pollution control equipment nor a higher stack is justified for this butane barge unloading station because of its infrequent use and small impact of the emissions on the ambient air quality. More frequent use of the equipment than that proposed in the application will require a reevaluation of the station and, if deemed necessary by

the department, air pollution control equipment. The department proposes to approve the barge unloading station and operations as requested by the Company. The General and Specific Conditions listed in proposed permit AC 17-85169 (attached) will assure compliance of the source with all applicable air pollution control regulations.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

**DRAFT**

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

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

Permit Number: AC 17-85169  
Expiration Date: July 1, 1986  
County: Escambia  
Latitude/Longitude: 30° 35' 59" N/  
87° 14' 50" W  
Project: Butane Barge Unloading  
Station

This permit is issued under the provisions of Chapter(s) 403  
17-2 and 17-4, 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:

Construction of a butane barge unloading station consisting of two  
Chiksan marine unloading arms, piping connecting the station to the  
existing butane storage vessels and existing plant steam system,  
and a 20 foot high stack equipped with a vent silencer. This  
station is located near the intersection of State Roads 292 and 297  
in Escambia County. The UTM coordinates of the site are 16-476.3E  
and 3385.1 N.

Construction shall be in accordance with the application for a  
permit to construct a Butane Barge Unloading Arm Vent Stack that  
was signed by Mr. R. L. Monty on March 29, 1984, and the additional  
information supplied by Monsanto Company in their letter dated May  
7, 1984.

**DRAFT**

PERMITTEE:  
Monsanto Company

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

**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

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

**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.



**DRAFT**

PERMITTEE:  
Monsanto Company

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

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

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

**GENERAL CONDITIONS:**

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

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

**SPECIFIC CONDITIONS:**

1. The butane barge unloading station shall not be used to transfer other chemicals unless prior approval has been obtained from the department.
2. The station shall not be used without the vent silencer.
3. Butane emissions from the barge unloading station shall not exceed 4.7 TPY. Compliance with this limit shall be determined by calculations based on the actual number of barges unloaded during the year and the estimated butane emissions each time the station is purged.
4. Monsanto Company shall maintain a log showing the date each butane barge is unloaded by this station.

**DRAFT**

PERMITTEE:  
Monsanto Company

I. D. Number:  
Permit Number: AC 17-85169  
Expiration Date: July 1, 1986

**SPECIFIC CONDITIONS:**

5. Monsanto Company shall submit a complete application for permit to operate the butane barge unloading station to the Northwest District prior to 90 days before the expiration date of this construction permit.

6. Any permit to operate issued for the butane barge unloading station shall require Monsanto Company to submit an annual report to the Northwest District giving, as a minimum, the number of barges unloaded at the station, the quantity of butane emitted from the station and a description of any modifications to the station that occurred during the preceding year.

Issued this \_\_\_ day of \_\_\_\_\_, 1984

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION

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VICTORIA J. TSCHINKEL, Secretary

\_\_\_ pages attached.

# Monsanto

---

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

May 7, 1984

DER  
MAY 10 1984  
BAQM

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

Dear Mr. Hanks:

Enclosed for your information is the additional information requested in the letter from C. H. Fancy, P.E. to Bruce P. McLeod, dated April 25, 1984.

#### Item No. 1

Supplement A presents the calculations used to arrive at the 60 lbs. of butane per venting occurrence as specified in the Construction Permit Application. Please note that there are two unloading arms. The Input line supplies butane vapor to the barge as it empties and the Output line connects to the transfer piping to the storage spheres.

#### Item No. 2

Attached for your information is a picture showing Chiksan marine unloading arms in service and description of their use. Also attached is a sketch of the vent stack.

This vent stack will be fitted with a vent silencer. The exact dimensions of this silencer have not been specified, but are expected to be 5 to 7½ feet long and 12 to 14 inches in diameter.

#### Item No. 3

The proposed project will allow the receipt of raw material butane by barge. The unloading arms are the connecting link between the butane transfer piping and the butane barge. This type of unloading system is specially designed for marine use and has a history of reliable service in similar applications. The butane vapor contained within the loading arm will be vented prior to breaking the connection between the barge and the unloading arms. The vent stack is being provided primarily to control ground level butane concentrations for personnel and fire protection safety.

Mr. Willard Hanks  
May 7, 1984  
Page 2

Item No. 4

The units for butane ground level concentration in Supplement 2 of the Construction Permit Application are in error. The units of concentration should have been milligrams per cubic meter rather than micrograms per cubic meter as used in Supplement 2. The current TLV-TWA (8 hour average) for butane is 1900 milligrams per meter cubed. No TLV-STEL values for butane have been established. The worst case short-term ground level concentration of butane (assuming the 60 lbs. of butane is vented in 1 minute) is 647 milligrams per cubic meter. Therefore, the maximum ground level concentration under worst case conditions (1 minute maximum exposure) is well below the 8 hour allowable average concentration of butane.

If you have any questions concerning this information or the project in general, please do not hesitate to contact me at (904) 968-8725.

Sincerely,



B. P. McLeod, Specialist  
Environmental Control

enc.

cc: Mr. C. H. Fancy, P.E.  
Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32301

Mr. Jack Preece  
Department of Environmental Regulation  
160 Governmental Center  
Pensacola, FL 32501-5794

SUPPLEMENT A

MONSANTO PENSACOLA

BUTANE BARGE UNLOADING ARM  
VENT STACK

CALCULATION OF POUNDS OF BUTANE CONTAINED IN THE UNLOADING ARMS

DATA

1. Unloading Arm Dimensions

<u>Output Arm</u>	<u>Input Arm</u>
14' - Inboard	14'
14' - Outboard	14'
13' - Riser	13'
6' - 4-90° ELs	4.5'
8" - nominal I.D.	8" nominal I.D.

2. Pipe

<u>Output Arm</u>	<u>Input Arm</u>
11' - Straight Pipe	3.5'
8" - nominal I.D.	6"

3. Vent Contents = Butane Vapor

82°C  
1.28 lb./ft<sup>3</sup> ? *MUST be Under pressure*

CALCULATIONS

- Volume Vented =  $\pi r^2 \times \text{Length}$
- Length = 14' + 14' + 13' + 6' + 11'  
= 58'
- Volume = 3.14159 x 0.33<sup>2</sup> ft<sup>2</sup> x 58 ft.  
= 19.84 ft<sup>3</sup> ✓
- Mass = 19.84 ft<sup>3</sup> x 1.28 lb./ft<sup>3</sup>  
= 25.4 lb. normal
- Similarly, Input Arm Mass  
= 18.1 ft<sup>3</sup> x 1.28 lb./ft<sup>3</sup>  
= 23.2 lb.

SUPPLEMENT A

(cont'd)

Total mass contained in unloading arms

25.4 lbs.

23.2 lbs.

\_\_\_\_\_

48.8 lbs.

Add 20% allowance for valve and fitting volumes

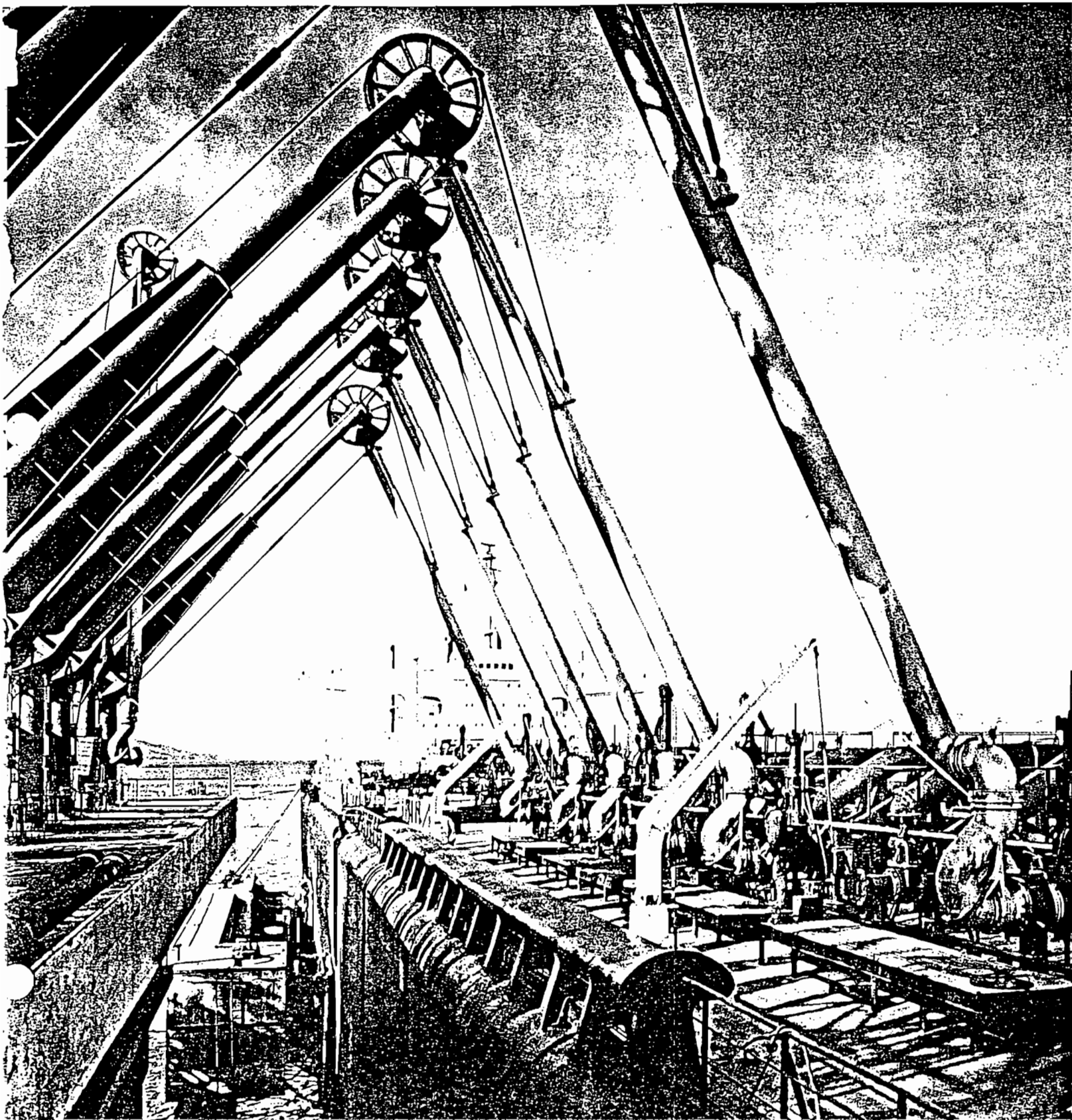
Estimated total butane in unloading arms = 60 lbs.



Chiksan marine loading systems

Project 386/  
Barge "Buttons" Unloading

Catalog MA-5





# Chiksan marine loading systems... pioneer and continuing leader

The first hydraulically powered, all-metal arm for loading and unloading liquid cargo was introduced by FMC at a Long Beach, California, terminal in 1956.

The speed and efficiency inherent in Chiksan marine loading systems gained worldwide acceptance throughout the petroleum producing and refining areas as well as ports handling other cryogenic to high-temperature cargoes. The reliability of these systems is borne out by the fact that there are more Chiksan marine arms in operation than those of any other manufacturer of this type equipment.

Chiksan marine loading systems are the modern answer to fluid loading problems. They reduce the expense of manpower normally required to handle other methods of loading. They reduce the possibility of massive spills that have occurred in the past due to ruptured lines. In addition to added strength, they offer short term payout of the initial investment while requiring minimum maintenance.

Chiksan marine loading systems reduce labor costs, and dock clutter, and speed barge or tanker turn-around time at any size port. They are available from small, manually operated, single-arm installations for inland waterways accommodating barge traffic, to multiple-bank, 24-inch, hydraulically

powered systems that will handle 90,000 barrels of liquid per hour per arm.

These arms are capable of loading or unloading the largest tankers now afloat or in the design stages. From the smallest to the largest, Chiksan marine loading systems can be readily expanded to accommodate growing port traffic and tanker size.

FMC engineers review requirements for each installation including pressure rating, temperature of product, dock dimensions, tides, size of vessels serviced, products to be handled, wind load and seismic factors, before determining arm diameter and length. At this time, they also determine feasibility of various operational control and flange connection systems.

Chiksan marine arms are self-adjusting, once connected to the ship's flanges, and will follow all movements of the ship as it rises or falls with tide and wave action or draft changes. Arm design allows for ample fore, aft and outward drift. An alarm system is available to warn operators automatically when drift limits are approached.

Most Chiksan marine loading systems can be mounted directly on a pier without other structural support. For installations where riser assemblies are higher than normal, structures are generally used to support the arms and to provide maintenance access to riser swivels. A control tower from which an operator can view the ship's manifold during connecting and disconnecting operations may be a part of the structure or an independent unit. When support structures and control towers are required, FMC engineers can assist with preparation of the proper design to handle the various installation requirements.

Maintenance on Chiksan marine loading systems is minimal, consisting of occasional greasing of swivels, dressing of cables and normal maintenance of electrical and hydraulic systems. The customer is supplied with a complete installation, operation and maintenance manual which gives full details of his particular installation. It offers a recommended spare parts list, recommended maintenance and trouble-shooting hints, as well as full details on hydraulics and electrical systems. Data covering outside-vendor-supplied parts are provided to assist the operator in achieving maximum performance from the system.

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## Chiksan swivel joints

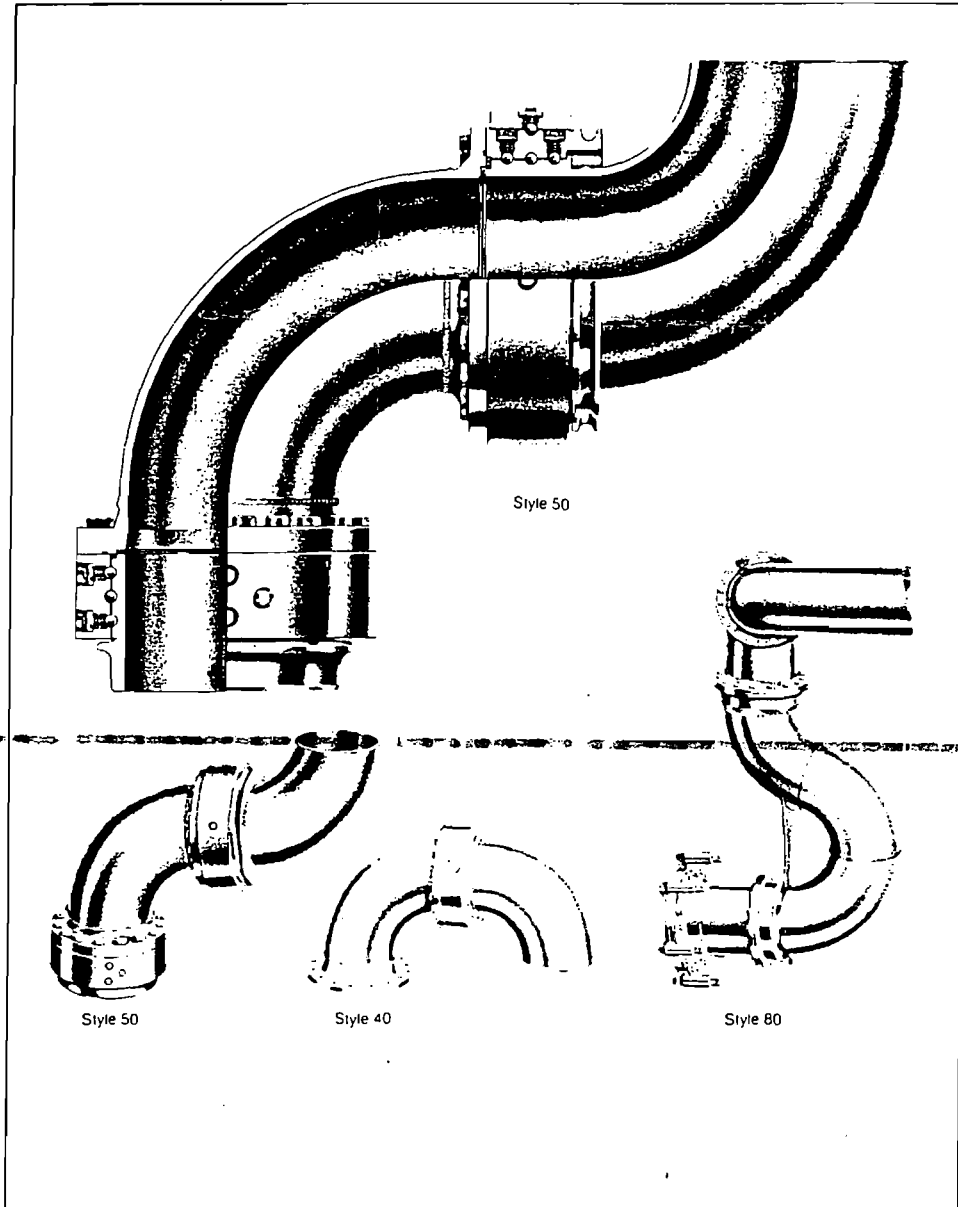
The success of Chiksan marine loading systems is due in large part to the integrity of another first in liquid handling—the Chiksan swivel joint.

The strength, durability and versatility of this swivel joint have been field-proven and have been regularly improved since its inception in the early 1920's.

Chiksan marine loading systems normally incorporate a combination of styles 50, 40 and 80 swivel joints. The style 50 swivel, located at the top of the riser, permits horizontal slewing and vertical movement of the arm assembly. At the apex of the assembly, the style 40 swivel provides vertical rotation at the point of junction between the inboard and outboard arms. The assembly terminates with a style 80 swivel which provides required flexibility in three planes where the arm connects to the barge or tanker manifold flange. After connection, this optimum combination of swivel joints allows the arm to follow the movement of the vessel in all planes of movement as it is being loaded.

Chiksan swivel joints are made in our factory of forged or cast steel after multiple tests and inspections assure the materials meet rigid metallurgical specifications. Long-life rotation is accomplished via two or three rows of ball bearings in hardened ball races. Bearing sections are sealed from product flow by elastomeric, poly-resin or other packing systems designed to function under specified pressure and temperature ratings. In-stream packing completely isolates the bearing section from flowing liquid and is designed to be unaffected by line surges.

All Chiksan marine loading arm swivel joints are supplied with stainless steel packing faces to resist corrosion and prolong packing life.



## Chiksan removable elbows

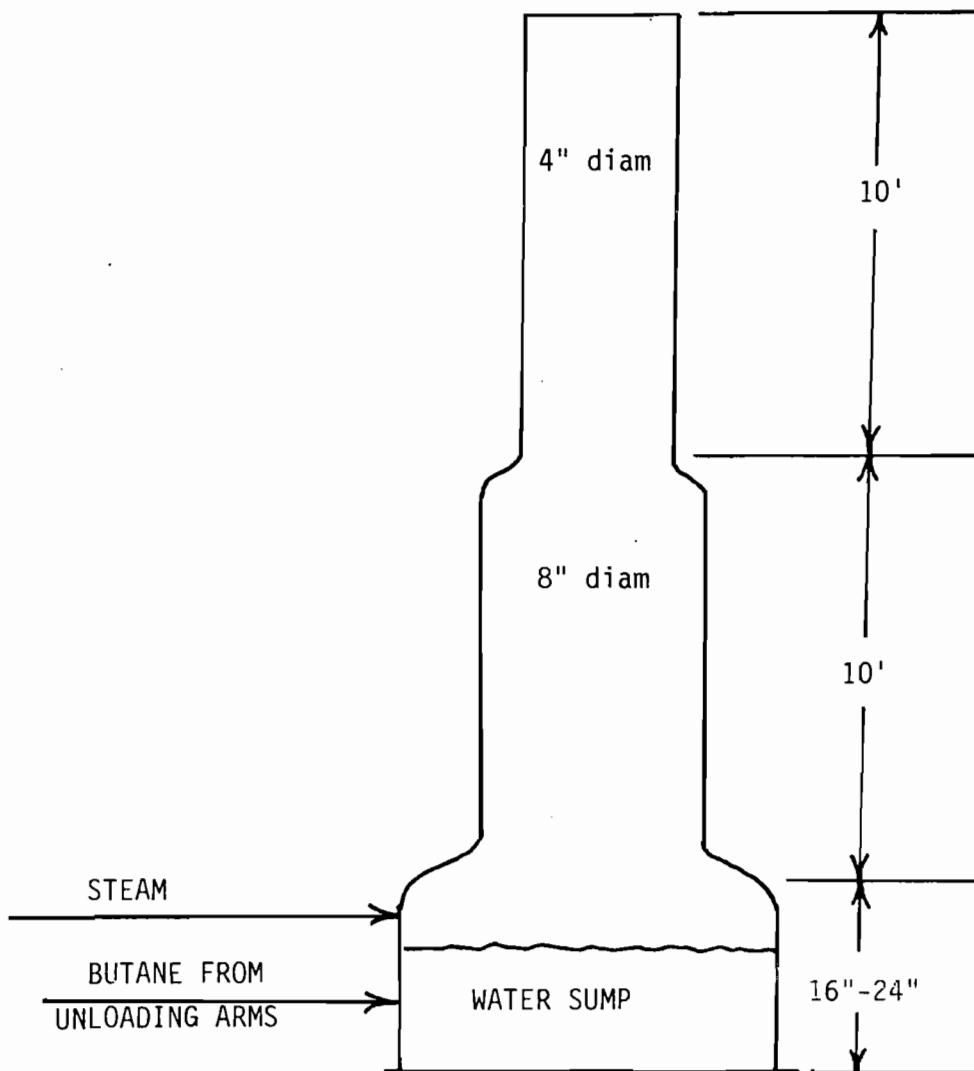
Based on extensive marine arm experience, our customers can expect many years of trouble-free service from the original sealing units installed when an arm is built. For those customers who require extra insurance, we offer removable elbows which permit access to the seals in style 40 and style 50 swivels without dismant-

ling major portions of the marine arm.

Removable elbows are supplied as standard equipment on Chiksan marine loading systems with 16-inch swivels and larger. In smaller sizes, this feature is optional.

In standard marine arms, the riser elbow supports the entire arm atop the riser pipe, while the outboard arm is suspended from the upper elbow. When swivel joints with removable elbows are installed, support brackets are added to carry these arm loads.

SUPPLEMENT B  
MONSANTO PENSACOLA  
BUTANE BARGE UNLOADING ARM  
VENT STACK SCHEMATIC



Not to scale

# BEST AVAILABLE COPY

## Monsanto Barge Unloading

240 *W/L*

1 PIPED VERSION 80021, TOM PIERCE AND BRUCE TURNER : ENVIRONMENTAL OPERATIONS BRANCH

MONSANTO

0 OPTIONS 1=YES USE THE OPTION 0=NO DO NOT USE THE OPTION

IOPT(1) = 0 (COMPUTE GRADUAL PLUME RISE)

AMBIENT AIR TEMP = 293.00(DEG.K)

IOPT(2) = 0 (COMPUTE STACK DOWNWASH)

WIND EXPONENTS = .10 .15 .20 .25 .30 .30

IOPT(3) = 0 (COMPUTE INITIAL PLUME SIZE)

ANEMOMETER HI = 7.00 (METERS)

IF = 1 USE PASQUILL'S RECOMMENDATION

0 SOURCE PARAMETERS

EMISSION RATE = 30.24(G/SEC)

PHYSICAL STACK HEIGHT = 6.10(METERS)

STACK TEMP = 373.00(DEG.K)

STACK EXIT VELOCITY = 36.60(M/SEC)

STACK DIAM = .08(METERS)

VOLUME FLOW = .18(CU M/SEC)

MIXING HY = 1500.0(METERS)

RECEPTOR HY = 0.00(METERS)

### ANALYSIS OF CONCENTRATION AS A FUNCTION OF STABILITY AND WIND SPEED

0

***EXTRAPOLATED WINDS***									
STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	
1	.50	1.3537E-02	.123	13.1	.49	1.3447E-02	.124	23.9	
1	.80	1.5655E-02	.087	17.1	.79	1.5529E-02	.088	17.2	
1	1.00	1.6382E-02	.075	14.9	.99	1.6366E-02	.076	15.0	
1	1.50	1.6750E-02	.060	11.9	1.48	1.6740E-02	.060	12.0	
1	2.00	1.6215E-02	.052	10.3	1.97	1.6255E-02	.052	10.6	
1	2.50	1.5388E-02	.047	9.6	2.47	1.5447E-02	.048	9.7	
1	3.00	1.4499E-02	.044	9.0	2.96	1.4570E-02	.044	9.1	

0

***EXTRAPOLATED WINDS***									
STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	
2	.50	1.4075E-02	.164	13.1	.49	1.3940E-02	.167	24.0	
2	.80	1.6756E-02	.116	17.1	.79	1.6641E-02	.117	17.3	
2	1.00	1.7595E-02	.100	14.9	.98	1.7533E-02	.101	15.1	
2	1.50	1.8071E-02	.079	11.9	1.47	1.8101E-02	.080	12.1	
2	2.00	1.7569E-02	.069	10.3	1.96	1.7631E-02	.069	10.6	
2	2.50	1.6712E-02	.062	9.6	2.45	1.6807E-02	.063	9.7	
2	3.00	1.5772E-02	.058	9.0	2.94	1.5863E-02	.059	9.1	
2	4.00	1.3986E-02	.053	8.3	3.92	1.4123E-02	.054	8.3	
2	5.00	1.2462E-02	.050	7.7	4.90	1.2606E-02	.050	7.9	

0

***EXTRAPOLATED WINDS***									
STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	
3	2.00	1.9209E-02	.099	10.3	1.95	1.9339E-02	19.289mg	10.6	
3	2.50	1.8321E-02	.090	9.6	2.43	1.8452E-02	19.289mg	9.7	
3	3.00	1.7324E-02	.084	9.0	2.92	1.7488E-02	19.289mg	9.1	
3	4.00	1.5403E-02	.077	8.3	3.99	1.5599E-02		8.4	
3	5.00	1.3747E-02	.072	7.7	4.96	1.3855E-02		7.9	
3	7.00	1.1214E-02	.067	7.4	6.81	1.1416E-02		7.4	
3	10.00	8.7254E-03	.064	7.0	9.73	8.9053E-03		7.0	
3	12.00	7.5886E-03	.062	6.6	11.67	7.7539E-03		6.9	
3	15.00	6.3412E-03	.061	6.2	14.59	6.4863E-03		6.7	

0

***EXTRAPOLATED WINDS***									
STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	
4	.50	1.2977E-02	.431	23.7	.48	1.2717E-02	.444	24.3	
4	.80	1.6237E-02	.295	17.1	.77	1.6052E-02	.300	17.5	
4	1.00	1.7244E-02	.251	14.9	.97	1.7112E-02	.257	15.2	
4	1.50	1.8051E-02	.195	12.0	1.45	1.8046E-02	.199	12.2	
4	2.00	1.7721E-02	.168	10.5	1.93	1.7800E-02	.171	10.6	
4	2.50	1.6978E-02	.152	9.6	2.42	1.7117E-02	.154	9.7	
4	3.00	1.6106E-02	.141	9.0	2.90	1.6284E-02	.143	9.1	
4	4.00	1.4382E-02	.128	8.3	3.86	1.4605E-02	.130	8.4	

# Best Available Copy

4	2.50	1.6106E-02	.141	9.0	2.90	1.6260E-02	.140	7.9
4	3.00	1.4382E-02	.128	8.3	3.84	1.4605E-02	.130	8.4
4	4.00	1.2872E-02	.120	7.9	4.83	1.3110E-02	.122	7.9
4	5.00	1.0534E-02	.112	7.4	6.74	1.0772E-02	.112	7.4
4	7.00	8.2204E-03	.105	7.0	9.66	8.4313E-03	.106	7.0
4	10.00	7.1569E-03	.103	6.8	11.57	7.3505E-03	.103	6.9
4	15.00	5.9875E-03	.100	6.7	14.49	6.1579E-03	.100	6.7
4	20.00	4.7006E-03	.098	6.5	19.32	4.8417E-03	.098	6.6

\*\*\*EXTRAPOLATED WINDS\*\*\*

STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)
5	2.00	5.3195E-03	.459	17.8	1.92	5.4334E-03	.464	18.0
5	2.50	4.7359E-03	.430	17.0	2.40	4.3399E-03	.435	17.1
5	3.00	4.2981E-03	.409	16.4	2.88	4.3943E-03	.413	16.5
5	4.00	3.6738E-03	.378	15.4	3.84	3.7586E-03	.382	15.5
5	5.00	3.2420E-03	.356	14.7	4.80	3.3184E-03	.360	14.9

\*\*\*EXTRAPOLATED WINDS\*\*\*

STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)
6	2.00	6.3034E-03	.686	15.8	1.92	6.4493E-03	.693	16.0
6	2.50	5.5604E-03	.648	15.1	2.40	5.6921E-03	.654	15.3
6	3.00	5.0082E-03	.619	14.6	2.88	5.1291E-03	.625	14.7
6	4.00	4.2295E-03	.577	13.8	3.84	4.3346E-03	.582	13.9
6	5.00	3.6975E-03	.547	13.3	4.80	3.7915E-03	.553	13.4

- 0 (1) NO COMPUTATION WAS ATTEMPTED AS 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.
- 0 (2) THE PLUME IS OF SUFFICIENT HEIGHT THAT EXTREME CAUTION SHOULD BE USED IN INTERPRETING THIS COMPUTATION AS THIS STABILITY TYPE MAY NOT EXIST TO THIS HEIGHT. ALSO WIND SPEED VARIATIONS WITH HEIGHT MAY EXERT A DOMINATING INFLUENCE.
- 0 (3) NO COMPUTATION WAS ATTEMPTED FOR THIS HEIGHT AS THE POINT OF MAXIMUM CONCENTRATION IS GREATER THAN 100 KILOMETERS FROM THE SOURCE.
- EOI ENCOUNTERED.

Monsanto

WORKING FUND ACCOUNT  
MONSANTO COMPANY  
PENSACOLA, FLORIDA

700 00675

62-20  
311

03/27/84

\$100.00

★ **100 AND 00 CTS**

PAY  
TO THE  
ORDER  
OF

DEPARTMENT OF ENVIRONMENTAL REGULATION

Citibank (Delaware)

*Howard L. Clark*  
*B. W. Hill*

MONSANTO COMPANY, PENSACOLA, FLORIDA

720 00675

P-13

03/27/84

THE ATTACHED CHECK IS IN PAYMENT OF THE FOLLOWING:

DEPARTMENT OF ENVIRONMENTAL REGULATION

MEMO	DATE	INVOICE NO.	AMOUNT	DEDUCTIONS & DISCOUNT	NET
Construction permit application fee for Butane Barge Unloading Arm Vent Stack.	03/27/84		\$100.00		\$100.00

DETACH BEFORE DEPOSITING

CH 142

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

**N9 76022**

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Monsanto Company Date April 5, 1984

Address P.O. Box 12860, Pensacola, Fla. 32575 Dollars \$ 100.00

Applicant Name & Address Same as above

Source of Revenue \_\_\_\_\_

Revenue Code 001001 Application Number AC 17-85169

By Patricia G. Adams

# Monsanto

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

March 27, 1984

Mr. Clair H. Fancy  
Central Air Permitting  
Bureau of Air Quality Management  
Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32301

DER  
MAR 30 1984  
BAQM

Dear Mr. Fancy:

I am enclosing an application for an Air Pollution Source Construction Permit submitted in quadruplicate. Also enclosed is a check for \$100.00 to cover the construction permit processing fee.

If you have any questions, please do not hesitate to contact me at (904) 968-8725.

Sincerely,

*Bruce P. McLeod*

Bruce P. McLeod, Specialist  
Environmental Control

/gj

encs.

DEPARTMENT OF ENVIRONMENTAL REGULATION

AC 17-85169

DER

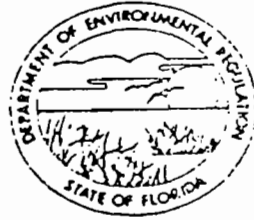
MAR 30 1984

BAQM

BOB GRAHAM GOVERNOR

VICTORIA J. TSCHINKEL SECRETARY

ROBERT V. KRIEGER DISTRICT MANAGER



NORTHWEST DISTRICT

160 GOVERNMENTAL CENTER PENSACOLA, FLORIDA 32501

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Pollution [X] New [ ] Existing

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: Monsanto 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) Butane Barge Unloading Arm Vent Stack

SOURCE LOCATION: Street Intersection State Rds. 292 & 297 City Pensacola

UTM: East North Latitude 30° 35' 59"N Longitude 87° 14' 50"W

APPLICANT NAME AND TITLE: R. L. Monty, Supt., Environmental Health and 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 Construction permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

\*Attach letter of authorization

Signed: [Signature] R. L. Monty, Supt., Environmental Health & Safety Name and Title (Please Type)

Date: 3-29-84 Telephone No. 904-968-7411

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 Name (Please Type)

P. O. Box 12830 Pensacola FL 32575

Mailing Address (Please Type)

Florida Registration No. 26956

Date: 3/29/84

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.

The project will consist of butane barge unloading station at the existing Pensacola plant wharf and butane transfer line to existing butane storage spheres. A steam sparged vent stack is used to safely discharge the butane contained in the loading arm from the barge at the end of the unloading operation.

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

Start of Construction construction permit Completion of Construction April 1, 1986

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.)

\$35,000 - steam sparged vent stack

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

None.

less than

E. Requested permitted equipment operating time: hrs/day 1; days/wk 2-3; wks/yr 52; if power plant, hrs/yr \_\_\_\_\_; if seasonal, describe: See Section III, Part C.

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? \_\_\_\_\_  
b. If yes, has "Lowest Achievable Emission Rate" been applied? \_\_\_\_\_  
c. If yes, list non-attainment pollutants. \_\_\_\_\_
2. Does best available control technology (BACT) apply to this source? No  
If yes, see Section VI.
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? \_\_\_\_\_  
b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

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

Due to the very small amount of hydrocarbon emissions (60 lbs./occurrence), the very short duration of venting (approximately 15 min./day) and the very infrequent ventings (2-3 per week), it is not considered feasible to abate this emission source. The very small amount of total emissions (3.7 tons/year) should have no measurable affect on ambient air quality. The cost of a flare to abate the butane emissions is estimated to be \$100,000 - \$150,000.

**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		
See Part C, below				

2. Process Rate, if applicable: (See Section V, Item 1)  
Not applicable

1. Total Process Input Rate (lbs/hr): \_\_\_\_\_
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 <sup>1</sup>		Allowed Emission Rate per Rule 17-2	Allowable <sup>3</sup> Emission lbs/hr	Potential <sup>4</sup> Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Butane	240	3.7	N/A	N/A		3.7	(1)
Approximately 60 lbs. of butane released per venting occurrence with up to 123 occurrences per year. The duration of each venting occurrence is expected to be approximately 15 minutes in conjunction with steam sparging at a rate of approximately 1200 lbs./hr.							

<sup>1</sup>See Section V, Item 2.

<sup>2</sup>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)

<sup>3</sup>Calculated from operating rate and applicable standard.

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

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
None				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
None			

\*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 Not applicable Maximum \_\_\_\_\_

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

None

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

Stack Height: 20 ft. Stack Diameter: .33 (4 inches) ft.  
 Gas Flow Rate: \*578 ACFM approx. 2.5 DSCFM Gas Exit Temperature: approx. 212 °F.  
 Water Vapor Content: 99.5 % Velocity: 120 FPS  
 \*design flow rates.

SECTION IV: INCINERATOR INFORMATION - Not Applicable

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

Description of Waste \_\_\_\_\_

Total Weight Incinerated (lbs/hr) \_\_\_\_\_ Design Capacity (lbs/hr) \_\_\_\_\_

Approximate Number of hours of Operation per day \_\_\_\_\_ day/wk \_\_\_\_\_ wks/yr. \_\_\_\_\_

Manufacturer \_\_\_\_\_

Date Constructed \_\_\_\_\_ Model No. \_\_\_\_\_

	Volume (ft) <sup>3</sup>	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: \_\_\_\_\_

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

\_\_\_\_\_

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.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY - Not applicable

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

Yes  No

Contaminant	Rate or Concentration
-------------	-----------------------

_____	_____
_____	_____
_____	_____
_____	_____

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

Yes  No

Contaminant	Rate or Concentration
-------------	-----------------------

_____	_____
_____	_____
_____	_____
_____	_____

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

Contaminant	Rate or Concentration
-------------	-----------------------

_____	_____
_____	_____
_____	_____
_____	_____

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

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

\*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

10. Stack Parameters

- a. Height: ft.
- b. Diameter: ft.
- c. Flow Rate: ACFM
- d. Temperature: °F.
- e. Velocity: FPS

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

1.

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

2.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:<sup>1</sup>
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:<sup>2</sup>
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

<sup>1</sup>Explain method of determining efficiency.

<sup>2</sup>Energy to be reported in units of electrical power - KWH design rate.



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

3.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:<sup>1</sup>
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:<sup>2</sup>
- 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:<sup>1</sup>
- d. Capital Costs:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:<sup>2</sup>
- 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:<sup>1</sup>
- 3. Capital Cost:
- 4. Useful Life:
- 5. Operating Cost:
- 6. Energy:<sup>2</sup>
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:
- a. (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

<sup>1</sup>Explain method of determining efficiency.

<sup>2</sup>Energy to be reported in units of electrical power - KWH design rate.

- (5) Environmental Manager:
- (6) Telephone No.:
- (7) Emissions:<sup>1</sup>

Contaminant

Rate or Concentration

- (8) Process Rate:<sup>1</sup>

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<sup>1</sup>

Contaminant

Rate or Concentration

- (8) Process Rate:<sup>1</sup>

10. Reason for selection and description of systems:

<sup>1</sup>Applicant 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 - Not applicable**

**A. Company Monitored Data**

1. \_\_\_\_\_ no. sites \_\_\_\_\_ TSP \_\_\_\_\_ ( ) SO<sub>2</sub>\* \_\_\_\_\_ Wind spd/dir

Period of Monitoring \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year month day year

Other data recorded \_\_\_\_\_

Attach all data or statistical summaries to this application.

\*Specify bubbler (B) or continuous (C).



MONSANTO PENSACOLA  
BUTANE BARGE UNLOADING ARM VENT STACK  
SUPPLEMENT 1

EMISSION ESTIMATE BASIS  
ACTUAL AND POTENTIAL EMISSIONS

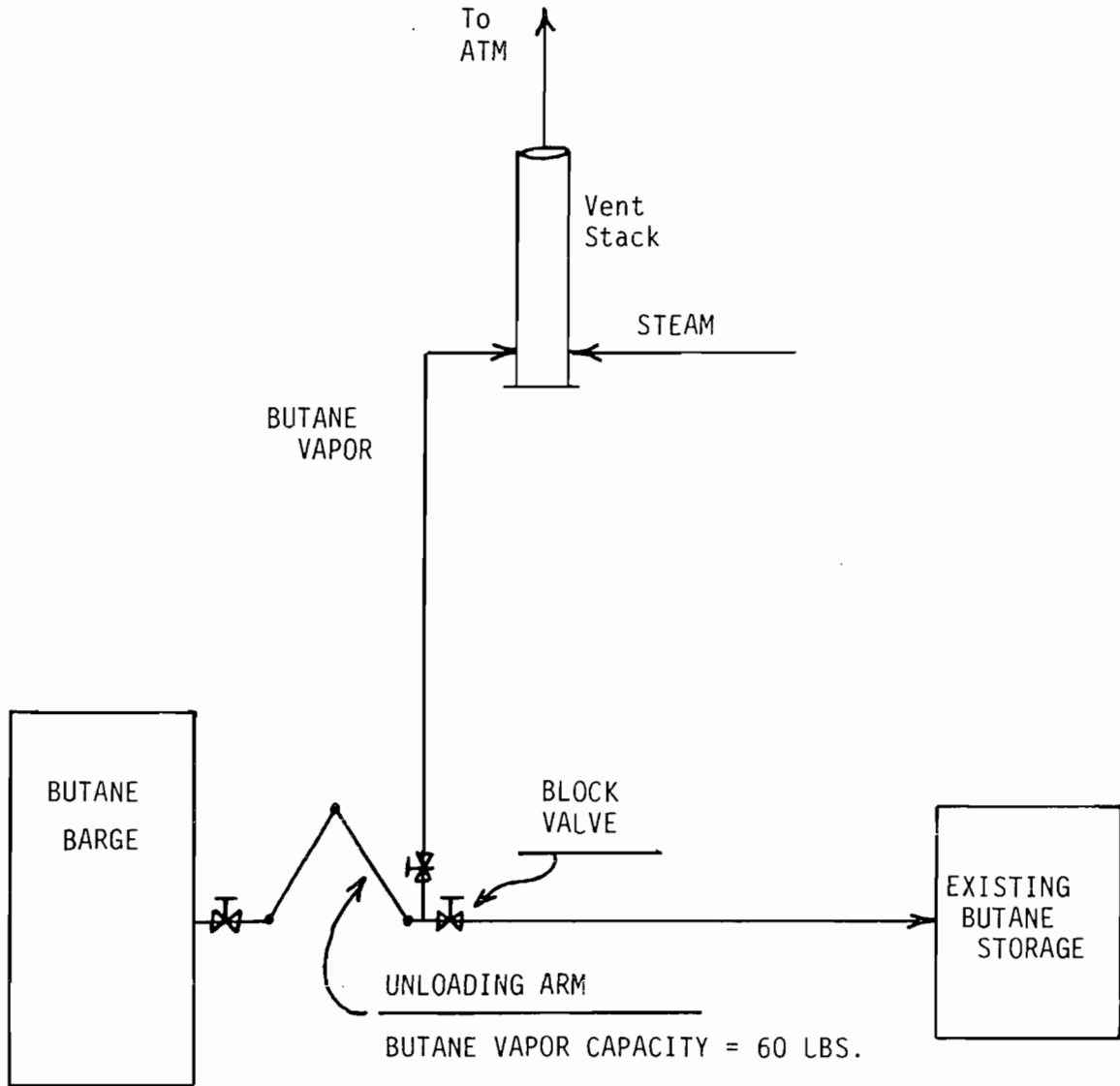
CALCULATION OF ANNUAL BUTANE EMISSIONS

$$\frac{60 \text{ lbs. butane}}{\text{venting occurrence}} \times \frac{123 \text{ occurrences}}{\text{year}} \times \frac{1 \text{ ton}}{2000 \text{ lbs.}} = \frac{3.7 \text{ tons butane}}{\text{year}}$$

$$\frac{3.7 \text{ tons}}{\text{year}} = \text{actual emission} = \text{potential emissions}$$

MONSANTO PENSACOLA  
BUTANE BARGE UNLOADING ARM VENT STACK

SUPPLEMENT 2



Worst cast short term ground level = 647  $\mu\text{g}/\text{m}^3$   
concentration (1 minute venting)

TWA (8 hr. average) for Butane = 1900  $\mu\text{g}/\text{m}^3$   
allowable