



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
NOTICE OF PERMIT

Mr. John M. Baggett, Director/Manager  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida, 32236

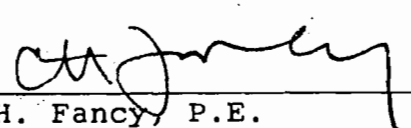
October 11, 1990

Enclosed is Construction Permit No. AC 16-183272 for Union Camp Corporation to construct Catalyst Slurry Tanks Nos. M562A and M562B at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida 32236. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

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

Copy furnished to:

Andy Kutyna, NE District  
Ron Roberson, BESD  
Stephen Alexander, M&A

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of buisness on 10-12-90.

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

Karin Jaber 10-12-90  
Clerk Date

Final Determination

Union Camp Corporation  
Jacksonville, Duval County, Florida

Catalyst Slurry Tanks Nos. M562A and M562B

File Number: AC 16-183272

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

October 9, 1990

## Final Determination

The Technical Evaluation and Preliminary Determination for the permit to construct Catalyst Slurry Tanks Nos. M562A and M562B at Union Camp Corporation in Jacksonville, Duval County, Florida, was distributed on August 16, 1990. The Notice of Intent to Issue was published in the Financial News & Daily Record on September 14, 1990. Copies of the evaluation were available for public inspection at the Department's offices in Jacksonville and Tallahassee, and the Duval County Department of Health, Welfare and Bio-Environmental Services office in Jacksonville.

No comments were submitted on the Department's Intent to Issue the permit. The final action of the Department will be to issue Construction Permit No. AC 16-183272 as proposed in the Technical Evaluation and Preliminary Determination.



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Daie Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**  
Union Camp Corporation  
Post Office Box 60639  
Jacksonville, FL 32236

Permit Number: AC 16-183272  
Expiration Date: Dec. 31, 1991  
County: Duval  
Latitude/Longitude: 30°20'53"N  
81°45'05"W  
Project: Catalyst Slurry Tanks  
Nos. M562A and M562B

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a catalyst slurry (catalyst powder and terpene oil - geraniol or alloocimene) system consisting of two 6 foot diameter by 7 foot high tanks, each equipped with an agitator, nitrogen gas purge system, and pumps/piping.

These tanks are located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida 32236. The UTM coordinates of this site are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

1. Application received July 5, 1990.
2. M&S letter dated July 16, 1990.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes Compliance with New Source Performance Standards (NSPS).

14. The permittee shall comply with the following:

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



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. The permittee shall maintain records that show the quantity of volatile organic liquid handled in each tank.

2. Each tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b, (a) and (b).

3. The storage tanks may be in service continuously, 8760 hrs/yr.

4. Any liquid leaks in the pump, piping, tank, or condenser shall be repaired promptly.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

SPECIFIC CONDITIONS:

5. These tanks and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).

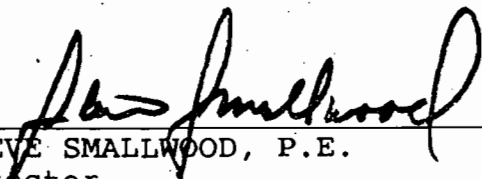
6. Volatile organic compound emissions from each tank shall not exceed 15.2 lbs/yr (30.4 lbs/yr for both tanks). Emissions shall be calculated annually by assuming the nitrogen purge gas is saturated with VOC. The permittee shall maintain records on the quantity of purge gas used with these tanks. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.

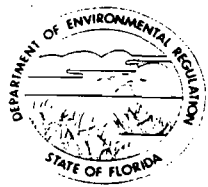
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

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

Issued this 11<sup>th</sup> day  
of October, 1990

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
\_\_\_\_\_  
STEVE SMALLWOOD, P.E.  
Director  
Division of Air Resources  
Management



State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

# Interoffice Memorandum

TO: Steve Smallwood  
FROM: Clair Fancy *CF*  
DATE: October 9, 1990  
SUBJ: Approval of Construction Permit AC 16-183272  
Union Camp Corporation

Attached for your approval and signature is a permit prepared by the Bureau of Air Regulation for the above mentioned company to construct two catalyst slurry tanks at their chemical plant in Jacksonville, Duval County, Florida.

No comments were received during the public notice period.

Day 90, after which this permit will be issued by default, is November 19, 1990.

I recommend your approval and signature.

CF/WH/plm

Attachments

**BEST AVAILABLE COPY**

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

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

3. Article Addressed to: John M. Baggett, mgs. Camp Corp. Box 37617 Jacksonville, FL 32236	4. Article Number P 256 395 196
5. Signature - Addressee <i>[Signature]</i>	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
6. Signature - Agent C. Noel Rowland	Always obtain signature of addressee or agent and DATE DELIVERED.
7. Date of Delivery 10-16-90	8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Apr. 1989

U.S.G.P.O. 1989-238-815

**DOMESTIC RETURN RECEIPT**

P 256 395 196

**RECEIPT FOR CERTIFIED MAIL**

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

U.S.G.P.O. 1989-234-555          PS Form 3800, June 1985	Send to John Baggett	
	Street and No. Union Camp Corp	
	P.O. State and ZIP Code PO Box 37617	
	Postage Tax, FL	\$
	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 10-12-90 ACU6-183272		



**Bush Boake Allen Inc.**

2051 N. Lane Avenue  
Jacksonville, Florida 32254

*CLAIR*

Tel: (904) 783 2180  
(800) 874 9220

February 17, 1994

Mr. Howard Rhodes, Director  
Division of Air Resources Management  
Florida Dept. of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

RE: Transfer of Ownership

Dear Mr. Rhodes:

Please be advised that, effective February 1, 1994, ownership of the Jacksonville, Florida facility will be transferred from Union Camp Corporation, BBA Division to Bush Boake Allen Inc., an independently managed corporation. Union Camp will still maintain a majority interest in BBA Inc.

Our new address is:

Bush Boake Allen Inc.  
Aroma and Terpene Products  
2051 North Lane Avenue  
Jacksonville, Florida 32254-1529

There has been no change in local operating management. All telephone and Fax numbers remain unchanged.

Sincerely,

R. G. Chubin  
Manager,  
Environmental Affairs

RGC/sh

RGC\BBANAME1.DEP

**RECEIVED**

**MAR 14 1994**

Bureau of  
Air Regulation

**RECEIVED**

**MAR 11 1994**

DIVISION OF AIR  
resources Management



# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Consultants

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

September 19, 1990

Clair H. Fancy, P.E.  
Bureau of Air Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8341

RECEIVED

SEP 20 1990

DER-BAQM

Subject: **Proof of Publication  
Notice of Intent to Issue  
Permit No. AC16-183272  
Catalyst Slurry Tanks  
Union Camp Corporation  
Jacksonville, Florida**

Dear Mr. Fancy:

The enclosed is the notarized proof of publication required under FDER Rule 17-103.150 for the subject permit.

Sincerely,

Stephen L. Alexander, P.E.  
Manager, Environmental Engineering

SLA/lis

cc: Andy Kutyna, NE District  
Ron Robertson, BESD  
Bill Van Duyn, Union Camp

Disk: 1

(Published Daily Except Saturday and Sunday)  
Jacksonville, Duval County, Florida

STATE OF FLORIDA, }  
                                  } SS:  
COUNTY OF DUVAL, }

Before the undersigned authority personally appeared  
Donna R. Collins, who on oath says that she is the Business Manager of FINANCIAL  
NEWS and DAILY RECORD, a daily (except Saturday and Sunday) newspaper published at  
Jacksonville, in Duval County, Florida; that the attached copy of advertisement, being a

NOTICE OF INTENT TO ISSUE

in the matter of Union Camp Corporation

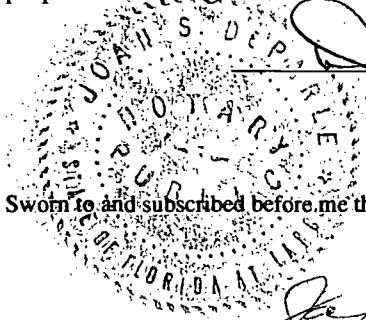
in the \_\_\_\_\_ Court, of Duval County, Florida, was published  
in said newspaper in the issues of September 14, 1990

Affiant further says that the said FINANCIAL NEWS and DAILY RECORD is a newspaper  
at Jacksonville, in said Duval County, Florida, and that the said newspaper has heretofore  
been continuously published in said Duval County, Florida, each day (except Saturday and  
Sunday) and has been entered as second class matter at the post office in Jacksonville, in  
said Duval 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 said newspaper.

*Donna R. Collins*

Business Manager

Sworn to and subscribed before me this 14th day of September A.D. 19 90



*Jean S. DeParle*

Notary Public, State of Florida  
My Comm. Exp. Oct. 14, 1990

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

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Union Camp Corporation, Post Office Box 37617, Jacksonville, Florida 32236, to construct two catalyst slurry tanks at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida 32236. Total volatile organic compound (VOC) emissions from both tanks will be 0.0152 TPY. These emissions will not interfere with reasonable further progress toward attainment of ambient air quality standards. A determination of Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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

The Petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department

Permit File Number and the county in which the project is proposed;

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

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

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

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

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

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

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

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

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

Department of Environmental  
Regulation  
Northeast District  
3426 Bills Road  
Jacksonville, Florida 32207

Duval County Department of Health,  
Welfare & Bio-Environmental Services  
421 W. Church Street, Suite 412  
Jacksonville, Florida 32202

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



● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

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

3. Article Addressed to: John M. Bassett, Dir./Mgr. Union Camp Corp. P.O. Box 37617 Jacksonville, FL 32236	4. Article Number P256 396 167
5. Signature - Addressee X	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
6. Signature - Agent X <i>Erin L. Howard</i>	Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
7. Date of Delivery 8      8-21-90	8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Apr. 1989

\*U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

P 256 396 167

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL

(See Reverse)

U.S.G.P.O. 1989-234-555

Sends	<i>John Bassett</i>
Street and No.	<i>Union Camp Corp</i>
P.O. State and ZIP Code	<i>P.O. Box 37617</i>
Postage	<i>jax, FL</i> \$
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	<i>8-16-90</i>
	<i>AC 16-183272</i>

PS Form 3800, June 1985



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

August 15, 1990

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. John M. Baggett, Director/Manager  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida 32236

Dear Mr. Baggett:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to construct catalyst slurry tanks Nos. M562A and B.

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

Sincerely,

C. H. Fancy, P.E.  
Chief

Bureau of Air Regulation

CHF/WH/plm

Attachments

c: Andy Kutyna, NE District  
Ron Roberson, BESD  
Stephen Alexander, M&A

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of  
Application for Permit by:

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida 32236

DER File No. AC 16-183272

---

INTENT TO ISSUE

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

The applicant, Union Camp Corporation, applied on July 5, 1990, to the Department of Environmental Regulation for a permit to construct catalyst slurry tanks Nos. M562A and B at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida 32236.

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

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

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

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

The Petition shall contain the following information;

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

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

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

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

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

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

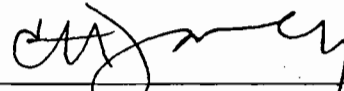
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION



---

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

Copies furnished to:

Andy Kutyna, NE District  
Ron Roberson, BESD  
Stephen Alexander, M&A

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 8-16-90.

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

Kuni Deber  
Clerk

8-16-90  
Date

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

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Union Camp Corporation, Post Office Box 37617, Jacksonville, Florida 32236, to construct two catalyst slurry tanks at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida 32236. Total volatile organic compound (VOC) emissions from both tanks will be 0.0152 TPY. These emissions will not interfere with reasonable further progress toward attainment of ambient air quality standards. A determination of Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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

The Petition shall contain the following information:

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

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

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

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

Department of Environmental Regulation  
Northeast District  
3426 Bills Road  
Jacksonville, Florida 32207

Duval County Department of Health,  
Welfare & Bio-Environmental Services  
421 W. Church Street, Suite 412  
Jacksonville, Florida 32202

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



Technical Evaluation  
and  
Preliminary Determination

490 (W)

Union Camp Corporation  
Jacksonville, Duval County, Florida

Catalyst Slurry Tanks Nos. M562 A and M562B

File Number: AC 16-183272

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

August 15, 1990

## I. General Information

### A. Applicant

Union Camp Corporation  
Post Office Box 60639  
Jacksonville, Florida 32236

### B. Project and Location

Mr. John M. Baggett, Director of Global Operations and Resident Manager for Union Camp Corporation, submitted an application for permit to construct two slurry feed tanks Nos. M562A and M562B on July 5, 1990. The application was considered complete on July 18, 1990. These tanks will be installed at Union Camp Corporation's chemical plant (SIC 2861) located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida 32236. The UTM coordinates of this site are Zone 17, 427.65 km E and 3,357.35 km N.

## II. Rule Applicability

The proposed project, construction of catalyst slurry tanks Nos. M562A and M562B at a chemical plant (SIC 2861), is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (F.A.C.).

The project is in an area designated nonattainment for ozone (F.A.C. Rule 17-2.410), unclassifiable for sulfur dioxide and particulate matter (F.A.C. Rule 17-2.430), and attainment for the other criteria pollutants (F.A.C. 17-2.420).

The chemical plant is a major facility because allowable volatile organic compounds (VOC) emissions exceed 100 TPY. The project will not cause a significant emission rate increase as defined by F.A.C. Chapter 17-2, Table 500-2. Therefore, the project is not subject to new source review for nonattainment areas (F.A.C. Rule 17-2.510) or prevention of significant deterioration regulations, F.A.C. Rule 17-2.500.

As the project results in an increase in VOC emissions, the project is subject to F.A.C. Rule 17-2.520 (Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements), F.A.C. Rule 17-2.620 (General Pollutant Emission Limiting Standards), and F.A.C. Rule 17-2.660 (NSPS), specifically, 40 CFR 60, Subpart Kb, Standard of Performance for VOC Storage Vessels.

### III. Technical Evaluation

Each tank will have a capacity of 1,500 gallons, be equipped with an agitator, and purged with 1 CFM of nitrogen to prevent air and moisture from contacting the catalyst. Each tank will handle 265 lbs/hr of slurry (530 lbs/hr total), a mixture of solid catalyst powder in terpene oil - either geraniol or alloocimene, and emit 15.2 pounds per year of VOC (30.4 lbs/yr total). The maximum emission rate of each tank could be 0.025 lbs/hr of VOC during the time the tank is being filled.

### IV. Air Quality Analysis

It is the judgement of the Department that the estimated VOC emissions from these tanks will not interfere with reasonable further progress toward attainment of ambient air quality standards or create a health hazard.

### V. Conclusion

Based on the information provided by Union Camp Corporation, the Department has reasonable assurance that the proposed project, construction of catalyst slurry tanks Nos. M562A and M562B, as described in this evaluation and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.

*Barry D. Archer*  
# 36024  
8-15-90

### III. Technical Evaluation

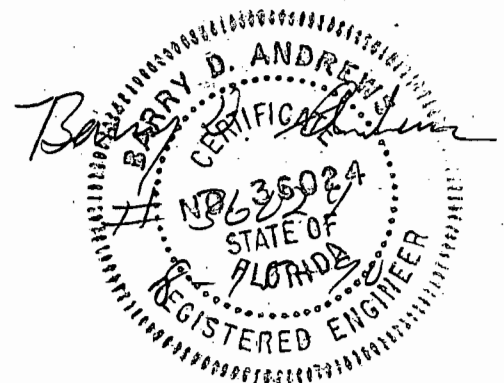
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# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**  
Union Camp Corporation  
Post Office Box 60639  
Jacksonville, FL 32236

Permit Number: AC 16-183272  
Expiration Date: Dec. 31, 1991  
County: Duval  
Latitude/Longitude: 30°20'53"N  
81°45'05"W  
Project: Catalyst Slurry Tanks  
Nos. M562A and M562B

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a catalyst slurry (catalyst powder and terpene oil - geraniol or alloocimene) system consisting of two 6 foot diameter by 7 foot high tanks, each equipped with an agitator, nitrogen gas purge system, and pumps/piping.

These tanks are located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida 32236. The UTM coordinates of this site are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

1. Application received July 5, 1990.
2. M&S letter dated July 16, 1990.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes Compliance with New Source Performance Standards (NSPS).

14. The permittee shall comply with the following:

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



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

**GENERAL CONDITIONS:**

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. The permittee shall maintain records that show the quantity of volatile organic liquid handled in each tank.
2. Each tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b, (a) and (b).
3. The storage tanks may be in service continuously, 8760 hrs/yr.
4. Any liquid leaks in the pump, piping, tank, or condenser shall be repaired promptly.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-183272  
Expiration Date: December 31, 1991

**SPECIFIC CONDITIONS:**

5. These tanks and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).

6. Volatile organic compound emissions from each tank shall not exceed 15.2 lbs/yr (30.4 lbs/yr for both tanks). Emissions shall be calculated annually by assuming the nitrogen purge gas is saturated with VOC. The permittee shall maintain records on the quantity of purge gas used with these tanks. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.

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

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

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1990

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION**

---

STEVE SMALLWOOD, P.E.  
Director  
Division of Air Resources  
Management



# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Consultants

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

RECEIVED  
JUL 18 1990  
DER-BAQM  
(904) 448-6400  
Fax (904) 448-8556

July 16, 1990

Mr. Willard M. Hanks  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8241

Subject: **Response to Questions**  
**Telephone Conversation, W. Hanks and S. Alexander,**  
**July 11, 1990**

RE: **Application to Construct Air Pollution Source Catalyst**  
**Slurry Tanks Nos. M562A and M562B**

Dear Mr. Hanks:

In order to expedite the processing of this permit, this response has been prepared based upon the referenced telephone conversation. The questions are in bold type with the answers following:

1. **There appears to be a discrepancy between the stack velocity of 20.4 FPS in Attachment 4 and the stated purge rate of 1 CFM.**

You are correct. The units on the stack velocity given are FPM, not FPS. Correcting to FPS, the correct value is 0.34 FPS (20.4 PPM divided by 60 seconds per minute).

2. **Are the emission values in the permit on a per tank basis or for the entire source?**

The emissions are on a per tank basis. The total emissions are thus two times the emissions shown on page 4 of the permit.

Actual emissions =  $2 \times 0.0076 \text{ t/yr} = 0.0152 \text{ t/yr}$ .

Potential emissions =  $2 \times 15.2 \text{ lbs/yr} = 30.4 \text{ lb/yr}$   
=  $2 \times .0076 \text{ T/yr} = 0.0152 \text{ T/yr}$

Mr. Willard M. Hanks  
July 16, 1990  
Page 2

Maximum emissions will occur at only one tank at any given time since only one tank will be filled at any given time. Thus maximum emissions remain 0.0025 lb/hr.

**3. What is the tank diameter and height?**

This information was unavailable at the time the application was prepared. Current design calls for a tank that is 72" in diameter and 84" in height that will be filled only to the 1500 gallon level.

**4. What toxicity data is available for the compounds used, geraniol and alloocimene?**

No toxicity data is available on these compounds. According to Union Camp, turpentine has similar characteristics and has a 100 ppm TLV.

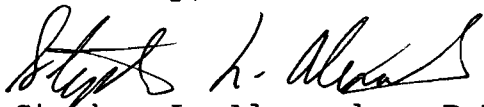
**5. Has the post office box changed for Union Camp?**

The correct address for Union Camp is:

Union Camp  
P.O. Box 37617  
Jacksonville, Florida 32236

Please call me if you have any further questions regarding this permit application at (904) 448-6400.

Sincerely,



Stephen L. Alexander, P.E.  
Manager, Environmental Engineering

SLA/lis

cc: Bill Van Duyn, Union Camp  
John Otterson, Union Camp

*Mr. Hanks*  
*G. Kutyma, NE Dist*  
*R. Robinson, BESD*

Department of Environmental Regulation

Daily Cash Listing

Dep # 0033

Date 07/11/90

Cost Center Air Regulation

Date Bureau of Acty. & Budgeting Received \_\_\_\_\_

Lister's Signature R Bruce Mitchell

Signature of Receiver R Bruce Mitchell

L.S. 7-11-90

REMITTED BY	CHECK NUMBER	AMOUNT	RECEIPT NUMBER	REVENUE CODE	FILE NUMBER
Union Camp Corporation	056171	\$200.00	151141	001031	AC16-183272

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

**№ 151141**

**RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE**

Received from Union Camp Corporation Date: 07/11/90

Address 2051 N. Lane Ave, Jacksonville, FL 32236 Dollars \$ 200.00

Applicant Name & Address John M. Baggett / ~~1000~~ P.O. Box 60639, Fax, FL 32236

Source of Revenue  # 056171

Revenue Code: 001031 Application Number: AC16-183272

By R Bruce Mitchell

TOTAL - This Page

\$200.00



# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Consultants

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

RECEIVED

JUL 5 1990

DER-BAQM

July 2, 1990

Mr. Willard Hanks  
Florida Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8241

Subject: **Transmittal Letter**  
**Application to Construct Air Pollution Source**  
**Union Camp Corporation**  
**Jacksonville, Florida**

Dear Mr. Hanks:

As we discussed, I am forwarding to you two (2) signed and sealed applications and a check for the \$200 application fee.

I have copied both Ron Roberson at BESD and Andy Kutyna of the N.E. FDER office.

Please contact me at (904) 448-6400 if you have any questions.

Sincerely,

Stephen L. Alexander, P.E.  
Manager, Environmental Engineering

SLA/lis

cc: Bill Van Duyn, Union Camp - w/o attachments  
Ron Roberson, BESD - w/attachments  
Andy Kutyna, NE FDER - w/attachments



BBA DIVISION  
AROMA & TERPENE  
CHEMICALS

P.O. BOX 37617, JACKSONVILLE, FLA. 32236 . TELEPHONE (904) 783-2180 . TELEX 808561

June 19, 1990

Clair H. Fancy, P.E., Deputy Chief  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8241

**Subject: Construction Permit Application  
Catalyst Slurry Tanks M562A and M562B  
Jacksonville Plant**

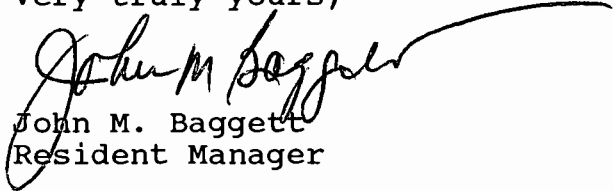
Dear Mr. Fancy:

This permit application is for the construction of two tanks at the Jacksonville plant. These tanks will emit only very small quantities of organic vapors which will be vented to the atmosphere.

We are and have been committed to protecting the environment for the benefit of our employees and the surrounding community. Accordingly, I have directed our staff to be sensitive to environmental issues and to assure compliance with all environmental laws and regulations as the design of this storage tank progresses.

We would like to permit this source as quickly as possible to avoid operating constraints. For this reason, we would sincerely appreciate your assistance in expediting the review process. If you have questions, please contact me or our consultant, Stephen Alexander, Missimer and Associates, Inc., at 904/448-6400.

Very truly yours,

  
John M. Baggett  
Resident Manager

JMB/cdb

Enclosure

APPLICATION TO CONSTRUCT  
AIR POLLUTION SOURCE

CATALYST SLURRY TANKS

BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

Prepared by:

MISSIMER AND ASSOCIATES, INC.  
8130 Baymeadows Way West, Suite 104  
Jacksonville, Florida 32256

June 19, 1990

Project Number JE9001



BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

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OWNER'S LETTER

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PROFESSIONAL ENGINEER'S LETTER

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ATTACHMENT 3: Section III C - Calculation of Airborne  
Contaminants Emitted

ATTACHMENT 4: Section III H - Emission Stack Geometry and  
Flow Characteristics

ATTACHMENT 5: Process Flow Diagram

ATTACHMENT 6: USGS Topographic Map: Jacksonville  
Quadrangle



# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Consultants

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

June 19, 1990

Clair H. Fancy, P.E., Deputy Chief  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8241

**Subject: Application to Construct Air Pollution Source  
Catalyst Slurry Tanks Nos. M-562 A and B  
BBA Division  
Aroma and Terpene Chemicals  
Union Camp Corporation  
Jacksonville, Florida**

Dear Mr. Fancy:

The enclosed construction permit application package has been prepared for at the Union Camp Plant in Jacksonville, Florida.

Enclosed is a check for \$200.00, payable to the Florida Department of Environmental Regulation, as required by 17-4.050(a) FAC for the permit application review fee. This fee is based upon the emissions in this application of much less than 25 tons/year.

The emissions will clearly be extremely low from this tank. Accordingly, we would appreciate any efforts on your part to expedite the processing of this permit.

Please feel free to contact me if you have any questions regarding this application. I can be reached at 904/448-6400.

Very truly yours,

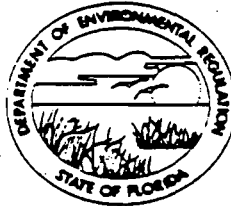
Stephen L. Alexander, P.E.  
Manager, Environmental Engineering

SLA/cdb

Enclosure

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: VOLATILE ORGANIC STORAGE TANK  New<sup>1</sup> [ ] Existing<sup>1</sup>

APPLICATION TYPE:  Construction [ ] Operation [ ] Modification

COMPANY NAME: UNION-CAMP CORPORATION COUNTY: DUVAL

Identify the specific emission point source(s) addressed in this application (i.e. Line  
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) FEED TANKS M562 A and B

SOURCE LOCATION: Street 2051 N. LANE AVENUE City JACKSONVILLE

UTM: East 427,650 meters North 3,357,350

Latitude 30 ° 20' 53" N Longitude 81 ° 45' 05" W

APPLICANT NAME AND TITLE: JOHN M. BAGGETT, RESIDENT MANAGER

APPLICANT ADDRESS: P.O. BOX 60639, JACKSONVILLE, FLORIDA 32236

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of UNION CAMP CORPORATION

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: *John M. Baggett*

John M. Baggett - Director of  
Global Operations & Resident Manager

Name and Title (Please Type)

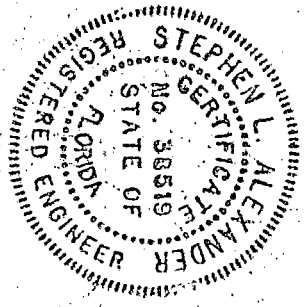
Date: 6/22/90 Telephone No. 904/783-2180

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

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

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

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed Stephen L. Alexander

STEPHEN L. ALEXANDER, P.E.

Name (Please Type)  
MISSIMER AND ASSOCIATES, INC.

Company Name (Please Type)  
8130 BAYMEADOWS WAY, W., SUITE 104  
JACKSONVILLE, FLORIDA 32256

Mailing Address (Please Type)

Florida Registration No. 38519 Date: 6/19/90 Telephone No. 904/448-6400

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.

REFER TO THE PROCESS DESCRIPTION (ATTACHMENT 1) AND THE PROCESS FLOW DIAGRAM (ATTACHMENT 5).

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

Start of Construction 8/1/90 Completion of Construction 8/1/91

- 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.)

N/A

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

DOES NOT APPLY

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

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? YES
  - a. If yes, has "offset" been applied? NO
  - b. If yes, has "Lowest Achievable Emission Rate" been applied? NO
  - c. If yes, list non-attainment pollutants. OZONE
- 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? N/A
  - b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

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

\*The only exception is a few minor recordkeeping requirements in 40CFR60, Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels... Refer to Attachment 3 for details.

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
CATALYST SLURRY TANK	VOC	NA	265.1	TAB 5

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

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

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

Name of Contaminant	Emission <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	
VOC	.025	.0076	17-2.660(2)(a)*	NA	15.2	.0076	TAB 5

<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).

J. Control Devices: (See Section V, Item 4) N/A

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

E. Fuels N/A

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

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

Fuel Analysis:

Percent Sulfur: N/A Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

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

Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

DOES NOT APPLY

SEE ATTACHMENT 4

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

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

SECTION IV: INCINERATOR INFORMATION

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

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

	Volume (ft) <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**

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

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

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

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

Contaminant

Rate or Concentration

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

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:

Explain method of determining efficiency.  
 Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<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

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).

2. Instrumentation, Field and Laboratory

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

B. Meteorological Data Used for Air Quality Modeling

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

C. Computer Models Used

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

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

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO <sup>2</sup>	_____ grams/sec

E. Emission Data Used in Modeling

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

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

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

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

**ATTACHMENT 1  
SECTION II A  
PROCESS DESCRIPTION**

**CATALYST SLURRY TANKS  
BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA**

Two catalyst slurry tanks, designated as M562A and M562B, will be constructed to store a slurry of solid catalyst in terpene oil. Depending upon which process is running, the tanks will contain either geraniol or alloocimene, mixed with a catalyst powder. Alloocimene is the more volatile of the two compounds. In order to be conservative, all calculations will be based on the vapor pressure of alloocimene.

The chemical process requires that all moisture be excluded from the catalyst mixture. To achieve this, ambient air will be excluded by a nitrogen purge. The purge will be at a rate such that the tank will not draw in ambient air, either during pumping or due to temperature changes. Thus, there will be no "working losses and breathing losses" as defined in EPA AP-42. VOC losses will be due to the concentration of volatiles in the exhaust from the nitrogen gas purge.

ATTACHMENT 2  
SECTION III A  
RAW MATERIALS

The utilization rate can be determined by multiplying the daily throughput by the appropriate conversion factors.

Based on 24 operating hours a day and a representative specific gravity for terpene oils, the utilization rate becomes:

$$\begin{aligned} & 3000 \frac{\text{gallon}}{\text{day}} \times \frac{1 \text{ day}}{24 \text{ hrs}} \times \frac{8.34 \text{ lbs}}{\text{gal}} \times 0.80 \text{ sp gr} \\ & = 834 \frac{\text{lbs}}{\text{hr}} \end{aligned}$$

Where,

Daily throughput = 3000 gal/day

Density of water = 8.34 lbs/gal

Specific gravity of terpene oils = 0.80, and

Daily operating time = 24 hrs/day



**ATTACHMENT 3  
CALCULATION OF AIRBORNE  
CONTAMINANTS EMITTED  
CATALYST SLURRY TANKS**

The terpene and catalyst mixture must be protected from moisture. For this reason the head space of the tank is purged with nitrogen at a flow rate of 1 CFM. The purge is vented to the atmosphere. The vapor phase of the mixture is conservatively assumed to be in equilibrium with the liquid phase. The actual concentration will probably be somewhat less than the equilibrium value. It follows that the emission of VOCs to the atmosphere will depend on the flow rate of nitrogen to the atmosphere. As previously stated in Attachment 1, the calculations will be based on the terpene with the higher vapor pressure, alloocimene.

**ACTUAL EMISSIONS**

The VOC emissions are low enough that a control device is not required. The actual emissions will be due solely to the purge losses.

Purge Losses

Tanks with a purge system are not subject to breathing and working losses. When the ambient temperature drops, a purged tank exhales at a lesser rate. When the ambient temperature rises, a purged tank exhales at a greater rate. Similarly, a purged tank exhales at lesser and greater rates as it is emptied and filled. The temporary increase in purge gas flow when the tank level rises is compensated for by a decrease in purge gas flow when the tank level falls. The average purge gas flow corresponds to a constant temperature and fluid level condition. To calculate purge losses, the volume fraction of VOCs in the

purge gas and the purge gas volumetric flow rate must be known. The volume fraction of VOC in the purge gas is determined by Dalton's law of Partial Pressures:

$$\frac{P_a}{P_t} = \frac{V_a}{V_p}$$

Where,

$P_a$  = Vapor pressure of alloocimene

= 0.018 psia

$P_t$  = Total pressure in system head space

= 14.696 psia

$V_a$  = Volume of alloocimene in 1 ft<sup>3</sup> of purge gas

$V_p$  = 1 ft<sup>3</sup> of purge gas

Using the above formula,

$$\frac{0.018}{14.696} = \frac{V_a}{1}$$

$$V_a = 0.0012 \text{ ft}^3$$

Next the number of moles contained in this volume of ideal gas must be calculated. This is done with the ideal gas law

$$PV = NRT$$

Where,

$P$  = system pressure

= 1 atm

$V$  = system volume

= 0.0012 ft<sup>3</sup>

N = number of moles in a cubic ft of purge gas

R = ideal gas constant

$$= 10.73 \frac{\text{atm ft}^3 \text{lb moles}}{^\circ\text{R}}$$

T = average system temperature,  $^\circ\text{R}$

$$= 68^\circ\text{F} + 460 \text{ (Fahrenheit to Rankine conversion)}$$

$$= 528^\circ\text{R}$$

The average temperature of  $68^\circ\text{F}$  in Jacksonville was obtained from the National Weather Service

Rearranging,  $N = \frac{PV}{RT}$

$$= \frac{(1)(.0012)}{(10.73)(528)}$$

$$= 2.12 \times 10^{-7} \frac{\text{lb moles}}{\text{ft}^3 \text{ purge}}$$

The molecular weight of alloocimene is 136. To determine the weight of alloocimene contained in a cubic foot of purge gas we multiply the moles by the molecular weight.

$$\begin{aligned} \text{Weight of alloocimene} &= (2.12 \times 10^{-7})(136) \\ &= 2.88 \times 10^{-5} \text{ lb/ft}^3 \end{aligned}$$

To find the emissions of VOC due to venting the purge to the atmosphere we multiply the moles of VOC in a cubic foot of purge gas by the purge gas flow rate in  $\text{ft}^3/\text{min}$ .

$$\text{Purge Loss} = (2.88 \times 10^{-5}) Q_n$$

Where,

$$\begin{aligned} Q_n &= \text{purge gas flow rate ft}^3/\text{min} \\ &= 1 \text{ ft}^3/\text{min} \end{aligned}$$

$$\begin{aligned} \text{Purge Loss} &= (2.88 \times 10^{-5}) \times 1 \\ &= 2.88 \times 10^{-5} \text{ lb/min} \end{aligned}$$

$$\begin{aligned} \text{Actual emissions} &= 2.88 \times 10^{-5} \frac{\text{ft}^3}{\text{min}} \times \frac{60 \text{ min}}{1 \text{ hr}} \\ &= 1.73 \times 10^{-3} \text{ lb/hr} \end{aligned}$$

On a tons per year basis,

Actual emissions

$$= 1.73 \times 10^{-3} \text{ lb/hr} \times 24 \text{ hr/day} \times 365 \text{ day/yr} \times \frac{1 \text{ ton}}{2000 \text{ lbs}}$$

$$= 7.6 \times 10^{-3} \text{ ton/yr}$$

$$\text{or } .0076 \text{ ton/yr}$$

#### Maximum Emissions

The maximum emissions rate will occur when the tank is filled. This rate will depend upon  $Q_t$ , the volumetric tank fill rate when the tank is being filled. The maximum fill rate will be 100 gallons per minute.

$$\text{Maximum emissions} = (Q_t + Q_n) \frac{\text{ft}^3}{\text{min}} (2.88 \times 10^{-5}) \frac{\text{lbs}}{\text{ft}^3}$$

Where,

$$Q_t = \text{Volumetric Tank Fill Rate, ft}^3/\text{min}$$

$$= \frac{100 \text{ gpm}}{7.48 \text{ gallons per ft}^3}$$

$$= 13.4 \text{ ft}^3/\text{min}$$

$$\text{Maximum emissions} = (13.4 + 1) \frac{\text{ft}^3}{\text{min}} \times 2.88 \times 10^{-5} \frac{\text{lbs}}{\text{ft}^3} \times \frac{60 \text{ min}}{\text{hr}}$$

$$= 2.5 \times 10^{-2} \frac{\text{lbs}}{\text{hr}}$$

$$\text{or } .025 \frac{\text{lbs}}{\text{hr}}$$

This emission rate will occur only during filling operations, typically less than 1 hour per day. As previously calculated, the average emission rate will be much less,  $1.73 \times 10^{-3}$  lb/hr.

#### Allowable Emissions

Chapter 17-2.660(2)(a) FAC, adopts by reference the federal New Source Performance Standards (NSPS) found in 40 CFR 60 including Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels.

Since the 1,500 gallon capacity of each catalyst slurry tank is less than  $40 \text{ m}^3$  (10,568 gallons), it is exempt from rule coverage except as specified in Section 60.116(a) and (b). Essentially, the requirements of those paragraphs are:

Maintain records showing dimensions of the storage vessel and an analysis of the capacity of the storage vessel for the life of the source. In addition, they should be readily accessible.

#### Potential Emissions

The FAC in Rule 17-2(100) defines emissions as emissions after the control device. Therefore, potential emissions are equal to actual emissions for this source.

actual emissions = potential emissions =  $7.6 \times 10^{-3}$  ton/yr  
or .0076 ton/yr

On a pounds per year basis,

potential emissions =  $7.6 \times 10^{-3}$  ton/yr x 2000 lb/ton  
= 15.2 lb/yr

ATTACHMENT 4

SECTION III H

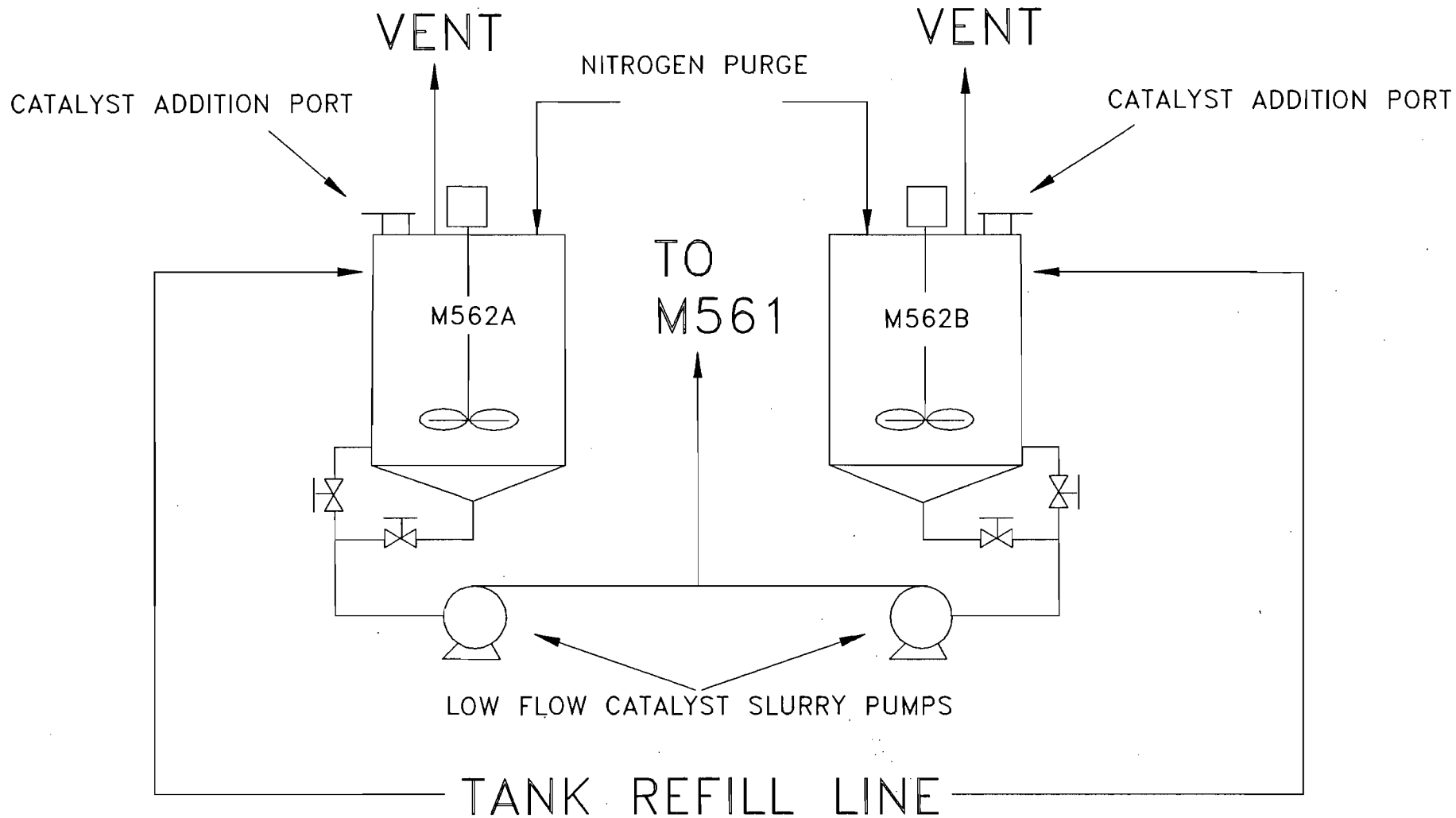
EMISSION STACK GEOMETRY AND FLOW CHARACTERISTICS

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TANK NO.	STACK HEIGHT (FT.)	STACK DIAMETER	FLOW (ACFM)	FLOW DSCFM	EXIT TEMP. (°F)	VELOCITY (FPS)
M-562A	15'	3"	1	NA	68°*	20.4
M-562B	15'	3"	1	NA	68°*	20.4

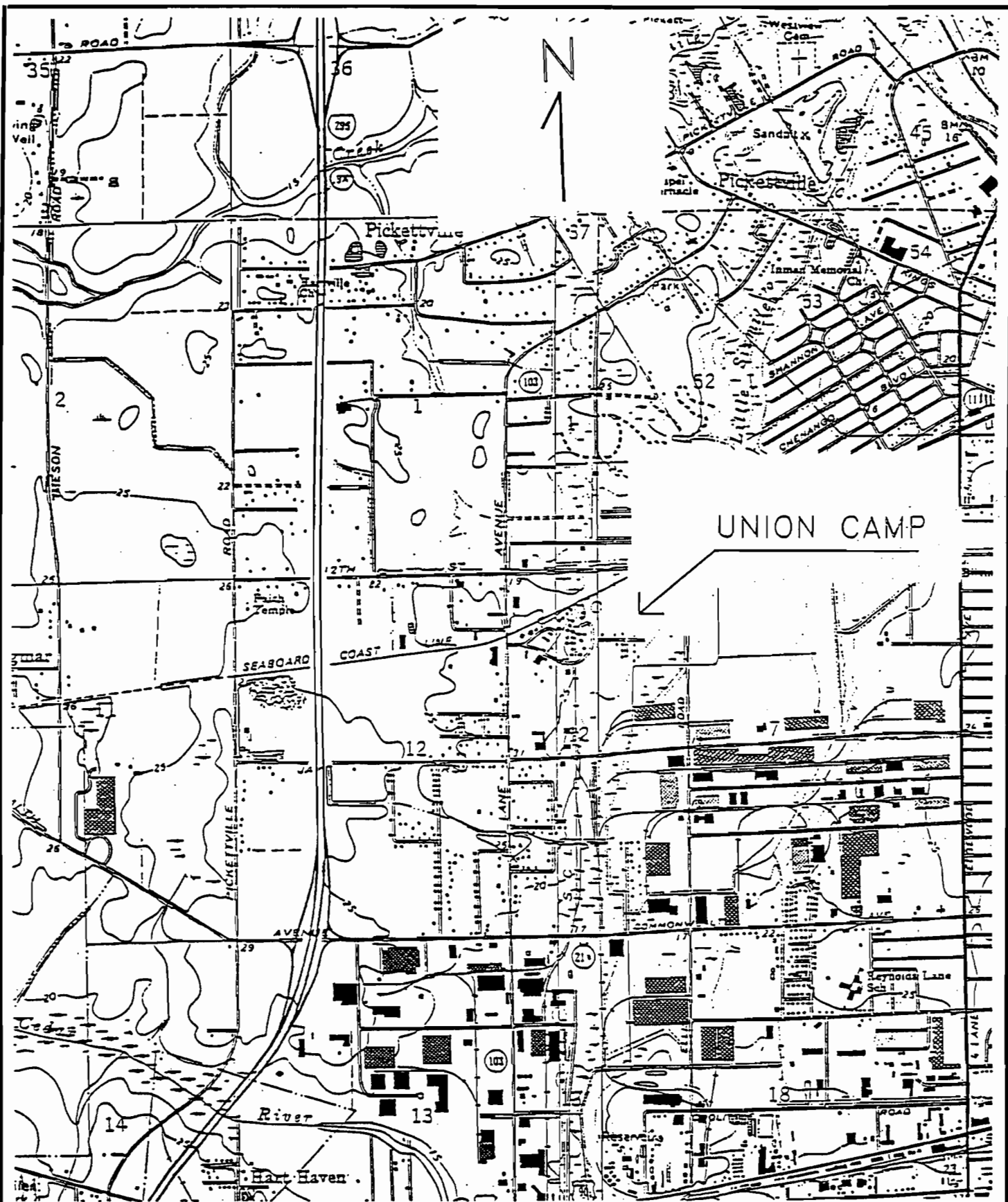
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\*Average annual temperature for Jacksonville, Florida.



UNION CAMP CORPORATION  
 JACKSONVILLE, FLORIDA

Attachment 5. Process Flow  
 MISSIMER AND ASSOCIATES  
 ENVIRONMENTAL AND GROUNDWATER CONSULTANTS  
 JACKSONVILLE, FLORIDA



UNION CAMP  
 JACKSONVILLE, FLORIDA

ATTACHMENT 6. SITE LOCATION  
 MISSIMER AND ASSOCIATES  
 ENVIRONMENTAL AND GROUNDWATER CONSULTANTS  
 JACKSONVILLE, FLORIDA





**MISSIMER & ASSOCIATES, INC.**

Environmental and Groundwater Consultants

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

RECEIVED  
NOV 16 1990  
DER-BAQW

November 13, 1990

Mr. Clair Fancy  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
~~2600~~ Blair Stone Road  
Tallahassee, Florida 32301-8241

Subject: **Construction Permit Nos.  
AC16-164388 and AC16-164391**

Dear Mr. Fancy:

Although the subject permits have been issued, the permittee, Union Camp Corporation, has elected not to construct the tanks at this time. These issues may be revisited in 1991.

Sincerely,

A handwritten signature in cursive script that reads 'Ben W. Martin'. The signature is written in dark ink and is positioned above the typed name.

Ben W. Martin  
Chemical Engineer

BWM/ljs



## Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
NOTICE OF PERMITS

Mr. John M. Baggett, Resident  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida 32236

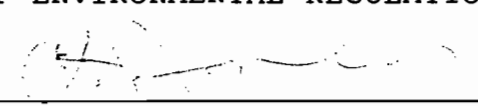
August 8, 1989

Enclosed are construction permits Nos. AC 16-164383, -164385 -164386, -164388, -164391, and -164219 for Union Camp Corporation to install six miscellaneous organic storage tanks at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. These permits are issued pursuant to Section 403, Florida Statutes.

Any party to these permits has the right to seek judicial review of the permits pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date these permits are filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

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

Copies furnished to:

Johnny Cole, NE District  
Khurshid Mehta, BESD  
Lloyd Stebbins, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on August 16, 1989

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

Martha McKee August 16, 1989  
Clerk Date

Final Determination

Union Camp Corporation  
Jacksonville, Duval County, Florida

Miscellaneous Organic Chemical Storage Tanks

Permit Numbers:

AC 16-164383  
AC 16-164385  
AC 16-164386  
AC 16-164388  
AC 16-164391  
AC 16-165219

Source:

Tank No. 1020 ✓  
Tank No. 551 ✓  
Tank No. 427 ✓  
Tank No. 607A ✓  
Tank No. 607B  
Tank No. M-500

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

July 31, 1989

## Final Determination

The Technical Evaluation and Preliminary Determination for six permits to construct miscellaneous organic chemical storage tanks at Union Camp Corporation's Jacksonville, Duval County, Florida, plant were distributed on June 22, 1989. The Notice of Proposed Agency Action was published in the Financial News & Daily Record on July 11, 1989.

The applicant's engineer commented that the proposed permits did not contain the revised General Conditions adopted in Chapter 17-4, F.A.C., on April 4, 1989, and that the new source performance standard requirements in proposed permit No. AC 16-164388 were not correct. The Bureau agrees with the engineer on both issues and has revised the permits accordingly.

The final action of the Department will be to issue the six construction permits as proposed in the Technical Evaluation and Preliminary Determination except for the changes noted above.



## Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"

Project: Storage Tank No. 1020

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 125,000 gallon terpene storage tank (32 ft. diameter x 21 ft. height) which vents vapors to the existing vapor collection system (AO 16-62025).

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 1, 1989.

Hunter Environmental Services, Inc. letter dated May 25, 1989.

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-164383  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

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

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

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

14. The permittee shall comply with the following:

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 1,250,000 gallons per year of TAB-C (mixture of terpenes including p-menthadienes and less than 1% alpha-pinene) or TABS-FEED (dipentene or alpha-pinene) in storage tank No. 1020. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b,(a) and (b).

PERMITTEE:  
Union Camp Corporation

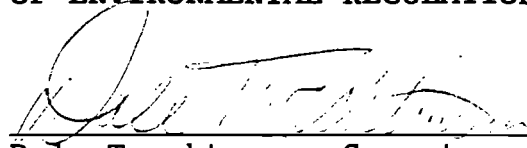
Permit Number: AC 16-164383  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. All organic vapors from this tank shall be vented to the vapor recovery system. Any liquid leaks in the pump, piping, tank, or vapor recovery system shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.282 TPY and being treated by the plant vapor control system. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this 7 day  
of August, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164385  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"  
Project: Storage Tank No. 551

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 25,000 gallon crude geranoil storage tank (12 ft. diameter x 29.5 ft. height) which vents vapors to the atmosphere.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 1, 1989.

Hunter Environmental Services, Inc. letter dated May 25, 1989.

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-164385  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

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

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

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

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

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-164385  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164385  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

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

14. The permittee shall comply with the following:

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

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-164385  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 258,000 gallons per year of crude geranoil in storage tank No. 551. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b,(a) and (b).



PERMITTEE:  
Union Camp Corporation

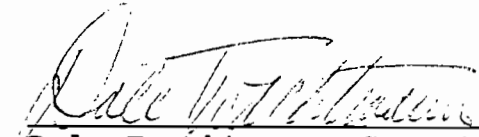
Permit Number: AC 16-164385  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. Any liquid leaks in the pump, piping, or tank shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.049 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this 7 day  
of August, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164386  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"  
Project: Storage Tank No. 427

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 7,000 gallon dimethyl sulfide and alpha pinene mixture storage tank (11 ft. diameter x 9 ft. height) which vents vapors to the existing vapor collection system (AO 16-62025).

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 1, 1989.

Hunter Environmental Services, Inc. letter dated May 25, 1989.

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-164386  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

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

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

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

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

**PERMITTEE:**  
Union Camp Corporation

Permit Number: AC 16-164386  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164386  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. 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:

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

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-164386  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 487,000 gallons per year of a mixture of dimethyl sulfide and alpha pinene in storage tank No. 427. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This storage tank is exempt from the requirements of 40 CFR 60, Subpart Kb.

PERMITTEE:  
Union Camp Corporation

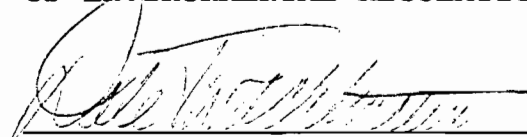
Permit Number: AC 16-164386  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. All organic vapors from this tank shall be vented to the vapor recovery system. Any liquid leaks in the pump, piping, tank, or vapor recovery system shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 2.839 TPY and being treated by the plant vapor control system. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this 7 day  
of August, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164388  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"

**Project: Storage Tank No. 607A**

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 20,000 gallon blended boiler fuel (residues, terpene light ends, and crude isobutanol) storage tank (12 ft. diameter x 24 ft. height) which vents vapors to the atmosphere.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 1, 1989.

Hunter Environmental Services, Inc. letter dated May 25, 1989.



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164388  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164388  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164388  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

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

14. The permittee shall comply with the following:

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

**PERMITTEE:**  
Union Camp Corporation

Permit Number: AC 16-164388  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 10,000,000 gallons per year of a mixture of blended boiler fuel (residue, terpene light ends, and crude isobutanol) in storage tank No. 607A. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This storage shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic liquid Storage Vessels. Applicable sections are 40 CFR 60.116b(a), (b), and (f)(1).

PERMITTEE:  
Union Camp Corporation

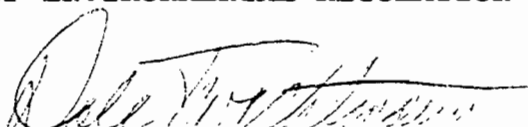
Permit Number: AC 16-164388  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. Any liquid leaks in the pumps, piping, or tank shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.553 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this 7 day  
of August, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164391  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"

Project: Storage Tank No. 607B

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 7,500 gallon boiler fuel (residues, terpene light ends, and crude isobutanol) blending tank (10 ft. diameter x 12 ft. height) which vents vapors to the atmosphere.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 1, 1989.  
Hunter Environmental Services, Inc. letter dated May 25, 1989.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164391  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

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

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

**PERMITTEE:**  
Union Camp Corporation

Permit Number: AC 16-164391  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164391  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. 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:

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

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-164391  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 10,000,000 gallons per year of a mixture of blended boiler fuel (residue, terpene light ends, and crude isobutanol) in storage tank No. 607B. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This tank is exempt from the requirements of 40 CFR 60, Subpart Kb.

PERMITTEE:  
Union Camp Corporation

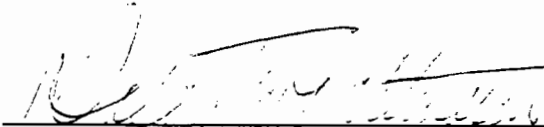
Permit Number: AC 16-164391  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. Any liquid leaks in the pumps, piping, or tank shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.521 TPY and being treated by the plant vapor control system. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this 7 day  
of August, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-165219  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"

Project: Storage Tank No. M-500

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 4,784 gallon myrcene storage tank (8 ft. diameter x 14 ft. height) which vents vapors to the atmosphere.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 12, 1989.

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-165219  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

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

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

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

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

**PERMITTEE:**  
Union Camp Corporation

Permit Number: AC 16-165219  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-165219  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. 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:

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

**PERMITTEE:**  
Union Camp Corporation

Permit Number: AC 16-165219  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 2,275,000 gallons per year of a mixture of myrene in storage tank No. M-500. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This tank is exempt from the requirements of 40 CFR 60, Subpart Kb.



PERMITTEE:  
Union Camp Corporation

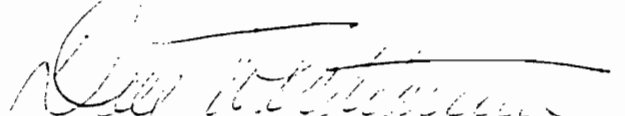
Permit Number: AC 16-165219  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. Any liquid leaks in the pumps, piping, or tank shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.329 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this 7 day  
of August, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
Dale Twachtman, Secretary



State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

# Interoffice Memorandum

TO: Dale Twachtmann

for

FROM: Steve Smallwood 

DATE: August 3, 1989

SUBJ: Approval of Construction Permits  
Union Camp Corporation

RECEIVED

AUG 2 1989

Office of the Secretary

Attached for your approval and signature are six permits prepared by Central Air Permitting for the above mentioned company to construct miscellaneous organic chemical storage tanks. This chemical plant is located in Jacksonville, Duval County, Florida.

During the public notice period, the applicant's engineer commented on the proposed permits. The Bureau agrees with the engineer's comments and has revised the permits accordingly.

Day 90, after which the permits will be issued by default, is September 29, 1989.

I recommend your approval and signature.

SS/WH/t

attachments

● **SENDER:** Complete Items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

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

3. Article Addressed to: Mr. John M. Baggett, Resident Mgr. Union Camp Corporation Post Office Box 27617 Jacksonville, FL 32236	4. Article Number P 938 762 650 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
5. Signature — Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X <i>[Signature]</i>	
7. Date of Delivery <i>[Signature]</i>	

Always obtain signature of addressee or agent and DATE DELIVERED.

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

P 938 762 650

**RECEIPT FOR CERTIFIED MAIL**

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

Sent to Mr. John M. Baggett, Union Camp	
Street and No. P. O. Box 27617	
P.O., State and ZIP Code Jacksonville, FL 32236	
Postage	S
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	S
Postmark or Date Mailed: 8-16-89 Permit: AC 16-164383, -85, 86 -88, -91, -164219	

PS Form 3800, June 1985

# HUNTER/ESE

ENVIRONMENTAL SERVICES, INC.

6737 Southpoint Drive South  
P.O. Box 4943 (32201)  
Jacksonville, Florida 32216  
904-739-2007  
FAX 904-731-1673

RECEIVED

JUL 19 1989

DER-BAQ

July 17, 1989

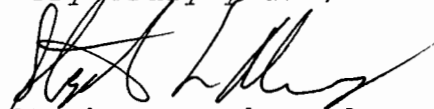
Mr. Clair H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality Management  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blan Stone Road  
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

Enclose is a notarized proof of publishing for a "Notice of Intent to Issue" six air permits for Union Camp Corporation. The DER file numbers for these permits are: AC16-164383, AC16-164385, AC16-164386, AC16-164388, AC16-164391, and AC16-164219.

If you have any further questions, please feel free to contact me at 904/739-2000.

Very truly yours,



Stephen L. Alexander, P.E.  
Project Manager

SLA/nk

cc: William Stewart, PE - DER NE District, w/attach.  
Kurshid Mehta, PE - BESD, w/attach.  
William Van Duyn - Union Camp, w/attach.

*St. Hanks*

**HUNTER/ESE**  
ENVIRONMENTAL SERVICES, INC.

97415-0000-1440  
6737 Southpoint Drive South  
P.O. Box 4943 (32201)  
Jacksonville, Florida 32216



Mr. Clair H. Fancy, P.E.  
Duputy Chief  
Bureau of Air Quality Management  
FL Dept. of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

(Published Daily Except Saturday and Sunday)  
Jacksonville, Duval County, Florida

STATE OF FLORIDA, }  
                                  } ss:  
COUNTY OF DUVAL, }

Before the undersigned authority personally appeared  
Donna R. Collins, who on oath says that she is the Business Manager of FINANCIAL  
NEWS and DAILY RECORD, a daily (except Saturday and Sunday) newspaper published at  
Jacksonville, in Duval County, Florida; that the attached copy of advertisement, being a

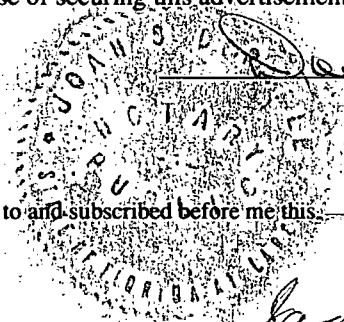
NOTICE OF INTENT TO ISSUE

in the matter of Union Camp Corporation

in the \_\_\_\_\_ Court, of Duval County, Florida, was published

in said newspaper in the issues of July 11, 1989

Affiant further says that the said FINANCIAL NEWS and DAILY RECORD is a newspaper  
at Jacksonville, in said Duval County, Florida, and that the said newspaper has heretofore  
been continuously published in said Duval County, Florida, each day (except Saturday and  
Sunday) and has been entered as second class matter at the post office in Jacksonville, in  
said Duval 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 said newspaper.



Donna R. Collins  
Business Manager

Sworn to and subscribed before me this 11th day of July A.D. 19 89

Jan S. DePalle  
Notary Public, State of Florida  
My Commission Expires Aug. 14, 1990

**STATE OF FLORIDA  
DEPARTMENT OF  
ENVIRONMENTAL REGULATION  
NOTICE OF INTENT TO ISSUE**  
The Department of Environmental Regulation hereby gives notice of its intent to issue six permits to Union Camp Corporation, Post Office Box 37617, Jacksonville, Florida 32236, to construct miscellaneous organic chemicals (myrcene, terpenes, geraniol, dimethylsulfides, turpentine derivatives, and alphapinene) storage tanks at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. Total volatile organic compound (VOC) emissions from the six tanks are estimated to be 0.331 lbs/hr (average) and 1.452 TPY. The VOC emissions from the vapor recovery system will increase by 0.12 TPY. These emissions will not interfere with reasonable future progress toward attainment of ambient air quality standards. A determination of Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.  
  
A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

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

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

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

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

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

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

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

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

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

Department of  
Environmental Regulation  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Dept. of Environmental  
Regulation  
Northeast District  
3426 Bills Road  
Jacksonville, Florida 32207  
Duval County Department  
of Health, Welfare &  
Bio-Environmental Services  
515 West Sixth Street  
Jacksonville, Florida 32206

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

July 11

(89-4057)

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. <input type="checkbox"/> Show to whom delivered, date, and addressee's address. (Extra charge)		2. <input type="checkbox"/> Restricted Delivery (Extra charge)	
3. Article Addressed to: Mr. John M. Baggett, Res. Mgr. Union Camp Corp. P. O. Box 37617 Jacksonville, FL 32236		4. Article Number P 938 762 598	
		Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and DATE DELIVERED.			
5. Signature - Address X <i>Rebecca Rauls</i>		8. Addressee's Address (ONLY if requested and fee paid)	
6. Signature - Agent X			
7. Date of Delivery 7-10-89			

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

P 938 762 598

**RECEIPT FOR CERTIFIED MAIL**

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

Sent to Mr. John M. Baggett, Union	
Street and No.      Camp Corp. P.O. Box 37617	
P.O., State and ZIP Code Jacksonville, FL 32236	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: 6-22-89 Permit: AC 16-164383, -85, 86 -88, -91, -219	

PS Form 3800, June 1985





# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

June 21, 1989

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. John M. Baggett, Resident Manager  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida 32236

Dear Mr. Baggett:

Attached is one copy of the Technical Evaluation and Preliminary Determination and six proposed permits to construct miscellaneous organic chemical storage tanks.

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

Sincerely,

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

CHF/WH/s

Attachments

cc: William Stewart, NE District  
Khurshid Mehta, BESD  
Lloyd Stebbins, P.E.

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of  
Application for Permit by:

Union Camp Corporation  
P. O. Box 37617  
Jacksonville, FL 32236

DER File Nos. AC 16-164383  
AC 16-164385  
AC 16-164386  
AC 16-164388  
AC 16-164391  
AC 16-164219

---

INTENT TO ISSUE

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

The applicant, Union Camp Corporation, applied on May 1 and 12, 1989 to the Department of Environmental Regulation for six permits to construct miscellaneous organic storage tanks at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida.

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

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

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

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

The Petition shall contain the following information;

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

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

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

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

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

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

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

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

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

Executed in Tallahassee, Florida

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION



---

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

Copies furnished to:

William Stewart, NE District  
Khurshid Mehta, BESD  
Lloyd Stebbins, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 6-22-89.

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

Martha M. Wise  
Clerk

6-22-89  
Date

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

The Department of Environmental Regulation hereby gives notice of its intent to issue six permits to Union Camp Corporation, P. O. Box 37617, Jacksonville, Florida, 32236, to construct miscellaneous organic chemicals (myrcene, terpenes, geraniol, dimethylsulfides, turpentine derivatives, and alpha-pinene) storage tanks at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. Total volatile organic compound (VOC) emissions from the six tanks are estimated to be 0.331 lbs/hr (average) and 1.452 TPY. The VOC emissions from the vapor recovery system will increase by 0.12 TPY. These emissions will not interfere with reasonable future progress toward attainment of ambient air quality standards. A determination of Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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

The Petition shall contain the following information;

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

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

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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:

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

Dept. of Environmental Regulation  
Northeast District  
3426 Bills Road  
Jacksonville, FL 32207

Duval County Department of Health,  
Welfare & Bio-Environmental Services  
515 West Sixth Street  
Jacksonville, Florida 32206

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

Technical Evaluation  
and  
Preliminary Determination

Union Camp Corporation  
Jacksonville, Duval County, Florida

Miscellaneous Organic Chemical Storage Tanks

File Numbers:

AC 16-164383  
AC 16-164385  
AC 16-164386  
AC 16-164388  
AC 16-164391  
AC 16-165219

Source:

Tank No. 1020  
Tank No. 551  
Tank No. 427  
Tank No. 607A  
Tank No. 607B  
Tank No. M-500

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

June 19, 1989



## I. General Information

### A. Applicant

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida 32236

### B. Project and Location

Mr. John M. Baggett, Resident Manager for Union Camp Corporation, submitted two applications for permits to construct six miscellaneous organic chemical storage tanks at their chemical plant (SIC 2861) located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida on May 10 and 12, 1989. Additional information on the project was submitted in a letter from Hunter Environmental Services, Inc. dated May 24, 1989. The UTM coordinates of this site are Zone 17, 427.65 km E and 3,357.35 km N.

A summary of the tank data is shown in the following table.

Tank No.	Tank Vol. (Gal.)	Chemical Stored	Thruput (GPY)	VOC. Emiss. (TPY)
1020	125,000	terpenes	1,250,000	0**
551	25,000	geranoil	258,000	0.049
427	7,000	DMS & alpha pinene	487,000	0**
607A	20,000	turpentine derivatives	10,000,000	0.553
607B	7,500	turpentine derivatives	10,000,000	0.521
M-500	4,784	myrcene	2,275,000	0.329

\* dimethylsulfide

\*\*tank Nos. 1020 and 427 are connected to existing vapor recovery system

Emissions of the vapor recovery system will increase by 0.12 TPY as a result of this project.

## II. Rule Applicability

The proposed project, construction of six miscellaneous organic chemical storage tanks at a chemical plant (SIC 2861), is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (F.A.C.).

The sources are in an area designated nonattainment for ozone and particulate matter (F.A.C. Rule 17-2.410), unclassifiable for sulfur dioxide (F.A.C. Rule 17-2.430), and attainment for the other criteria pollutants (F.A.C. 17-2.420).

The chemical plant is a major facility because allowable volatile organic compounds (VOC) emissions exceed 100 TPY. The project will not cause a significant emission rate increase as defined by F.A.C. 17-2, Table 500-2. Therefore, the project is not subject to new source review for nonattainment areas (F.A.C. Rule 17-2.510) or prevention of significant deterioration regulations, F.A.C. Rule 17-2.500.

As the project results in an increase in VOC emissions, the project is subject to F.A.C. Rule 17-2.520 (Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements), F.A.C. Rule 17-2.620 (General Pollutant Emission Limiting Standards), and F.A.C. Rule 17-2.660 (NSPS), specifically, 40 CFR 60, Subpart Kb, Standard of Performance for VOC Storage Vessels.

### III. Technical Evaluation

An estimate of the total VOC emission (breathing loss plus working loss) from each organic chemical storage tank that will be vented to the atmosphere was made by the applicant's engineer using the procedures given in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, Storage of Organic Liquids.

A summary of the emissions from each tank are shown below:

#### VOC Emissions (lbs/yr)

Tank No.	Breathing Loss	Working loss	Total Loss
1020*	0	0	0
551	69.38	27.65	97.03
427*	0	0	0
607A	130.0	976.8	1,106.8
607B	65.14	976.8	1,041.74
M-500	40.83	617.8	658.63
Total	305.35	2,598.85	2,904.20

\*VOC discharged to vapor recovery system

Two of the tanks (Nos. 1020 and 427), which handle sulfur bearing compounds, will be vented to the vapor recovery system. Tank No. 1020 will discharge 0.282 TPY VOC to this system. Tank No. 427 will discharge 2.839 TPY VOC to this system. The vapors from this system are burned in a 96% efficient incinerator (AO

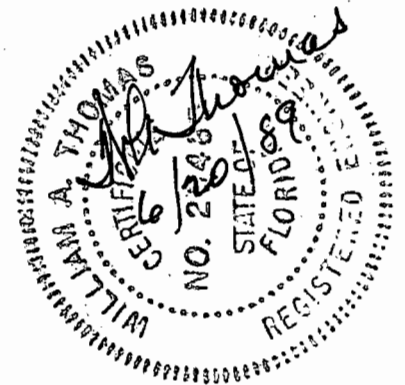
16-62025). This results in an additional 0.12 TPY VOC emissions from the incinerator. Based on this estimate, the incinerator will be able to operate within its current permitted limits.

#### IV. Air Quality Analysis

It is the judgement of the Department that the estimated VOC emissions from the six miscellaneous organic chemical storage tanks (1.452 TPY) and increase in emissions from the incinerator (0.12 TPY) will not interfere with reasonable future progress toward attainment of ambient air quality standards.

#### V. Conclusion

Based on the information provided by Union Camp Corporation, the Department has reasonable assurance that the proposed project, construction of six miscellaneous organic chemical storage tanks, as described in this evaluation and subject to the conditions proposed herein, will not cause or contribute to a violation of any ambient air quality standard or PSD increment, or violate any other technical provision of Chapter 17-2 of the Florida Administrative Code.





# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"  
Project: Storage Tank No. 1020

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 125,000 gallon terpene storage tank (32 ft. diameter x 21 ft. height) which vents vapors to the existing vapor collection system (AO 16-62025).

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 1, 1989.  
Hunter Environmental Services, Inc. letter dated May 25, 1989.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- (x) 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:  
Union Camp Corporation

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 1,250,000 gallons per year of TAB-C (mixture of terpenes including p-menthadienes and less than 1% alpha-pinene) or TABS-FEED (dipentene or alpha-pinene) in storage tank No. 1020. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b,(a) and (b).



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164383  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. All organic vapors from this tank shall be vented to the vapor recovery system. Any liquid leaks in the pump, piping, tank, or vapor recovery system shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.282 TPY and being treated by the plant vapor control system. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

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Dale Twachtman, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164385  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"  
Project: Storage Tank No. 551

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 25,000 gallon crude geranoil storage tank (12 ft. diameter x 29.5 ft. height) which vents vapors to the atmosphere.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 1, 1989.  
Hunter Environmental Services, Inc. letter dated May 25, 1989.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164385  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164385  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164385  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- (x) 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:  
Union Camp Corporation

Permit Number: AC 16-164385  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 258,000 gallons per year of crude geranoil in storage tank No. 551. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b,(a) and (b).

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164385  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. Any liquid leaks in the pump, piping, or tank shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.049 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

---

Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164386  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"  
Project: Storage Tank No. 427

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 7,000 gallon dimethyl sulfide and alpha pinene mixture storage tank (11 ft. diameter x 9 ft. height) which vents vapors to the existing vapor collection system (AO 16-62025).

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below: ,

Application received May 1, 1989.

Hunter Environmental Services, Inc. letter dated May 25, 1989.



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164386  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164386  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164386  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164386  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 487,000 gallons per year of a mixture of dimethyl sulfide and alpha pinene in storage tank No. 427. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This storage tank is exempt from the requirements of 40 CFR 60, Subpart Kb.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164386  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. All organic vapors from this tank shall be vented to the vapor recovery system. Any liquid leaks in the pump, piping, tank, or vapor recovery system shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 2.839 TPY and being treated by the plant vapor control system. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1989

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION**

---

Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

**Permit Number:** AC 16-164388  
**Expiration Date:** June 1, 1990  
**County:** Duval  
**Latitude/Longitude:** 30°20'53"  
81°45'05"

**Project:** Storage Tank No. 607A

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 20,000 gallon blended boiler fuel (residues, terpene light ends, and crude isobutanol) storage tank (12 ft. diameter x 24 ft. height) which vents vapors to the atmosphere.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 1, 1989.  
Hunter Environmental Services, Inc. letter dated May 25, 1989.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164388  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164388  
Expiration Date: June 1, 1990

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

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

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

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

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



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164388  
Expiration Date: June 1, 1990

GENERAL CONDITIONS:

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- (x) 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:**  
Union Camp Corporation

**Permit Number:** AC 16-164388  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

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

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

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 10,000,000 gallons per year of a mixture of blended boiler fuel (residue, terpene light ends, and crude isobutanol) in storage tank No. 607A. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This storage shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic liquid Storage Vessels. Applicable sections are 40 CFR 60.116b(a), (b), (d), and (f).

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164388  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

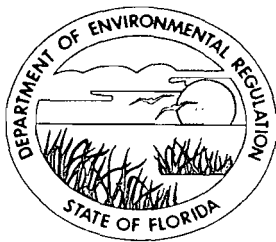
3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. Any liquid leaks in the pumps, piping, or tank shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.553 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

---

Dale Twachtmann, Secretary



## Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

### PERMITTEE:

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164391  
Expiration Date: June 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"

Project: Storage Tank No. 607B

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 7,500 gallon boiler fuel (residues, terpene light ends, and crude isobutanol) blending tank (10 ft. diameter x 12 ft. height) which vents vapors to the atmosphere.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 1, 1989.  
Hunter Environmental Services, Inc. letter dated May 25, 1989.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164391  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164391  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164391  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

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

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

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

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-164391  
**Expiration Date:** June 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 10,000,000 gallons per year of a mixture of blended boiler fuel (residue, terpene light ends, and crude isobutanol) in storage tank No. 607B. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This tank is exempt from the requirements of 40 CFR 60, Subpart Kb.



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-164391  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. Any liquid leaks in the pumps, piping, or tank shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.521 TPY and being treated by the plant vapor control system. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

---

Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-165219

Expiration Date: June 1, 1990

County: Duval

Latitude/Longitude: 30°20'53"

81°45'05"

Project: Storage Tank No. M-500

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 4,784 gallon myrcene storage tank (8 ft. diameter x 14 ft. height) which vents vapors to the atmosphere.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received May 12, 1989,

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-165219  
Expiration Date: June 1, 1990

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-165219  
Expiration Date: June 1, 1990

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-165219  
Expiration Date: June 1, 1990

GENERAL CONDITIONS:

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-165219  
Expiration Date: June 1, 1990

**GENERAL CONDITIONS:**

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

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

**SPECIFIC CONDITIONS:**

1. The permittee shall notify the Duval County Bio-Environmental Services Division prior to handling more than 2,275,000 gallons per year of a mixture of myrene in storage tank No. M-500. The permittee shall maintain records that show the composition and quantity of volatile organic liquid handled in this tank.

2. This tank is exempt from the requirements of 40 CFR 60, Subpart Kb.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-165219  
Expiration Date: June 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. Any liquid leaks in the pumps, piping, or tank shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compounds emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.329 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

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Dale Twachtman, Secretary

6737 Southpoint Drive South  
P.O. Box 4943 (32201)  
Jacksonville, Florida 32216  
904-739-2007  
FAX 904-731-1673

May 24, 1989  
97415-0000

RECEIVED

MAY 25 1989

DER-BAQM

C.H. Fancy, P.E., Deputy Chief  
Bureau of Air Quality Management  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8341

Subject: **Application to Construct Air Pollution Source  
Miscellaneous Storage Tanks  
BBA Division  
Aroma and Terpene Chemicals  
Union Camp Corporation  
Jacksonville, Florida**

Re: Telecon from Willard Hanks, FDER, to  
S.L. Alexander, HSI, on May 10, 1989

Dear Mr. Fancy:

During a conversation with Steve Alexander, Willard Hanks raised several questions regarding the permit application for the miscellaneous storage tanks. Our responses to the four questions follow in sequence:

1. Tanks No. 1020 and 427 will both be connected to the vapor collection system. However, we have, for informational purposes, revised Attachment 3 to include data for "apparent" losses from those tanks. The vapors released from those two storage tanks are ducted to an incinerator [Refer to Permit No. A016-62025].
2. The incinerator is permitted with a destruction removal efficiency of 96%.
3. Accordingly, the maximum amount of vapors from Tanks No. 1020 and 427 which could potentially pass through the incinerator are  $100 - 96 = 4\%$  of the input, which is equivalent to approximately 0.12 tons per year.
4. Plant operating records indicate that the incinerator is operating well below its permitted capacity of 389 pounds per hour. Consequently, the small additional load created by Tanks No. 1020 and 427 will result in an extremely small increase in emissions which will be well within the currently permitted limits.



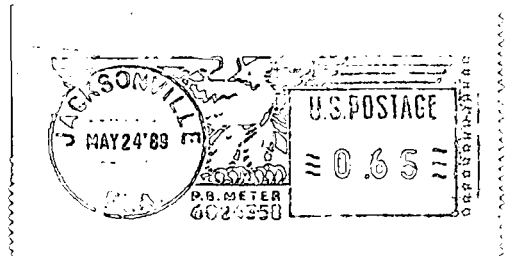
**HUNTER/ESE**  
ENVIRONMENTAL SERVICES, INC.

97415-0000

6737 Southpoint Drive South (32216) • P.O. Box 4943  
Jacksonville, Florida 32201 • 904/739-2007 • FAX 904/731-1673

**To:** C.H. Fancy, Deputy Chief  
Bureau of Air Quality Management  
FL Dept. of Environmental Regulation  
Twin Towers Office Bldg.  
2600 Blair Stone Rd.  
Tallahassee, FL 32301-8341

"An Equal Opportunity Employer"

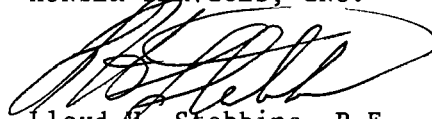


C.H. Fancy, P.E.  
Page 2  
May 24, 1989

If you have any additional questions, please feel free to call. I can be easily reached at 904/739-2007.

Very truly yours,

HUNTER SERVICES, INC.



Lloyd H. Stebbins, P.E.  
Director  
Environmental Programs

LHS/cdb

*copied: H. Hanks  
B. Stewart, NE Dist.  
R. Roberson, BESD  
CHF/BT*

**ATTACHMENT 3**  
**SECTION III C**  
**CALCULATION OF AIRBORNE**  
**CONTAMINANTS EMITTED**

Tank emissions result from a combination of losses due to displaced vapors from tank filling, i.e. working issues, and tank "breathing" due to changes in ambient temperatures.

The rate of VOC emissions from the new tanks, due to breathing losses and working losses, can be calculated as described in USEPA AP-42, "Compilation of Air Pollutant Emission Factors," pages 4.3-5 through 4.3-11, Fourth Edition, 1985.

**ACTUAL EMISSIONS**

**Calculations of Breathing Loss**

Use the breathing loss equation in AP-42, page 4.3-5:

$$L_B = 2.26 \times 10^{-2} M_V \left( \frac{P}{P_A - P} \right)^{0.68} D^{1.73} H^{0.51} T^{0.50} F_P C K_C$$

where:

$L_B$  = Breathing Loss (lb/yr)

$M_V$  = Vapor Molecular Weight (lb/lb mol)

$P$  = True Vapor Pressure at Bulk Storage Conditions (psia)

$P_A$  = Atmospheric Pressure, psia  
 = 14.7 psia

$D$  = Tank Diameter (ft.)

$H$  = Average Vapor Space Height (ft.)

According to AP-42, the vapor space in a cone roof is equal in volume to a cylinder which has the same base diameter as the cone and is one-third the height of the cone. For purposes of calculating breathing losses, use this criterion along with the assumption that the tank is normally half full.

$T$  = Average Ambient Diurnal Temperature Change ( $^{\circ}\text{F}$ )

Information from National Oceanic and Atmospheric Administration (NOAA) received by telephone on 6-20-88 indicates that the Jacksonville average high temperature is  $78.7^{\circ}\text{F}$  and the average low  $57.2^{\circ}\text{F}$ . The average diurnal change, "Delta T," is therefore  $78.7 - 57.2 = 21.5^{\circ}\text{F}$ .

$F_p$  = Paint Factor from AP-42, Table 4.3-1--Assume that the green tanks at Union Camp are similar to medium gray in the Table. Select  $F_p = 1.58$

$C$  = Small Diameter Tank Adjustment Factor, AP-42, Figure 4.3-4 = 0.665

$K_C$  = product factor, AP-42, Page 4.3-11 = 1.0

The parameters for the breathing loss equation are listed in Table 3-1 followed by a tabularized calculation of breathing loss.

### Calculation of Working Loss

Use the working loss equation in AP-42, page 4.3-8

$$L_W = (2.4 \times 10^{-5}) M_V P V N K_N K_C$$

where:

$L_W$  = Working Loss (lb/yr)

$M_V$  = Vapor Molecular Weight (lb/lb mol)

$P$  = True Vapor Pressure at bulk storage conditions (psia)

$V$  = Tank Volume (gallons)

TABLE 3-1  
CALCULATION OF BREATHING LOSS

TANK NUMBER	FACTOR	MOLECULAR WT. OF VAPOR $M_v$ (LB/LB MOL)	TRUE VAPOR PRESSURE P (PSIA)	AVERAGE ATMOS. PRESSURE $P_A$ (PSIA)	TANK DIAMETER D (FT.)	AVERAGE VAPOR SPACE HEIGHT H (FT.)	AVERAGE AMBIENT DIURNAL TEMP. CHGE. $\Delta T$ ( $^{\circ}$ F)	PAINT FACTOR $F_p$	ADJUSTMENT FACTOR SMALL TANKS C	PRODUCT FACTOR $K_C$
1020*	$2.26 \times 10^{-2}$	136	0.029	14.7	32.0	11.0	21.5	1.58	1.00	1.0
551	$2.26 \times 10^{-2}$	154	0.029	14.7	12.0	15.0	21.5	1.58	0.64	1.0
427*	$2.26 \times 10^{-2}$	62	10.33	14.7	11.0	5.1	21.5	1.58	0.58	1.0
607A	$2.26 \times 10^{-2}$	74	0.25	14.7	12.0	12.0	21.5	1.58	0.64	1.0
607B	$2.26 \times 10^{-2}$	74	0.25	14.7	10.0	8.0	21.5	1.58	0.54	1.0

\*Tanks No. 1020 and 427 will be connected to the vapor connection system. There will be no emissions from the tanks to atmosphere. The calculations are provided for illustrative purposes only.

TABLE 3-2  
CALCULATION OF BREATHING LOSS (Cont'd)

TANK	FACTOR	M <sub>V</sub>	$\left(\frac{P}{P_A - P}\right)^{0.68}$	D <sup>1.73</sup>	H <sup>0.51</sup>	ΔT <sup>0.50</sup>	F <sub>P</sub>	C	K <sub>C</sub>	L <sub>B</sub>
1020*	2.26 x 10 <sup>-2</sup>	136	0.0145	401.7	3.40	4.64	1.58	1.00	1.0	446.2
551	2.26 x 10 <sup>-2</sup>	154	0.0145	73.62	3.98	4.64	1.58	0.64	1.0	69.38
427*	2.26 x 10 <sup>-2</sup>	62	1.795	63.33	2.30	4.64	1.58	0.58	1.0	1558.0
607A	2.26 x 10 <sup>-2</sup>	74	0.0634	73.62	3.55	4.64	1.58	0.64	1.0	130.0
607B	2.26 x 10 <sup>-2</sup>	74	0.0634	53.70	2.89	4.64	1.58	0.54	1.0	65.14

\*Tanks No. 1020 and 427 will be connected to the vapor collection system. There will be no emissions from the tanks to atmosphere. The calculations are provided for illustrative purposes only.

N = Number of Annual Turnovers of Tank Volume

$K_N$  = turnover factor from AP-42, Figure 4.3-7

$K_C$  = Product factor from AP-42, Page 4.3-11

Accordingly, the calculation of working loss is indicated in Table 3-3, "Calculations of Working Loss."

### Combined Breathing and Working Losses

The total losses are simply the sums of the respective breathing and working losses as indicated in Table 3-4, "Calculation of Combined Loss."

**TABLE 3-4  
CALCULATION OF COMBINED LOSS**

TANK NUMBER	BREATHING LOSS (LBS/YR)	WORKING LOSS (LBS/YR)	TOTAL LOSS		
			(LBS/YR)	(LBS/HR)	(TONS/YR)
1020*	(446.2)	(118.32)	(564.52)	(0.452)	(0.282)
551	69.38	27.65	97.03	0.011	0.049
427*	(1558.0)	(4119.0)	(5,677.0)	(4.549)	(2.839)
607A	130.0	976.8	1,106.8	0.126	0.553
607B	65.14	976.6	1,041.74	0.119	0.521
TOTAL					1.123

\*Figures in parentheses indicate apparent "losses" from Tanks No. 1020 and 427. Since both tanks are connected to the vapor collection system, the apparent emissions never reach the atmosphere. Accordingly, those figures are not included in the combined total.

TABLE 3-3  
CALCULATION OF WORKING LOSS

TANK NUMBER	FACTOR	MOLECULAR WT. OF VAPOR $M_V$ (LB/LB MOL)	TRUE VAPOR PRESSURE P (PSIA)	TANK VOLUME V (GAL.)	NUMBER OF ANNUAL TURNOVERS OF TANK VOLUME N	TURNOVER FACTOR $K_N$	PRODUCT FACTOR $K_C$	WORKING LOSS $L_W$ (LB/YR)
1020*	$2.4 \times 10^{-5}$	136	0.029	125,000	10.0	1.0	1.0	118.32
551	$2.4 \times 10^{-5}$	154	0.029	25,000	10.32	1.0	1.0	27.65
427*	$2.4 \times 10^{-5}$	62	10.33	7,000	69.6	0.55	1.0	4119.0
607A	$2.4 \times 10^{-5}$	74	0.25	20,000	500	0.22	1.0	976.8
607B	$2.4 \times 10^{-5}$	74	0.25	7,500	1,333	0.22	1.0	976.6

\*Tanks No. 1020 and 427 will be connected to the vapor collection system. There will be no emissions from the tanks to atmosphere. The calculations are provided for illustrative purposes only.



### Maximum Emissions

The maximum emissions rate occurs during tank loading operations due to the displacement of the vapor space in the tank as it fills. Although an instantaneous peak emissions rate could be calculated, it would be a meaningless value because the absolute VOC emissions from any individual tank is small, the tanks are filled intermittently and there will never be a time when all the tanks are filled simultaneously at peak loading rates. Consequently, the maximum emissions rate is considered to be equivalent to the actual emissions for these tanks.

### Allowable Emissions

Chapter 17-2.660(2)(a) FAC, adopts by reference the federal New Source Performance Standards (NSPS) found in 40 CFR 60 including Subpart Kb-- Standards of Performance for Volatile Organic Liquid Storage Vessels.... However, each tank must be compared to the exceptions and exemptions of § 60.110b to determine specific rule applicability.

### TANK NO. 1020

Since the 125,000-gallon capacity of Tank No. 1020 exceeds 151 m<sup>3</sup> (39,890 gallons) but the 0.029 psia vapor pressure does not exceed 3.5 kPa (0.508 psia), Tank No. 1020 is exempt from rule coverage except as specified in § 60.116b(b) and (c). Essentially, the requirements of those subparagraphs include:

- (b) Maintain records showing dimensions of the storage vessel and an analysis of the capacity of the storage vessel.
- (c) Maintain a record of volatile organic liquids (VOL) stored, the period of storage and the maximum true vapor pressure of the VOL during the storage period.

However, Tank No. 1020 is further exempted from the requirements of subparagraph (c) by § 60.116(g), because it is connected to the vapor collection system.

#### TANK NO. 551

Similar logic applies to Tank No. 551 when compared to Section 60.110b(c). The tank volume (25,000 gallons) falls between 75 m<sup>3</sup> (19,815 gallons) and 151 m<sup>3</sup> (39,890 gallons) but the vapor pressure of the geraniol (0.029 psia) is below 15 kPa (2.176 psia). Therefore, only § 60.116b(b) and (c) apply as indicated above.

#### TANK NO. 427

Tank No. 427 is completely exempted by § 60.110b(a), because the volume (7,000 gallons) is less than 40 m<sup>3</sup> (10,568 gallons).

#### TANK NO. 607A

The line of logic for Tank No. 607A is identical to Tank No. 551 except that Tank No. 607A contains a "waste mixture of indeterminate or variable composition." Accordingly, Tank No. 551 is subject only to § 60.116b(b) and (f). The respective requirements are generally as follows:

- (b) Maintain records showing the dimensions of the storage vessel and an analysis of the capacity of the vessel.
- (f)(1) Prior to initial filling, determine the highest vapor pressure for the range of mixtures to be stored.

#### TANK NO. 607B

Tank No. 607B is completely exempted by § 60.110b(a), because the volume (7,500 gallons) is less than 40 m<sup>3</sup> (10,568 gallons).

The combined emissions from all tanks vented to the atmosphere (Tanks No. 551, 607A and 607B) is only 1.123 tons/year. Such extremely low emissions do not constitute a significant emission rate for VOC, which according to 17-2.500(2)(e)2, Table 500-2, is equivalent to 40 tons per year.

#### Potential Emissions

Since there are no emission control devices specifically dedicated to these tanks, the potential emissions are equal to the actual emissions.



RECEIVED

MAY 12 1989

DER-BAQM

BBA DIVISION  
AROMA & TERPENE  
CHEMICALS

P.O. BOX 37617, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

May 9, 1989

C.H. Fancy, PE, Deputy Chief  
Bureau of Air Quality Management  
Florida Department of  
Environmental Regulation  
Twin Towers Office Building  
2600 Blainstone Road  
Tallahassee, Florida 32301

Subject: Construction Permit Application  
Tank No. M-500  
Jacksonville Plant

Dear Mr. Fancy:

As part of our on-going efforts to upgrade the plant and reduce atmospheric emissions, we are planning to install a new myrcene storage tank. This tank will emit only very small quantities of organic vapors.

We are and have been committed to protecting, and where practical, enhancing the environment for the benefit of our employees and the surrounding community. Accordingly, I have directed our staff to be sensitive to environmental issues and to assure compliance with all environmental laws and regulations as the design of this storage tank progresses.

We are anxious to permit this facility as quickly as possible to avoid severe operating constraints. For this reason, we would sincerely appreciate your assistance in expediting the review process. If you have questions, please contact me or our consultant, Lloyd H. Stebbins, Hunter Services, Inc., at 904/739-2007.

Very truly yours,

  
John M. Baggett  
Resident Manager

JMB/efc

Enclosure

RECEIVED  
DER-MAIL ROOM  
1989 MAY 12 PM 1:24

**APPLICATION TO CONSTRUCT  
AIR POLLUTION SOURCE**

**TANK NO. M-500**

**BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA**

Prepared by:  
**HUNTER SERVICES, INC.**

May 9, 1989

RECEIVED  
DER - MAIL ROOM  
1989 MAY 12 PM 1:26

RECEIVED

MAY 12 1989

DER - BANK



P. O. BOX 60369  
JACKSONVILLE, FLORIDA 32236

FIRST UNION NATIONAL BANK OF FLORIDA  
JACKSONVILLE, FLORIDA

No. 052558

MAY 3 89

\$ 200.00

200.00

UNION CAMP CORPORATION  
REGULAR ACCOUNT

PAY TO THE ORDER OF

Florida Department of Environmental Regulation 17 4 (a)  
1600 Blairstone Road  
Tallahassee, FL 32301

*[Signature]*  
AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

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OWNER'S LETTER

TABLE OF CONTENTS

PROFESSIONAL ENGINEER'S LETTER

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ATTACHMENT 2: Section III A - Raw Materials

ATTACHMENT 3: Section III C - Calculation of Airborne  
Contaminants Emitted

ATTACHMENT 4: Section III H - Emission Stack Geometry  
and Flow Characteristics

ATTACHMENT 5: Process Flow Diagram

ATTACHMENT 6: Storage Tank Outline Diagram

ATTACHMENT 7: USGS Topographic Map: Jacksonville Quadrangle

ATTACHMENT 8: Plot Plan

# **HUNTER/ESE**

**ENVIRONMENTAL SERVICES, INC.**

6737 Southpoint Drive South  
P.O. Box 4943 (32201)  
Jacksonville, Florida 32216  
904-739-2007  
FAX 904-731-1673

May 9, 1989  
2900051000

C.H. Fancy, PE, Deputy Chief  
Bureau of Air Quality Management  
Florida Department of  
Environmental Regulation  
Twin Towers Office Building  
1600 Blairstone Road  
Tallahassee, Florida 32301

Subject: Application to Construct Air Pollution Source  
Tank No. M-500  
BBA Division  
Aroma and Terpene Chemicals  
Union Camp Corporation  
Jacksonville, Florida

Dear Mr. Fancy:

The enclosed construction permit application package has been prepared for a myrcene storage tank at the Union Camp Plant in Jacksonville, Florida

Enclosed is a check for \$200.00, payable to the Florida Department of Environmental Regulation, as required by 17-4.050(a) FAC for the permit application review fee. This fee is based upon the emissions in this application of much less than 25 tons/year.

Since Duval County is a nonattainment area for ozone, the PSD levels do not apply.

Although the enclosed application represents a modification to a major facility [17-2.510(2)(a)4 FAC], the increase in VOC emissions is less than one-third of a ton per year. Since this increase is only a small fraction of the significant net emission increase threshold for VOCs, i.e. 40 tons/year, a New Source Review is not required.

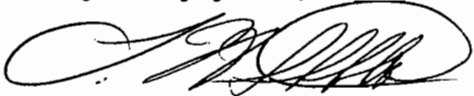
C.H. Fancy

2

May 9, 1989

There is nothing environmentally unique about this storage tank and the corresponding emissions are clearly very low. However, any undue permitting delay will create an operating hardship on the plant. Accordingly, we would greatly appreciate your efforts to expedite the processing of the permit.

Very truly yours,



Lloyd H. Stebbins, PE  
Director Environmental Programs

LHS/efc

Enclosures



\$200pd.  
5-12-89  
Recpt. # 117617

STATE OF FLORIDA AC 16-165219  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2800 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Tank No. M-500 [] New [] Existing  
APPLICATION TYPE: [] Construction [] Operation [] Modification  
COMPANY NAME: Union Camp Corporation COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Line  
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Organic Chemical Storage Tank

SOURCE LOCATION: Street 2051 N. Lane Avenue City Jacksonville  
UTM: East 427,650 Meters North 3,357,350 Meters  
Latitude 30° 20' 53"N Longitude 81° 45' 05"W

APPLICANT NAME AND TITLE: John M. Baggett, Resident Manager  
APPLICANT ADDRESS: P.O. Box 60639, Jacksonville, Florida 32236

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

1. APPLICANT

I am the undersigned owner or authorized representative of Union Camp Corporation

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

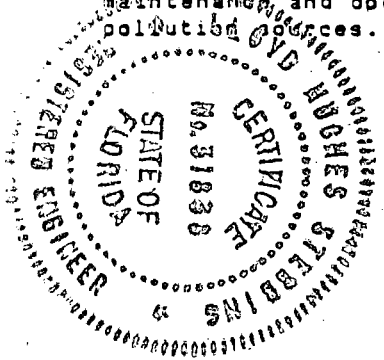
Signed: John M. Baggett  
John M. Baggett, Resident Manager  
Name and Title (Please Type)  
Date: 5/10/89 Telephone No. (904) 783-2180

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

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

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

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution control devices.



Signed [Signature]  
Lloyd H. Stebbins  
Name (Please Type)

Hunter Services, Inc.  
Company Name (Please Type)

P.O. Box 4943, Jacksonville, Florida 32201  
Mailing Address (Please Type)

Florida Registration No. 31838 Date: 5/9/89 Telephone No. 904/739-2007

**SECTION II: GENERAL PROJECT INFORMATION**

- 1. 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.

Refer to the Process Description (Attachment 1) and the Process Flow Diagram (Attachment 5).

- 3. Schedule of project covered in this application (Construction Permit Application Only)  
Start of Construction June 1, 1989 Completion of Construction December 31, 1989

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

- D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.  
Does not apply.

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

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? YES
  - a. If yes, has "offset" been applied? NO
  - b. If yes, has "Lowest Achievable Emission Rate" been applied? NO
  - c. If yes, list non-attainment pollutants. OZONE
- 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? N/A
  - b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted. N/A

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

\*The only exception is a few minor recordkeeping requirements in 40 CFR 60, Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels....Refer to Attachment 3 for details.

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

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

REFER TO ATTACHMENT 2

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
TK M-500	VOC	NA	1,733	TAB 5

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

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

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

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

REFER TO ATTACHMENT 3

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	
TK M-500	0.075	0.329	17-2.660(2)(a)*	NA	658.6	0.329	TAB 5

<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).

\*Chapter 17-2.660 FAC adopts 40 CFR 60 by reference, including Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels... The federal rules do not apply any specific allowable emission rate. Since certain exceptions apply, Tank M-500 is only subject to a few limited recordkeeping requirements.

J. 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)
TK M-500	VOC	NA - Vented to	Atmosphere	

E. Fuels

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

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

Fuel Analysis:

Percent Sulfur: NA Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

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

Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

Does not apply.

REFER TO ATTACHMENT 4

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

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ ft.  
 Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM Gas Exit Temperature: \_\_\_\_\_ °F.  
 Water Vapor Content: N/A % Velocity: \_\_\_\_\_ FPS

SECTION IV: INCINERATOR INFORMATION

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

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

	Volume (ft) <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: \_\_\_\_\_

N/A

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

N/A

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** Does not apply.

- A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 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

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 devices, 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:

\* Explain method of determining efficiency.

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<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** Does not apply.

4. Company Monitored Data

1. \_\_\_\_\_ no. sites \_\_\_\_\_ TSP ( ) SO<sub>2</sub>+ \_\_\_\_\_ Wind spd/di:

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

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

Attach all data or statistical summaries to this application.

Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

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

B. Meteorological Data Used for Air Quality Modeling

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

C. Computer Models Used

1. \_\_\_\_\_ Modified? If yes, attach description.
2. \_\_\_\_\_ Modified? If yes, attach description.
3. \_\_\_\_\_ Modified? If yes, attach description.
4. \_\_\_\_\_ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ gram/sec
SO <sub>2</sub>	_____ gram/sec

E. Emission Data Used in Modeling

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

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

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

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

ATTACHMENT 1  
SECTION II A  
PROCESS DESCRIPTION

TANK NO. M-500  
BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

Tank No. M-500 is used for the storage of myrcene, a triple unsaturated hydrocarbon which is an intermediate for the production of flavor and perfume chemicals. The myrcene from this tank is later converted to geraniol, a product having a floral rose-type odor. It is widely used as a fragrance in soaps, detergents and cosmetics. The tank is not a reaction site nor is it used for any other process activity.

TANK DATA SUMMARY

TANK NUMBER	TANK COLOR	MATERIAL STORED	MATERIAL OF CONSTRUCTION	VOLUME (GAL.)	SIZE	VENT	ANNUAL THROUGHPUT (GAL/YR)	VAPOR PRESSURE (PSIA)
M-500	Light Green	Myrcene	Carbon Steel	4,784	8'0" x 14'0" SS	Atmosphere	2,275,000	0.0832

**ATTACHMENT 2**

**SECTION III A**

**RAW MATERIALS**

The utilization rate can be determined by dividing the total annual throughput for Tank No. M-500 by the total annual operating hours and applying the appropriate conversion factors.

Based on 8,760 operating hours per year and a representative specific gravity of 0.80 for myrcene, the utilization rate becomes:

$$(2,275,000 \text{ Gal/Yr} \times 8.34 \text{ lb/Gal} \times 0.80 \text{ sp.gr.}) / (8,760 \text{ Hr/Yr}) = 1,733 \text{ lb/hr}$$

Where,

Annual Throughput = 2,275,000 Gal/Yr,

Density of Water = 8.34 lbs/Gal,

Specific Gravity of Myrcene = 0.80 and

Annual Operating Time = 8,760 Hrs/Yr

ATTACHMENT 3  
SECTION III C  
CALCULATION OF AIRBORNE  
CONTAMINANTS EMITTED

Tank emissions result from a combination of losses due to displaced vapors from tank filling, i.e. working issues, and tank "breathing" due to changes in ambient temperatures.

The rate of VOC emissions from the new tank, due to breathing losses and working losses, can be calculated as described in USEPA AP-42, "Compilation of Air Pollutant Emission Factors," pages 4.3-5 through 4.3-11, Fourth Edition, 1985.

**ACTUAL EMISSIONS**

**Calculations of Breathing Loss**

Use the breathing loss equation in AP-42, page 4.3-5:

$$L_B = 2.26 \times 10^{-2} M_V \left( \frac{P}{P_A - P} \right)^{0.68} D^{1.73} H^{0.51} T^{0.50} F_P C K_C$$

where:

$L_B$  = Breathing Loss (lb/yr)

$M_V$  = Vapor Molecular Weight (lb/lb mol)

$P$  = True Vapor Pressure at Bulk Storage Conditions (psia)

$P_A$  = Atmospheric Pressure, psia  
= 14.7 psia

$D$  = Tank Diameter (ft.)

$H$  = Average Vapor Space Height (ft.)



According to AP-42, the vapor space in a cone roof is equal in volume to a cylinder which has the same base diameter as the cone and is one-third the height of the cone. For purposes of calculating breathing losses, use this criterion along with the assumption that the tank is normally half full.

$T$  = Average Ambient Diurnal Temperature Change ( $^{\circ}\text{F}$ )

Information from National Oceanic and Atmospheric Administration (NOAA) received by telephone on 6-20-88 indicates that the Jacksonville average high temperature is  $78.7^{\circ}\text{F}$  and the average low  $57.2^{\circ}\text{F}$ . The average diurnal change, "Delta T," is therefore  $78.7 - 57.2 = 21.5^{\circ}\text{F}$ .

$F_p$  = Paint Factor from AP-42, Table 4.3-1--Assume that the green tanks at Union Camp are similar to medium gray in the Table. Select  $F_p = 1.58$

$C$  = Small Diameter Tank Adjustment Factor, AP-42, Figure 4.3-4 = 0.42

$K_C$  = product factor, AP-42, Page 4.3-11 = 1.0

The parameters for the breathing loss equation are listed in Table 3-1 followed by a tabularized calculation of breathing loss.

#### Calculation of Working Loss

Use the working loss equation in AP-42, page 4.3-8

$$L_W = (2.4 \times 10^{-5}) M_V P V N K_N K_C$$

where:

$L_W$  = Working Loss (lb/yr)

$M_V$  = Vapor Molecular Weight (lb/lb mol)

$P$  = True Vapor Pressure at bulk storage conditions (psia)

$V$  = Tank Volume (gallons)

TABLE 3-1--CALCULATION OF BREATHING LOSS

TANK NUMBER	FACTOR	MOLECULAR WT. OF VAPOR $M_V$ (LB/LB MOL)	TRUE VAPOR PRESSURE P (PSIA)	AVERAGE ATMOS. PRESSURE $P_A$ (PSIA)	TANK DIAMETER D (FT.)	AVERAGE VAPOR SPACE HEIGHT H (FT.)	AVERAGE AMBIENT DIURNAL TEMP. CHGE. $\Delta T$ ( $^{\circ}F$ )	PAINT FACTOR $F_P$	ADJUSTMENT FACTOR SMALL TANKS C	PRODUCT FACTOR $K_C$
M-500	$2.26 \times 10^{-2}$	136	0.0832	14.7	8.0	15.0	21.5	1.58	0.42	1.0

TABLE 3-2--CALCULATION OF BREATHING LOSS (Cont'd)

TANK	FACTOR	$M_V$	$\left(\frac{P}{P_A - P}\right)^{0.68}$	$D^{1.73}$	$H^{0.51}$	$T^{0.50}$	$F_P$	C	$K_C$	$L_B$
M-500	$2.26 \times 10^{-2}$	136	0.0297	36.50	3.98	4.64	1.58	0.42	1.0	40.83

TABLE 3-3--CALCULATION OF WORKING LOSS

TANK NUMBER	FACTOR	MOLECULAR WT. OF VAPOR $M_V$ (LB/LB MOL)	TRUE VAPOR PRESSURE P (PSIA)	TRUE VOLUME V (GAL.)	NUMBER OF ANNUAL TURNOVERS OF TANK VOLUME N	TURNOVER FACTOR $K_N$	PRODUCT FACTOR $K_C$	WORKING LOSS $L_W$ (LB/YR)
M-500	$2.4 \times 10^{-5}$	136	0.0832	4,785	475.4	1.0	1.0	617.8

N = Number of Annual Turnovers of Tank Volume

$K_N$  = turnover factor from AP-42, Figure 4.3-7

$K_C$  = Product factor from AP-42, Page 4.3-11

Accordingly, the calculation of working loss is indicated in Table 3-3, "Calculations of Working Loss."

#### Combined Breathing and Working Losses

The total losses are simply the sums of the respective breathing and working losses as indicated in Table 3-4, "Calculation of Combined Loss."

TABLE 3-4  
CALCULATION OF COMBINED LOSS

TANK NUMBER	BREATHING LOSS (LBS/YR)	WORKING LOSS (LBS/YR)	TOTAL LOSS		
			(LBS/YR)	(LBS/HR)	(TONS/YR)
M-500	40.83	617.8	658.6	0.075	0.329

#### Maximum Emissions

The maximum emissions rate occurs during tank loading operations due to the displacement of the vapor space in the tank as it fills. Although an instantaneous peak emissions rate could be calculated, it would be a meaningless value because the absolute VOC emissions from any individual tank is small, the tanks are filled intermittently and there will never be a time when all the tanks are filled simultaneously at peak loading rates. Consequently, the maximum emissions rate is considered to be equivalent to the actual emissions for this tank.

Allowable Emissions

Chapter 17-2.660(2)(a) FAC, adopts by reference the federal New Source Performance Standards (NSPS) found in 40 CFR 60 including Subpart Kb-- Standards of Performance for Volatile Organic Liquid Storage Vessels.... However, Tank M-500 must be compared to the exceptions and exemptions of § 60.110b to determine specific rule applicability.

TANK NO. M-500

Since the 4,785-gallon capacity of Tank No. M-500 is less than 40 m<sup>3</sup> (10,568 gallons), it is exempt from rule coverage except as specified in § 60.116b(a) and (b). Essentially, the requirements of those subparagraphs include:

- (a) Maintain records required by § 60.116b(c) for the life of the vessel and all other records for two years.
- (b) Maintain records showing dimensions of the storage vessel and an analysis of the capacity of the storage vessel.

ATTACHMENT 4

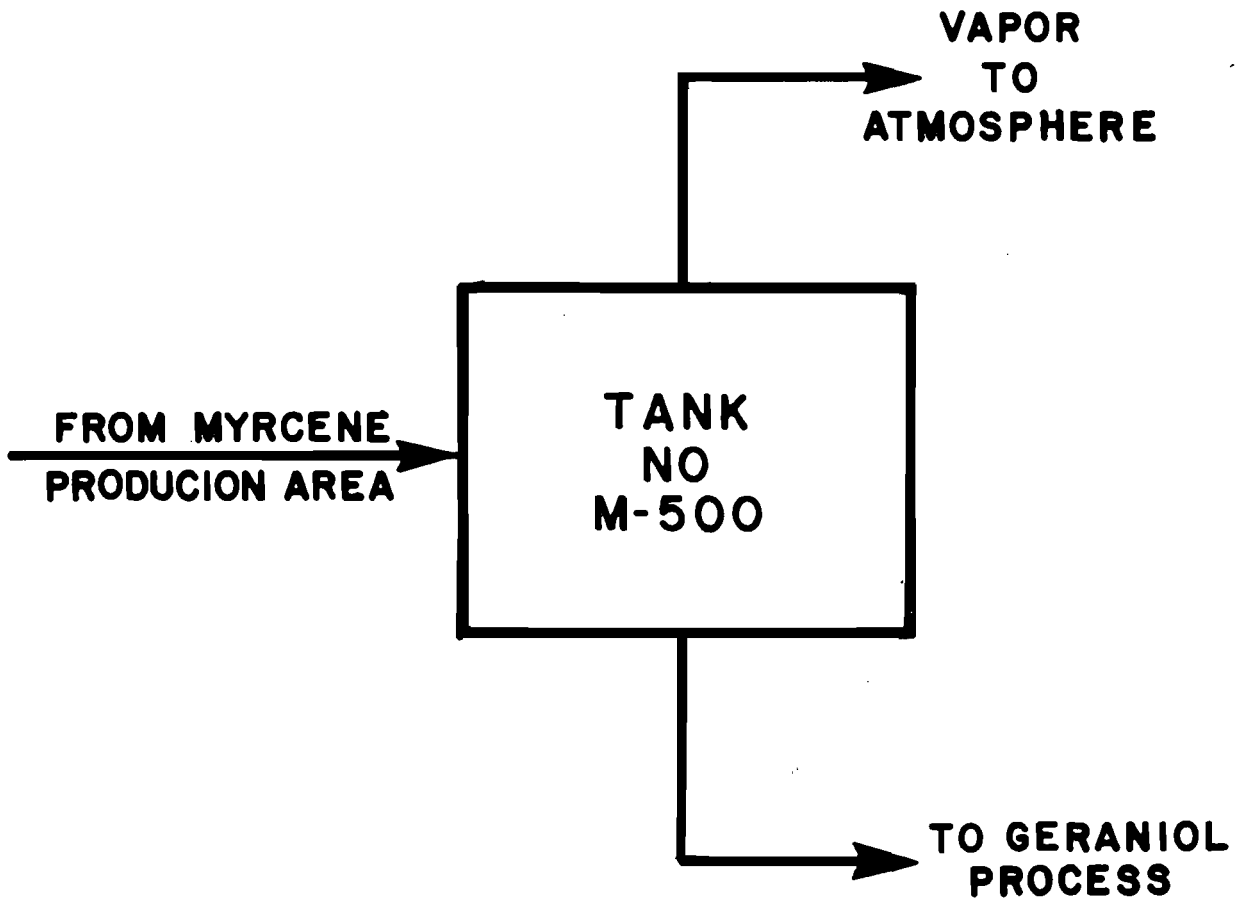
SECTION III H

EMISSION STACK GEOMETRY AND FLOW CHARACTERISTICS

---

TANK NUMBER	STACK HEIGHT (FT.)	STACK DIAMETER	FLOW (ACFM)	FLOW DSCFM	EXIT TEMP. (°F)	VELOCITY (FPS)
M-500	17'0"	2"	Intermittent Flow		80.6	Variable

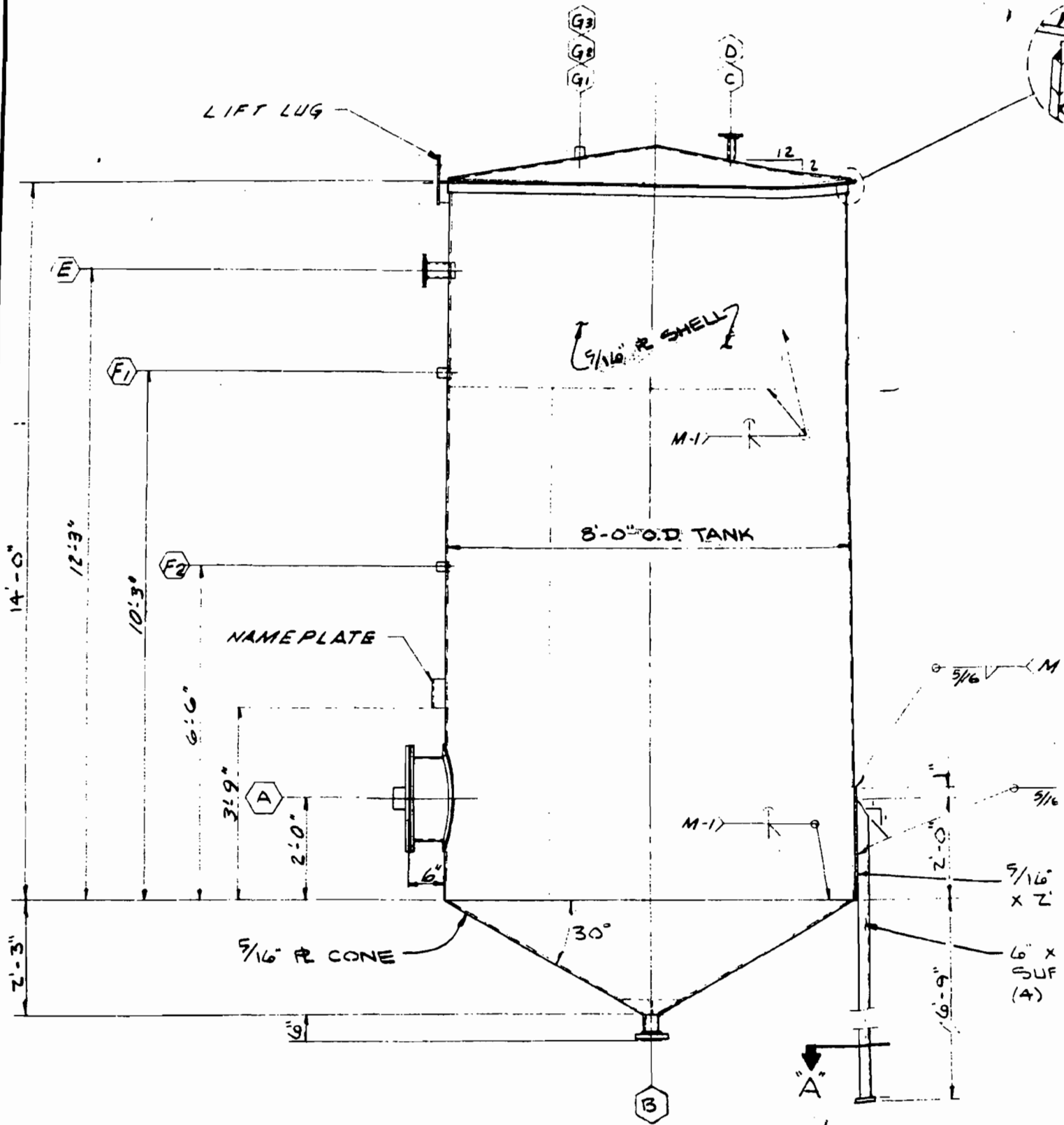
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**HUNTER**

Architecture, Engineering, Planning and Environmental Services

NEW M-500



SCHMATIC ELEVATION  
NOT TO SCALE

ORDER NO.

0636

N21792

1	B	3"	150#	RFSO	STD. WT. PIPE	OUTLET
1	C	2"				INLET
1	D	2"				VENT
1	E	3"	150#	RFSO	STD. WT. PIPE	INLET
2	F-2	1"	3000	—	SCD. CPLG	LVL. GA.
2	G1-2	1 1/4"	—	TQE.	3/40 PIPE X 3" LG NIPP.	LVL. IND.
1	G-3	1 1/2"	3000	—	SC'D CPLG	" "

**GENERAL NOTES**

1. VESSEL TO BE FABRICATED IN ACCORDANCE WITH THE LATEST EDITION OF THE  
**API 650**

2. CODE STAMP: **NONE**

3. CUSTOMER SPECIFICATION:  
**NEW M-500**

4. CUSTOMER INSPECTION: **OPTIONAL**

5. DESIGN DATA:

DESIGN PRESSURE

DESIGN TEMPERATURE

HYDROSTATIC TEST PRESSURE

RADIOGRAPH

CORROSION ALLOWANCE

CAPACITY

HEAT TREATMENT

VESSEL		JACKET/COIL
ATM.	PSIG	PSIG
158	°F	°F
FULL WATER	PSIG	PSIG
NONE		
1/8"		
4500		GAL.
NONE		

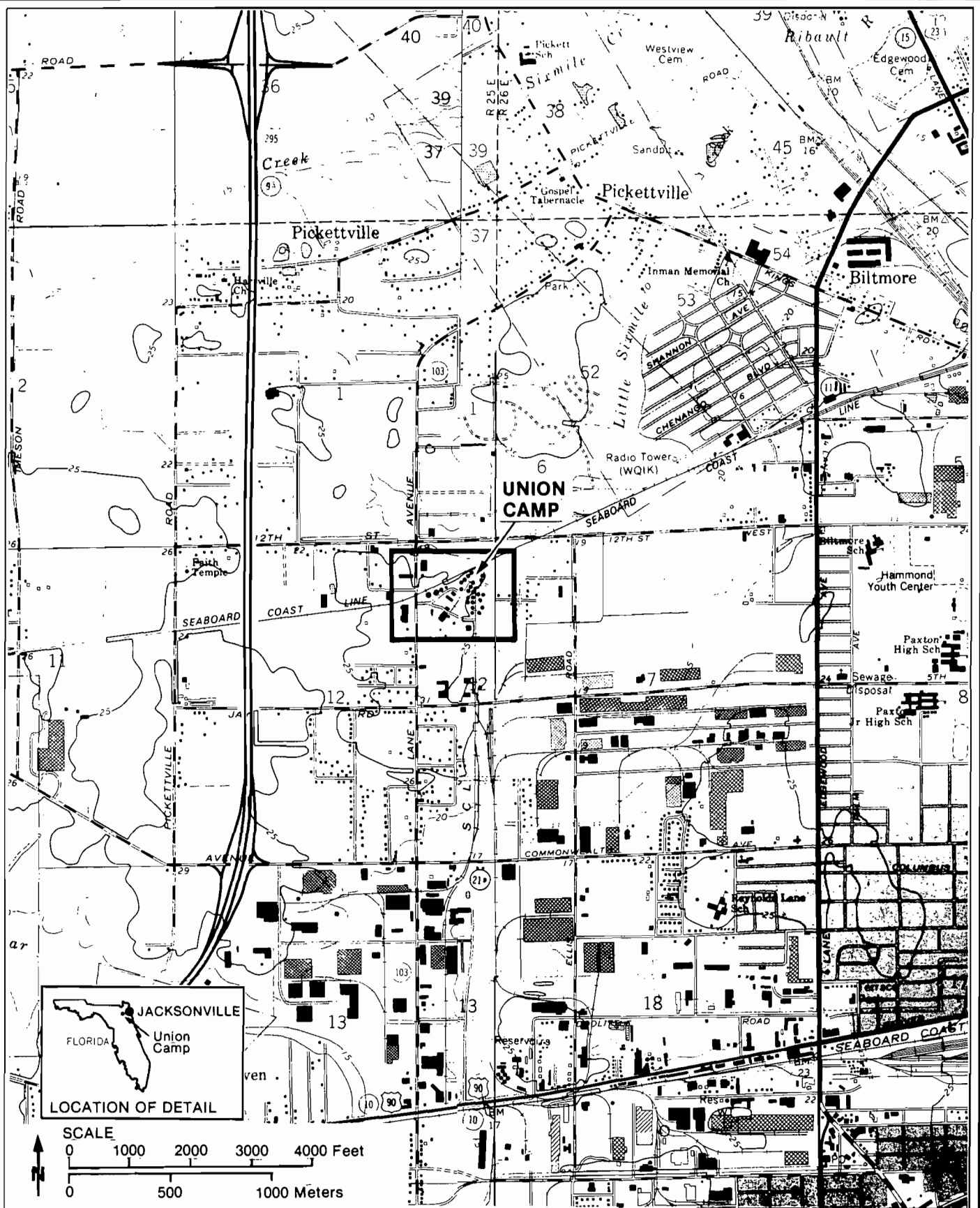
6. ESTIMATE WEIGHT: **7,091#**      **EMPTY 44,644#**      **FULL OF WATER**

- 6x6x3/8 #

1/2" 45 #

(3) 3/4" Ø HOLES

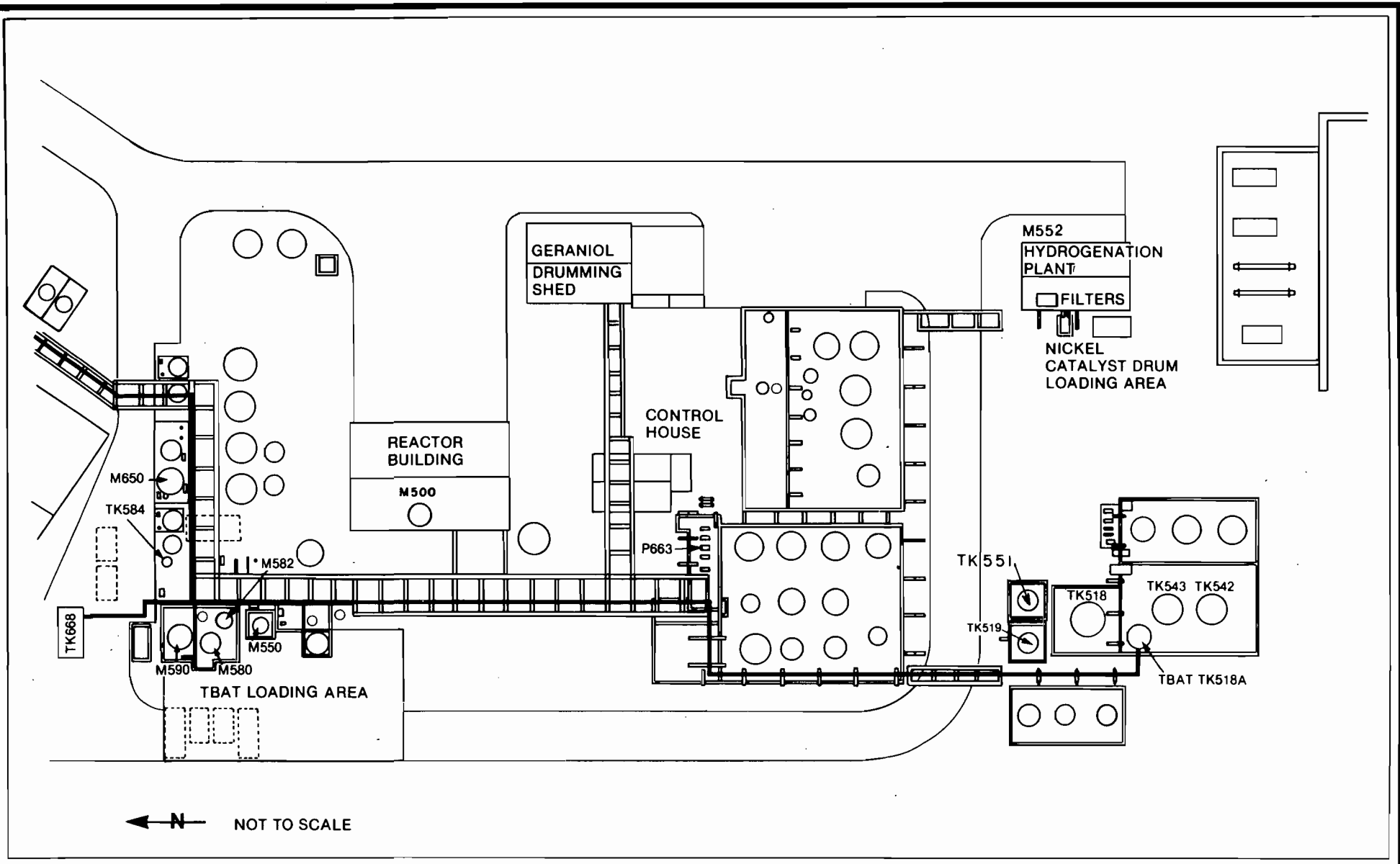




**SITE LOCATION MAP**

**UNION CAMP**

SOURCES: USGS, 1982; ESE, 1986.



GENERAL FACILITY LAYOUT (EAST SECTION)

UNION CAMP

SOURCE: UNION CAMP, 1986.



P. O. BOX 60369  
JACKSONVILLE, FLORIDA 32236

FIRST UNION NATIONAL BANK OF FLORIDA  
JACKSONVILLE, FLORIDA

No. 052438

03-2  
630

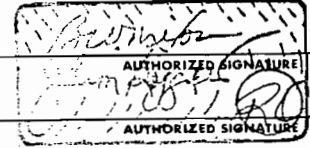
APR 19 89

\$  
800.00

UNION CAMP 800 UNION CAMP CORPORATION  
REGULAR ACCOUNT

PAY TO THE ORDER OF:

Florida Dept. of Environmental Regulation  
17-4.050.(a)  
1600 Blairstone Rd.  
Tallahassee, Fla. 32301



Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301-8341

Subject: Application to Construct Air Pollution Source  
Miscellaneous Storage Tanks  
BBA Division  
Aroma and Terpene Chemicals  
Union Camp Corporation  
Jacksonville, Florida

Re: Letter from C. H. Fancy, FDER, to  
L. H. Stebbins, HSI, dated April 17, 1989

Dear Mr. Fancy:

Pursuant to your letter, dated April 17, 1989, and your previous conversation with Lloyd Stebbins, we respectfully disagree with the Department's interpretation of the Similar Source Fee Rule, 17-4.050(4)(a)3 FAC, as applied to the storage tanks in the permit application package. For reference, the enclosed "Tank Data Summary" outlines the salient features of the five storage tanks.

According to the Similar Source Fee Rule, tanks must be "substantially similar" to qualify for consideration of a single fee. There are seven criteria which must be considered to establish sources as substantially similar. The following commentary addresses each criterion separately:

- Sources must be of the same kind - All of these vessels are storage tanks; none have any internal baffling or moving parts of any kind; no chemical reactions occur at any time within the tanks.
- Use the same type of fuels - Not applicable.

DEPARTMENT OF ENVIRONMENTAL REGULATION

**ROUTING AND TRANSMITTAL SLIP**

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)

*Patty*

Initial

Date

2.

Initial

Date

3.

Initial

Date

4.

Initial

Date

REMARKS:

*Stebbins will send  
#800 and letter  
end of next week.  
Please write him 1st  
letter on why doesn't  
qualify under single  
source. Thanks  
we can hold application*

INFORMATION

Review & Return

Review & File

Initial & Forward

DISPOSITION

Review & Respond

Prepare Response

For My Signature

For Your Signature

Let's Discuss

Set Up Meeting

Investigate & Report

Initial & Forward

Distribute

Concurrence

For Processing

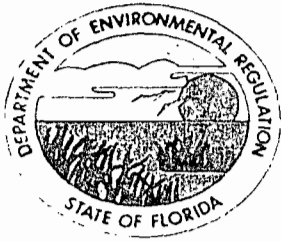
Initial & Return

FROM:

*Alan*

DATE *4-14*

PHONE



## Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

April 17, 1989

Mr. Lloyd H. Stebbins, P.E.  
Hunter Services  
Post Office Box 4943  
Jacksonville, Florida 32201

Dear Mr. Stebbins:

RE: Union Camp Corporation  
Miscellaneous Storage Tanks

This is in response to our conversation regarding the processing fee for the above referenced air construction permit application. I have determined that since the five storage tanks proposed in the application would be different sizes, store different materials, and have varying annual throughput rates, the sources cannot be considered similar for fee purposes. This decision is consistent with previous fee determinations for applications of this type processed by the Bureau of Air Quality Management.

Processing will begin on Union Camp's application as soon as the remaining \$800 is received, and we will make every effort to comply with your request to expedite this permit.

Sincerely,

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

CHF/pa

cc: John M. Baggett, Union Camp Corp.

RECEIVED  
DER - MAIL ROOM

1989 APR 10 AM 11: 29



BBA DIVISION  
AROMA & TERPENE  
CHEMICALS

P.O. BOX 37617, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

April 6, 1989

C.H. Fancy, PE, Deputy Chief  
Bureau of Air Quality Management  
Florida Department of  
Environmental Regulation  
Twin Towers Office Building  
2600 Blainstone Road  
Tallahassee, Florida 32301

Subject: Construction Permit Application  
Miscellaneous Storage Tanks  
Jacksonville Plant

Dear Mr. Fancy:

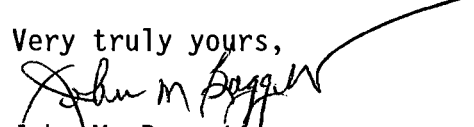
As part of our on-going efforts to upgrade the plant and reduce atmospheric emissions, we are planning to install five new storage tanks. The tanks will be used to store a variety of liquid organic chemicals prior to either further processing or incineration.

We are and have been committed to protecting, and where practical, enhancing the environment for the benefit of our employees and the surrounding community. Accordingly, I have directed our staff to be sensitive to environmental issues and to assure compliance with all environmental laws and regulations as the design of these storage tanks progresses.

These five tanks will each emit very small quantities of organic vapors. Nevertheless, because two of them may contain sulfur bearing compounds, we have committed the resources necessary to vent them to our vapor collection system for incineration.

We are anxious to permit this facility as quickly as possible to avoid severe operating constraints. For this reason, we would sincerely appreciate your assistance in expediting the review process. If you have questions, please contact me or our consultant, Lloyd H. Stebbins, Hunter Services, Inc., at 904/739-2007.

Very truly yours,

  
John M. Baggett  
Resident Manager

JMB/efc

Enclosure

Union Camp

P. O. BOX 60369  
JACKSONVILLE, FLORIDA 32236

FIRST UNION NATIONAL BANK OF FLORIDA  
JACKSONVILLE, FLORIDA

No. 052325

630

0364

APR. 5 89

\$ 200.00

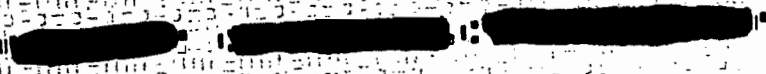
UNION CAMP CORPORATION  
REGULAR ACCOUNT

PAY TO THE ORDER OF:

Florida Department of Environmental  
Regulation 17-4.050(a)  
1600 Blairstone Road  
Tallahassee, FL 32301

*Beumbe*  
AUTHORIZED SIGNATURE

1032



BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

P. O. BOX 60369  
JACKSONVILLE, FLORIDA 32236



Florida Dept. of Env. Reg.  
2600 Blairstone Road  
Tallahassee, FL 32301

ATTN: Mr. C. H. Fancy

FIRST CLASS MAIL

**APPLICATION TO CONSTRUCT  
AIR POLLUTION SOURCE**

**MISCELLANEOUS STORAGE TANKS**

**BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA**

**Prepared by:  
HUNTER SERVICES, INC.**

**April 6, 1989**



BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

TABLE OF CONTENTS

OWNER'S LETTER

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# **HUNTER/ESE**

**ENVIRONMENTAL SERVICES, INC.**

6737 Southpoint Drive South  
P.O. Box 4943 (32201)  
Jacksonville, Florida 32216  
904-739-2007  
FAX 904-731-1673

April 6, 1989  
97415-0000

C.H. Fancy, PE, Deputy Chief  
Bureau of Air Quality Management  
Florida Department of  
Environmental Regulation  
Twin Towers Office Building  
1600 Blainstone Road  
Tallahassee, Florida 32301

Subject: **Application to Construct Air Pollution Source  
Miscellaneous Storage Tanks  
BBA Division  
Aroma and Terpene Chemicals  
Union Camp Corporation  
Jacksonville, Florida**

Dear Mr. Fancy:

The enclosed construction permit application package has been prepared for five organic chemical storage tanks at the Union Camp Plant in Jacksonville, Florida.

Tank No. 1020 has been included as an existing tank which is being converted from non-VOC (humate slurry) to VOC (terpenes) service. It will be vented to the vapor collection system.

Tank No. 551 is a new tank for storing crude geraniol. Since the combined breathing loss and working loss emissions are only 0.048 tons/year, it will be vented to the atmosphere.

Old Tank No. 427 will be replaced by existing Tank No. 1021, which will subsequently be renamed Tank No. 427. Existing Tank No. 1021 has not been previously permitted because it was devoted to humate slurry storage. Since the head fractions which will be stored in this tank will contain dimethylsulfide (DMS), it will be vented to the vapor collection system.

Tank No. 607A will be replaced by a new tank, No. 607A, which will be used to store turpentine derivatives including crude isobutanol prior to fueling the boiler. In addition, a new tank, No. 607B, will be installed for blending and viscosity adjustment of the materials stored in Tank No. 607A. The combined emissions from these tanks are so small that both tanks are designed to vent to atmosphere.

April 6, 1989

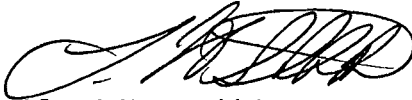
Enclosed is a check for \$200.00, payable to the Florida Department of Environmental Regulation, as required by 17-4.050(a) FAC for the permit application review fee. A check for \$225.00, payable to the Tax Collector, City of Jacksonville, has been sent under separate cover to the Bio-Environmental Services Division for their review fee, as required by City Ordinance 87-984-548. These fees are based upon the combined emissions in this application totalling much less than 25 tons/year.

Since Duval County is a nonattainment area for ozone, the PSD levels do not apply.

Although the enclosed application represents a modification to a major facility [17-2.510(2)(a)4 FAC], the total combined increase in VOC emissions is only slightly more than one ton per year. Since the increase is only a small fraction of the significant net emission increase threshold for VOCs, i.e. 40 tons/year, a New Source Review is not required.

There is nothing environmentally unique about any of these storage tanks and the corresponding emissions are clearly very low. However, any undue permitting delay will create an operating hardship on the plant. Accordingly, we would greatly appreciate your efforts to expedite the processing of the permit.

Very truly yours,



Lloyd H. Stebbins, PE  
Director Environmental Programs

LHS/efc

Enclosures

# 1000 pd  
5-1-89  
Rept. # 117411

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



AC 16-164343 - TK 1020  
AC 16-164345 - TK 551  
AC 16-164344 - TK 427  
AC 16-164348 - TK 607A  
AC 16-164341 - TK 607B

BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Miscellaneous Storage Tanks  New  Existing  
APPLICATION TYPE:  Construction  Operation  Modification  
COMPANY NAME: Union Camp Corporation COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Line  
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Organic Chemical Storage Tanks

SOURCE LOCATION: Street 2051 N. Lane Avenue City Jacksonville  
UTM: East 427,650 Meters North 3,357,350 Meters  
Latitude 30° 20' 53"N Longitude 81° 45' 05"W

APPLICANT NAME AND TITLE: John M. Baggett, Resident Manager  
APPLICANT ADDRESS: P.O. Box 60639, Jacksonville, Florida 32236

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of Union Camp Corporation

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

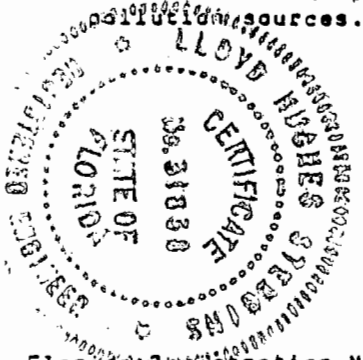
Signed: John M. Baggett  
John M. Baggett, Resident Manager  
Name and Title (Please Type)  
Date: 4/6/89 Telephone No. (904) 783-2180

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

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

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

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution control resources.



Signed *L. H. Stebbins*

Lloyd H. Stebbins  
Name (Please Type)

Hunter Services, Inc.  
Company Name (Please Type)

P.O. Box 4943, Jacksonville, Florida 32201  
Mailing Address (Please Type)

Florida Registration No. 31838 Date: APR - 6 '89 L. H. STEBBINS Telephone No. 904/739-2007

**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.

Refer to the Process Description (Attachment 1) and the Process Flow Diagrams (Attachment 5).

B. Schedule of project covered in this application (Construction Permit Application Only)  
Start of Construction May 1, 1989 Completion of Construction December 31, 1989

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

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.  
None except Tanks No. 427 and 607 previously listed on Permit No. A016-124126.

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

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? YES  
a. If yes, has "offset" been applied? NO  
b. If yes, has "Lowest Achievable Emission Rate" been applied? NO  
c. If yes, list non-attainment pollutants. OZONE, PART
2. Does best available control technology (BACT) apply to this source?  
If yes, see Section VI. NO
3. Does the State "Prevention of Significant Deterioration" (PSD)  
requirement apply to this source? If yes, see Sections VI and VII. NO
4. Do "Standards of Performance for New Stationary Sources" (NSPS)  
apply to this source? NO\*
5. Do "National Emission Standards for Hazardous Air Pollutants"  
(NESHAP) apply to this source? NO

- H. Do "Reasonably Available Control Technology" (RACT) requirements apply  
to this source? NO
- a. If yes, for what pollutants? N/A
- b. If yes, in addition to the information required in this form,  
any information requested in Rule 17-2.650 must be submitted. N/A

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

\*The only exception is a few minor recordkeeping requirements in 40 CFR 60,  
Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage  
Vessels....Refer to Attachment 3 for details.

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

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

REFER TO ATTACHMENT 2

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
TK 1020-Terpenes	VOC	NA	1,012	TAB 5
TK 551-Geraniol	VOC	NA	2,176	TAB 5
TK 427-50% DMS -50% AP	VOC	NA	3,987	TAB 5
TK 607A- Isobutanol	VOC	NA	7,693	TAB 5
TK 607B- Isobutanol	VOC	NA	7,693	TAB 5

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

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

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

REFER TO ATTACHMENT 3

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	
TK 1020 VOC	NA	NA	17-2.660(2)(a)*	NA	NA	NA	TAB 5
TK 551 VOC	0.011	0.048	17-2.660(2)(a)	NA	96.0	0.048	TAB 5
TK 427 VOC	NA	NA	17-2.660(2)(a)	NA	NA	NA	TAB 5
TK 607A VOC	0.126	0.553	17-2.660(2)(a)	NA	1106	0.553	TAB 5
TK 607B VOC	0.119	0.521	17-2.660(2)(a)	NA	1042	0.521	TAB 5

<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).

\*Chapter 17-2.660 FAC adopts 40 CFR 60 by reference, including Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels... The federal rules do not apply any specific allowable emission rate. Since certain exceptions apply, only Tanks No. 1020, 551 and 607A are subject to a few limited recordkeeping requirements. DER Form 17-1.202(1) Tanks No. 427 and 607B are completely exempted from rule coverage Effective November 30, 1982

J. 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)
TK 1020	VOC	NA - Connected	to Vapor Collection System	
TK 551	VOC	NA - Vented to	Atmosphere	
TK 427	VOC	NA - Connected	to Vapor Collection System	
TK 607A	VOC	NA - Vented to	Atmosphere	
TK 607B	VOC	NA - Vented to	Atmosphere	

E. Fuels

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

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

Fuel Analysis:

Percent Sulfur: NA Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

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

Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

Does not apply.



REFER TO ATTACHMENT 4

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

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ ft.  
 Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM Gas Exit Temperature: \_\_\_\_\_ °F.  
 Water Vapor Content: N/A % Velocity: \_\_\_\_\_ FPS

**SECTION IV: INCINERATOR INFORMATION**

REFER TO PERMIT NO. A016-62025

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

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

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

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

Manufacturer: \_\_\_\_\_

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

	Volume (ft) <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 devices:  Cyclone  Wet Scrubber  Afterburner  
 Other (specify) \_\_\_\_\_

Brief description of operating characteristics of control devices: \_\_\_\_\_

N/A

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

N/A

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** Does not apply.

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

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:

Explain method of determining efficiency.

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<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** Does not apply.

**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).

2. Instrumentation, Field and Laboratory

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

B. Meteorological Data Used for Air Quality Modeling

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

C. Computer Models Used

1. \_\_\_\_\_ Modified? If yes, attach description.
2. \_\_\_\_\_ Modified? If yes, attach description.
3. \_\_\_\_\_ Modified? If yes, attach description.
4. \_\_\_\_\_ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO <sub>2</sub>	_____ grams/sec

E. Emission Data Used in Modeling

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

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

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

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

ATTACHMENT 1

SECTION II A

PROCESS DESCRIPTION

MISCELLANEOUS STORAGE TANKS

BBA DIVISION

AROMA AND TERPENE CHEMICALS

UNION CAMP CORPORATION

JACKSONVILLE, FLORIDA

Five tanks are used for storage or blending of organic chemicals related to the production of flavors or fragrances. The tanks are not used for reaction sites or any other process activity except for one tank, which is used for blending.

TANK NO. 1020

Tank No. 1020 is a vertical cylindrical carbon steel tank, which is being converted from non-VOC service, i.e. humate slurry storage, to VOC service. Accordingly, the converted tank receives a variety of terpenes from the distillation area. The chemicals stored in Tank No. 1020, are primarily TABS-C and TABS-Feed. The former is a mixture of terpenes including p-menthadienes and less than one percent alpha pinene. TABS-Feed is dipentene or a solution of 15-90% alpha pinene. The fluids stored in Tank No. 1020 are pumped to a terpene reactor in the distillation area for further processing or may be shipped directly as product. The tank vent is connected to the plant vapor collection system.

TANK NO. 551

Tank No. 551 is a new vertical cylindrical carbon steel tank used to store crude geraniol from the geraniol plant. It is a domed top tank with a nominal storage capacity of 25,000 gallons. The crude geraniol is later pumped to the distillation complex. The tank is vented to atmosphere.



TANK NO. 427

Old Tank No. 427 (Refer to Permit No. A016-124126.) is being replaced with an existing Tank No. 1021, which will be renamed Tank No. 427. The replacement tank, which will be moved to the old Tank No. 427 location, has not been previously permitted because it has been used for humate slurry service.

New Tank No. 427 (formerly 1021) is a vertical cylindrical carbon steel tank. It stores TRS head fractions, from Distillation Column No. 10, which are subsequently burned in the incinerator. Since the stored head fractions contain significant amounts of dimethyl sulfide, an odorous substance, the tank is vented to the vapor collection system.

TANKS NO. 607B AND 607A

Tank 607A formerly stored waste organics, which were burned in the boiler. It is being replaced by two new tanks, No. 607B and 607A. Tank No. 607B is an elevated cone bottom tank used to blend residues, terpene light ends and crude isobutanol to achieve a viscosity suitable for combustion in the boiler. It is a 7,500-gallon carbon steel tank, appropriately sized for the blending operation.

Tank No. 607A is a 20,000-gallon carbon steel tank used for holding the blended waste fuels prior to burning in the boiler.

Both tanks vent to the atmosphere. Refer to the following Tank Data Summary for additional information.

TANK DATA SUMMARY

TANK NUMBER	TANK COLOR	MATERIAL STORED	MATERIAL OF CONSTRUCTION	VOLUME (GAL.)	SIZE	VENT	ANNUAL THROUGHPUT (GAL/YR)	VAPOR PRESSURE (PSIA)
1020	Light Green	Terpenes*	Carbon Steel	125,000	32'0" $\emptyset$ x 21'0" SS	Vapor Collection System	1,250,000	0.029
551	Light Green	Geraniol	Carbon Steel	25,000	12'0" $\emptyset$ x 29'6" SS	Atmos.	258,000	0.029
427	Light Green	50% DMS 50% Alpha Pinene	Carbon Steel	7,000	11'0" $\emptyset$ x 9'0" SS	Vapor Collection System	487,000	1.8/0.03
607A	Light Green	Crude** Isobutanol	Carbon Steel	20,000	12'0" $\emptyset$ x 24'0" SS	Atmos.	10,000,000	0.25
607B	Light Green	Crude** Isobutanol	Carbon Steel	7,500	10'0" $\emptyset$ x 12'0" SS	Atmos.	10,000,000	0.25

\*TABS-C [Mixture of Terpenes Including p-menthadienes and less than one percent alpha-pinene] or TABS-FEED [Dipentene or alpha-pinene (15-90 percent)]

\*\*Isobutanol will be used as a surrogate material.

ATTACHMENT 2  
SECTION III A  
RAW MATERIALS

The utilization rate can be determined by dividing the total annual throughput for each tank by the total annual operating hours and applying the appropriate conversion factors.

For example, based on 8,760 operating hours per year and a representative specific gravity of 0.850 for alpha pinene, the utilization rate for Tank No. 1020 becomes:

$$(1,250,000 \text{ Gal/Yr} \times 8.34 \text{ lb/Gal} \times 0.850 \text{ sp.gr.}) / (8,760 \text{ Hr/Yr}) = 1.012 \text{ lb/hr}$$

Where,

Annual Throughput = 1,250,000 Gal/Yr,

Density of Water = 8.34 lbs/Gal,

Specific Gravity of Alpha Pinene = 0.850 and

Annual Operating Time = 8,760 Hrs/Yr

Similarly, the utilization rates for the other tanks can be found as indicated in the following Utilization Rate Summary.

UTILIZATION RATE SUMMARY

TANK NUMBER	VAPOR PRESSURE SURROGATE	PRODUCT CODE	ANNUAL THROUGHPUT (GAL/YR)	DENSITY OF WATER (LBS/GAL)	SPECIFIC GRAVITY TANK FLUID	ANNUAL OPERATING TIME (HRS/YR)	UTILIZATION RATE (LBS/HR)
1020	Alpha Pinene	TH	1,250,000	8.34	0.850	8,760	1,012
551	Geraniol	TA	258,000	8.34	0.886	8,760	218
427	50% DMS 50% Alpha Pinene	F	487,000	8.34	0.860	8,760	399
607A	Crude Isobutanol	F	10,000,000	8.34	0.808	8,760	7,693
607B	Crude Isobutanol	F	10,000,000	8.34	0.808	8,760	7,693

PRODUCT CODE

TH Terpene Hydrocarbons  
 TA Terpene Alcohols  
 F Boiler/Incinerator Fuel

**ATTACHMENT 3**  
**SECTION III C**  
**CALCULATION OF AIRBORNE**  
**CONTAMINANTS EMITTED**

Tank emissions result from a combination of losses due to displaced vapors from tank filling, i.e. working issues, and tank "breathing" due to changes in ambient temperatures.

The rate of VOC emissions from the new tanks, due to breathing losses and working losses, can be calculated as described in USEPA AP-42, "Compilation of Air Pollutant Emission Factors," pages 4.3-5 through 4.3-11, Fourth Edition, 1985.

**ACTUAL EMISSIONS**

**Calculations of Breathing Loss**

Use the breathing loss equation in AP-42, page 4.3-5:

$$L_B = 2.26 \times 10^{-2} M_V \left( \frac{P}{P_A - P} \right)^{0.68} D^{1.73} H^{0.51} T^{0.50} F_P C K_C$$

where:

$L_B$  = Breathing Loss (lb/yr)

$M_V$  = Vapor Molecular Weight (lb/lb mol)

$P$  = True Vapor Pressure at Bulk Storage Conditions (psia)

$P_A$  = Atmospheric Pressure, psia  
= 14.7 psia

$D$  = Tank Diameter (ft.)

$H$  = Average Vapor Space Height (ft.)

According to AP-42, the vapor space in a cone roof is equal in volume to a cylinder which has the same base diameter as the cone and is one-third the height of the cone. For purposes of calculating breathing losses, use this criterion along with the assumption that the tank is normally half full.

$T$  = Average Ambient Diurnal Temperature Change ( $^{\circ}\text{F}$ )

Information from National Oceanic and Atmospheric Administration (NOAA) received by telephone on 6-20-88 indicates that the Jacksonville average high temperature is  $78.7^{\circ}\text{F}$  and the average low  $57.2^{\circ}\text{F}$ . The average diurnal change, "Delta T," is therefore  $78.7 - 57.2 = 21.5^{\circ}\text{F}$ .

$F_p$  = Paint Factor from AP-42, Table 4.3-1--Assume that the green tanks at Union Camp are similar to medium gray in the Table. Select  $F_p = 1.58$

$C$  = Small Diameter Tank Adjustment Factor, AP-42, Figure 4.3-4 = 0.665

$K_c$  = product factor, AP-42, Page 4.3-11 = 1.0

The parameters for the breathing loss equation are listed in Table 3-1 followed by a tabularized calculation of breathing loss.

#### Calculation of Working Loss

Use the working loss equation in AP-42, page 4.3-8

$$L_w = (2.4 \times 10^{-5}) M_v P V N K_N K_c$$

where:

$L_w$  = Working Loss (lb/yr)

$M_v$  = Vapor Molecular Weight (lb/lb mol)

$P$  = True Vapor Pressure at bulk storage conditions (psia)

$V$  = Tank Volume (gallons)

TABLE 3-1  
CALCULATION OF BREATHING LOSS

TANK NUMBER	FACTOR	MOLECULAR WT. OF VAPOR $M_v$ (LB/LB MOL)	TRUE VAPOR PRESSURE P (PSIA)	AVERAGE ATMOS. PRESSURE $P_A$ (PSIA)	TANK DIAMETER D (FT.)	AVERAGE VAPOR SPACE HEIGHT H (FT.)	AVERAGE AMBIENT DIURNAL TEMP. CHGE. $\Delta T$ ( $^{\circ}$ F)	PAINT FACTOR $F_p$	ADJUSTMENT FACTOR SMALL TANKS C	PRODUCT FACTOR $K_C$
1020				Connect to Vapor Collection System						
551	$2.26 \times 10^{-2}$	154	0.029	14.7	12.0	15.0	21.5	1.58	0.64	1.0
427				Connected to Vapor Collection System						
607A	$2.26 \times 10^{-2}$	74	0.25	14.7	12.0	12.0	21.5	1.58	0.64	1.0
607B	$2.26 \times 10^{-2}$	74	0.25	14.7	10.0	8.0	21.5	1.58	0.54	1.0

TABLE 3-2

## CALCULATION OF BREATHING LOSS (Cont'd)

TANK	FACTOR	M <sub>V</sub>	$\left(\frac{P}{P_A - P}\right)^{0.68}$	D <sup>1.73</sup>	H <sup>0.51</sup>	ΔT <sup>0.50</sup>	F <sub>P</sub>	C	K <sub>C</sub>	L <sub>B</sub>
1020			Connected to Vapor Collection System							
551	2.26 x 10 <sup>-2</sup>	154	0.0145	73.62	3.98	4.64	1.58	0.64	1.0	69.38
427			Connected to Vapor Collection System							
607A	2.26 x 10 <sup>-2</sup>	74	0.0634	73.62	3.55	4.64	1.58	0.64	1.0	130.0
607B	2.26 x 10 <sup>-2</sup>	74	0.0634	53.70	2.89	4.64	1.58	0.54	1.0	65.14



N = Number of Annual Turnovers of Tank Volume

$K_N$  = turnover factor from AP-42, Figure 4.3-7

$K_C$  = Product factor from AP-42, Page 4.3-11

Accordingly, the calculation of working loss is indicated in Table 3-3, "Calculations of Working Loss."

#### Combined Breathing and Working Losses

The total losses are simply the sums of the respective breathing and working losses as indicated in Table 3-4, "Calculation of Combined Loss."

TABLE 3-4  
CALCULATION OF COMBINED LOSS

TANK NUMBER	BREATHING LOSS (LBS/YR)	WORKING LOSS (LBS/YR)	TOTAL LOSS		
			(LBS/YR)	(LBS/HR)	(TONS/YR)
1020	NA	NA	NA	NA	NA
551	69.38	27.65	97.03	0.011	0.049
427	NA	NA	NA	NA	NA
607A	130.0	976.8	1,106.8	0.126	0.553
607B	65.14	976.6	1,041.74	0.119	0.521
TOTAL					1.123

#### Maximum Emissions

The maximum emissions rate occurs during tank loading operations due to the displacement of the vapor space in the tank as it fills. Although an instantaneous peak emissions rate could be calculated, it would be a meaningless value because the absolute VOC emissions from any individual tank is small, the tanks are filled intermittently and there will never be a time

TABLE 3-3  
CALCULATION OF WORKING LOSS

TANK NUMBER	FACTOR	MOLECULAR WT. OF VAPOR $M_V$ (LB/LB MOL)	TRUE VAPOR PRESSURE P (PSIA)	TRUE VOLUME V (GAL.)	NUMBER OF ANNUAL TURNOVERS OF TANK VOLUME N	TURNOVER FACTOR $K_N$	PRODUCT FACTOR $K_C$	WORKING LOSS $L_W$ (LB/YR)
1020			Connected to Vapor Collection System					
551	$2.4 \times 10^{-5}$	154	0.029	25,000	10.32	1.0	1.0	27.65
427			Connected to Vapor Collection System					
607A	$2.4 \times 10^{-5}$	74	0.25	20,000	500	0.22	1.0	976.8
607B	$2.4 \times 10^{-5}$	74	0.25	7,500	1,333	0.22	1.0	976.6

when all the tanks are filled simultaneously at peak loading rates. Consequently, the maximum emissions rate is considered to be equivalent to the actual emissions for these tanks.

#### Allowable Emissions

Chapter 17-2.660(2)(a) FAC, adopts by reference the federal New Source Performance Standards (NSPS) found in 40 CFR 60 including Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels.... However, each tank must be compared to the exceptions and exemptions of § 60.110b to determine specific rule applicability.

#### TANK NO. 1020

Since the 125,000-gallon capacity of Tank No. 1020 exceeds 151 m<sup>3</sup> (39,890 gallons) but the 0.029 psia vapor pressure does not exceed 3.5 kPa (0.508 psia), Tank No. 1020 is exempt from rule coverage except as specified in § 60.116b(b) and (c). Essentially, the requirements of those subparagraphs include:

- (b) Maintain records showing dimensions of the storage vessel and an analysis of the capacity of the storage vessel.
- (c) Maintain a record of volatile organic liquids (VOL) stored, the period of storage and the maximum true vapor pressure of the VOL during the storage period.

However, Tank No. 1020 is further exempted from the requirements of subparagraph (c) by § 60.116(g), because it is connected to the vapor collection system.

#### TANK NO. 551

Similar logic applies to Tank No. 551 when compared to Section 60.110b(c). The tank volume (25,000 gallons) falls between 75 m<sup>3</sup> (19,815 gallons) and 151 m<sup>3</sup> (39,890 gallons) but the vapor pressure of the geraniol (0.029 psia) is below 15 kPa (2.176 psia). Therefore, only § 60.116b(b) and (c) apply as indicated above.

TANK NO. 427

Tank No. 427 is completely exempted by § 60.110b(a), because the volume (7,000 gallons) is less than 40 m<sup>3</sup> (10,568 gallons).

TANK NO. 607A

The line of logic for Tank No. 607A is identical to Tank No. 551 except that Tank No. 607A contains a "waste mixture of indeterminant or variable composition." Accordingly, Tank No. 551 is subject only to § 60.116b(b) and (f). The respective requirements are generally as follows:

- (b) Maintain records showing the dimensions of the storage vessel and an analysis of the capacity of the vessel.
- (f)(1) Prior to initial filling, determine the highest vapor pressure for the range of mixtures to be stored.

TANK NO. 607B

Tank No. 607B is completely exempted by § 60.110b(a), because the volume (7,500 gallons) is less than 40 m<sup>3</sup> (10,568 gallons).

The combined emissions from all tanks vented to the atmosphere (Tanks No. 551, 607A and 607B) is only 1.123 tons/year. Such extremely low emissions do not constitute a significant emission rate for VOC, which according to 17-2.500(2)(e)2, Table 500-2, is equivalent to 40 tons per year.

Potential Emissions

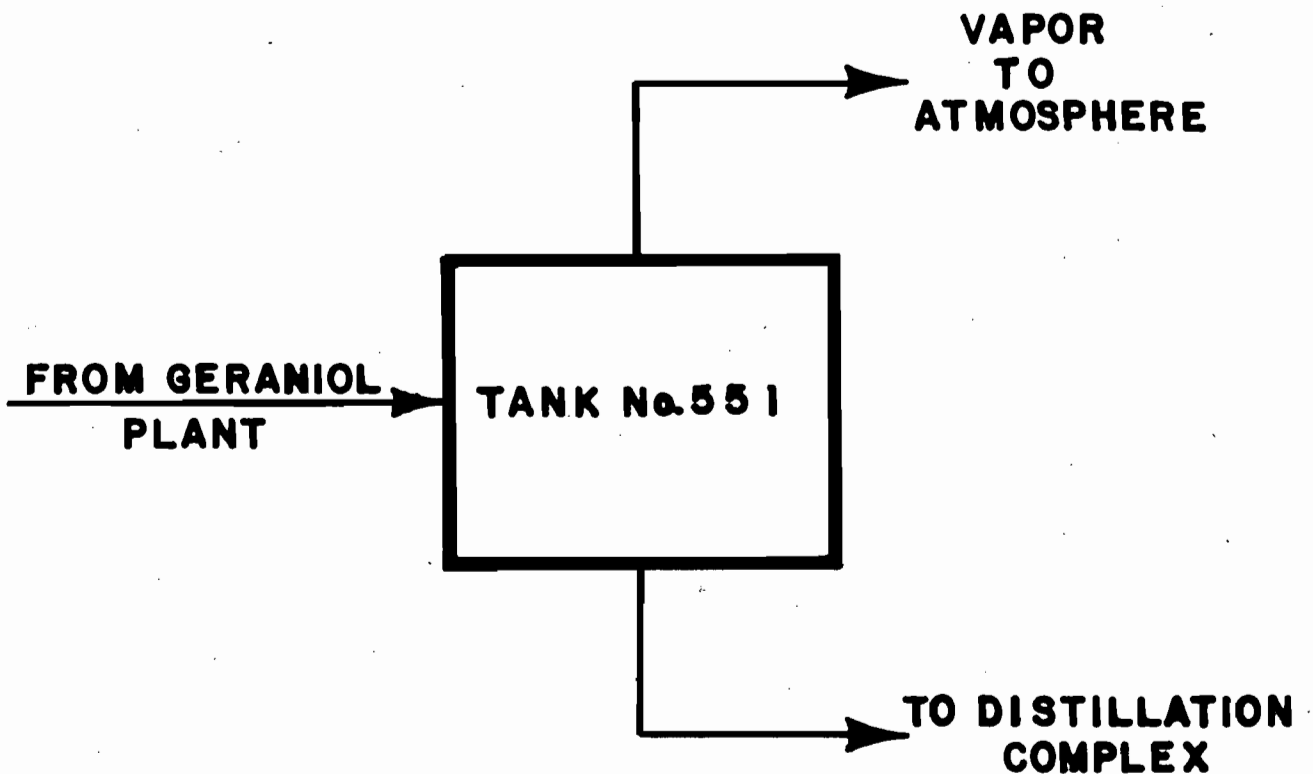
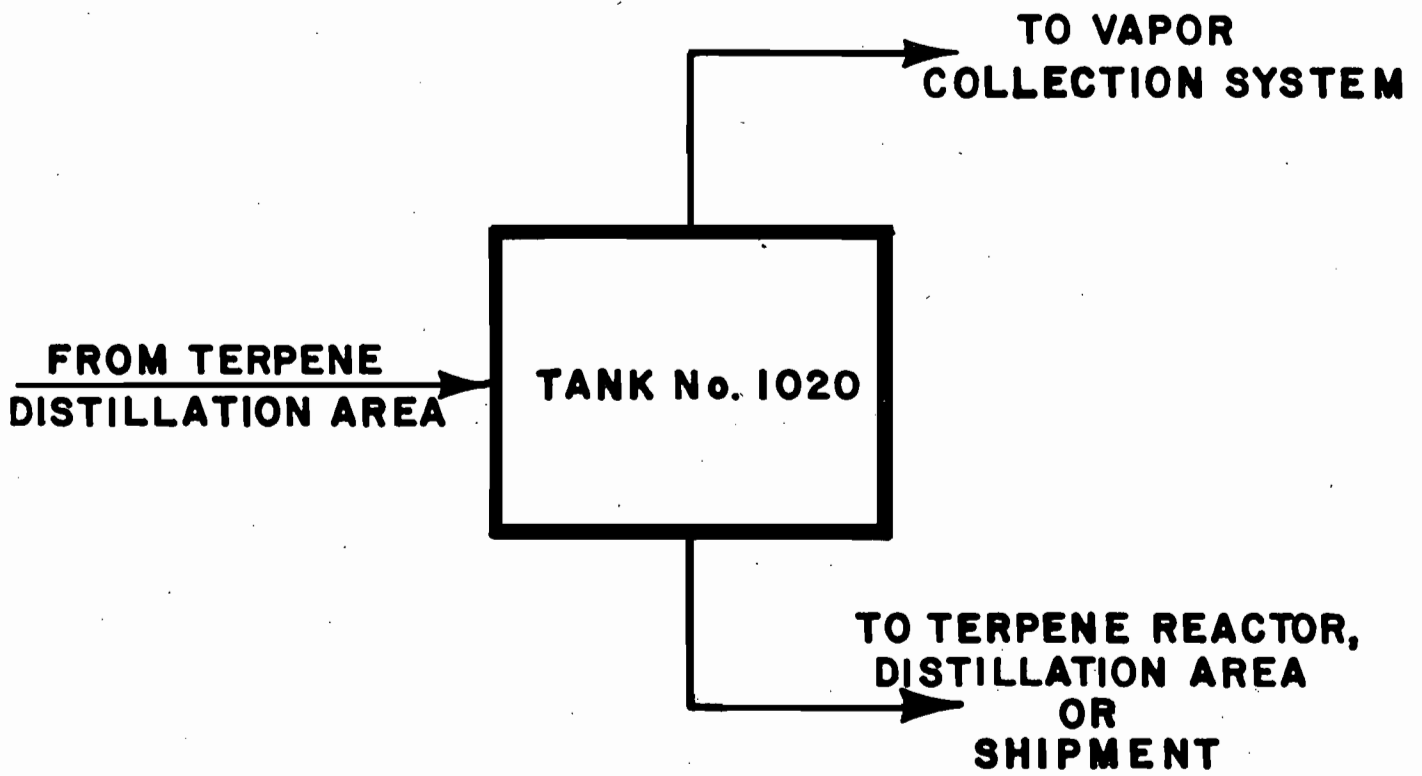
Since there are no emission control devices specifically dedicated to these tanks, the potential emissions are equal to the actual emissions.

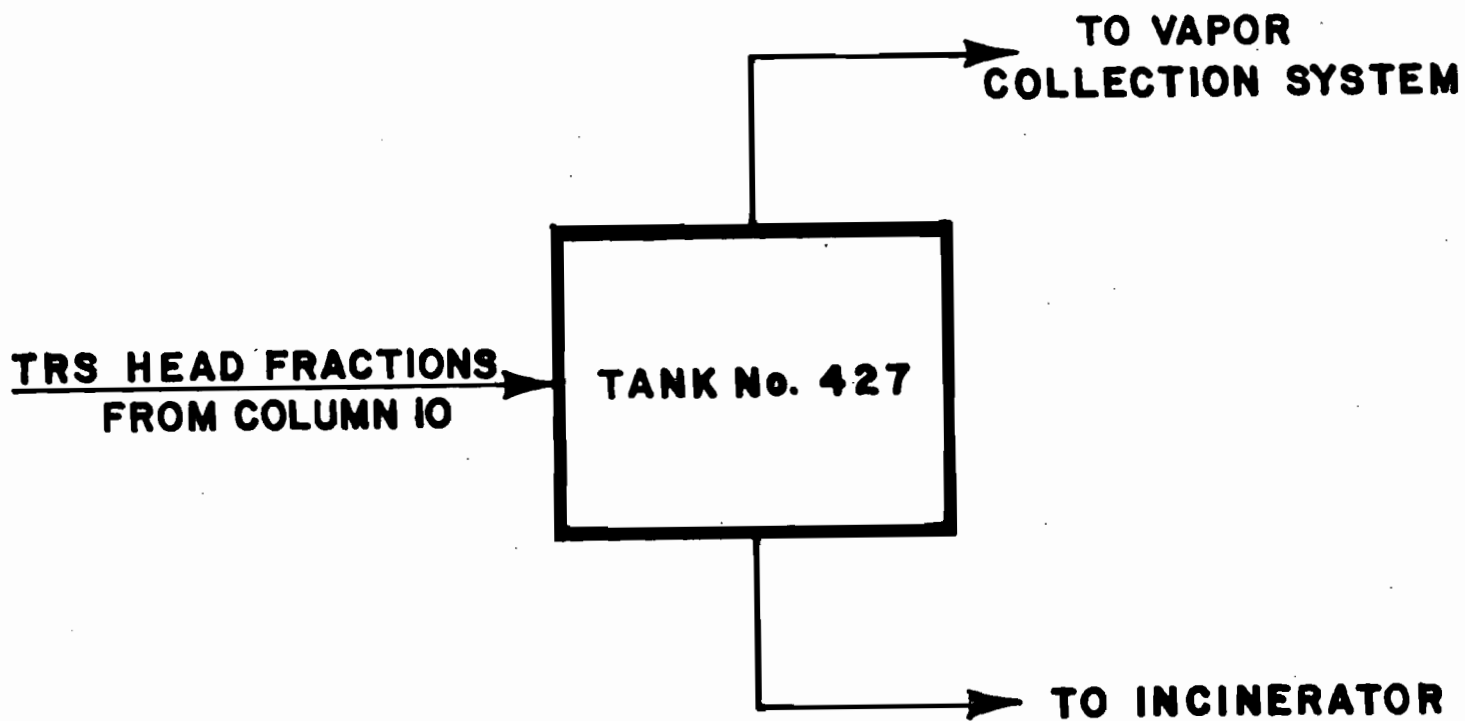
ATTACHMENT 4

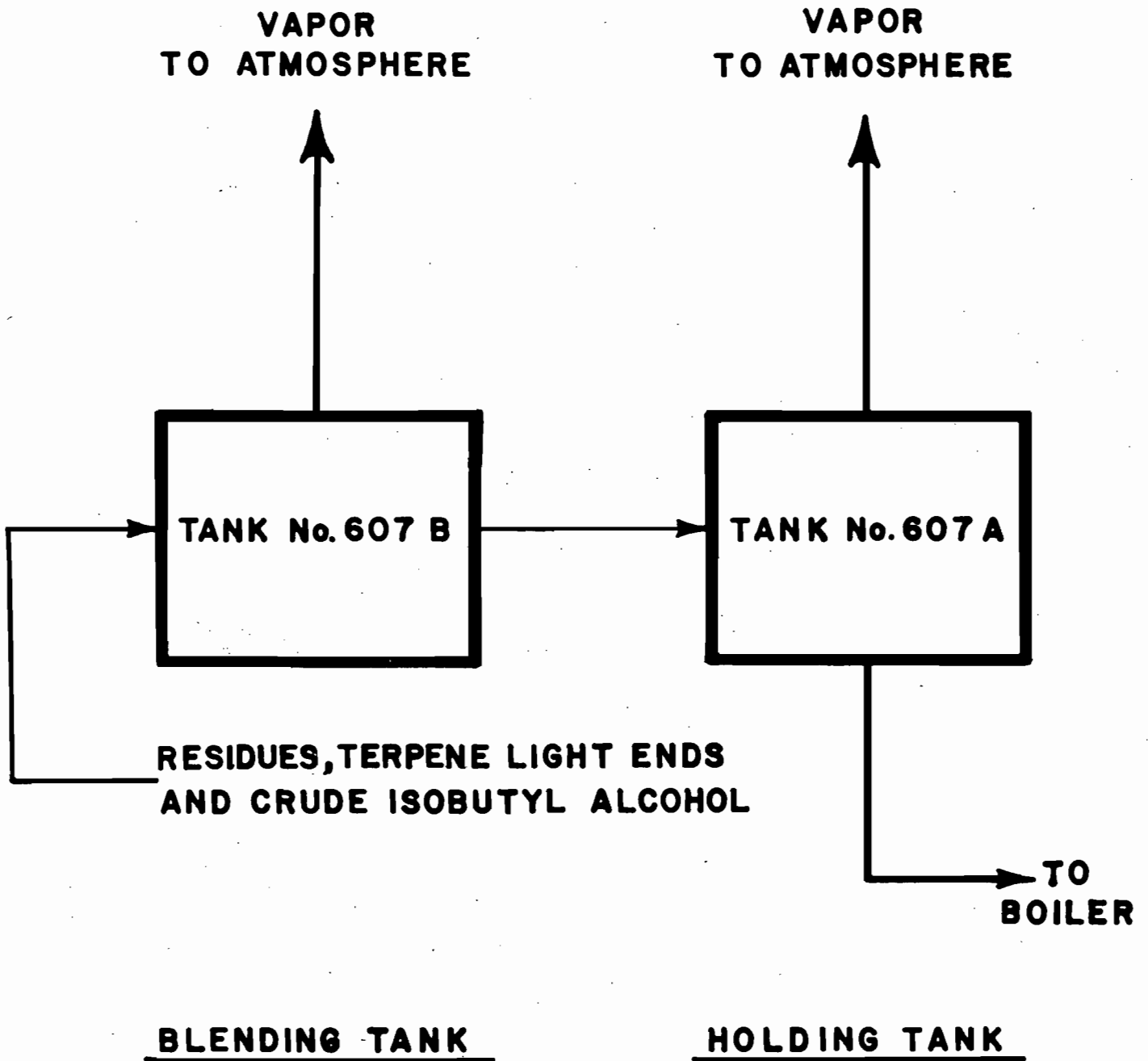
SECTION III H

EMISSION STACK GEOMETRY AND FLOW CHARACTERISTICS

TANK NUMBER	STACK HEIGHT (FT.)	STACK DIAMETER	FLOW (ACFM)	FLOW DSCFM	EXIT TEMP. (°F)	VELOCITY (FPS)
1020	NA - Connected to Vapor Collection System					
551	32'0"	3"	Intermittent Flow		80.6	Variable
427	NA - Connected to Vapor Collection System					
607A	27'0"	3"	Intermittent Flow		80.6	Variable
607B	20'0"	2"	Intermittent Flow		80.6	Variable

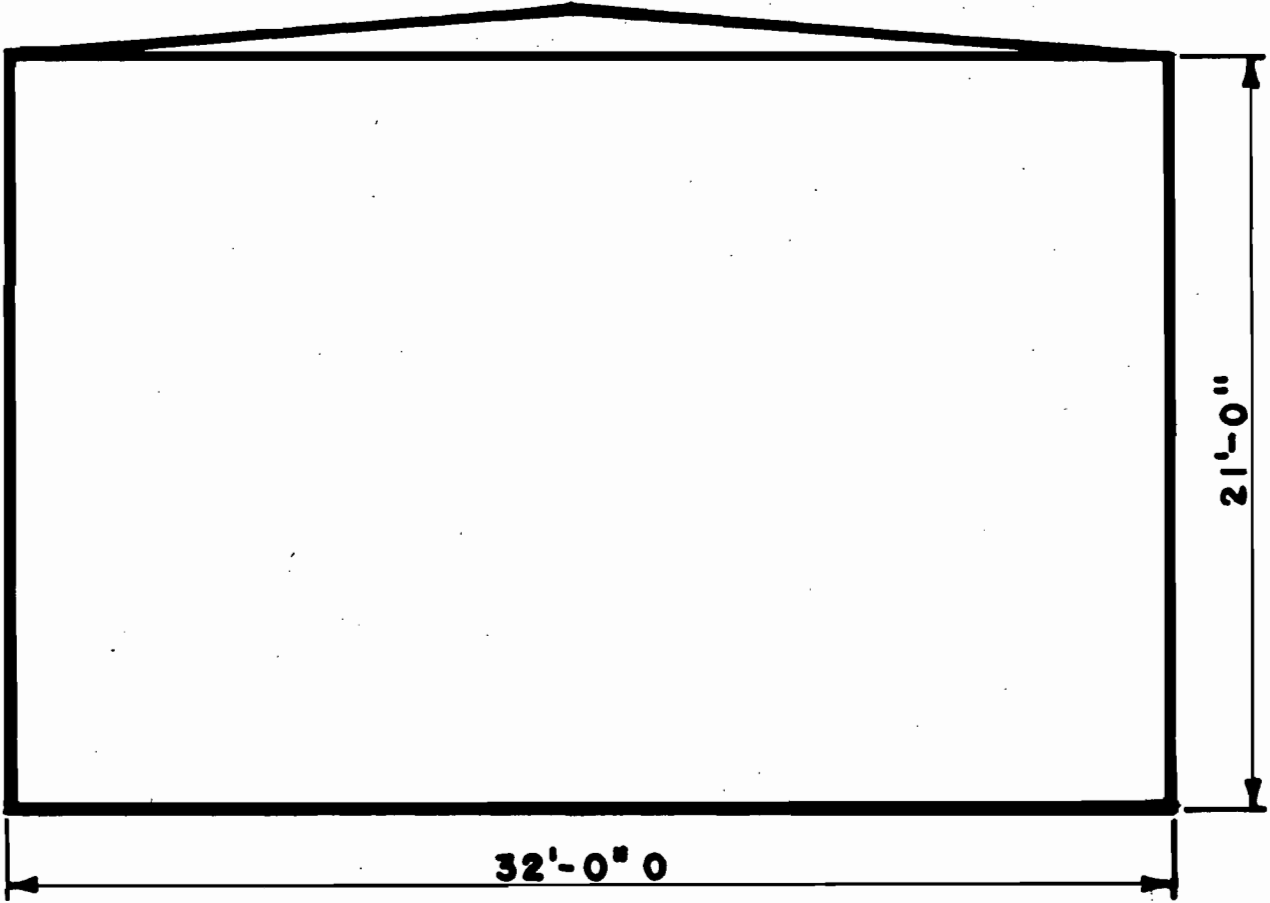






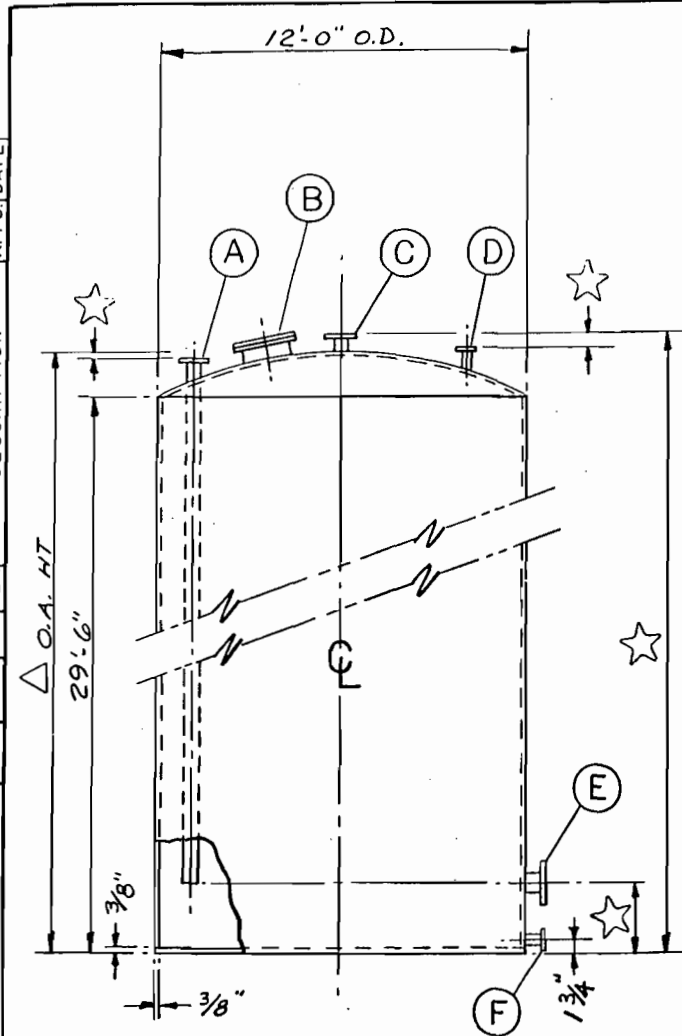


TANK NO. 1020



REV.	DESCRIPTION	APPD. DATE

REV.	DESCRIPTION	APPD. DATE
1	ADDED DIP PIPE FOR BIDS ONLY	3/10/88
0		



NOZZLE ORIENTATION

☆ (HOLD)

☆ DENOTES DIMENSION TO BE SUPPLIED LATER

△ TO BE SUPPLIED BY THE VENDOR

NOTES:

1. VENDOR MAY BID CONICAL TOP HEAD IF DEEMED MORE COST EFFECTIVE.

REFERENCE DRAWINGS

JB-301-4

SCALE 1/4" = 1'-0" DATE

DWN. BY ELP 3/14/88

CHKD.

APPR.

PROJ. NO. JCC-121610

1	VESSEL DIAMETER — 12'-0"
2	VESSEL STRAIGHT SIDE — 29'-6"
3	NOMINAL CAPACITY — 25,000 GALLONS
4	PRODUCT — DRY CRUDE GERANIOL
5	SP. GR. OF PRODUCT — 0.9
6	WORKING PRESSURE — ATMOSPHERIC
7	DESIGN PRESSURE — ATMOSPHERIC
8	WORKING TEMP — 100°F
9	DESIGN TEMP — 100°F
10	WEIGHT EMPTY/FULL
11	SEISMIC FACTOR — NONE
12	WIND FACTOR
13	JOINT EFFICIENCY
14	SHELL MATERIAL — CARBON STL. SA-285 GR.C
15	SHELL THICKNESS 3/8"
16	BOTTOM MATERIAL — CARBON STL. SA-285 GR.C
17	BOTTOM THICKNESS 3/8"
18	HEAD MATERIAL — CARBON STL. SA-285 GR.C
19	HEAD THICKNESS — 3/8"
20	CORROSION ALLOWANCE — NONE
21	LINER — NONE
22	CODE — API 650
23	CODE STAMP — NO
24	STRESS RELIEVE — NO
25	RADIOGRAPH — NO
26	INSULATION SUPPORTS — NO
27	INSULATION — NO
28	PAINT — SHOP PRIME ON OUTSIDE
29	ACCESSORIES
30	PRESSURE TEST — HYDROSTATIC

NOZZLE SCHEDULE				
NOZZLE	SIZE	TYPE	RATING	REMARKS
A	3"	RF	150 LB	INLET
B	16"	FF	—	MANHOLE
C	3"	RF	150 LB	VENT
D	2"	RF	150 LB	LEVEL GAUGE
E	4"	RF	150 LB	OUTLET
F	2"	RF	150 LB	DRAIN

BAYMONT ENGINEERING CO.  
CLEARWATER, FLORIDA

UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA  
DRY CRUDE GERANIOL STORAGE

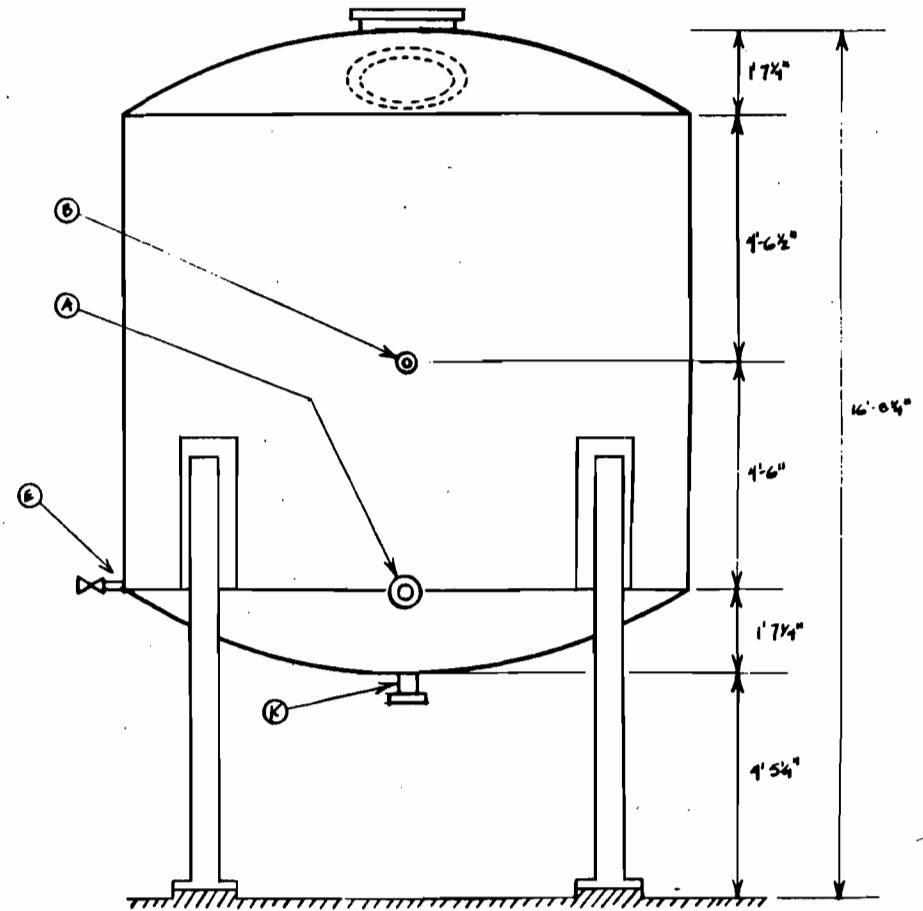
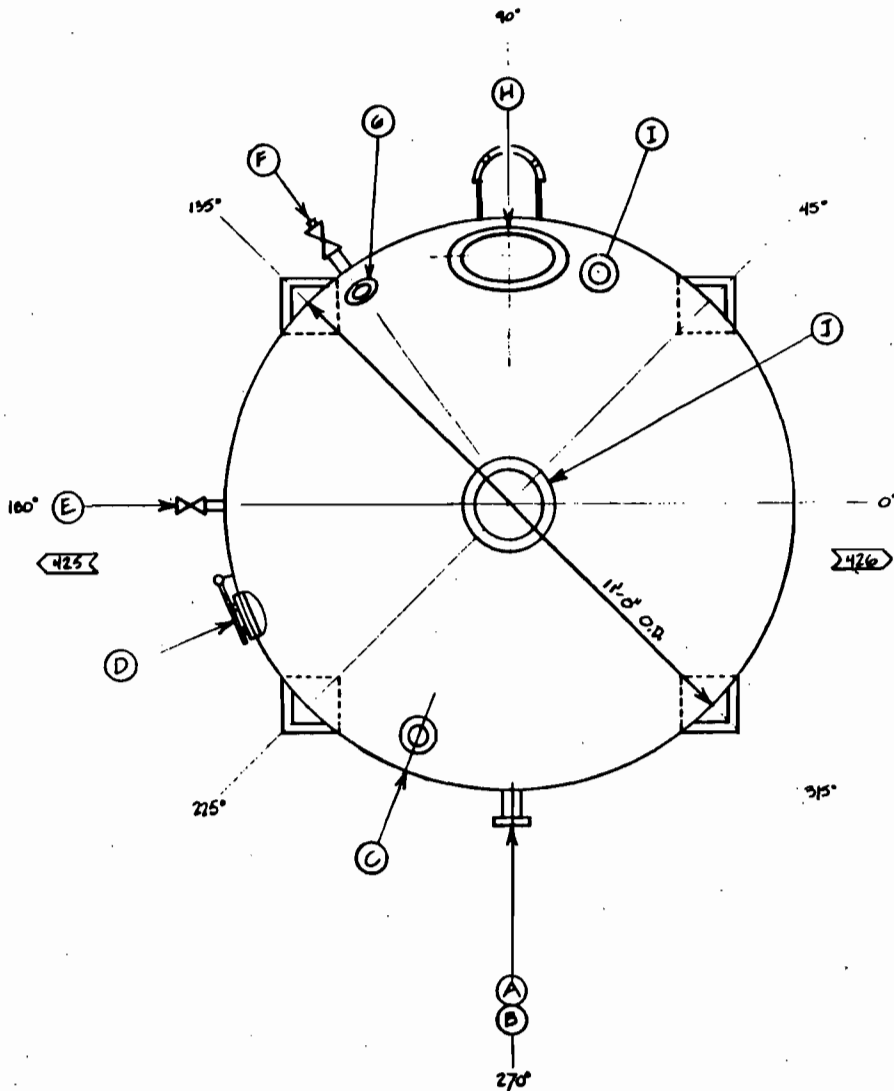
DWG. NO.

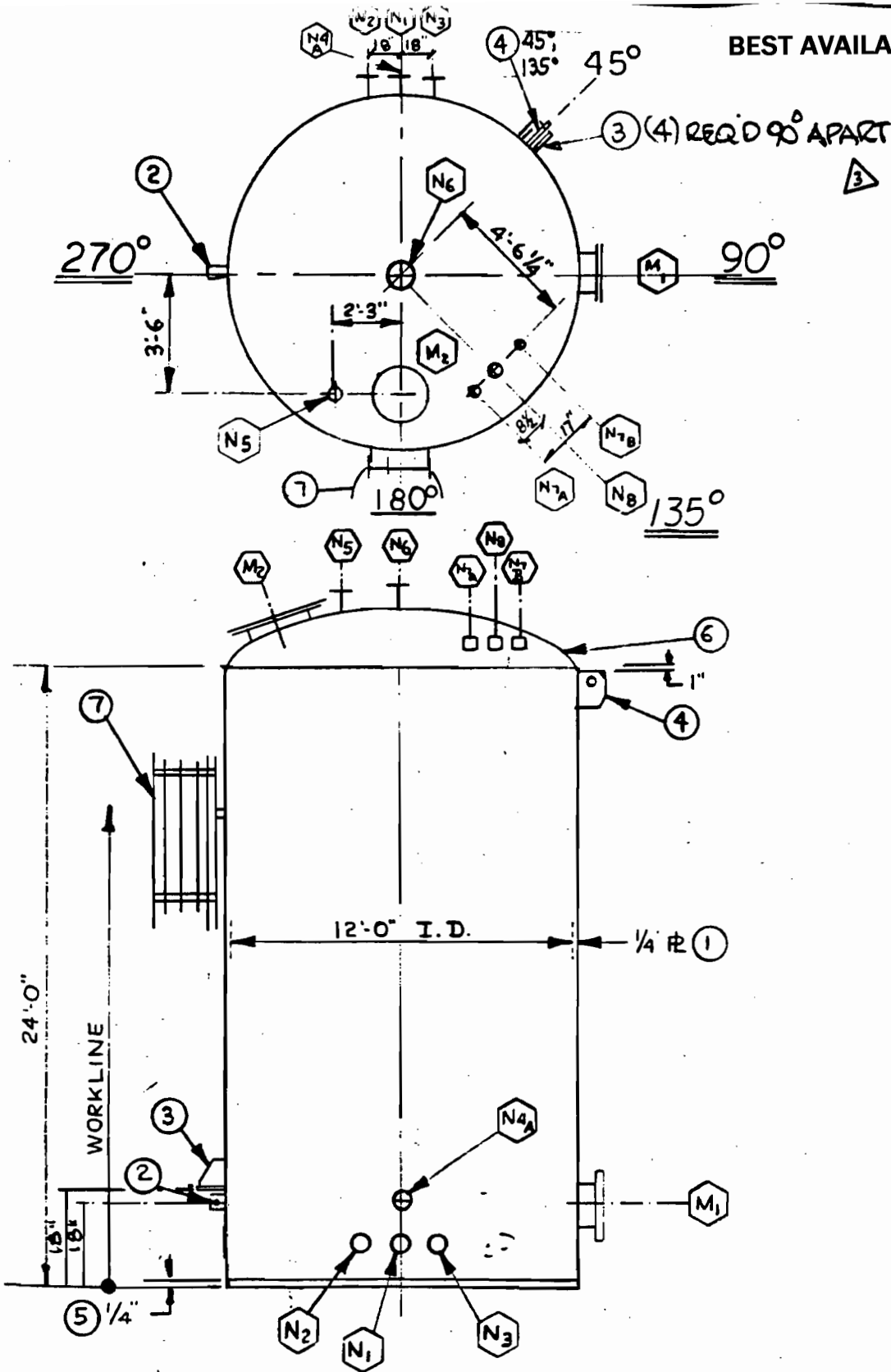
REV. 1

TANK NO. 551

# TANK 427

ITEM	TYPE	SERVICE + REMARKS
A	5" NOZZ.	EXTRA NOZZLE
B	2" NOZZ.	EXTRA NOZZLE
C	4" NOZZ.	A-10 VACUUM PUMP LIQUID INLET
D	MANWAY	WELDED MANWAY PERMANENTLY SHUT TO PREVENT LEAKAGE
E	1" NIPP.	CONNECT TO 425 FUEL PIPING
F	2" NIPP.	EXTRA NOZZLE
G	2" NOZZ.	EXTRA NOZZLE
H	MANWAY	24" SERVICE MANWAY AT LADDER
I	4" NOZZ.	USE THIS NOZZLE FOR NITROGEN CONNECTION
J	MANWAY	MOUNT CONSERVATION VENT TO TOP MANWAY
K	5" NOZZ.	CONNECT BOTTOM DRAIN TO TANK 426





CONSTRUCTION				INSPECTION B.T.C.			
WELDING BUTT WELDED VERTICAL SEAMS, OFFSET				SHELL SA-36	HEADS SA-36	SUPPORTS	
WELDED OUTSIDE ONLY ON CIRCUMFERENTIAL SEAM				FLANGES/PLATE SA-105	PIPE SA56/SA106	GASKETS 1/8"	
PRESSURE	OPERATING	PSIG	DESIGN ATMOS	PSIG	SEALS SA-305	SPRINGS	RAFTS 2-
TEMPERATURE	OPERATING	°	DESIGN AMBIENT	°	SURFACE PREPARATION NOT REQUIRED		
CORROSION ALLOWANCE SHELL $\phi$				HEADS $\phi$	NOZZLES $\phi$		
MAXIMUM PRESSURE NEW ATMOS				PSIG	DESIGNED BY	PAINTING NOT REQUIRED	
TEST PRESSURE 1 1/2*				PSIG	AIR / SOAP SUDS	TANK NO. 607A	
RADIOGRAPHS NOT REQUIRED							
POST WELD HEAT TREATMENT NOT REQUIRED							
				NOZZLE BOLT NUTS BRASS 1/2" - 20" EXCEPT AS NOTED			

NOZZLE SCHEDULE										PAGE 11 OF 13 EACH			CONTRACT J-4251		
ITEM	SIZE	LENGTH	NO.	WT.	TYPE	NO.	WT.	NO.	WT.	NO.	WT.	NO.	WT.	NO.	WT.
SUCTION	0°	0'-10"	N <sub>1</sub>	3"	150 <sup>#</sup>	50	RF	1350		6"	40		1350		
PUMP-OUT	SEE PLAN	0'-10"	N <sub>2</sub>	3"	150 <sup>#</sup>	50	RF	—		6"	—	—	—	—	PER SK-4251-1
INLET	SEE PLAN	0'-10"	N <sub>3</sub>	2"	150 <sup>#</sup>	50	RF	1350		6"	40		1350		
HIGH LINE		2'-6"	N <sub>4</sub>	2"	150 <sup>#</sup>	50	RF	1350		6"	40		1350		
VENT	SEE PLAN		N <sub>5</sub>	3"	150 <sup>#</sup>	50	RF	1350		6"	40		1350		
FLAME ARR	SEE PLAN		N <sub>6</sub>	2"	150 <sup>#</sup>	50	RF	1350		6"	40		1350		
LLI	SEE PLAN		N <sub>7A</sub>	1 1/4"	—	—	—	—		80		—	1350		See 80 NIPPLE T.O.E
LLI	SEE PLAN		N <sub>7B</sub>	1 1/4"	—	—	—	—		80		—	1350		See 80 NIPPLE T.O.E.
LLI	SEE PLAN		N <sub>8</sub>	1 1/2"	300 <sup>#</sup>	CRG	2 <sup>nd</sup>	1350		—	—	—	—		
MANWAY	90°	2'-6"	M <sub>1</sub>	24"	—	—	—	1350		6"	—	—	—		PER BTS FL 3.24
MANWAY	SEE PLAN		M <sub>2</sub>	24"	—	—	—	1350		6"	—	—	—		PER BTS FL 1.24

NO.	QTY.	DESCRIPTION	UNIT	WT.
1	3	R 1/4" x 96" x 480"		R-1
2	1	GROUND LUG PER SK-4251-2		~
3	4	ANCHOR LUGS PER SK-4251-3		~
4	2	LIFTING LUGS PER SK-4251-4		~
5	1	1/4" FLAT FLG BOTTOM 144 1/2" O.D.		1380
6	1	1/4" STD DISHED & FLANGED HD 144" ID		1380
7	1	LADDER W/CAGE SEE SK-4251-5		~
8				
9				
10				
11		W/W		W-50 1350

JOB SITE:  
 UNION CAMP CORPORATION  
 JACKSONVILLE, FLA.

TRUCK SHIPPING LIST			DRAWING LIST	
REQ'D	DESCRIPTION	WT.	NO.	DESCRIPTION
1	TANK	13,000 <sup>#</sup>	SK-4251-1	NOZZLE (N <sub>2</sub> )
			SK-4251-2	GROUND LUG
			SK-4251-3	ANCHOR LUG
			SK-4251-4	LIFTING LUG
			SK-4251-5	LADDER

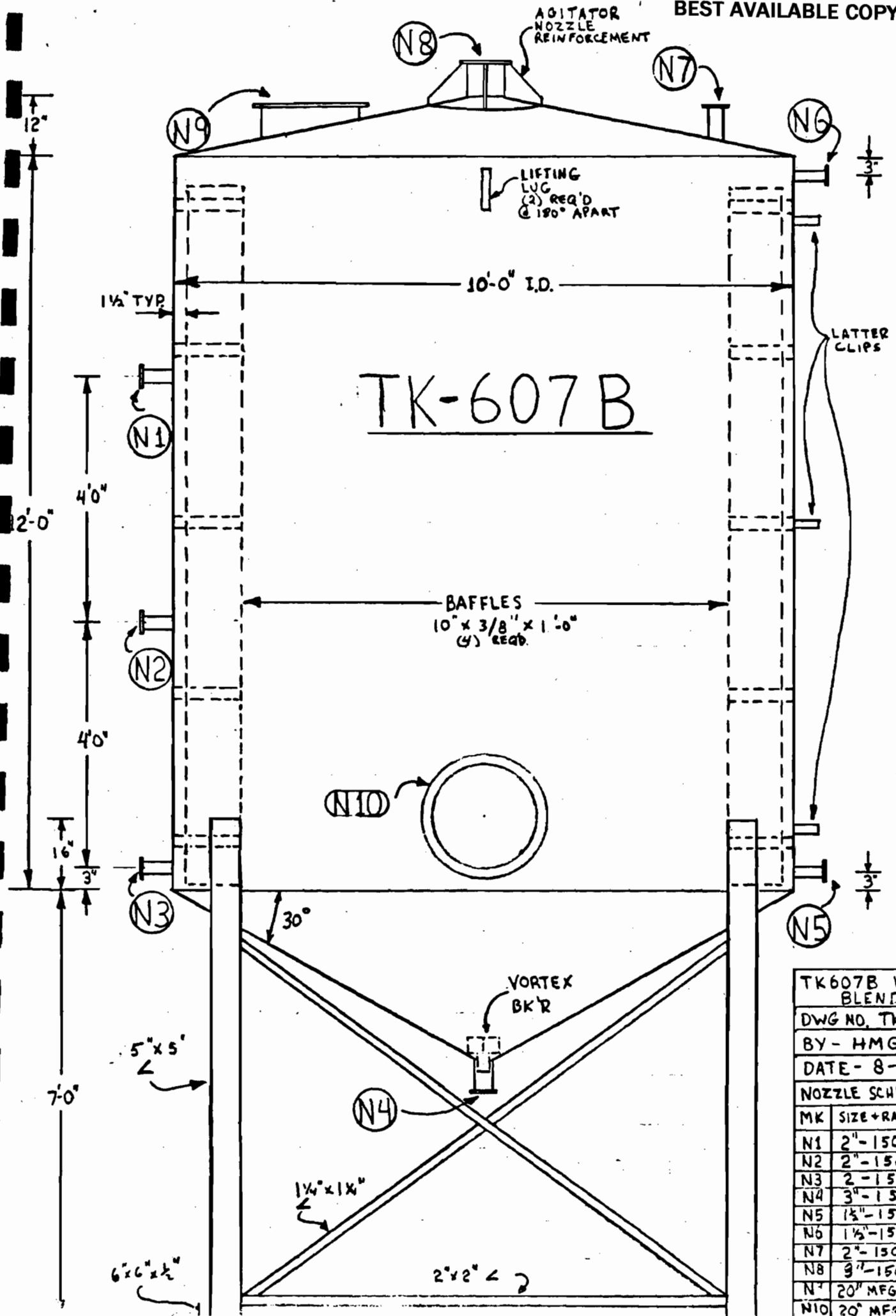
**BUFFALO TANK CORPORATION**

CUSTOMER:  
 UNION CAMP CORPORATION  
 JACKSONVILLE, FLA

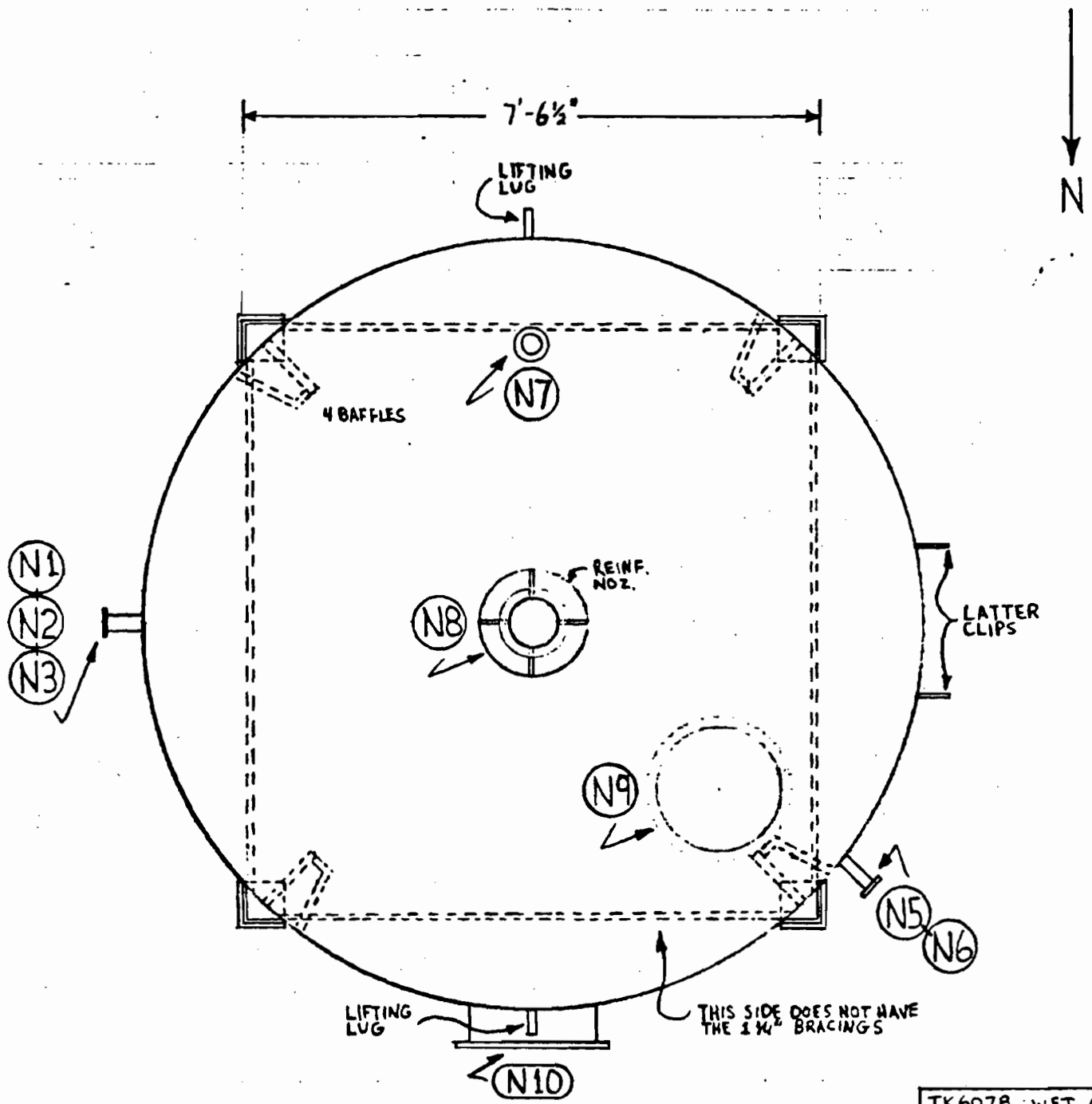
DESCRIPTION	(1) 12'-0" I.D. X 24'-0" VERT. TANK TANK 607-A
DATE	2/23/88
CUSTOMER ORDER NO.	TA-21114
DRAWING NO.	J-4251
CONTRACT NO.	J-4251
BY	B

**NOTE 1**  
 VESSELS MUST BE PROVIDED WITH SUITABLE PRESSURE-RELIEFING DEVICES TO PREVENT OVERPRESSURE. VACUUM RELIEF IS REQUIRED UNLESS VESSEL IS SPECIFICALLY DESIGNED FOR VACUUM SERVICE. THIS VESSEL IS NOT DESIGNED FOR VACUUM SERVICE.

ASBES



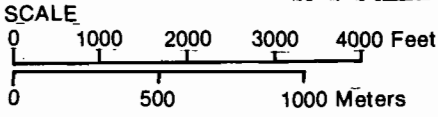
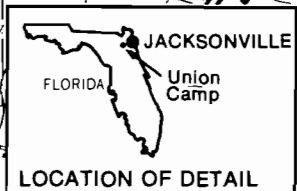
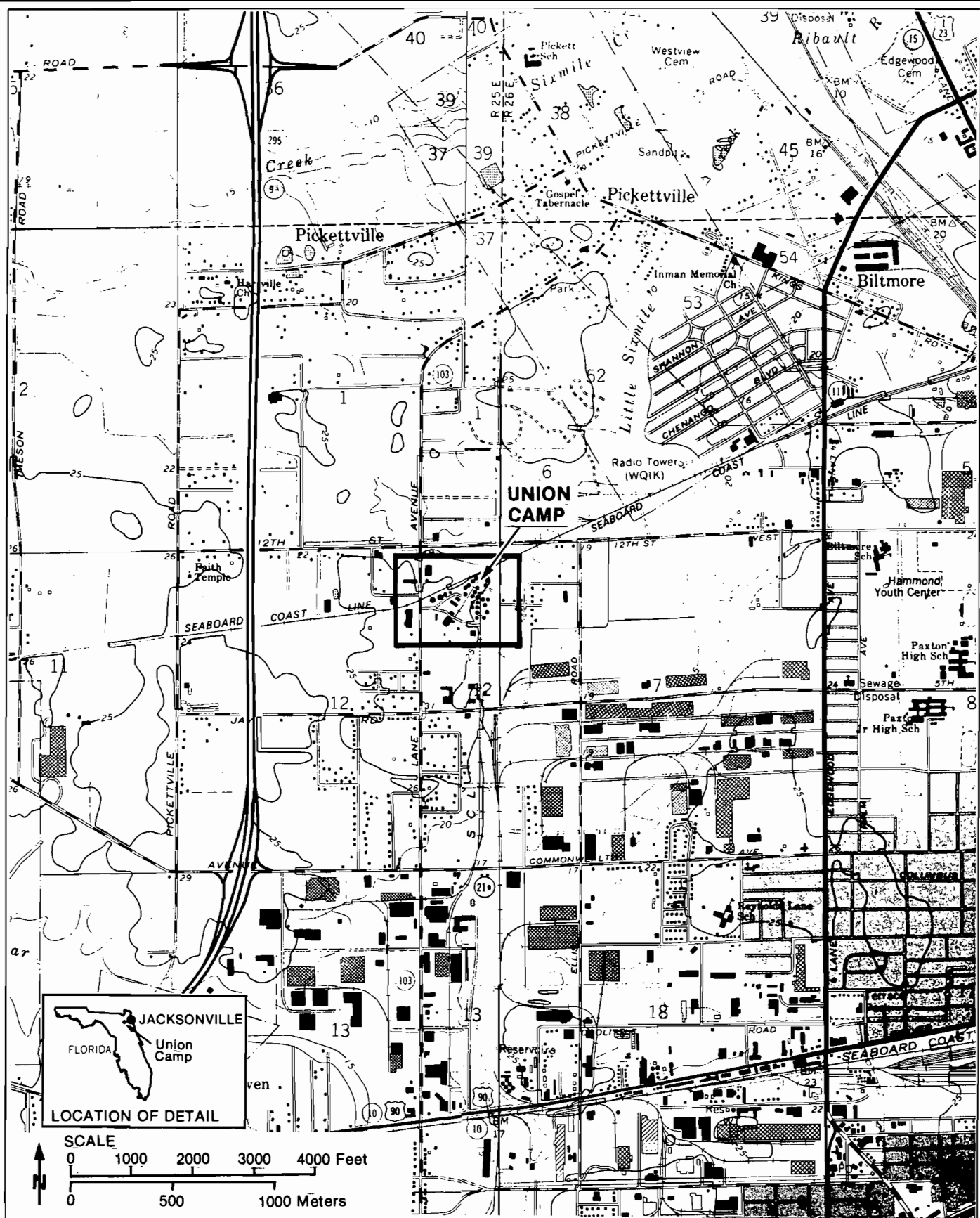
TK607B WET CIBO BLEND TANK		
DWG NO. TK607B-1		
BY - HMG		
DATE - 8-25-88		
NOZZLE SCHEDULE		
MK	SIZE + RATING	DESC.
N1	2" - 150#	INLET
N2	2" - 150#	INLET
N3	2" - 150#	INLET
N4	3" - 150#	SUCTION
N5	1 1/2" - 150#	SIGHT GLAS
N6	1 1/2" - 150#	SIGHT GLA
N7	2" - 150#	VENT
N8	3" - 150#	AGITATOR
N9	20" MFG. STD.	MANHOLES
N10	20" MFG. STD.	MANHOLES



TK-607B

TK607B WET CIBO BLEND TANK		
DWG. NO. TK607B-2		
DATE - 8-25-88		
BY - HMG		
NOZZLE SCHEDULE		
MK	SIZE & RATING	DES.
N1	2" - 150#	INLET
N2	2" - 150#	INLET
N3	2" - 150#	INLET
N4	3" - 150#	SUCTIO
N5	1 1/2" - 150#	SIGHTGL
N6	1 1/2" - 150#	SIGHTGL
N7	2" - 150#	VENT
N8	8" - 150#	AGITAT
N9	20" MFG. STD.	MANHOLE
N10	20" MFG. STD.	MANHOLE

WELDING : CONT. BUTT IN AND OUT

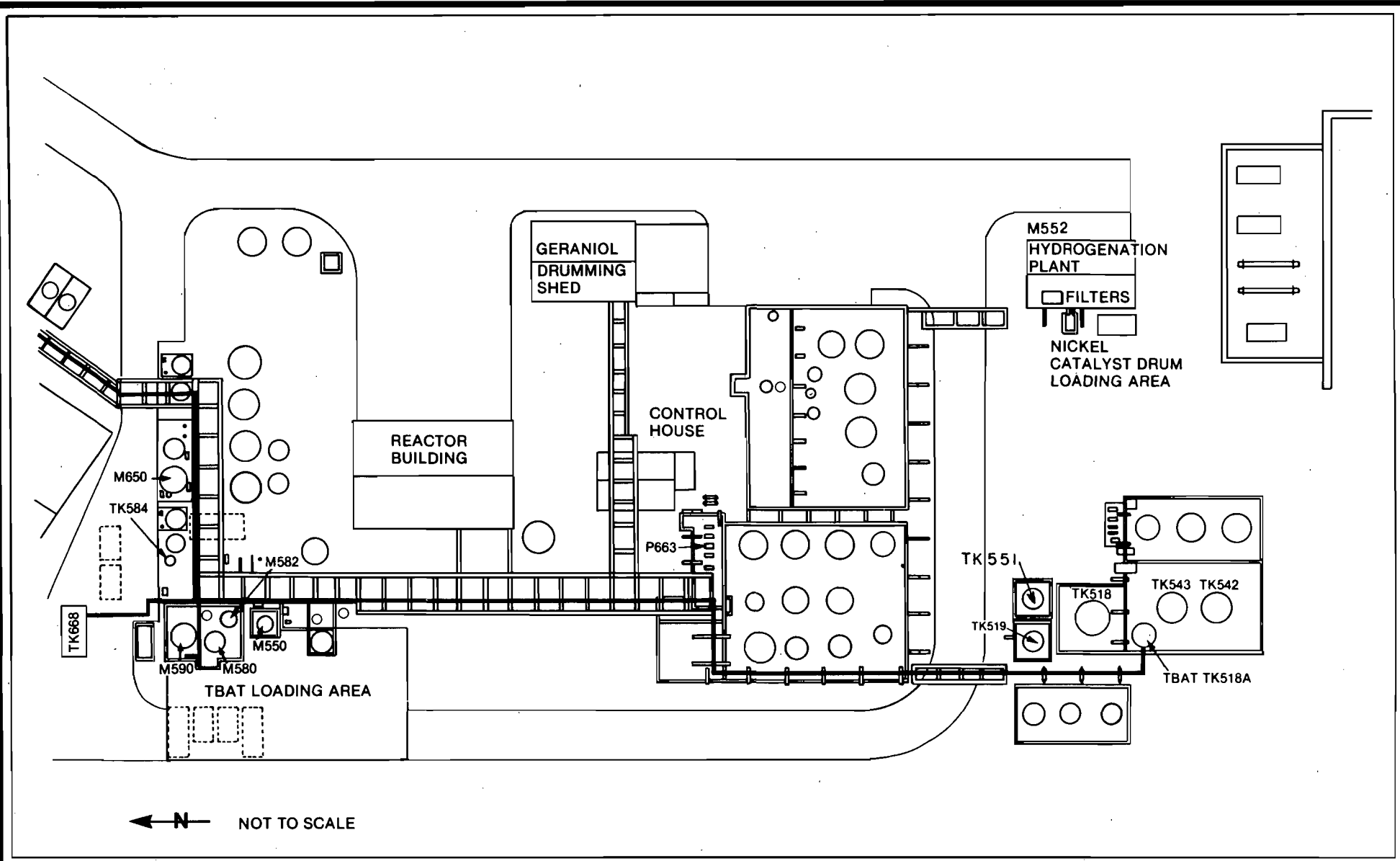


**SITE LOCATION MAP**

**UNION CAMP**

SOURCES: USGS, 1982; ESE, 1986.

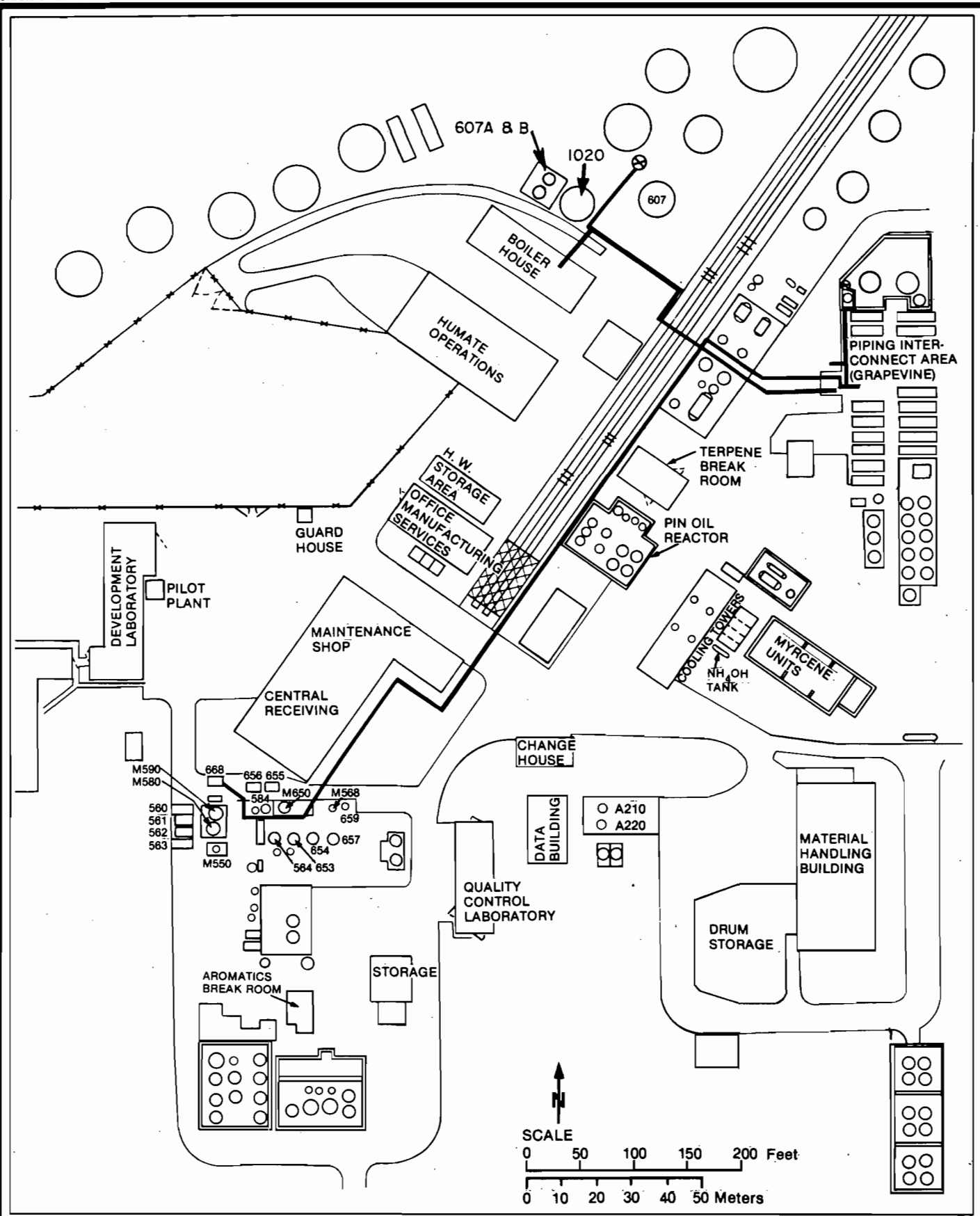




GENERAL FACILITY LAYOUT (EAST SECTION)

UNION CAMP

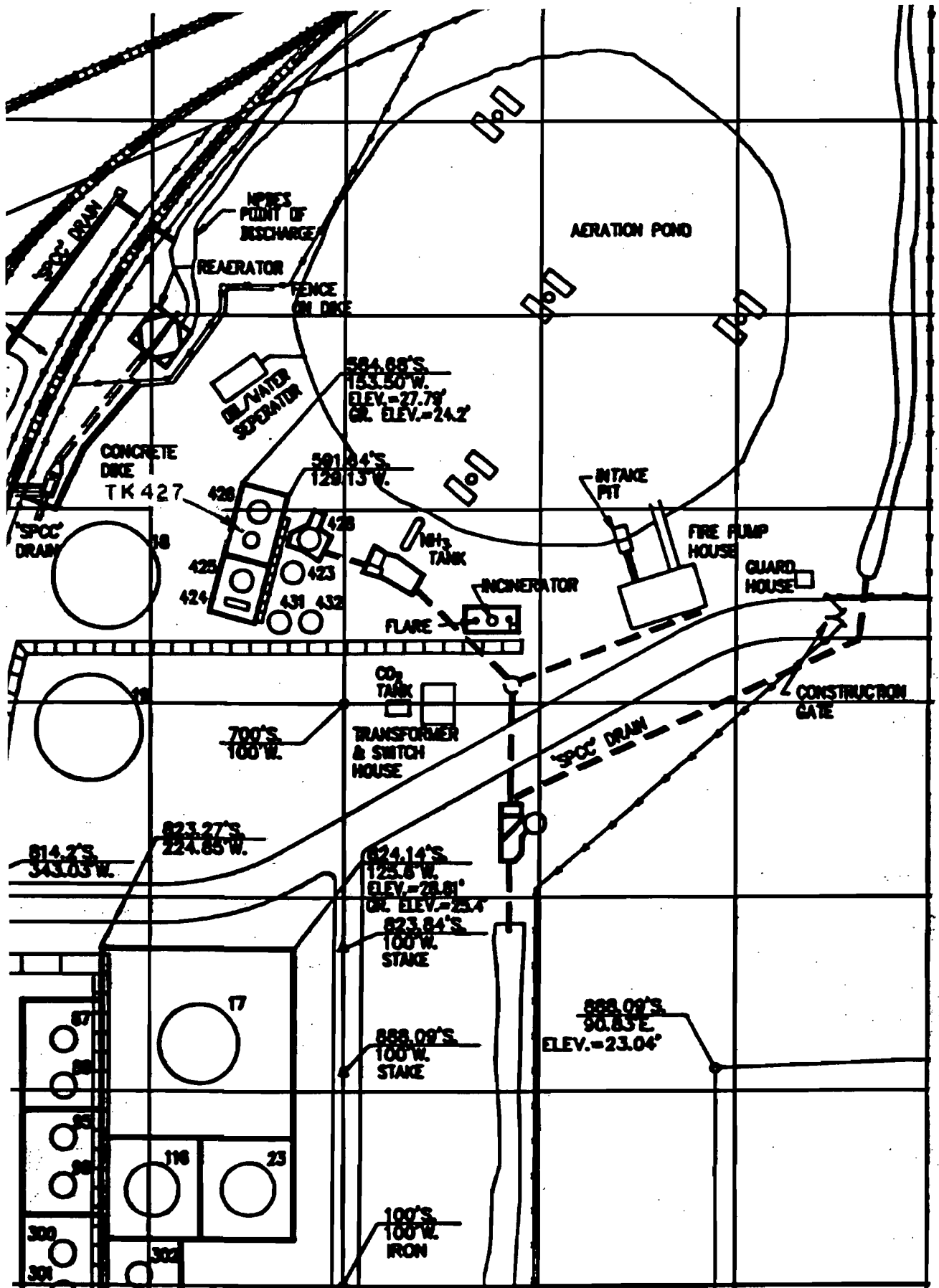
SOURCE: UNION CAMP, 1986.



**GENERAL FACILITY LAYOUT (WEST SECTION)**

**UNION CAMP**

SOURCE: UNION CAMP, 1986.



Check Sheet

Company Name: Union Camp Corporation  
Permit Number: AC16-169034, -170421  
PSD Number: \_\_\_\_\_  
Permit Engineer: \_\_\_\_\_

**Application:**

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

**Cross References:**

- Bush Boake Allen, Inc.
- 
- 

**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



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMITS

Mr. John M. Baggett, Resident Manager  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida 32236

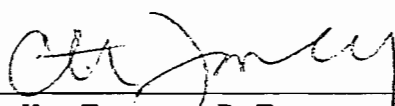
December 4, 1989

Enclosed are construction permits Nos. AC 16-169834 and AC 16-170421 for Union Camp Corporation to construct decanter tank No. 118 and storage tank No. 93 at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. These permits are issued pursuant to Section 403, Florida Statutes.

Any party to these permits has the right to seek judicial review of the permits pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date these permits are filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

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

Copy furnished to:

K. Kutyna, NE District  
S. Pace, BESD  
L. Stebbins, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 12-5-89.

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

Lyni Lopez  
Clerk

12-5-89  
Date

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

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

<b>3. Article Addressed to:</b> Mr. John M. Baggett Resident Manager Union Camp Corporation P. O. Box 37617 Jacksonville, FL 32236	<b>4. Article Number</b> P 938 762 780  <b>Type of Service:</b> <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise  Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
<b>5. Signature - Address</b> X <b>6. Signature - Agent</b> X <b>7. Date of Delivery</b> 12/08/89 SW	<b>8. Addressee's Address (ONLY if requested and fee paid)</b>

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

P 938 762 780

**RECEIPT FOR CERTIFIED MAIL**

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

Sent to Mr. John M. Baggett, Union	
Street and No.      Camp Corp. P.O. Box 37617	
P.O., State and ZIP Code Jacksonville, FL 32236	
Postage	S
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	S
Postmark or Date Mailed: 12-5-89 Permit: AC 16-169834 AC 29-170421	

PS Form 3800, June 1985

Final Determination

Union Camp Corporation  
Jacksonville, Duval County, Florida

Volatile Organic Liquid Tanks

Permit Numbers:

AC 16-169834, Decanter Tank No. 118  
AC 16-170421, Storage Tank No. 93

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

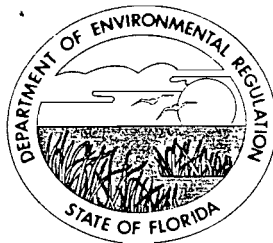
November 30, 1989



## Final Determination

The Technical Evaluation and Preliminary Determination for the permits to construct decanter tank No. 118 and storage tank No. 93 at Union Camp Corporation's chemical plant in Jacksonville, Duval County, Florida was distributed on October 20, 1989. The Notice of Intent to Issue was published in the Financial News & Daily Record on November 7, 1989. Copies of the evaluation were available for public inspection at the Duval County's Bio-Environmental Services office in Jacksonville and the Department's offices in Jacksonville and Tallahassee.

No comments were submitted on the Department's Intent to Issue the permits. The final action of the Department will be to issue construction permits Nos. AC 16-169834 and AC 16-170421 as proposed in the Technical Evaluation and Preliminary Determination.



## Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164834  
Expiration Date: May 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"  
Project: Decanter Tank # 118

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 5,264 gallon terpene oil/aqueous acid decanter tank No. 118 (8 ft. diameter x 17 ft. height) which vents vapors through a condenser and flame arrestor.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received September 1, 1989.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-169834  
Expiration Date: May 1, 1990

GENERAL CONDITIONS:

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

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-169834  
Expiration Date: May 1, 1990

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-169834  
Expiration Date: May 1, 1990

GENERAL CONDITIONS:

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

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

14. The permittee shall comply with the following:

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-169834  
Expiration Date: May 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. Decanter tank No. 118 shall not process more than 2,275,000 gallons of terpene oils during any 12 month period. The permittee shall maintain records that show the quantity of volatile organic liquid handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b,(a) and (b).

PERMITTEE:  
Union Camp Corporation

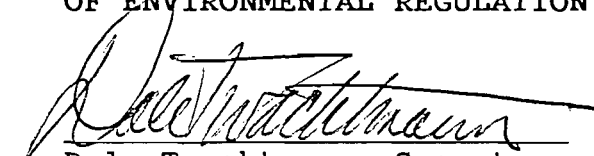
Permit Number: AC 16-169834  
Expiration Date: May 1, 1990

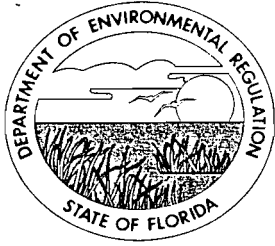
SPECIFIC CONDITIONS:

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. All organic vapors from this tank shall be vented to the vapor condenser. Any liquid leaks in the pump, piping, tank, or condenser shall be repaired promptly.
5. This tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Volatile organic compound emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, shall not exceed 0.013 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this 30 day  
of November, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"  
Project: Storage Tank No. 93

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 10,104 gallon terpene oils and/or No. 2 fuel oil storage tank (10.5 ft. diameter x 15.6 ft. height) which vents vapors to the existing vapor collection system (AO 16-62025) to replace the existing tank No. 93 (AO 16-124126).

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received September 21, 1989.



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990

**GENERAL CONDITIONS:**

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

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990

GENERAL CONDITIONS:

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

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

14. The permittee shall comply with the following:

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. Tank No. 93 shall not handle more than 348,011 gallons of terpene oils and/or No. 2 fuel oil during any 12 month period. The permittee shall maintain records that show the quantity of organic liquids handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b,(a) and (b).

PERMITTEE:  
Union Camp Corporation

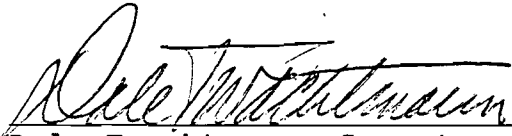
Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990

SPECIFIC CONDITIONS:

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. All organic vapors from this tank shall be vented to the vapor recovery system. Any liquid leaks in the pump, piping, tank, or vapor recovery system shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compound emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.061 TPY and being treated by the plant vapor control system. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this 30 day  
of November, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
Dale Twachtmann, Secretary

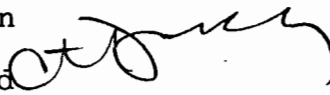


State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

# Interoffice Memorandum

TO: Dale Twachtmann

*for* FROM: Steve Smallwood 

SUBJ: Approval of Union Camp Corporation Permit Applications  
AC 16-169834 and AC 16-170421

DATE: November 30, 1989

Attached for your approval and signature are two permits prepared by Bureau of Air Regulation for the above mentioned company to construct a decanter tank and a storage tank at their chemical plant located in Jacksonville, Duval County, Florida.

No comments were received during the public notice period. Day 90, after which these permits will be issued by default, is February 10, 1990.

I recommend your approval and signature.

Attachments

SS/WH/plm



**Bush Boake Allen Inc.**

2051 N. Lane Avenue  
Jacksonville, Florida 32254

Tel: (904) 783 2180  
(800) 874 9220

February 17, 1994

RECEIVED  
FEB 24 1994  
Bureau of  
Air Regulation

Mr. Clair Fancy, Chief, Bureau of Air Regulation  
Florida Dept. of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

RE: Transfer of Ownership

Dear Mr. Fancy:

Please be advised that, effective February 1, 1994, ownership of the Jacksonville, Florida facility will be transferred from Union Camp Corporation, BBA Division to Bush Boake Allen Inc., an independently managed corporation. Union Camp will still maintain a majority interest in BBA Inc.

Our new address is:

Bush Boake Allen Inc.  
Aroma and Terpene Products  
2051 North Lane Avenue  
Jacksonville, Florida 32254-1529

There has been no change in local operating management. All telephone and Fax numbers remain unchanged.

Sincerely,

R. G. Chubin  
Manager,  
Environmental Affairs



# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Consultants

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

November 13, 1989  
JE9001

Clair H. Fancy, P.E.  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8241

Subject: Notice of Intent to Issue  
Union Camp Corporation  
Jacksonville, Florida

Dear Mr. Fancy:

Enclosed is a notarized proof of publishing for a "Notice of Intent to Issue" two air permits for Union Camp Corporation. The DER file numbers for these permits are: AC16-169834 and AC16-170421.

If you have any further questions, please feel free to contact me at 904/448-6400.

Very truly yours,

Stephen L. Alexander, P.E.  
Manager, Environmental Engineering

SLA/cdb

cc: M. Benjamin - DER NE District w/encl.  
S. Pace - BESD w/encl.  
W. Van Duyn - Union Camp w/encl.



BEST AVAILABLE COPY

		USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII. USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO. QUESTIONS? CALL 800-238-5355 TOLL-FREE.		AIRBILL PACKAGE TRACKING NUMBER		4792323513	
71524 4792323513		Date 11-13-89		RECIPIENT'S COPY			
1 From (Your Name) Please Print <b>STEVE ALEXANDER</b>		Your Phone Number (Very Important) (813) 448-5000		2 To (Recipient's Name) Please Print <b>CLAIR FANCY</b>		Recipient's Phone Number (Very Important) (904) 488-0176	
Company REGISTERED MAIL SERVICE INC.		Department/Floor No.		Company FL DEPT. OF ENVIRONMENTAL REGULATION		Department/Floor No.	
Street Address 50 LAVERGNE DRIVE		City ORLANDO		Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes) 2600 BLAIR STONE RD. TWIN TOWERS		City TALLAHASSEE FL 32301	
State FL		ZIP Required		State FL		ZIP Required	
3 YOUR BILLING REFERENCE INFORMATION (First 24 characters will appear on invoice) JE9001				IF HOLD FOR PICK-UP, Print FEDEX Address Here Street Address City State ZIP Required			
PAYMENT 1 <input checked="" type="checkbox"/> Bill Sender 2 <input type="checkbox"/> Bill Recipient's FedEx Acct. No. 3 <input type="checkbox"/> Bill 3rd Party FedEx Acct. No. 4 <input type="checkbox"/> Bill Credit Card 5 <input type="checkbox"/> Cash				City State ZIP Required			
4 SERVICES (Check only one box) Priority Overnight Service (Delivery by next business morning) Standard Overnight Service (Delivery by next business afternoon) 11 <input type="checkbox"/> YOUR PACKAGING 51 <input type="checkbox"/> 16 <input checked="" type="checkbox"/> FEDEX LETTER 56 <input type="checkbox"/> FEDEX LETTER 12 <input type="checkbox"/> FEDEX PAK 52 <input type="checkbox"/> FEDEX PAK 13 <input type="checkbox"/> FEDEX BDX 53 <input type="checkbox"/> FEDEX BDX 14 <input type="checkbox"/> FEDEX TUBE 54 <input type="checkbox"/> FEDEX TUBE Economy Service (formerly Standard Air) (Delivery by second business day) Heavyweight Service (for Extra Large or any package over 150 lbs.) 30 <input type="checkbox"/> ECONOMY SERVICE 70 <input type="checkbox"/> HEAVYWEIGHT 80 <input type="checkbox"/> DEFERRED HEAVYWEIGHT † Delivery commitment may be later in some areas. ** Declared Value Limit \$100. ** Call for delivery schedule.		DELIVERY AND SPECIAL HANDLING 1 <input type="checkbox"/> HOLD FOR PICK-UP (Fill in Box #) 2 <input checked="" type="checkbox"/> DELIVER WEEKDAY 3 <input type="checkbox"/> DELIVER SATURDAY (Extra charge) 4 <input type="checkbox"/> DANGEROUS GOODS (Extra charge) 5 <input type="checkbox"/> CONSTANT SURVEILLANCE SVC. (CSS) (Extra charge) (Release Signature Not Applicable) 6 <input type="checkbox"/> DRY ICE lbs. 7 <input type="checkbox"/> OTHER SPECIAL SERVICE 8 <input type="checkbox"/> 9 <input type="checkbox"/> SATURDAY PICK-UP (Extra charge) 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> HOLIDAY DELIVERY (if offered) (Extra charge)		PACKAGES WEIGHT in Pounds Only YOUR DECLARED VALUE OVER SIZE Total Total Total		Emp. No. Date Federal Express Use <input type="checkbox"/> Cash Received <input type="checkbox"/> Return Shipment <input type="checkbox"/> Third Party <input type="checkbox"/> Chg. To Del. <input type="checkbox"/> Chg. To Hold Street Address City State Zip Received By Date/Time Received FedEx Employee Number 5 Release Signature: Date/Time Emp. No.	
DIM SHIPMENT (Heavyweight Services Only) <input type="checkbox"/> lbs.		Received At <input type="checkbox"/> Regular Stop <input type="checkbox"/> On-Call Stop <input type="checkbox"/> Drop Box <input type="checkbox"/> B.S.C. Station		014 © 1989 F.E.C. PRINTED IN U.S.A.			

FINANCIAL NEWS &  
**Daily Record**

**PROOF OF PUBLICATION**

(Published Daily Except Saturday and Sunday)  
Jacksonville, Duval County, Florida

STATE OF FLORIDA, }  
                              } SS:  
COUNTY OF DUVAL, }

Before the undersigned authority personally appeared  
Donna R. Collins, who on oath says that she is the Business Manager of FINANCIAL  
NEWS and DAILY RECORD, a daily (except Saturday and Sunday) newspaper published at  
Jacksonville, in Duval County, Florida; that the attached copy of advertisement, being a

NOTICE OF INTENT TO ISSUE

in the matter of Union Camp Corporation

in the \_\_\_\_\_ Court, of Duval County, Florida, was published  
in said newspaper in the issues of November 7, 1989

Affiant further says that the said FINANCIAL NEWS and DAILY RECORD is a newspaper  
at Jacksonville, in said Duval County, Florida, and that the said newspaper has heretofore  
been continuously published in said Duval County, Florida, each day (except Saturday and  
Sunday) and has been entered as second class matter at the post office in Jacksonville, in  
said Duval 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 said newspaper.

Donna R. Collins  
Business Manager

Sworn to and subscribed before me this 7th day of November A.D. 19 89

Jean S. DePasse  
Notary Public, State of Florida  
My Commission Expires Aug. 14, 1990

STATE OF FLORIDA  
DEPARTMENT OF  
ENVIRONMENTAL REGULATION  
NOTICE OF INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue two permits to Union Camp Corporation, P. O. Box 37617, Jacksonville, Florida, 32236 to construct decanter tank No. 118 which separates terpene oils and aqueous acid and replace tank No. 93 which stores terpene oils and/or No. 2 fuel oil at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. Total volatile organic compound (VOC) emissions from decanter tank No. 118 are estimated to be 0.003 lbs/hr and 0.01 TPY. Total VOC emissions from storage tank No. 93 are estimated to be 0.0006 lbs/hr and 0.0024 TPY. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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

The Petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the coun-

ty in which the project is proposed;

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

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

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

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

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

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

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

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

Department of  
Environmental Regulation  
Bureau of Air Regulation  
2500 Blair Stone Road  
Tallahassee, Florida 32399-2400

Department of  
Environmental Regulation  
Northeast District  
3426 Bills Road  
Jacksonville, Florida 32207  
Duval County Department of Health,  
Welfare & Bio-Environmental Services  
421 W. Church Street, Suite 412  
Jacksonville, Florida 32202

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

Nov. 7

(89-6420)

**SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.**  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

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

<b>3. Article Addressed to:</b> Mr. John M. Baggett Resident Manager Union Camp Corporation P. O. Box 37617 Jacksonville, Florida 32236	<b>4. Article Number</b> P 938 762 719
	<b>Type of Service:</b> <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
	Always obtain signature of addressee or agent and <b>DATE DELIVERED.</b>
<b>5. Signature - Address</b> X <i>Mark Galley</i>	<b>8. Addressee's Address (ONLY if requested and fee paid)</b>
<b>6. Signature - Agent</b> X	
<b>7. Date of Delivery</b> <i>10-27-88</i>	

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

P 938 762 719

**RECEIPT FOR CERTIFIED MAIL**

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

PS Form 3800, June 1985

Sent to Mr. John M. Baggett, Union	
Street and No.      Camp Corp. P.O. Box 37617	
P.O., State and ZIP Code Jacksonville, FL 32236	
Postage	S
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	S
Postmark or Date Mailed: 10-20-89 Permit: AC 16-169834 AC 16-170421	



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

October 17, 1989

**CERTIFIED MAIL-RETURN RECEIPT REQUESTED**

Mr. John M. Baggett, Resident Manager  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida 32236

Dear Mr. Baggett:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to construct a decanter tank No. 118 and storage tank No. 93.

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

Sincerely,

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

CHF/WH/t

Attachments

cc: M. Benjamin, NE District  
S. Pace, BESD  
L. Stebbins, P.E.

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of  
Applications for Permits by:

Union Camp Corporation  
P. O. Box 37617  
Jacksonville, Florida 32236

DER File No. AC 16-169834  
AC 16-170421

---

INTENT TO ISSUE

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

The applicant, Union Camp Corp., applied on September 1, 1989, to the Department of Environmental Regulation for permits to construct decanter tank No. 118 and on September 21, 1989, for a permit to replace storage tank No. 93 at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida.

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

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

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

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

The Petition shall contain the following information;

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

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

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

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

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

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

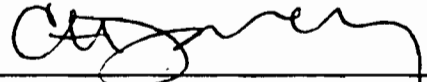
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION



---

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

Copies furnished to:

M. Benjamin, NE District  
S. Pace, BESD  
L. Stebbins, P.E.



CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 10/20/89.

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

Karin J. Jones      10/20/89  
Clerk                                  Date

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

The Department of Environmental Regulation hereby gives notice of its intent to issue two permits to Union Camp Corporation, P. O. Box 37617, Jacksonville, Florida, 32236 to construct decanter tank No. 118 which separates terpene oils and aqueous acid and replace tank No. 93 which stores terpene oils and/or No. 2 fuel oil at their chemical plant located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. Total volatile organic compound (VOC) emissions from decanter tank No. 118 are estimated to be 0.003 lbs/hr and 0.01 TPY. Total VOC emissions from storage tank No. 93 are estimated to be 0.0006 lbs/hr and 0.0024 TPY. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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

The Petition shall contain the following information;

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

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

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

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

Department of Environmental Regulation  
Northeast District  
3426 Bills Road  
Jacksonville, Florida 32207

Duval County Department of Health,  
Welfare & Bio-Environmental Services  
421 W. Church Street, Suite 412  
Jacksonville, Florida 32202

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

Technical Evaluation  
and  
Preliminary Determination

Union Camp Corporation  
Jacksonville, Duval County, Florida

Volatile Organic Liquid Tanks

File Numbers:

AC 16-169834

AC 16-170421

Sources: --

Decanter Tank No. 118

Storage Tank No. 93

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

October 17, 1989

## I. General Information

### A. Applicant

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida 32236

### B. Project and Location

Mr. John M. Baggett, Resident Manager for Union Camp Corporation, submitted two applications for permits to construct a new decanter tank No. 118 and replace the existing storage tank No. 93 on September 1 and September 21, respectively. These tanks will be installed at Union Camp Corporation's chemical plant (SIC 2861) located at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this site are Zone 17, 427.65 km E and 3,357.35 km N.

Decanter tank No. 118 is an 8 ft. diameter x 17' high tank with a condenser and flame arrestor on its cone roof. The tank has a capacity of 5,264 gallons. The decanter is used to separate terpene oils from aqueous acid. Based on an annual throughput of 2,275,000 gals/yr, VOC emissions are estimated to be 25 lbs/yr. Without the condenser, the VOC emissions would be 109 lbs/yr.

Storage tank No. 93 is a 10.5 ft. diameter x 15.6 ft. high tank with a cone roof connected to the plant's existing vapor collection system. The tank has a capacity of 10,104 gallons. It is used to store terpene oils and/or No. 2 fuel oil for four pyrolysis units. Based on an annual throughput of 348,011 gals/yr, VOC emissions are estimated to be 7.3 lbs/yr. Without controls, the VOC emissions would be 184 lbs/yr. As this tank is replacing an existing tank, there will be no increase in VOC emissions caused by the replacement.

## II. Rule Applicability

The proposed project, construction of decanter tank No. 118 and storage tank No. 93 at a chemical plant (SIC 2861), is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (F.A.C.).

The sources are in an area designated nonattainment for ozone and particulate matter (F.A.C. Rule 17-2.410), unclassifiable for sulfur dioxide (F.A.C. Rule 17-2.430), and attainment for the other criteria pollutants (F.A.C. 17-2.420).

The chemical plant is a major facility because allowable volatile organic compounds (VOC) emissions exceed 100 TPY. The project will not cause a significant emission rate increase as defined by F.A.C. 17-2, Table 500-2. Therefore, the project is not subject to new source review for nonattainment areas (F.A.C. Rule 17-2.510) or prevention of significant deterioration regulations, F.A.C. Rule 17-2.500.

As the project results in an increase in VOC emissions, the project is subject to F.A.C. Rule 17-2.520 (Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements), F.A.C. Rule 17-2.620 (General Pollutant Emission Limiting Standards), and F.A.C. Rule 17-2.660 (NSPS), specifically, 40 CFR 60, Subpart Kb, Standard of Performance for VOC Storage Vessels.

### III. Technical Evaluation

An estimate of the total VOC emission (breathing loss plus working loss) from the decanter and storage tanks was made by the applicant's engineer using the procedures given in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, Storage of Organic Liquids.

A summary of the emissions from these tanks are shown below:

#### VOC Emissions (lbs/yr)

Decanter Tank No. 118	Breathing loss	Working Loss	Total Loss
Without Condenser	109	0	109
With Condenser	25	0	25

Storage Tank No. 93	Breathing loss	Working Loss	Total Loss
Without Controls	69.6	114.1	183.7
With Controls	0	0	7.3*

\* Vapors from this tank are destroyed by the existing vapor collection system at this plant. As tank No. 93 is replacing an existing tank, there will be no increase in emissions from the facility caused by this tank.

### IV. Air Quality Analysis

It is the judgement of the Department that the estimated VOC emissions from these tanks will not interfere with reasonable future progress toward attainment of ambient air quality standards.

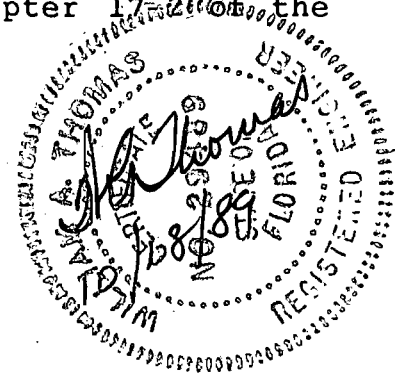
V. Conclusion

Based on the information provided by Union Camp Corporation, the Department has reasonable assurance that the proposed project, construction of decanter tank No. 118 and storage tank No. 93, as described in this evaluation and subject to the conditions proposed herein, will not cause or contribute to a violation of any ambient air quality standard or PSD increment, or violate any other technical provision of Chapter 17-2 of the Florida Administrative Code.

*John Thomas*  
10/18/89

V. Conclusion

Based on the information provided by Union Camp Corporation, the Department has reasonable assurance that the proposed project, construction of decanter tank No. 118 and storage tank No. 93, as described in this evaluation and subject to the conditions proposed herein, will not cause or contribute to a violation of any ambient air quality standard or PSD increment, or violate any other technical provision of Chapter 17-210 of the Florida Administrative Code.







# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-164834

Expiration Date: May 1, 1990

County: Duval

Latitude/Longitude: 30°20'53"  
81°45'05"

Project: Decanter Tank # 118

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 5,264 gallon terpene oil/aqueous acid decanter tank No. 118 (8 ft. diameter x 17 ft. height) which vents vapors through a condenser and flame arrestor.

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received September 1, 1989.

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-169834  
**Expiration Date:** May 1, 1990

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-169834  
Expiration Date: May 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-169834  
Expiration Date: May 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

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

14. The permittee shall comply with the following:

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

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-169834  
**Expiration Date:** May 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. Decanter tank No. 118 shall not process more than 2,275,000 gallons of terpene oils during any 12 month period. The permittee shall maintain records that show the quantity of volatile organic liquid handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b,(a) and (b).

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-169834  
Expiration Date: May 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. All organic vapors from this tank shall be vented to the vapor condenser. Any liquid leaks in the pump, piping, tank, or condenser shall be repaired promptly.
5. This tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Volatile organic compound emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, shall not exceed 0.013 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1989

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

\_\_\_\_\_  
Dale Twachtmann, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

Union Camp Corporation  
Post Office Box 37617  
Jacksonville, FL 32236

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990  
County: Duval  
Latitude/Longitude: 30°20'53"  
81°45'05"  
Project: Storage Tank No. 93

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Install a 10,104 gallon terpene oils and/or No. 2 fuel oil storage tank (10.5 ft. diameter x 15.6 ft. height) which vents vapors to the existing vapor collection system (AO 16-62025) to replace the existing tank No. 93 (AO 16-124126).

This tank is located at Union Camp Corporation's chemical plant (SIC 2861) at 2051 N. Lane Avenue, Jacksonville, Duval County, Florida. The UTM coordinates of this facility are Zone 17, 427.65 km E and 3,357.35 km N.

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

Attachments are listed below:

Application received September 21, 1989.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990

**GENERAL CONDITIONS:**

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

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

14. The permittee shall comply with the following:

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

**PERMITTEE:**  
Union Camp Corporation

**Permit Number:** AC 16-170421  
**Expiration Date:** Oct. 1, 1990

**GENERAL CONDITIONS:**

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

c. Records of monitoring information shall include:

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

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 corrected promptly.

**SPECIFIC CONDITIONS:**

1. Tank No. 93 shall not handle more than 348,011 gallons of terpene oils and/or No. 2 fuel oil during any 12 month period. The permittee shall maintain records that show the quantity of organic liquids handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels. Applicable sections are 40 CFR 60.116b,(a) and (b).

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-170421  
Expiration Date: Oct. 1, 1990

**SPECIFIC CONDITIONS:**

3. This storage tank may be in service continuously, 8,760 hrs/yr.
4. All organic vapors from this tank shall be vented to the vapor recovery system. Any liquid leaks in the pump, piping, tank, or vapor recovery system shall be repaired promptly.
5. This storage tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).
6. Approval of this permit is based on the actual volatile organic compound emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, not exceeding 0.061 TPY and being treated by the plant vapor control system. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit this data to the Duval County Bio-Environmental Services Division.
7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
8. An application for an operation permit must be submitted to the Duval County Bio-Environmental Services Division at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1989

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION**

\_\_\_\_\_  
Dale Twachtmann, Secretary


**MISSIMER & ASSOCIATES, INC.**

Environmental and Groundwater Consultants

 8130 BAYMEADOWS WAY WEST  
 SUITE 104  
 JACKSONVILLE, FLORIDA 32256

 PHONE (904) 448-6400  
 FAX (904) 448-8556

RECEIVED

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 October 2, 1989  
 JE9001

 Mr. Willard Hanks  
 Florida Department of Environmental  
 Regulation  
 Twin Towers Office Building  
 2600 Blair Stone Road  
 Tallahassee, Florida 32301-8241

 Subject: **Application to Construct  
 Air Pollution Sources  
 Decanter Tank No. 118 and Tank No. 93  
 Union Camp Corporation  
 Jacksonville, Florida**

 Re: Telephone Conversation between W. Hanks, FDER,  
 and S. Alexander, M&A, 9/28/89

Dear Mr. Hanks:

After reviewing the subject permit applications, we agree with your comments and would like to acknowledge the necessary changes.

On the Decanter Tank TK118 application, page 4 of the application contains incorrect values for actual and potential emissions. The correct values are .0029 lbs/hr maximum, .0125 tons/yr actual and 25 lbs/yr potential emissions as indicated in Attachment No. 3. A revised page 4 is enclosed.

On the Tank No. 93 application, refer to Tab No. 3, calculation of Airborne Contaminants Emitted. An error was introduced in the calculation for breathing loss. The corrected pages for Attachment No. 3 and page 4 of the application are enclosed.

These corrections do not alter the regulatory conclusions in the application. We would appreciate your assistance in expediting the processing of these permit applications.

Mr. Willard Hanks  
Page 2  
October 2, 1989

Please feel free to call me if you have any further questions at  
Missimer and Associates, Inc., 904/448-6400.

Very truly yours,

MISSIMER AND ASSOCIATES, INC.



Lloyd H. Stebbins, P.E.  
Vice President - Regional Manager

LHS/cdb

cc: W. B. Van Duyn

*Steve Pace, RESO -*  
*M. Benjamin, NE Dist*  
*CMF/BT*

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

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

REFER TO ATTACHMENT 2

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Decanter Tk. 118	VOC	NA	1,733	TAB 5

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

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

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

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

REFER TO ATTACHMENT 3

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	
Decanter							
Tk. 118	0.029	0.0125	17-2.660(2)(a)*	NA	25	0.0125	TAB 5

<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).

\*Chapter 17-2.660 FAC adopts 40 CFR 60 by reference, including Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels...The federal rules do not apply any specific allowable emission rate. Since certain exceptions apply,

Tank No. 118 is only subject to a few limited recordkeeping requirements.

**ATTACHMENT 3**  
**CALCULATION OF AIRBORNE**  
**CONTAMINANTS EMITTED**  
**TANK NO. 93**

Tank emissions result from a combination of losses due to displaced vapors from tank filling, i.e., working losses, and tank "breathing" due to changes in ambient temperatures, also called breathing losses.

The rate of VOC emissions due to breathing losses and working losses can be calculated as described in USEPA AP-42, "Compilation of Air Pollutant Emission Factors," pages 4.3-5 through 4.3-11, Fourth Edition, 1985.

The tank will be used to store mixed terpenes, #2 fuel oil or a mixture of #2 fuel oil and terpenes as the need arises. The terpene alpha-pinene is used as a reference compound for calculations. Although the tank will contain a variety of terpene derived materials, each compound will have a molecular weight and vapor pressure close to that of alpha-pinene. A review of the thermodynamic data for alpha-pinene and #2 fuel oil indicates that the terpenes have a higher vapor pressure than the fuel oil. Since the relative volumes of terpenes and fuel oil can not be estimated, calculations based upon alpha-pinene will be conservative. Actual VOC emissions will be slightly less than calculated.

**ACTUAL EMISSIONS**

The tank will be connected to the plant vapor collection system which will destroy the majority of the uncontrolled VOC emissions. Uncontrolled emissions are calculated based upon AP-42 and actual emissions are based upon a destruction efficiency for the vapor collection system of 96%.



### Calculation of Uncontrolled Breathing Loss

Use the breathing loss equation in AP-42, page 4.3-5:

$$L_B = 2.26 \times 10^{-2} M_v \left[ \frac{P}{P_A - P} \right]^{0.68} D^{1.73} H^{0.51} \Delta T^{0.50} F_p C KC$$

where:

$L_B$  = Breathing Loss (lb./yr.)

$M_v$  = Vapor Molecular Weight (lb./lb./mol.)

= 136 for alpha-pinene

$P$  = True Vapor Pressure at Bulk Storage Conditions (psia)

= 0.10 psia @ 27°C for alpha-pinene

$P_A$  = Atmospheric Pressure, psia

= 14.7 psia

$D$  = Tank Diameter (ft.)

= 10.5 ft. for tank 93

$H$  = Average Vapor Space Height (ft.)

According to AP-42, the vapor space can be assumed to be half the height of the tank when information is unavailable. For TK-93, this value is 7.8 feet.

$T$  = Average Ambient Diurnal Temperature Change (°F)

Information from National Oceanic and Atmospheric

Administration (NOAA) received by telephone on 6-20-88

indicates that the Jacksonville average high temperature is

78.7°F and the average low 57.2°F. The average diurnal change,

"Delta T," is therefore 78.7 - 57.2 = 21.5°F.

$F_p$  = Paint Factor from AP-42, Table 4.3-1 -- Assume that the green tanks at Union Camp are similar to medium gray in the Table. Select  $F_p = 1.58$

C = Small Diameter Tank Adjustment Factor, AP-42, Figure 4.3-4  
= 0.55

K<sub>c</sub> = product factor, AP-42, Page 4.3-11 = 1.0

$$L_B = 2.26 \times 10^{-2} (136) \left( \frac{.1}{14.7 - .1} \right)^{0.68} (10.5)^{1.73} 7.8^{0.51} 21.5^{.50} (1.58) (.55) (1)$$

L<sub>B</sub> = 69.6 lb./yr.

### Calculation of Uncontrolled Working Losses

Working losses are calculated from the working loss equation in AP-42:

$$L_w = 2.4 \times 10^{-5} M_v P V N K_N K_C$$

where:

L<sub>w</sub> = Working Loss (lb/yr)

M<sub>v</sub> = Vapor Molecular Weight (lb/lb/mol)  
= 136 for alpha-pinene

P = True Vapor Pressure at Bulk Storage Conditions (psia)\*  
= 0.10 psia @ 27°C for alpha-pinene

V = Tank volume (gallons)

Tank diameter is 10.5 ft. Tank height, excluding the cone top, is 15.6 ft.

$$V = \text{Pi} (10.5/2)^2 \times 15.6 \times 7.48 \text{ gal./ft}^3 \\ = 10,104 \text{ gallons}$$

N = Number of annual turnovers of tank volume.

Average annual throughput for the tank will be 348,011 gal./yr.  
or approximately 350,000 gal./yr.

$$\text{Therefore, } 350,000 \text{ gal./yr.} / 10,104 \text{ gal.} = 34.6$$

N = 34.6

K<sub>N</sub> = Turnover factor from AP-42, Page 4.3-11  
= 1.0

K<sub>c</sub> = product factor, AP-42, Page 4.3-11 = 1.0

$$L_w = 2.4 \times 10^{-5} (136) (.10) (10,104) (34.6) (1.0) (1.0)$$

$$L_w = 114.1 \text{ lb./yr.}$$

#### Calculation of Actual Emissions After Control Device

The removal efficiency of the plant vapor collection system is 96%. The emissions from TK-93 will therefore be equal to the uncontrolled breathing and working loss emissions times (100 - 96)/100:

$$\begin{aligned} L_c &= \text{Actual VOC emissions after the control device} \\ &= (L_B + L_w) \times (100 - 96)/100 \\ &= (69.6 \text{ lb./yr.} + 114.1 \text{ lb./yr.}) \times (100 - 96)/100 \\ &= 7.35 \text{ lb./yr.} \end{aligned}$$

On an hourly basis,

$$\begin{aligned} \text{Actual emissions} &= 7.35 \text{ lb./hr.}/8760 \\ &= 0.0008 \text{ lb./hr.} \end{aligned}$$

Converting to tons per year,

$$\begin{aligned} &= \frac{7.35 \text{ lb./yr.}}{2,000 \text{ lb./ton}} \\ &= .004 \text{ ton/yr.} \end{aligned}$$

#### Maximum Emissions

The maximum emissions rate occurs during tank loading operations due to the displacement of the vapor space in the tank as it fills. Although an instantaneous peak emissions rate could be calculated, it would be a meaningless value because the absolute VOC emissions from any individual tank is small and the tank is filled intermittently. Consequently, the maximum emissions rate is considered to be equivalent to the actual emissions for this tank.

### **Allowable Emissions**

Chapter 17-2.660(2)(a) FAC, adopts by reference the federal New Source Performance Standards (NSPS) found in 40 CFR 60 including Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels. However, Tank 118 must be compared to the exceptions and exemptions of Section 60.110b to determine specific rule applicability.

### **Tank No. 93**

Since the 10,104 gallon capacity of Tank No. 93 is less than 40 m<sup>3</sup> (10,568 gallons), it is exempt from rule coverage except as specified in Section 60.116b(a) and (b). Essentially, the requirements of those subparagraphs include:

- (a) Maintain records required by Section 60.116b(c) for the life of the vessel and all other records for two years.
- (b) Maintain records showing dimensions of the storage vessel and an analysis of the capacity of the storage vessel.

### **Potential Emissions**

The F.A.C. in Rule 17-2(100) defines potential emissions as emissions after the control device. Therefore, potential emissions are equal to actual emissions for this source.

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

A. Raw Materials and Chemicals Used in your Process, if applicable:  
REFER TO ATTACHMENT 2

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Tk.No. 93	VOC	NA	265.1	TAB 5

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

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

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

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

REFER TO ATTACHMENT 3

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	
TK No. 93	0.0008	0.004	17-2.660 (2)	NA	7.35	0.0037	TAB 5
			(a)*				

<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).

\*Chapter 17-2.660 FAC adopts 40 CFR 60 by reference, including Subpart Kb-- Standards of Performance for Volatile Organic Liquid Storage Vessels... The federal rules do not apply any specific allowable emission rate. Since certain exceptions apply, Tank No. 93 is only subject to a few limited recordkeeping requirements.  
DEC Form 17-1-202 (1)  
Effective November 30, 1982



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BBA DIVISION  
AROMA & TERPENE  
CHEMICALS

P.O. BOX 37617, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

September 15, 1989

Clair H. Fancy, P.E., Deputy Chief  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8341

Subject: Construction Permit Application  
Tank No. 93  
Jacksonville Plant

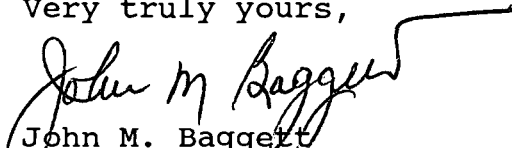
Dear Mr. Fancy:

This permit application is for the construction of a replacement tank at the Jacksonville plant. This tank will emit only very small quantities of organic vapors which will be vented to the plant vapor collection system.

We are and have been committed to protecting the environment for the benefit of our employees and the surrounding community. Accordingly, I have directed our staff to be sensitive to environmental issues and to assure compliance with all environmental laws and regulations as the design of this storage tank progresses.

We would like to permit this source as quickly as possible to avoid severe operating constraints. For this reason, we would sincerely appreciate your assistance in expediting the review process. If you have questions, please contact me or our consultant, Lloyd H. Stebbins, Missimer and Associates, at 904/448-6400.

Very truly yours,

  
John M. Baggett  
Resident Manager

JMB/cdb

Enclosure

**APPLICATION TO CONSTRUCT  
AIR POLLUTION SOURCE**

**TANK NO. 93**

**BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA**

**Prepared by:**

**MISSIMER AND ASSOCIATES, INC.  
Jacksonville, Florida**

**September 15, 1989**

BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

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**MISSIMER & ASSOCIATES, INC.**

Environmental and Groundwater Consultants

8130 BAYMEADOWS WAY WEST  
SUITE 104  
JACKSONVILLE, FLORIDA 32256

PHONE (904) 448-6400  
FAX (904) 448-8556

September 15, 1989  
JE9-001

Clair H. Fancy, P.E., Deputy Chief  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8341

Subject: **Application to Construct Air Pollution Source  
Tank No. 93  
BBA Division  
Aroma and Terpene Chemicals  
Union Camp Corporation  
Jacksonville, Florida**

Dear Mr. Fancy:

The enclosed construction permit application package has been prepared for a tank replacement at the Union Camp Plant in Jacksonville, Florida.

Enclosed is a check for \$200.00, payable to the Florida Department of Environmental Regulation, as required by 17-4.050(a) FAC for the permit application review fee. This fee is based upon the emissions in this application of much less than 25 tons/year.

The enclosed application represents a modification to a major facility [17-2.510(2)(a)4 FAC]. The VOC emissions from this source is calculated to be only 0.0024 tons per year which will be offset by a corresponding decrease in emissions from the decommissioning of the existing Tk. No. 93 permitted under Operating Permit No. A016-124126. Since there will be no net increase in emissions, a New Source Review is not required.

Although the uncontrolled emissions from the tank are not significant, the vent will be tied in to the plant vapor collection system to minimize any potential odors from the tank.

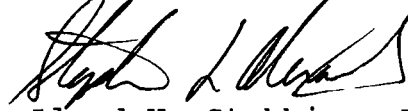
Clair H. Fancy, P.E.  
Page 2  
September 15, 1989

The emissions will clearly be extremely low from this tank. Accordingly, we would appreciate any efforts on your part to expedite the processing of this permit.

Please feel free to contact me if you have any questions regarding this application. I can be reached at 904/448-6400.

Very truly yours,

MISSIMER AND ASSOCIATES, INC.

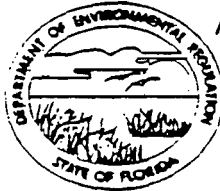
 for LHS  
Lloyd H. Stebbins, P.E.  
Vice President

LHS/cdb

#200pd.  
9-21-84  
Rept #117061

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2800 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301



AC16-170421

BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Tank No. 93  New  Existing (Replacement)

APPLICATION TYPE:  Construction  Operation  Modification

COMPANY NAME: Union Camp Corporation COUNTY: Duval

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) Organic Chemical Storage Tank

SOURCE LOCATION: Street 2051 N. Lane Ave. city Jacksonville

UTM: East 427,650 Meters North 3,357,350 Meters

Latitude 30° 20' 53" N Longitude 81° 45' 05" W

APPLICANT NAME AND TITLE: John M. Baggett, Resident Manager

APPLICANT ADDRESS: P.O. Box 60639, Jacksonville, Florida 32236

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

1. APPLICANT

I am the undersigned owner or authorized representative\* of Union Camp Corp.

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

\*Attach letter of authorization

Signed: John M. Baggett

John M. Baggett, Resident Manager

Name and Title (Please Type)

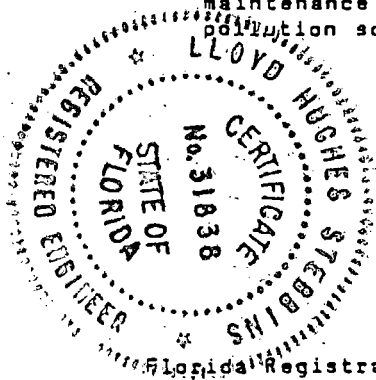
Date: 9/18/84 Telephone No. 904/783-2180

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

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

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

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed *Lloyd H. Stebbins*  
Lloyd H. Stebbins  
Name (Please Type)  
Missimer and Associates, Inc.  
Company Name (Please Type)  
8130 Baymeadows Way, W., Suite 104  
Jacksonville, Florida 32256  
Mailing Address (Please Type)  
 Florida Registration No. 31838 Date: 9-19-89 Telephone No. 904/739-2007

**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.

Refer to the Process Description (Attachment 1) and the Process Flow Diagram (Attachment 5).

- B. Schedule of project covered in this application (Construction Permit Application Only)  
 Start of Construction October 15, 1989 Completion of Construction April 15, 1990
- 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.)

N/A

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

Does not apply.

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

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

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

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

\*The only exception is a few minor recordkeeping requirements in 40 CFR 60, Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels...Refer to Attachment 3 for details.

This permit covers the installation of a replacement tank for the existing Tk. No. 93 permitted under Operating Permit No. A016-124126. Emissions from the new Tk. No. 93 will be offset by the decommissioning of the old Tank No. 93.

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

A. Raw Materials and Chemicals Used in your Process, if applicable:  
REFER TO ATTACHMENT 2

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Tk.No. 93	VOC	NA	265.1	TAB 5

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

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

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

REFER TO ATTACHMENT 3

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	
Tk No. 93	0.0006	0.0024	17-2.660 (2)	NA	4.86	0.0024	TAB 5
			(a)*				

<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).

\*Chapter 17-2.660 FAC adopts 40 CFR 60 by reference, including Subpart Kb-- Standards of Performance for Volatile Organic Liquid Storage Vessels... The federal rules do not apply any specific allowable emission rate. Since certain exceptions apply, Tank No. 93 is only subject to a few limited recordkeeping requirements.

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)
Tank No. 93	VOC			

E. Fuels

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

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

Fuel Analysis:

Percent Sulfur: NA Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

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

Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

Does not apply

REFER TO ATTACHMENT 4

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

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

SECTION IV: INCINERATOR INFORMATION

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

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

	Volume (ft) <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 devices:  Cyclone  Wet Scrubber  Afterburner  
 Other (specify) \_\_\_\_\_



Brief description of operating characteristics of control devices: \_\_\_\_\_

NA

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

NA

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

#### SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

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

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** Does not apply.

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:

Explain method of determining efficiency.  
 Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<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

##### 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).

2. Instrumentation, Field and Laboratory

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

B. Meteorological Data Used for Air Quality Modeling

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

C. Computer Models Used

1. \_\_\_\_\_ Modified? If yes, attach description.
2. \_\_\_\_\_ Modified? If yes, attach description.
3. \_\_\_\_\_ Modified? If yes, attach description.
4. \_\_\_\_\_ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO <sub>2</sub>	_____ grams/sec

E. Emission Data Used in Modeling

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

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

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

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

**ATTACHMENT 1  
SECTION II A  
PROCESS DESCRIPTION**

**TANK NO. 93  
BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA**

Tank No. 93 currently exists, but is being replaced by a new tank covered by this permit application. The tank is used to store a mixture of terpene oils and/or #2 fuel oil. The mixture is used to fuel four fired heaters called pyrolysis units. Tank No. 93 will emit volatile organic compounds (VOCs) due to breathing losses and working losses. Emission calculations are contained in Attachment 3 following the AP-42 format. The tank will be vented to the plant vapor collection system.

**ATTACHMENT 2**  
**SECTION III A**  
**RAW MATERIALS**

The utilization rate can be determined by dividing the total annual throughput for Tank No. 93 by the total annual operating hours and applying the appropriate conversion factors.

Based on 8,760 operating hours per year and a representative specific gravity of 0.80 for terpene oils, the utilization rate becomes:

$$\begin{aligned} & (348,011 \text{ gal./yr.} \times 8.34 \text{ lb./gal.} \times 0.80 \text{ sp. gr.}) / (8,760 \\ & \text{hr./yr.} \\ & \qquad \qquad \qquad = 265.1 \text{ lb/hr} \end{aligned}$$

Where,

Annual Throughput = 348,011 gal/yr,

Density of Water = 8.34 lbs/gal,

Specific Gravity of Terpene Oils = 0.80 and

Annual Operating Time = 8,760 hrs/yr



**ATTACHMENT 3**  
**CALCULATION OF AIRBORNE**  
**CONTAMINANTS EMITTED**  
**TANK NO. 93**

Tank emissions result from a combination of losses due to displaced vapors from tank filling, i.e., working losses, and tank "breathing" due to changes in ambient temperatures, also called breathing losses.

The rate of VOC emissions due to breathing losses and working losses can be calculated as described in USEPA AP-42, "Compilation of Air Pollutant Emission Factors," pages 4.3-5 through 4.3-11, Fourth Edition, 1985.

The tank will be used to store mixed terpenes, #2 fuel oil or a mixture of #2 fuel oil and terpenes as the need arises. The terpene alpha-pinene is used as a reference compound for calculations. Although the tank will contain a variety of terpene derived materials, each compound will have a molecular weight and vapor pressure close to that of alpha-pinene. A review of the thermodynamic data for alpha-pinene and #2 fuel oil indicates that the terpenes have a higher vapor pressure than the fuel oil. Since the relative volumes of terpenes and fuel oil can not be estimated, calculations based upon alpha pinene will be conservative. Actual VOC emissions will be slightly less than calculated.

**ACTUAL EMISSIONS**

The tank will be connected to the plant vapor collection system which will destroy the majority of the uncontrolled VOC emissions. Uncontrolled emissions are calculated based upon AP-42 and actual emissions are based upon a destruction efficiency for the vapor collection system of 96%.

### Calculation of Uncontrolled Breathing Loss

Use the breathing loss equation in AP-42, page 4.3-5:

$$L_b = 2.26 \times 10^{-2} M_v \frac{P}{P_A - P}^{0.68} D^{1.73} H^{0.51} T^{0.50} F_p C K_c$$

where:

$L_b$  = Breathing Loss (lb./yr.)

$M_v$  = Vapor Molecular Weight (lb./lb./mol.)

= 136 for alpha-pinene

$P$  = True Vapor Pressure at Bulk Storage Conditions (psia)

= 0.10 psia @ 27°C for alpha-pinene

$P_A$  = Atmospheric Pressure, psia

= 14.7 psia

$D$  = Tank Diameter (ft.)

= 10.5 ft. for tank 93

$H$  = Average Vapor Space Height (ft.)

According to AP-42, the vapor space can be assumed to be half the height of the tank when information is unavailable. For TK-93, this value is 7.8 feet.

$T$  = Average Ambient Diurnal Temperature Change (°F)

Information from National Oceanic and Atmospheric

Administration (NOAA) received by telephone on 6-20-88

indicates that the Jacksonville average high temperature is

78.7°F and the average low 57.2°F. The average diurnal change,

"Delta T," is therefore 78.7 - 57.2 = 21.5°F.

$F_p$  = Paint Factor from AP-42, Table 4.3-1 -- Assume that the green tanks at Union Camp are similar to medium gray in the Table. Select  $F_p = 1.58$

C = Small Diameter Tank Adjustment Factor, AP-42, Figure 4.3-4  
= 0.55

K<sub>c</sub> = product factor, AP-42, Page 4.3-11 = 1.0

$$L_b = 2.26 \times 10^{-2} (136) \frac{.1}{14.7 - .1}^{0.68} (10.5)^{1.73} 7.8^{0.51} 21.5^{.50} (1.58) (.55) (1)$$

L<sub>b</sub> = 7.51 lb./yr.

### Calculation of Uncontrolled Working Losses

Working losses are calculated from the working loss equation in AP-42:

$$L_w = 2.4 \times 10^{-5} M_v P V N K_N K_c$$

where:

L<sub>w</sub> = Working Loss (lb/yr)

M<sub>v</sub> = Vapor Molecular Weight (lb/lb/mol)  
= 136 for alpha-pinene

P = True Vapor Pressure at Bulk Storage Conditions (psia)\*  
= 0.10 psia @ 27°C for alpha-pinene

V = Tank volume (gallons)

Tank diameter is 10.5 ft. Tank height, excluding the cone top, is 15.6 ft.

$$V = \text{Pi} (10.5/2)^2 \times 15.6 \times 7.48 \text{ gal./ft}^3$$

= 10,104 gallons

N = Number of annual turnovers of tank volume.

Average annual throughput for the tank will be 348,011 gal./yr. or approximately 350,000 gal./yr.

$$\text{Therefore, } 350,000 \text{ gal./yr.} / 10,104 \text{ gal.} = 34.6$$

N = 34.6

K<sub>N</sub> = Turnover factor from AP-42, Page 4.3-11  
= 1.0

K<sub>c</sub> = product factor, AP-42, Page 4.3-11 = 1.0

$$L_v = 2.4 \times 10^{-5} (136) (.10) (10,104) (34.6) (1.0) (1.0)$$
$$L_v = 114.1 \text{ lb./yr.}$$

#### Calculation of Actual Emissions After Control Device

The removal efficiency of the plant vapor collection system is 96%. The emissions from TK-93 will therefore be equal to the uncontrolled breathing and working loss emissions times (100 - 96)/100:

$$L_c = \text{Actual VOC emissions after the control device}$$
$$= (L_B + L_W) \times (100 - 96)/100$$
$$= (7.51 \text{ lb./yr.} + 114.1 \text{ lb./yr.}) \times (100 - 96)/100$$
$$= 4.86 \text{ lb./yr.}$$

On an hourly basis,

$$\text{Actual emissions} = 4.86 \text{ lb./hr.} / 8760$$
$$= 0.0006 \text{ lb./hr.}$$

Converting to tons per year,

$$= \frac{4.86 \text{ lb./yr.}}{2,000 \text{ lb./ton}}$$
$$= .0024 \text{ ton/yr.}$$

#### Maximum Emissions

The maximum emissions rate occurs during tank loading operations due to the displacement of the vapor space in the tank as it fills. Although an instantaneous peak emissions rate could be calculated, it would be a meaningless value because the absolute VOC emissions from any individual tank is small and the tank is filled intermittently. Consequently, the maximum emissions rate is considered to be equivalent to the actual emissions for this tank.

### Allowable Emissions

Chapter 17-2.660(2)(a) FAC, adopts by reference the federal New Source Performance Standards (NSPS) found in 40 CFR 60 including Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels. However, Tank 118 must be compared to the exceptions and exemptions of Section 60.110b to determine specific rule applicability.

### Tank No. 93

Since the 10,104 gallon capacity of Tank No. 93 is less than 40 m<sup>3</sup> (10,568 gallons), it is exempt from rule coverage except as specified in Section 60.116b(a) and (b). Essentially, the requirements of those subparagraphs include:

- (a) Maintain records required by Section 60.116b(c) for the life of the vessel and all other records for two years.
- (b) Maintain records showing dimensions of the storage vessel and an analysis of the capacity of the storage vessel.

### Potential Emissions

The F.A.C. in Rule 17-2(100) defines potential emissions as emissions after the control device. Therefore, potential emissions are equal to actual emissions for this source.

ATTACHMENT 4

SECTION III H

EMISSION STACK GEOMETRY AND FLOW CHARACTERISTICS

---

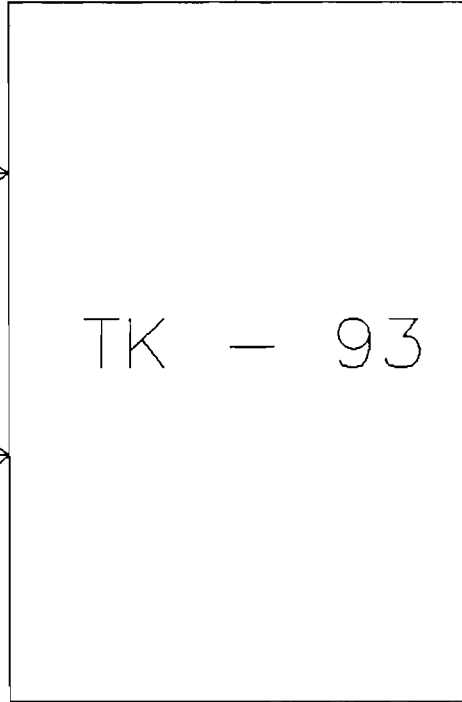
TANK NO.	STACK HEIGHT (FT.)	STACK DIAMETER	FLOW (ACFM)	FLOW DSCFM	EXIT TEMP. (°F)	VELOCITY (FPS)
93	17'0"	2"	NA	NA	80.6	NA

---

VENT TO VAPOR COLLECTION SYSTEM

MIXED TERPENES

#2 FUEL OIL

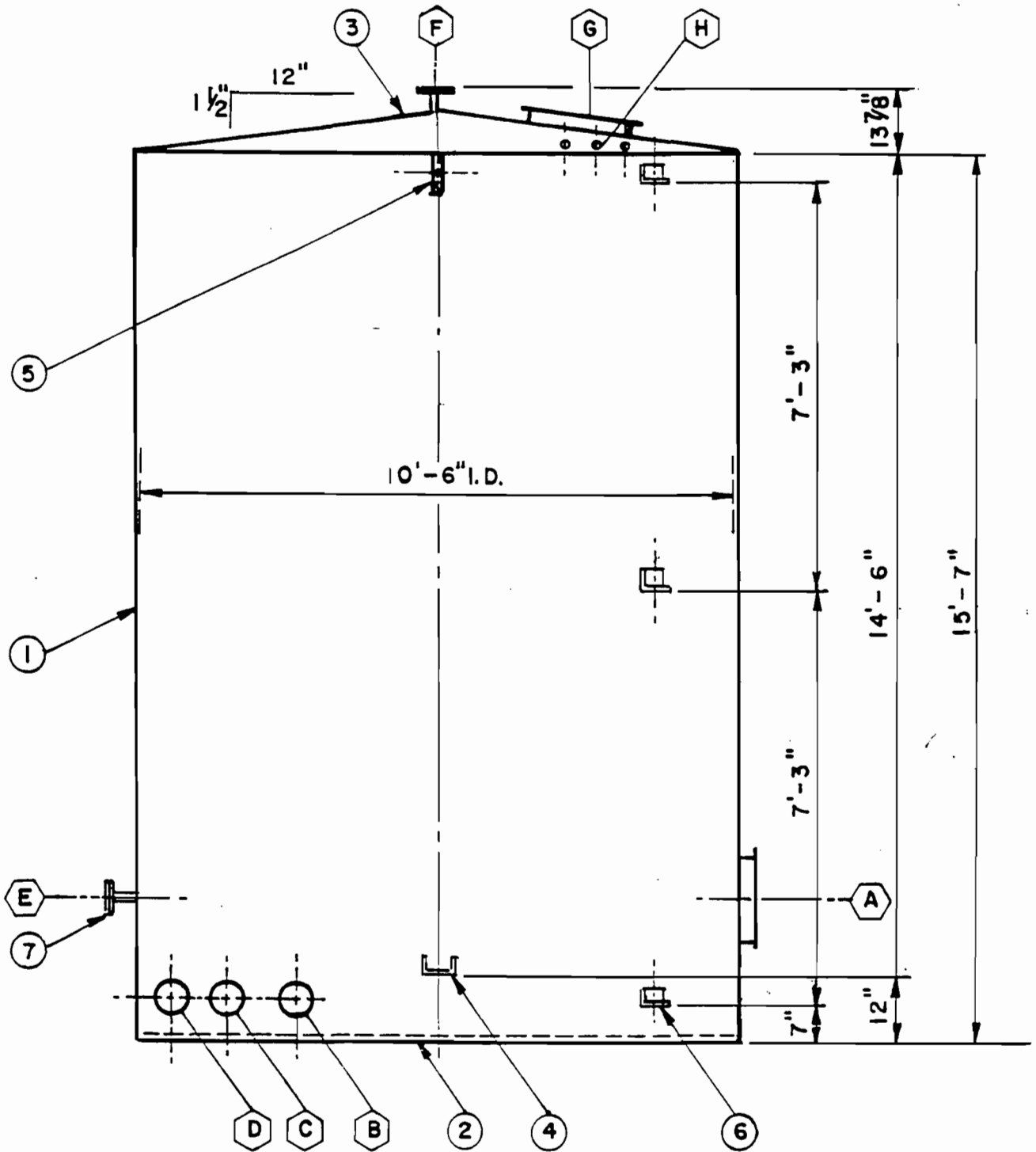


PYROLYSIS  
UNIT FUEL

TK - 93

UNION CAMP  
JACKSONVILLE, FLORIDA

TANK NO. 93  
PROCESS FLOW

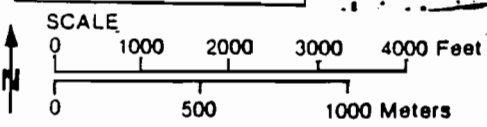
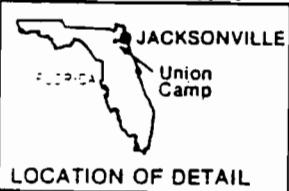
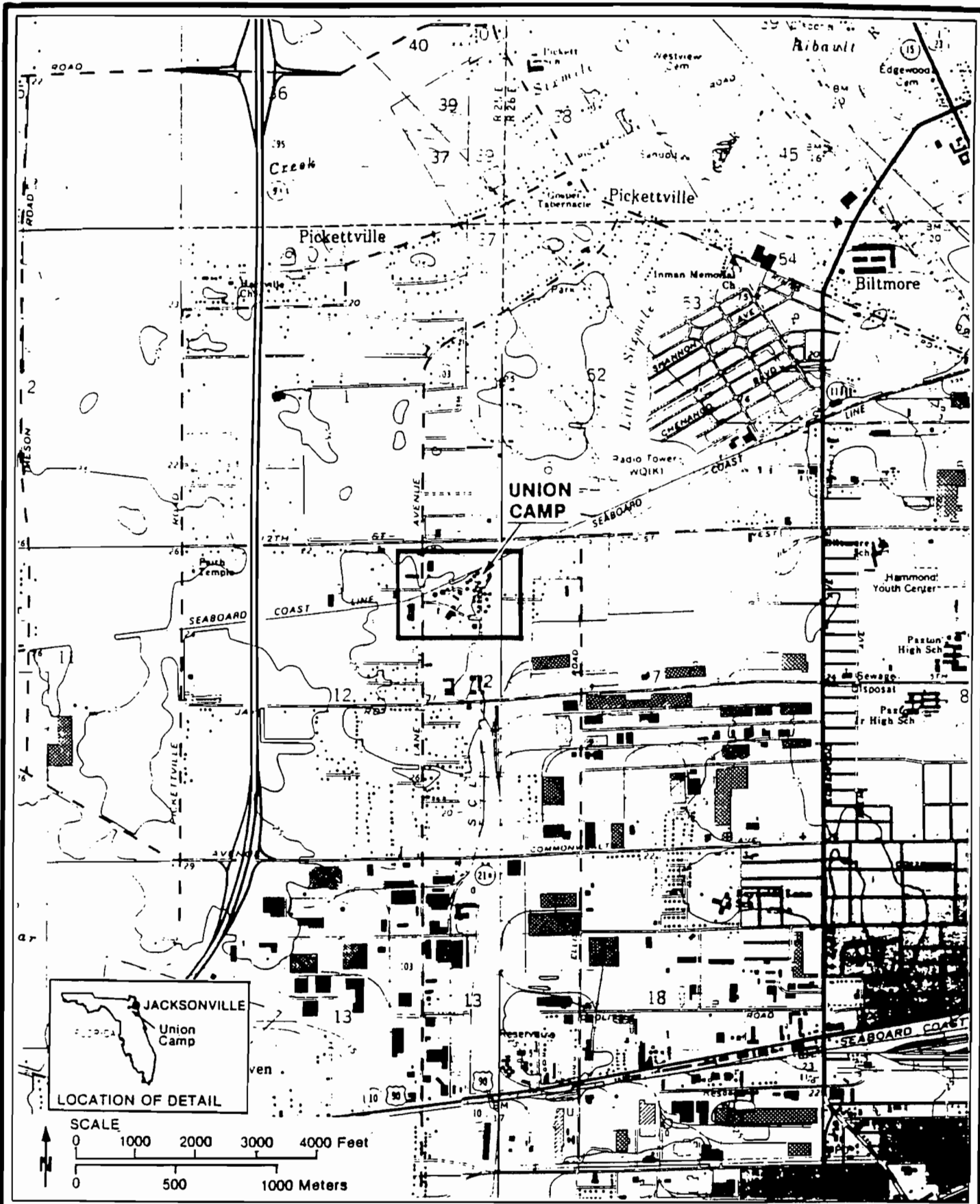


Line diagram of existing Tk. No. 93.  
 Replacement tank covered by this permit to be  
 similar in overall dimensions. Some tank  
 details subject to change.

**TANK 93 LINE DIAGRAM**

**UNION CAMP**

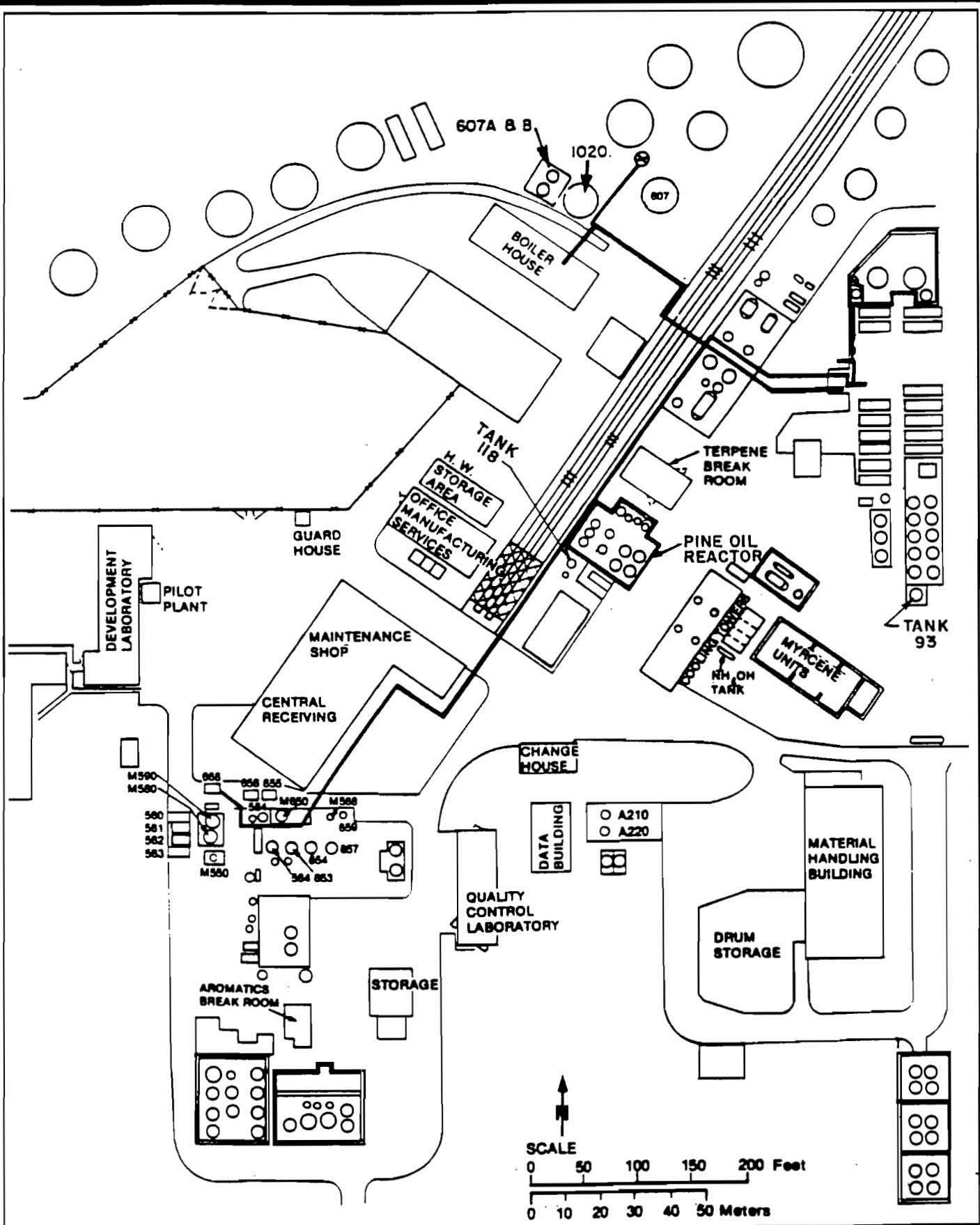




**SITE LOCATION MAP**

**UNION CAMP**

SOURCES: USGS, 1982



GENERAL FACILITY LAYOUT (WEST SECTION)

UNION CAMP



RECEIVED  
DER - MAIL ROOM  
1989 SEP -1 AM 8:50

BBA DIVISION  
AROMA & TERPENE  
CHEMICALS

P.O. BOX 37617, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

August 30, 1989

Clair H. Fancy, P.E., Deputy Chief  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8341

Subject: Construction Permit Application  
Decanter Tank No. 118  
Jacksonville Plant

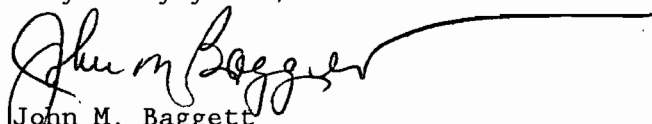
Dear Mr. Fancy:

As part of a plant process improvement, we are planning to install a new decanter tank. This tank will emit only very small quantities of organic vapors.

We are and have been committed to protecting the environment for the benefit of our employees and the surrounding community. Accordingly, I have directed our staff to be sensitive to environmental issues and to assure compliance with all environmental laws and regulations as the design of this storage tank progresses.

We would like to permit this source as quickly as possible to avoid severe operating constraints. For this reason, we would sincerely appreciate your assistance in expediting the review process. If you have questions, please contact me or our consultant, Stephen L. Alexander, Hunter Services, Inc., at 904/739-2000.

Very truly yours,

  
John M. Baggett  
Resident Manager

JMB/cdb

Enclosure



RECEIVED  
DER - MAIL ROOM

1989 SEP -1 AM 8:50

BBA DIVISION  
AROMA & TERPENE  
CHEMICALS

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Very truly yours,

John M. Baggett  
Resident Manager

JMB/cdb

Enclosure

1031



P. O. BOX 60369  
JACKSONVILLE, FLORIDA 32236

FIRST UNION NATIONAL BANK OF FLORIDA  
JACKSONVILLE, FLORIDA

63-2  
630

No. 053511

AUG. 29 89

\$ 200.00

UNION CAMP 2000000 UNION CAMP CORPORATION  
REGULAR ACCOUNT

PAY TO THE ORDER OF:

Dept. of Environmental Regulation  
1600 Blair Stone Road  
Tallahassee, FL 32301

*[Signature]*  
AUTHORIZED SIGNATURE  
*[Signature]*  
AUTHORIZED SIGNATURE



RECEIVED

SEP 1 1989

DER - BAQM

BEST AVAILABLE COPY



0569

FIRST UNION NATIONAL BANK OF FLORIDA  
JACKSONVILLE, FLORIDA

No. 053510

AUG. 29 89

P. O. BOX 60369  
JACKSONVILLE, FLORIDA 32236

\$ 200.00

UNION CAMP 2000000 UNION CAMP CORPORATIO  
REGULAR ACCO

PAY TO THE ORDER OF:

Dept. of Environmental Regulation  
1600 Blair Stone Road  
Tallahassee, FL 32301

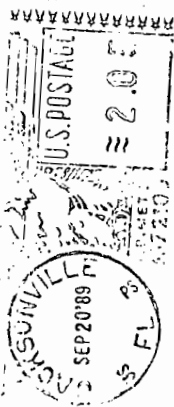
*[Signature]*  
AUTHORIZED SIGNATURE  
*[Signature]*  
AUTHORIZED SIGNATURE



**First class  
Mail**

*AIR*  
*00/03/1*

**First class  
Mail**



Clair H. Fancy, P.E.  
FL Dept. of Environmental Regulation  
Twin Towers Office Bldg.  
2600 Blair Stone Rd.  
Tallahassee, FL 32301-8241

d Associates, Inc.  
dows Way, W., Suite 104  
e, FL 32256

APPLICATION TO CONSTRUCT

AIR POLLUTION SOURCE

DECANTER TANK NO. 118

BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

Prepared by:

HUNTER SERVICES, INC.

August 30, 1989

BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

TABLE OF CONTENTS

OWNER'S LETTER

TABLE OF CONTENTS

PROFESSIONAL ENGINEER'S LETTER

APPLICATION TO CONSTRUCT AIR POLLUTION SOURCE

ATTACHMENT 1: Section II A - Process Description

ATTACHMENT 2: Section III A - Raw Materials

ATTACHMENT 3: Section III C - Calculation of Airborne  
Contaminants Emitted

ATTACHMENT 4: Section III H - Emission Stack Geometry  
and Flow Characteristics

ATTACHMENT 5: Process Flow Diagram

ATTACHMENT 6: Storage Tank Outline Diagram

ATTACHMENT 7: USGS Topographic Map: Jacksonville Quadrangle

ATTACHMENT 8: Plot Plan



# HUNTER

Architecture, Engineering, Planning and Environmental Services

Hunter Services, Inc.  
6737 Southpoint Drive South (32216-6177)  
P.O. Box 4850  
Jacksonville, Florida 32201-4850  
904/739-2000 FAX 904/731-1673

August 30, 1989  
2900073-0001-1443

Clair H. Fancy, P.E., Deputy Chief  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8341

Subject: Application to Construct Air Pollution Source  
Decanter Tank No. 118  
BBA Division  
Aroma and Terpene Chemicals  
Union Camp Corporation  
Jacksonville, Florida

Dear Mr. Fancy:

The enclosed construction permit application package has been prepared for a process decanter tank at the Union Camp Plant in Jacksonville, Florida.

Enclosed is a check for \$200.00, payable to the Florida Department of Environmental Regulation, as required by 17-4.050(a) FAC for the permit application review fee. This fee is based upon the emissions in this application of much less than 25 tons/year.

Although the enclosed application represents a modification to a major facility [17-2.510(2)(a)4 FAC], the increase in VOC emissions is calculated to be only 0.0125 tons per year. Since this increase is only a small fraction of the significant net emission increase threshold for VOCs, i.e., 40 tons/year, a New Source Review is not required.

We originally requested that this tank be exempted from permitting due to the low level of VOC emissions expected from this tank. However, in a letter from FDER to Mr. W. B. Van Duyn, dated August 2, 1989, the permit exemption was denied due to the location of the facility in an ozone non-attainment area and due to odor abatement issues.

C.H. Fancy, P.E.  
Page 2  
August 30, 1989

Although not exempt from permitting, the emissions will clearly be very low from the operation of this tank due to the installation of a conservation vent condenser. The vent condenser will be installed as a good faith effort to further reduce the minor emissions of VOC from this installation. Installation of this condenser is not required by any regulation covering this type of minor VOC source. Accordingly, we would greatly appreciate your efforts to expedite the processing of the permit.

If you have any questions whatsoever, feel free to contact me at 904/739-2000.

Very truly yours,

HUNTER SERVICES, INC.



Lloyd H. Stebbins, P.E.  
Director  
Environmental Programs

LHS/cdb

Enclosures

\$200 pd.  
9-1-89  
Receipt #117633

AC 16-169834

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Decanter Tank No. 118 [] New<sup>1</sup> [] Existing<sup>1</sup>  
APPLICATION TYPE: [] Construction [] Operation [] Modification  
COMPANY NAME: Union Camp Corporation COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Line  
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Organic Chemical Storage Tank

SOURCE LOCATION: Street 2051 N. Lane Avenue City Jacksonville  
UTM: East 427,650 Meters North 3,357,350 Meters  
Latitude 30 ° 20 ' 53 " N Longitude 81 ° 45 ' 05 " W

APPLICANT NAME AND TITLE: John M. Baggett, Resident Manager

APPLICANT ADDRESS: P.O. Box 60639, Jacksonville, Florida 32236

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

4. APPLICANT

I am the undersigned owner or authorized representative\* of Union Camp Corporation

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

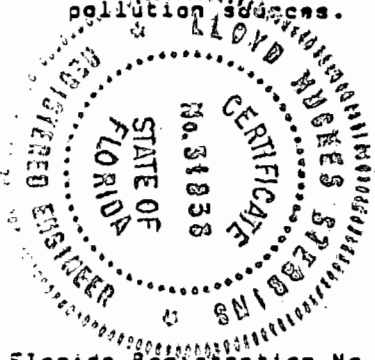
Signed: John M. Baggett  
John M. Baggett, Resident Manager  
Name and Title (Please Type)  
Date: 8/3/89 Telephone No. 904/783-2180

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

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

See Florida Administrative Code Rule 17-2.100(37) 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 *Lloyd H. Stebbins*

Lloyd H. Stebbins

Name (Please Type)

Hunter Services, Inc.

Company Name (Please Type)

P.O. Box 4943, Jacksonville, Florida 32201

Mailing Address (Please Type)

Florida Registration No. 31838 Date: 8-31-89 Telephone No. 904/739-2000

**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.

Refer to the Process Description (Attachment 1) and the Process Flow Diagram (Attachment 5).

- B. Schedule of project covered in this application (Construction Permit Application Only)  
Start of Construction October 1, 1989 Completion of Construction August 31, 1989

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

N/A

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

Does not apply.

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

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? YES  
a. If yes, has "offset" been applied? NO  
b. If yes, has "Lowest Achievable Emission Rate" been applied? NO  
c. If yes, list non-attainment pollutants. OZONE

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

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

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

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

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

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

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

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

\*The only exception is a few minor recordkeeping requirements in 40 CFR 60,  
Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels...  
Refer to Attachment 3 for details.

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

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

REFER TO ATTACHMENT 2

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Decanter Tk. 118	VOC	NA	1,733	TAB 5

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

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

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

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

REFER TO ATTACHMENT 3

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	
Decanter Tk. 118	0.075	0.329	17-2.660(2)(a)*	NA	658.6	0.329	TAB 5

<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).

\*Chapter 17-2.660 FAC adopts 40 CFR 60 by reference, including Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels...The federal rules do not apply any specific allowable emission rate. Since certain exceptions apply, Tank No. 118 is only subject to a few limited recordkeeping requirements.

J. 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)
Decanter Tank No. 118	VOC	NA-Vented to	Atmosphere	

E. Fuels

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

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

Fuel Analysis:

Percent Sulfur: NA Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

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

Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

Does not apply.

REFER TO ATTACHMENT 4

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

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ ft.  
 Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM Gas Exit Temperature: \_\_\_\_\_ °F  
 Water Vapor Content: N/A % Velocity: \_\_\_\_\_ FPS

**SECTION IV: INCINERATOR INFORMATION**

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

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

	Volume (ft) <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: \_\_\_\_\_

N/A

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

N/A

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** Does not apply.

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

Yes  No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (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

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.

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

#### A. Company Monitored Data

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

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

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

Attach all data or statistical summaries to this application.

Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

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

B. Meteorological Data Used for Air Quality Modeling

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

C. Computer Models Used

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

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

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO <sub>2</sub>	_____ grams/sec

E. Emission Data Used in Modeling

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

- F. Attach all other information supportive to the PSD review.
- G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.
- H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

ATTACHMENT 1  
SECTION II A  
PROCESS DESCRIPTION

DECANTER TANK NO. 118  
BBA DIVISION  
AROMA AND TERPENE CHEMICALS  
UNION CAMP CORPORATION  
JACKSONVILLE, FLORIDA

Tank No. 118 is used to separate a mixture of terpene oils and aqueous acid by gravity settling. A mixture of terpenes and an aqueous acid is pumped into the tank through a nozzle midway up the side of the tank. Acid is continuously drawn off the bottom and terpene oils are continuously drawn off the top layer of material in the tank. A level control system maintains a constant level in the tank to avoid "working losses" and to keep the process in continuous operation. The tank is vented to the atmosphere through a conservation vent condenser to reduce emissions and any potential for odor.

ATTACHMENT 2  
SECTION III A  
RAW MATERIALS

The utilization rate can be determined by dividing the total annual throughput for Decanter Tank No. 118 by the total annual operating hours and applying the appropriate conversion factors.

Based on 8,760 operating hours per year and a representative specific gravity of 0.80 for terpene oils, the utilization rate becomes:

$$(2,275,000 \text{ gal/yr} \times 8.34 \text{ lb/gal} \times 0.80 \text{ sp. gr.}) / (8,760 \text{ hr/yr} = 1,733 \text{ lb/hr}$$

Where,

Annual Throughput = 2,275,000 gal/yr,

Density of Water = 8.34 lbs/gal,

Specific Gravity of Terpene Oils = 0.80 and

Annual Operating Time = 8,760 hrs/yr



ATTACHMENT 3  
CALCULATION OF AIRBORNE  
CONTAMINANTS EMITTED  
DECANTER TANK NO. 118

Tank emissions result from a combination of losses due to displaced vapors from tank filling, i.e., working issues, and tank "breathing" due to changes in ambient temperatures.

Since the decanter is designed to operate at a constant level, there will be virtually no working losses. The rate of VOC emissions due to breathing losses can be calculated as described in USEPA AP-42, "Compilation of Air Pollutant Emission Factors," pages 4.3-5 through 4.3-11, Fourth Edition, 1985.

ACTUAL EMISSIONS

Calculations of Breathing Loss

Use the breathing loss equation in AP-42, page 4.3-5:

$$L_B = 2.26 \times 10^{-2} M_V \frac{P}{P_A - P}^{0.68} D^{1.73} H^{0.51} T^{0.50} F_p C K_C$$

where:

$L_B$  = Breathing Loss (lb/yr)

$M_V$  = Vapor Molecular Weight (lb/lb/mol)

$P$  = True Vapor Pressure at Bulk Storage Conditions (psia)\*

= 1.306 psia @ 80°C [without vapor condenser]

= 0.16 psia @ 27°C [with vapor condenser]

$P_A$  = Atmospheric Pressure, psia

= 14.7 psia

$D$  = Tank Diameter (ft.)

$H$  = Average Vapor Space Height (ft.)

According to AP-42, the vapor space in a cone roof is equal in volume to a cylinder which has the same base diameter as the cone and is one-third the height of the cone.

$T$  = Average Ambient Diurnal Temperature Change ( $^{\circ}\text{F}$ )

Information from National Oceanic and Atmospheric Administration (NOAA) received by telephone on 6-20-88 indicates that the Jacksonville average high temperature is  $78.7^{\circ}\text{F}$  and the average low  $57.2^{\circ}\text{F}$ . The average diurnal change, "Delta T," is therefore  $78.7 - 57.2 = 21.5^{\circ}\text{F}$ .

$F_p$  = Paint Factor from AP-42, Table 4.3-1 -- Assume that the green tanks at Union Camp are similar to medium gray in the Table. Select  $F_p = 1.58$

$C$  = Small Diameter Tank Adjustment Factor, AP-42, Figure 4.3-4 = 0.665

$K_c$  = product factor, AP-42, Page 4.3-11 = 1.0

The parameters for calculating breathing loss without and with the vent condenser functioning are listed in Table 1 followed by a tabularized calculation of respective breathing losses in Table 2. Note that the only difference is the elevated temperature of the vapors in the unlikely event of vent condenser failure.

#### Maximum Emissions

The maximum emissions rate occurs during tank loading operations due to the displacement of the vapor space in the tank as it fills. Although an instantaneous peak emissions rate could be calculated, it would be a meaningless value because the absolute VOC emissions from any individual tank is small, the tanks are filled intermittently and there will never be a time when all the tanks are filled simultaneously at peak loading rates. Consequently, the maximum emissions rate is considered to be equivalent to the actual emissions for this tank.

Allowable Emissions

Chapter 17-2.660(2)(a) FAC, adopts by reference the federal New Source Performance Standards (NSPS) found in 40 CFR 60 including Subpart Kb-- Standards of Performance for Volatile Organic Liquid Storage Vessels. However, Tank 118 must be compared to the exceptions and exemptions of Section 60.110b to determine specific rule applicability.

Decanter Tank No. 118

Since the 5,264 gallon capacity of Tank No. 118 is less than 40 m<sup>3</sup> (10,568 gallons), it is exempt from rule coverage except as specified in Section 60.116b(a) and (b). Essentially, the requirements of those subparagraphs include:

- (a) Maintain records required by Section 60.116b(c) for the life of the vessel and all other records for two years.
- (b) Maintain records showing dimensions of the storage vessel and an analysis of the capacity of the storage vessel.

**TABLE 1**  
**CALCULATION OF BREATHING LOSS**

DECANTER TANK NUMBER	FACTOR	MOLECULAR WT. OF VAPOR $M_V$ (LB/ LB MOL)	TRUE VAPOR PRESSURE $P$ (PSIA)	AVERAGE ATMOS. PRESSURE $P_A$ (PSIA)	TANK DIAMETER $D$ (FT.)	AVERAGE VAPOR SPACE HEIGHT $H$ (FT.)	AVERAGE AMBIENT DIURNAL TEMP. CHGE. $\Delta T$ ( $^{\circ}F$ )	PAINT FACTOR $F_p$	ADJUSTMENT FACTOR SMALL TANKS $C$	PRODUCT FACTOR $K_C$
118	$2.26 \times 10^{-2}$	136	1.306	14.7	8.0	2.33	21.5	1.58	0.42	1.0
118	$2.26 \times 10^{-2}$	136	0.16	14.7	8.0	2.33	21.5	1.58	0.42	1.0

**TABLE 2**  
**CALCULATION OF BREATHING LOSS (Cont'd)**

TANK	FACTOR	$M_V$	$\left(\frac{P}{P_A - P}\right)^{0.68}$	$D^{1.73}$	$H^{0.51}$	$\Delta T^{0.50}$	$F_p$	$C$	$K_C$	$\frac{L_B}{T/Y}$	LBS/YR	LBS/HR
118	$2.26 \times 10^{-2}$	136	0.205	36.5	1.54	4.64	1.58	0.42	1.0	109	0.0545	0.012
118	$2.26 \times 10^{-2}$	136	0.047	36.5	1.54	4.64	1.58	0.42	1.0	25	0.0125	0.0029

ATTACHMENT 4

SECTION III H

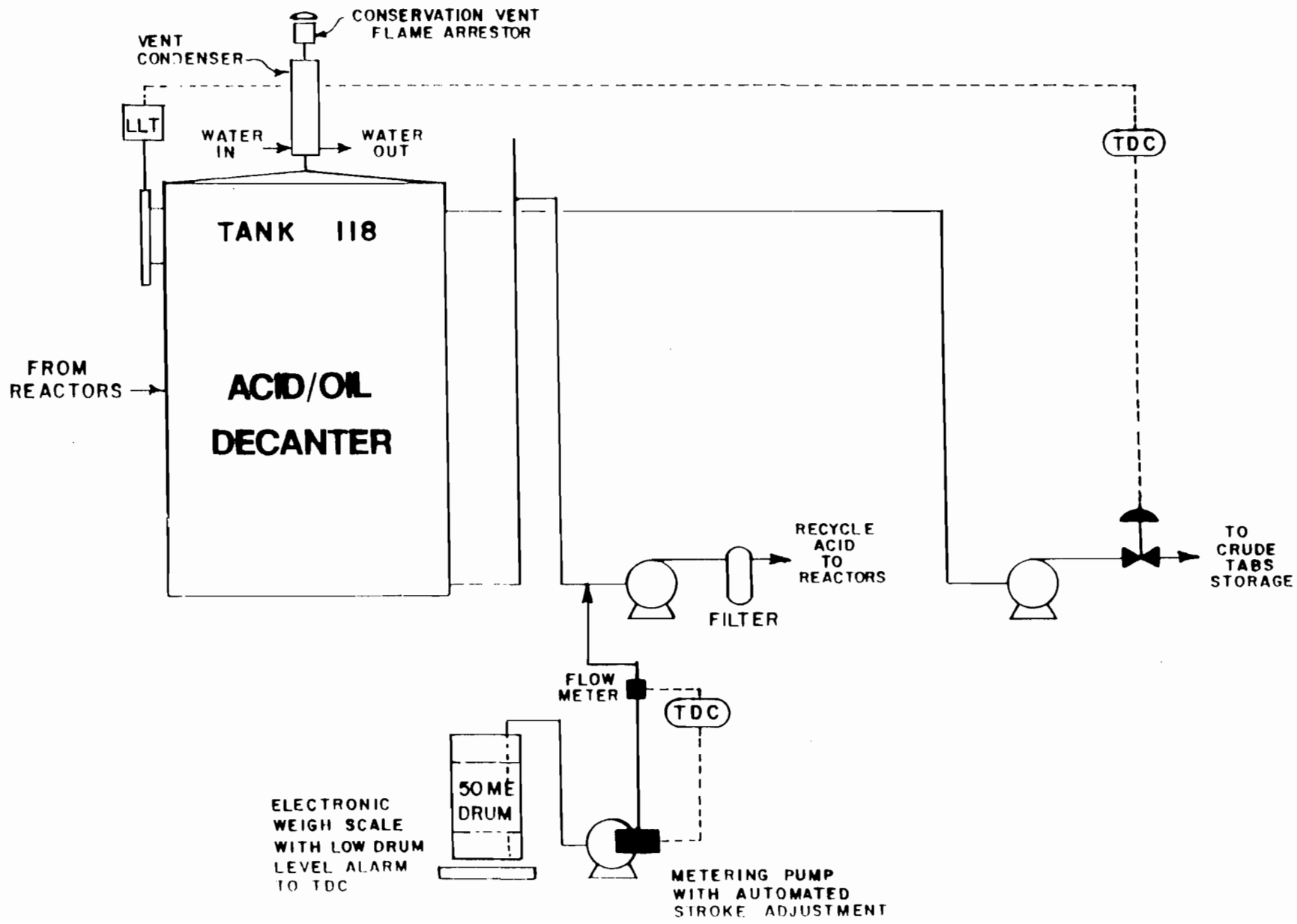
EMISSION STACK GEOMETRY AND FLOW CHARACTERISTICS

---

TANK NO.	STACK HEIGHT (FT.)	STACK DIAMETER	FLOW (ACFM)	FLOW DSCFM	EXIT TEMP. (°F)	VELOCITY (FPS)
118	17'0"	2"	Negligible		80.6	Negligible

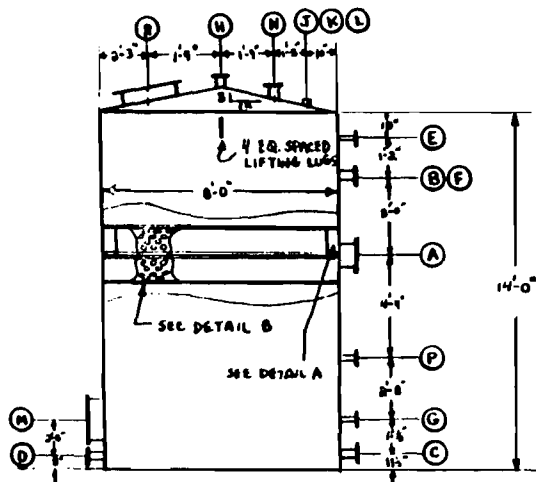
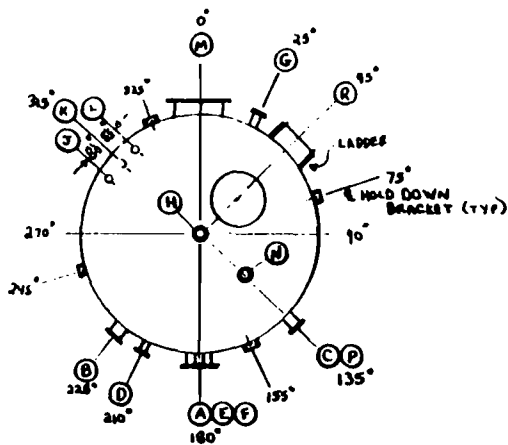
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# ACID/OIL SEPARATION AND HANDLING



BEST AVAILABLE COPY

FORM LB



NO. REQD.	SIZE	FACING	RATING	ORIENT.	SERVICE	VESSEL SPECIFICATION		SPEC. NO.
A	8"	R.F.	150#	180°	INLET	ASSOC. ENGR.		JBS222-1 A
B	4"	R.F.	150#	225°	OIL OUTLET	ASSOC. ENGR. CONTRACT NO.		PAGE 1 OF 2
C	4"	R.F.	150#	135°	ACID OUTLET	ITEM NAME: ACID/OIL DECANter		
D	3"	R.F.	150#	210°	ACID INLET	ITEM NO.	TK	NO. REQD. 1
E	1 1/2"	R.F.	150#	180°	LEVEL TRANS.	DESIGN CONDITIONS		
F	1 1/2"	R.F.	150#	180°	LEVEL TRANS.	VESSEL: ATMOS. PSIG: ° F. JACKET: PSIG: ° F.		
G	2"	R.F.	150#	25°	LEVEL SWITCH	OPERATING CONDITIONS		
H	2"	R.F.	150#	-	VENT	VESSEL: ATMOS. PSIG: ° F. JACKET: PSIG: ° F.		
J	1 1/4"	CPLG	3000#	-	LIG. LEVEL IND.	SPECIFIED CORROSION ALLOWANCE: MAK. ALLOW. W.P., PSIG		
K	1 1/4"	CPLG	3000#	315°	LIG. LEVEL IND.	VESSEL: NONE. JACKET: VESSEL: JACKET:		
L	1 1/4"	CPLG	3000#	-	LIG. LEVEL IND.	THICKNESSES		
M	30"	F.F.	STD.	0°	MANWAY	VESSEL SHELL: 3/16" TOP HEAD: 3/16" BOTTOM HEAD: 3/16"		
N	2"	R.F.	150#	-	SPARE	JKT. SHELL: JKT. TOP HD.: JKT. BTM. HD.:		
P	2"	R.F.	150#	135°	SPARE	CONSTRUCTION		
R	30"	F.F.	STD.	-	MANWAY	CODE: API 650. CODE STAMP: YES <input checked="" type="checkbox"/> NO		

ADDITIONAL NOTES

- (4) EXTERIOR OF VESSEL LADDER AND HANDRAIL SHALL BE PAINTED WITH PORTER PAINT PRIME: MEGNA PRIME 5 MILS INTERMEDIATE: MEGNA COAT 5 MILS FINAL COAT: HITHANE 2 MILS "NELLIO GREEN"
- (5) INTERMEDIATE COAT SHALL BE OF DIFFERENT COLOR THAN FINAL COAT
- (6) NO SPOT WELDS ALLOWED
- (7) ROOF SHALL BE SELF SUPPORTING
- (8) NOZZLE PROJECTION SHALL BE 6"

STRESS RELIEF: NONE	RADIOGRAPH: NONE	YES <input checked="" type="checkbox"/> NO
VESSEL SHELL MATL: 304 L SS	JOINT EFF: NONE	
VESSEL HEAD MATL: 304 L SS	JOINT EFF: NONE	
JACKET MATL: NONE	JOINT EFF:	
JACKET HEAD MATL: NONE	JOINT EFF:	
CLADDING OR LINING: NONE	BY OTHERS:	
GASKET MATL: BLUE GUARD GASKET	GASKET THICKNESS:	
EXTERNAL PIPING MATL: 304 L SS		
INTERNAL PIPING MATL: 304 L SS		
FLANGE MATL: SA 181 GR. 1	BOLTING MATL: C. STL.	
TESTING: HYDROSTATIC TEST FOR LEAKS		
INSPECTION: NONE		
NAME PLATE: NONE	SUPPORT MATL:	
INSULATION THICKNESS: 2"	(INSULATION BY OTHERS):	
INSULATION SUPPORTS REQD: YES <input checked="" type="checkbox"/> NO		
PAINTING BY: FABRICATOR <input checked="" type="checkbox"/> OTHERS		
WELDING ROD SPEC: SHELL: JACKET:		
SPECIALS AND REMARKS:		
(1) PROVIDE HANDRAIL CLIPS AND HANDRAIL WITH KICK PATE FOR OSHA - BOLTED TO CLIPS ON VESSEL		
(2) PROVIDE LADDER WITH CAGE PER OSHA BOLTED TO CLIP ON VESSEL		
(3) FABRICATOR TO OBTAIN CAP SPECIFICATION: ZBS-105-S		

CAPACITIES		
FULL CAPACITY:	5264	GALS; 82120 LBS.
S.G. OF PRODUCT:	1.52	BULK DENSITY:
ESTIMATED WEIGHTS		
WT. EMPTY:	8	LBS. WT. FULL OF PROD.: 8
WT. FULL OF WATER:	8	LBS.

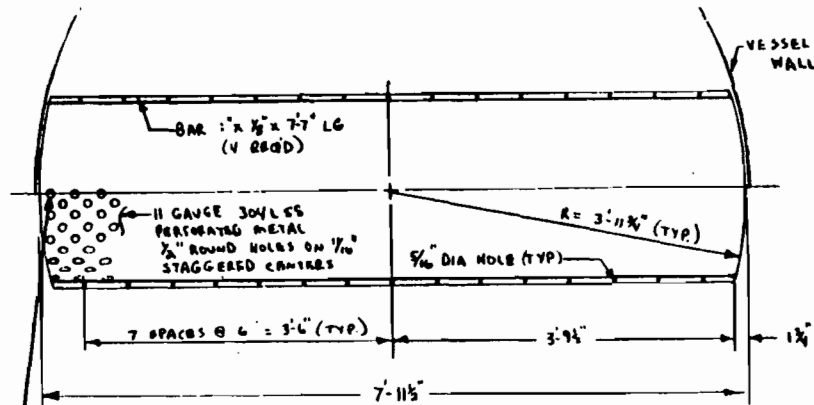
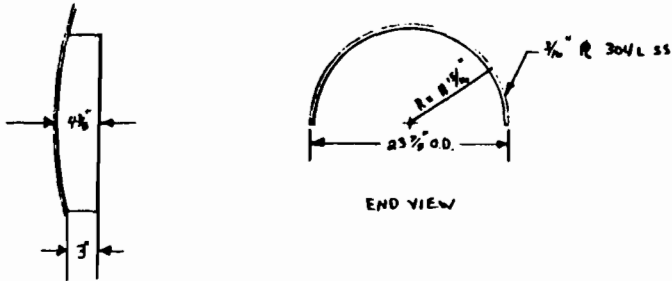
- NOTES:
1. Vendor to supply all data marked "
  2. Orientation measured clockwise from 0°. North is 0° unless noted.
  3. Nozzle projection to be 6" for nozzles 6" and smaller and 10" for nozzles 8" and larger and manways unless noted otherwise. For insulated vessels, add insulation thickness to the nozzle projection given above.

REV	DATE	REVISION DESCRIPTION	BY	CHK'D	APP'D
A	10/6/68	FOR INQUIRY	HMG		

FORM 9

**DETAIL B**

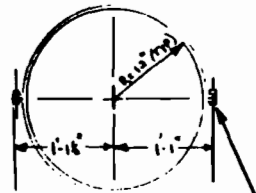
DIFFUSER PIPE SUPPORT  
(2 REQ'D)



DIFFUSER PIPE  
(TWO HALVES REQ'D)

**DETAIL A**

NOTE: DRILL 1/2" DIA. HOLE IN SUPPORT BRACKET THROUGH AN EXISTING HOLE IN DIFFUSER PIPE AS NEAR AS POSSIBLE TO THE CENTER OF THE SUPPORT BRACKET FOR 1/16-14 X 1" HEX BOLT 4 NUT W/FLAT WASHERS 304L SS (TYPICAL BOTH ENDS)



1/16-20 X 1" HEX BOLT  
4 NUT, GRADE 2 W/LOCK  
WASHER, TYP 304L SS  
(30 REQ'D)

END VIEW

NO. REQ'D	SIZE	FACING	RATING	ORIENT.	SERVICE	VESSEL SPECIFICATION		SPEC. NO.
A						ASSOC. ENGR.		JBS222-1A
B						ASSOC. ENGR. CONTRACT NO.		PAGE 2 OF 2
C						ITEM NAME		ACID/OIL DECANTER - DIFFUSER PIPE
D						ITEM NO.		NO. REQ'D 1
E						DESIGN CONDITIONS		
F						VESSEL _____ PSIG @ _____ °F JACKET _____ PSIG @ _____ °F		
G						OPERATING CONDITIONS		
H						VESSEL _____ PSIG @ _____ °F JACKET _____ PSIG @ _____ °F		
J						SPECIFIED CORROSION ALLOWANCE _____ MAX. ALLOW. W.P., PSIG		
K						VESSEL _____ JACKET _____ VESSEL _____ JACKET _____		
L						THICKNESSES		
						VESSEL SHELL _____ TOP HEAD _____ BOTTOM HEAD _____		
						JKT. SHELL _____ JKT. TOP NO. _____ JKT. BTM. NO. _____		

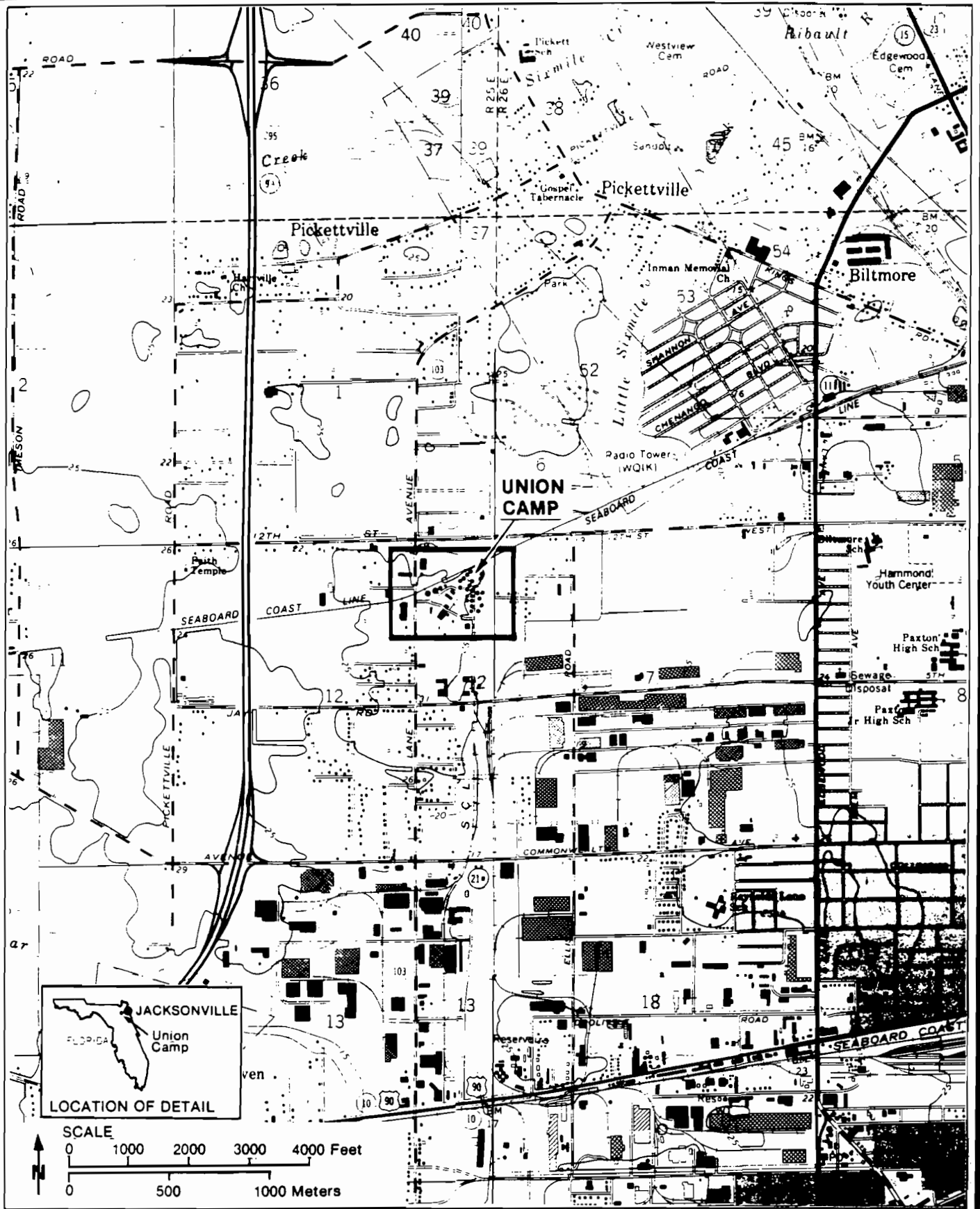
CONSTRUCTION	
CODE _____	CODE STAMP _____ YES _____ NO _____
STRESS RELIEF _____	RADIOGRAPH _____
VESSEL SHELL MATL. _____	JOINT EFF. _____
VESSEL HEAD MATL. _____	JOINT EFF. _____
JACKET MATL. _____	JOINT EFF. _____
JACKET HEAD MATL. _____	JOINT EFF. _____
CLADDING OR LINING MATL. _____	BY OTHERS _____
GASKET MATL. _____	GASKET THICKNESS _____
EXTERNAL PIPING MATL. _____	
INTERNAL PIPING MATL. _____	
FLANGE MATL. _____	BOLTING MATL. _____
TESTING _____	
INSPECTION _____	
NAME PLATE _____	SUPPORT MATL. _____
INSULATION THICKNESS _____	(INSULATION BY OTHERS) _____
INSULATION SUPPORTS REQ'D: _____	YES _____ NO _____
PAINTING BY: _____	FABRICATOR _____ OTHERS _____
WELDING ROD SPEC: _____	SHELL _____ JACKET _____
SPECIALS AND REMARKS: _____	

CAPACITIES	
FULL CAPACITY: _____	GALS; _____ LBS.
S.G. OF PRODUCT _____	BULK DENSITY _____
ESTIMATED WEIGHTS	
WT. EMPTY _____ LBS.	WT. FULL OF PROD. _____ LBS.
WT. FULL OF WATER _____ LBS.	

- NOTES:
- Vendor to supply all data marked "
  - Orientation measured clockwise from 0°. North is 0° unless noted.
  - Nozzle projection to be 6" for nozzles 6" and smaller and 10" for nozzles 8" and larger and manways unless noted otherwise. For insulated vessels, add insulation thickness to the nozzle projection given above.

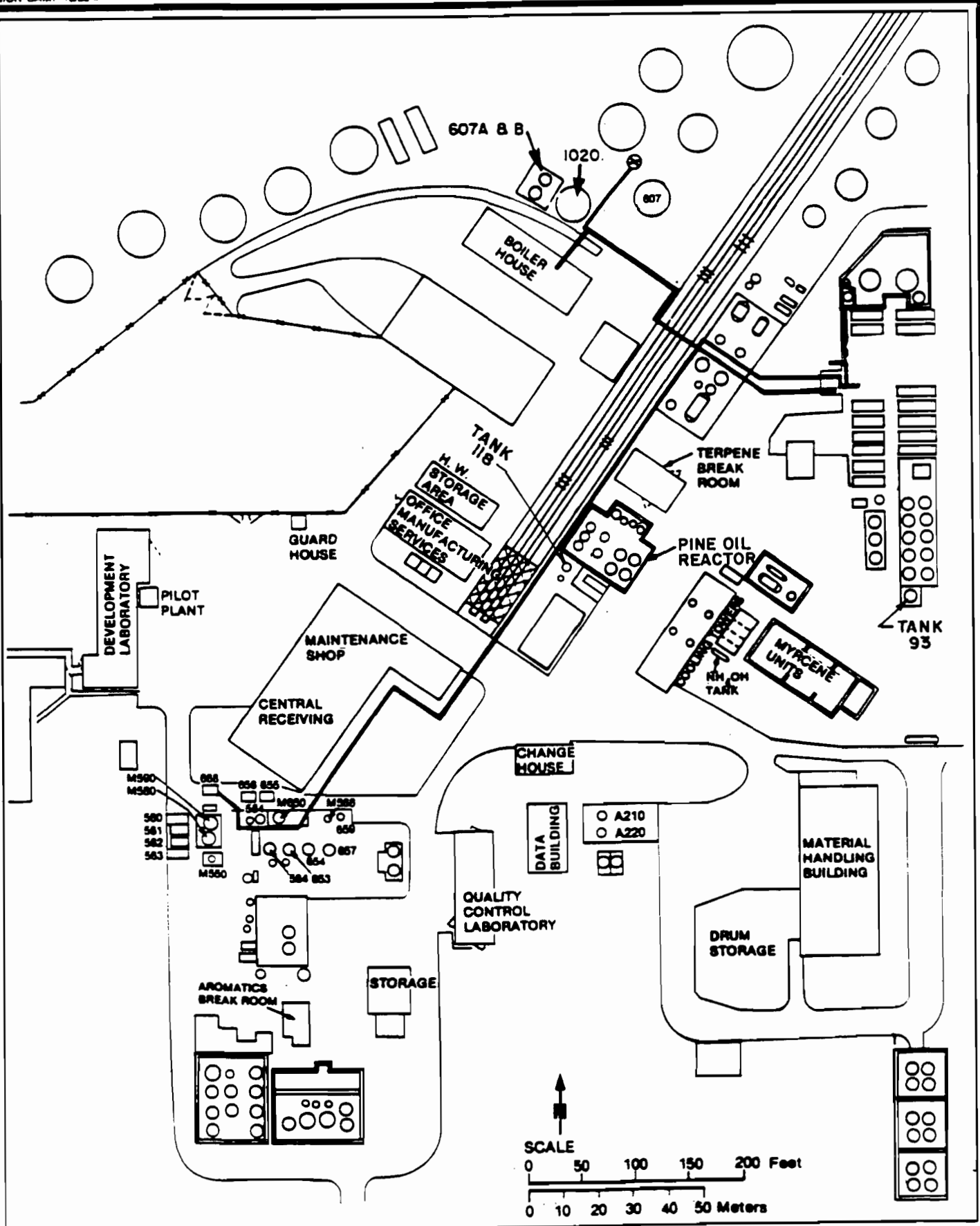
REV	DATE	REVISION DESCRIPTION	BY	CHK'D	APP'D
A	10/26/88	FOR INQUIRY	MMG		





**SITE LOCATION MAP**

**UNION CAMP**



GENERAL FACILITY LAYOUT (WEST SECTION)

UNION CAMP

*Willard's Copy*



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary

August 2, 1989

Mr. W. B. Van Duyn  
Manager, Environmental Affairs  
Union Camp Corporation  
Post Office Box 37617  
Jacksonville, Florida 32236

Dear Mr. Van Duyn:

Re: Exemption of a Decanter from Permitting Requirements

The Bio-Environmental Services Division and the Bureau of Air Quality Management has reviewed your request to exempt the proposed decanter for your Jacksonville chemical plant from the permitting requirements of F.A.C. Rules 17-2 and 17-4. It is the Bureau's conclusion that the decanter will require a new construction permit based on the following considerations.

- o The source will be located at a major VOC facility in an area designated nonattainment for ozone.
- o The source will emit VOC estimated at up to 134 lbs/yr. *109725*
- o The combination of terpene and acid may produce objectionable odors.
- o The Duval County Bio-Environmental Services has an active program to reduce objectionable odors.
- o Existing storage tanks and process equipment at this plant have been permitted by the Department, including tanks emitting less VOC than that estimated for the decanter.

Because of the character of the material handled (VOC in an ozone nonattainment area), the quality of material handled (terpene/acid have a potential to cause an objectionable odor), location (major facility for VOC in an ozone nonattainment area), and use (at a facility that is permitted by the Department), we have concluded that a construction permit is needed.

Mr. W. B. Van Duyn  
Page Two  
August 2, 1989

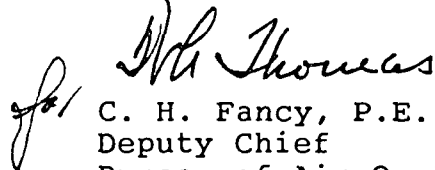
On a related issue, we understand that you are concerned with the cost of the construction and operation permits for the numerous small sources at this plant. Several ways you may be able to reduce the number of permits at this facility is to take advantage of our similiar source provisions in the revised regulation for any identical sources. You can also consolidate the permits so that all dependent storage tanks and process equipment in a specific operation are under the same construction or operation permit.

It could be that the proposed decanter can be permitted by modifying the permit for the terpene and acid storage, decanter, and product storage tanks, assuming this equipment is in dedicated service with each other. If not, separate permits will probably be needed.

If you are interesting in pursuing the consolidation of the permits, a meeting between representatives of your organization, Duval County Bio-Environmental Services, and the Department would be advisable.

If you have any questions on this matter, please write to me or call Willard Hanks at (904)488-1344.

Sincerely,



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

CHF/WH/s

cc: William Stewart, NE District  
Ron Roberson, BESD  
Lloyd Stebbins, P.E.

**DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES**  
Bio-Environmental Services Division  
Air and Water Pollution Control



RECEIVED  
JUL 25 1989  
DER-BAQM

July 21, 1989

Mr. Willard M. Hanks  
Department of Environmental Regulations  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301-8241

Subject: General Exemption From Air Permitting Requirements  
Requested By Union Camp Corporation

Dear Mr. Hanks:

Bio-Environmental Services Division (BESD) has received additional information from Union Camp Corporation (UCC) regarding the Decanter for which an exemption from air permitting requirements has been requested. The information received has addressed those questions which were submitted to the Department of Environmental Regulations (DER) in BESD's correspondence dated May 31, 1989. UCC has demonstrated that the Decanter as described will function similarly to an existing unit. The existing unit is not permitted.

BESD recommends that the proposed Decanter not be required to have an Air Construction Permit at this time. BESD proposes that the Decanter be investigated after construction is complete and normal operating status has been attained. An evaluation at that time will yield more conclusive data with respect to air and odor emissions. BESD does not recommend that a general exemption be granted.

Please contact the undersigned at (904) 630-3666 if additional information is required.

Very truly yours,

Ronald L. Roberson  
Associate Pollution Control Engineer

RLR/ecr

cc: Mr. Bill Stewart, P.E., DER  
BESD File 2360-A  
Disc 1, 13  
BESD Air Permitting File  
Mr. Bill VanDuyn, UCC



DEPARTMENT OF ENVIRONMENTAL REGULATION

**ROUTING AND TRANSMITTAL SLIP**

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)

*BT*

Initial

Date

2.

Initial

Date

3.

Initial

Date

4.

Initial

Date

REMARKS: *Another controversial issue*

① *Should one VOL storage tank at Union Camp be exempt from permitting.*

② *Correspondence attached*  
 A. *Union Camp request for exempt.*  
 B. *BESD letter recommending denial*  
 C. *BAQM draft denial*  
 D. *Winter reply to BESD*  
*Concerns*  
 E. *BESD latest recommendation that no permit be required at this time.*

③ *Need policy / guidance on how BAQM should handle these requests*  
*Let's discuss when you have time*

INFORMATION

Review & Return

Review & File

Initial & Forward

DISPOSITION

Review & Respond

Prepare Response

For My Signature

For Your Signature

Let's Discuss

Set Up Meeting

Investigate & Report

Initial & Forward

Distribute

Concurrence

For Processing

Initial & Return

FROM:

*lwh*

DATE

PHONE



RECEIVED

JUL 10 1989

DER-BAQM

BBA DIVISION  
AROMA & TERPENE  
CHEMICALS

P.O. BOX 37617, JACKSONVILLE, FLA. 32236

TELEPHONE (904) 783-2180 · TELEX 808561

June 21, 1989

7-11-89 Ron Roberson  
does not want exemption  
or permit at this time,  
Will reply in about 1 week.  
wmd

Mr. Ronald L. Roberson  
Bio-Environmental Services Division  
Towncentre, Suite 412  
421 W. Church Street  
Jacksonville, Florida 32202

Subject: **General Exemption from Air Permitting Requirements**  
**Decanter**  
**BBA Division**  
**Aroma and Terpene Chemicals**  
**Union Camp Corporation**  
**Jacksonville, Florida**

Re: Letter from R. L. Roberson, BESD, to  
W. Hanks, FDER-CAPS, dated May 31, 1989

Dear Mr. Roberson:

Regarding the concerns expressed in your letter to Willard Hanks, I have enclosed a typical analysis of the crude TABS which forms the oil layer in Decanter Tank No. 118. Note particularly that there is only about 35 PPM sulfur in the oil layer; this is an extremely small liquid layer concentration. The crude TABS is a low sulfur feedstock; it has previously been desulfurized to the maximum extent possible. It is used for odor grade products which are manufactured and sold for their pleasurable fragrance characteristics. As a result, even a hint of malodor in these materials is intolerable from a quality control perspective. Any trace of malodor would render a costly product unmarketable.

As a practical matter, the 35 ppm sulfur stays in the product. Further, the crude TABS oil layer is predominantly alpha-terpinene, gamma-terpinene, and iso-terpinolene, all of which have very low volatility.

To alleviate concerns regarding maintaining a constant level in the decanter, we have attached a sketch of the acid/oil separation and handling system. This system is specifically designed to maintain a constant level. It is clear from the sketch that the liquid level cannot rise higher than the oil outlet nozzle near the top of the tank. The oil is continuously pumped to crude TABS storage. The pump is tied to a control system which responds to small level changes near the top of the tank.

Mr. Ronald Roberson  
Page 2  
June 20, 1989

The oil level cannot drop below the acid outlet nozzle because the acid pump is tied into a tall vertical inverted U-tube with a syphon breaker at the top. In the event that the pump tries to draw liquid below the top of the inverted U-tube, an open stand pipe (syphon breaker) will allow air to enter the line. At that point, no further acid can be pumped from the tank, until the level rises a small amount, sufficient to refill the inverted U-tube.

We appreciate your concerns and trust that we have satisfactorily addressed these issues. Accordingly, we respectfully request that you reconsider the views expressed in your letter.

Very truly yours,

UNION CAMP CORPORATION

William B. Van Duyn

WBVD/cdb

Enclosure

cc: Willard Hanks, FDER-CAPS



ATTACHMENT 1

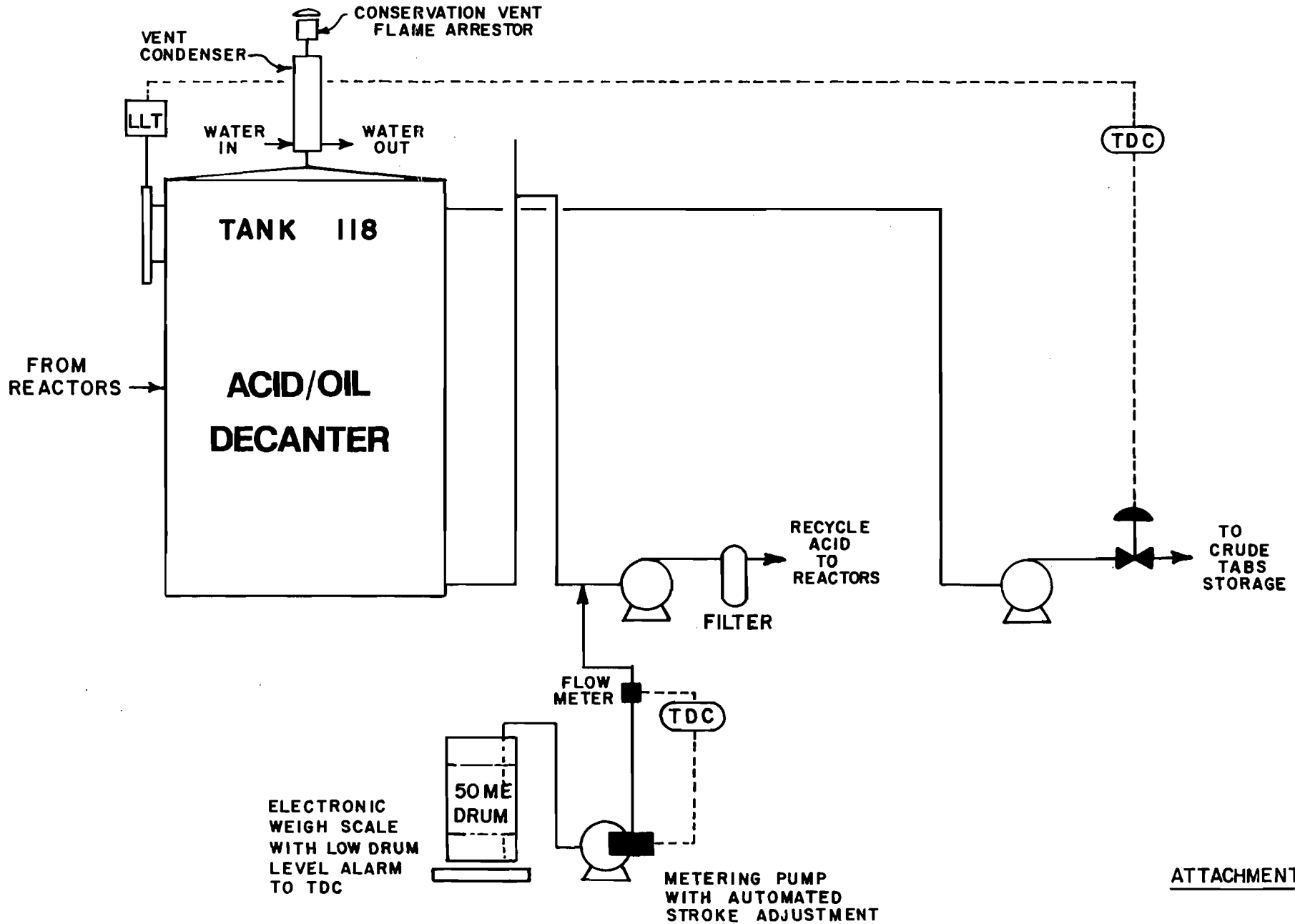
OIL LAYER IN TANK 118 DECANTER

TYPICAL CRUDE TABS

ALPHA PINENE	0.2%
CAMPHENE	4.9%
1, 4 CINEOLE	0.2%
A-TERPINENE	40.5%
P-CYMENE	0.7%
1,8 CINEOLE	0.7%
LIMONENE	0.7%
G-TERPINENE	15.5%
1,3,8-P-MENTHADIENE	3.7%
ISO TERPINOLENE	24.4%
TERPINOLENE	2.8%
MISC. ALCOHOLS	1.5%
HIGH BOILERS	2.7%
OTHERS	2.3%
SULFUR	35 PPM

The crude TABS oil layer is predominantly alpha-terpinene, gamma-terpinene, and iso-terpinolene which have very low volatility and odor. The crude TABS as a mixture has little odor. The sulfur content is very low and is largely in the form of very non-volatile heavy organic sulfur compounds not removed in the turpentine fractionation.

# ACID/OIL SEPARATION AND HANDLING



file copy

6-1-89  
Jacksonville

RECEIVED  
JUN 2 1989



DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control

DER - BA  
May 31, 1989

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

**RE: UNION CAMP PERMIT EXEMPTION REQUEST**

Dear Mr. Hanks:

Bio-Environmental Services Division (BESD) submits the following comments for your consideration in determining the permitting status of Union Camp Corporation's (UCC) proposed decanter:

1. BESD strongly recommends that UCC's request for a permit exemption be denied. UCC is a major facility and one of the major contributors to the odor problem in Jacksonville. The request does not address the potential emissions or control of odorous compounds and even though VOC emissions may be low, the control and monitoring of such emissions through the permitting process is imperative.
2. UCC has described the system as one wherein a constant level will be maintained and working losses of VOC's would be negligible. What control measures will be implemented to assure a constant level in the proposed decanter?

BESD appreciates the opportunity given to comment on UCC's request. However, BESD urges the Department to instruct UCC and others within BESD's jurisdiction to submit their request to BESD. BESD should take the lead in environmental matters of Duval County. BESD will refer to DER those issues which have not been delegated.

Please contact the undersigned if additional information is required.

Very truly yours,

*Ronald L. Roberson*

Ronald L. Roberson  
Associate Engineer

RLR/rlj

cc: Mr. Bill Stewart, P.E., DER  
BESD Air Permitting File  
BESD File 2360-A  
(Disc: 1/31)  
Mr. Bill Van Duyn - Union Camp

*cy. W. Hamba  
CHF/ST*



AREA CODE 904 / 630-3666 — NIGHTS/WEEKENDS - 630-3685  
421 WEST CHURCH STREET, SUITE 412 / JACKSONVILLE, FLORIDA 32202-4111



RECEIVED

MAY 5 1989

DER-BA...

BBA DIVISION  
AROMA & TERPENE  
CHEMICALS

P.O. BOX 37617, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

May 2, 1989

C. H. Fancy, PE, Deputy Chief  
Bureau of Air Quality Management  
Florida Department of  
Environmental Regulation  
Twin Towers Office Building  
1600 Blairstone Road  
Tallahassee, Florida 32301

Subject: General Exemption from Air Permitting Requirements  
Decanter  
BBA Division  
Aroma and Terpene Chemicals  
Union Camp Corporation  
Jacksonville, Florida

Dear Mr. Fancy:

Union Camp plans to install a new decanter to be known as tank 118. The device resembles a storage tank as indicated in the attached sketch; however, it differs from a storage tank because it is designed to operate with liquid at a constant level.

In this case, a mixture of terpene oils and acid is pumped into the tank through a nozzle midway up the side of the tank. Acid is continuously drawn off the bottom and terpene oils are continuously drawn off the top. Since the operation is constant, the liquid level is always at the oil outlet nozzle. Consequently, there are virtually no working losses.

Although breathing losses are very small, a vent condenser has been added to the decanter design to further reduce losses. Even in the unlikely event of vent condenser failure, breathing losses will still be very small. Nevertheless, the breathing losses have been calculated both ways for your review, as indicated in Attachment 1.

The enclosed excerpts from FAC 17-4.040 indicate a series of exemptions from permitting requirements including the general exemption specified in FAC 17-4.040(1)(b):

C. H. Fancy, PE, Deputy Chief  
May 2, 1989  
Page 2

Any existing or proposed installation which the Department shall determine does not or will not cause the issuance of air or water contaminants in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified. Such a determination is agency action and is subject to Chapter 120, F.S. Such determination shall be made in writing and filed by the Department as a public record. Such determination may be revoked if the installation is substantially modified or the basis for the exemption is determined to be materially incorrect.

Accordingly, Union Camp hereby submits an application for a general exemption from the permitting requirements of FAC 17-4.

The following information is provided to support the request for a general permit exemption:

The VOC losses are negligible. The decanter is designed with a vapor condenser which will reduce losses to only 25 lbs/yr, i.e., 0.0125 TPY or 0.0029 lbs/hr.

In the unlikely event of vent condenser failure, the VOC emissions are still only 109 lbs/yr, i.e., 0.0545 TPY or 0.012 lbs/hr.

Since the quantities of materials vaporized are extremely small, we respectfully request that the general exemption be granted.

There is nothing environmentally unique about the decanter and the corresponding emissions are clearly very low. However, any undue permitting delay will create an operating hardship on the plant. Accordingly, we would greatly appreciate your efforts to expedite the processing of the permit exemption.

C. H. Fancy, PE, Deputy Chief  
May 2, 1989  
Page 3

If you have any further questions or require additional information, please do not hesitate to call me at 904/783/2180.

Very truly yours,

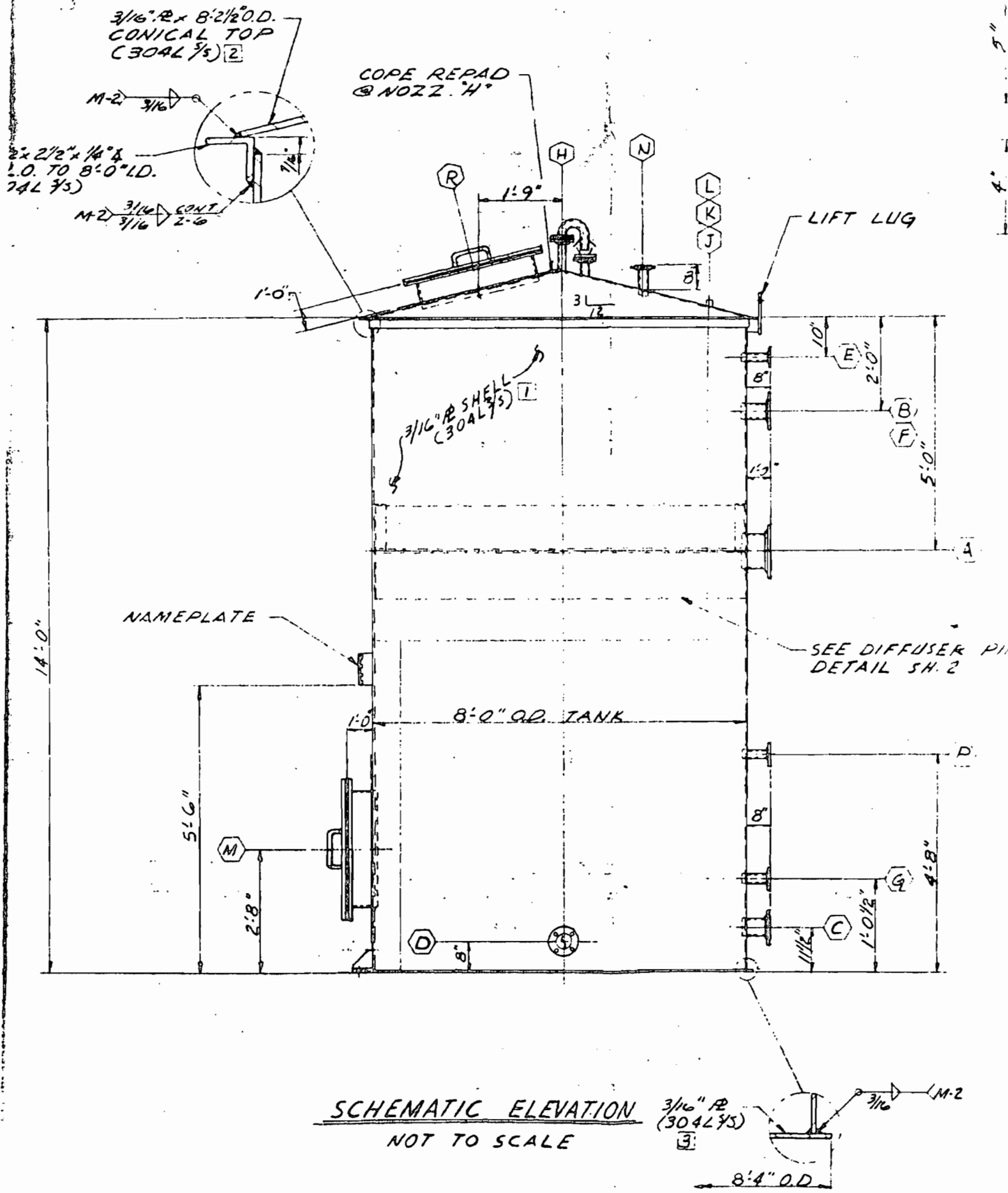
A handwritten signature in black ink, appearing to read "W. B. Van Duyn". The signature is fluid and cursive, with a large loop for the letter 'V'.

W. B. Van Duyn  
Manager, Environmental Affairs

WBV/lld  
Enclosures

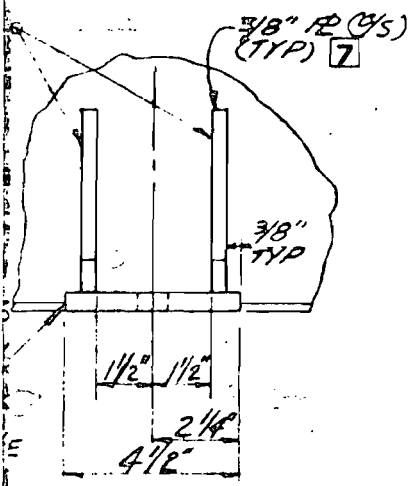
NEWTANK.D1

cc: Lloyd Stebbins, Hunter Env.Svs.



NOZZLE SCHEDULE TK 1

NO. NOZZ.	MK	SIZE	RATING	PACING	NOZZLE NECK	SERVICE
1	A	8"	150 <sup>PSI</sup>	R.F.S.Q.	5/405 PIPE	INLET
1	B	4"	"	"	"	OIL OUTLET
1	C	4"	"	"	"	ACID OUTLET
1	D	3"	"	"	"	ACID. INLET
1	E	1 1/2"	"	"	"	LEV. TRANS.
1	F	1 1/2"	"	"	"	LEV. TRANS.
1	G	2"	"	"	"	LEV. SWITCH
1	H	2"	"	"	"	VENT
1	J	1 1/4"	3000 <sup>PSI</sup>	—	SCR'D FULL CPLG.	LIQ. LEV. IND.
1	K	1 1/2"	"	—	"	LIQ. LEV. IND.
1	L	1 1/4"	"	—	"	LIQ. LEV. IND.
1	M	30"	API 650	F.F.	SEE DETAIL	MANWAY
1	N	2"	150 <sup>PSI</sup>	R.F.S.Q.	5/405 PIPE	SPARE
1	P	2"	"	"	"	SPARE
1	R	30"	API 650	F.F.	SEE DETAIL	MANWAY



TAIL

R (304L 1/2) (TYP.)

1/8" HOLES EQUALLY PACED TO STRADDLE 'S. (24) NOZZ. "R" (42) NOZZ. "M"

S.M. ABOUT

(24) 3/4" x 3" LG STUDS MINUS NOZZ. "R"  
(42) 3/4" x 3" LG STUDS MINUS NOZZ. "M"

1/4" R (1/2) NOZZ. "R" (NO MACH.)

1/2" R (1/2), 3/8" THK AFTER MACH. NOZZ. "M"

THK x 30 3/8" ID x 32 3/8" OD (M)  
THK x 30 3/8" ID x 32 3/8" OD (R)

1/4" R (1/2) NOZZ. "R" (NO MACH.)

1/2" R (1/2), 3/8" THK AFTER MACH. NOZZ. "M"

REINF. R. (304L 1/2)

GENERAL NOTES

1. VESSEL TO BE FABRICATED IN ACCORDANCE WITH THE LATEST EDITION OF THE API 650

2. CODE STAMP: NONE

3. CUSTOMER SPECIFICATION:

4. CUSTOMER INSPECTION:

5. DESIGN DATA:

DESIGN PRESSURE  
DESIGN TEMPERATURE  
HYDROSTATIC TEST PRESSURE  
RADIOGRAPH  
CORROSION ALLOWANCE  
CAPACITY  
HEAT TREATMENT

	VESSEL	JACKET/COM.
DESIGN PRESSURE	ATM. PSIG	PSIG
DESIGN TEMPERATURE	AMB °F	°F
HYDROSTATIC TEST PRESSURE	FULL WATER PSIG	PSIG
RADIOGRAPH	NONE	
CORROSION ALLOWANCE	0	
CAPACITY	5264	GAL.
HEAT TREATMENT	NONE	

6. ESTIMATE WEIGHT: 6257# EMPTY 50/85# FULL OF WATER

7. MATERIALS:

SHELL  
HEADS  
FLANGED/COUPLES  
PIPE  
FITTINGS  
SUPPORTS  
COLTING (UNLESS NOTED)  
STRUCTURAL  
GASKETS

	VESSEL	JACKET/COM.
SHELL	SA-240-304L	
HEADS	SA-240-304L	
FLANGED/COUPLES	SA-181-1/2SA-181F-304L	
PIPE	SA-312TP-304L	
FITTINGS	—	
SUPPORTS	—	
COLTING (UNLESS NOTED)	CLIP ON TO BE ELECTRO DEPOSITED A-307	
STRUCTURAL	—	
GASKETS	BLUBGUARD GASKET	



ATTACHMENT 1  
CALCULATION OF AIRBORNE  
CONTAMINANTS EMITTED  
DECANTER TANK NO. 118

Tank emissions result from a combination of losses due to displaced vapors from tank filling, i.e. working issues, and tank "breathing" due to changes in ambient temperatures.

Since the decanter is designed to operate at a constant level, there will be virtually no working losses. The rate of VOC emissions due to breathing losses can be calculated as described in USEPA AP-42, "Compilation of Air Pollutant Emission Factors," pages 4.3-5 through 4.3-11, Fourth Edition, 1985.

**ACTUAL EMISSIONS**

**Calculations of Breathing Loss**

Use the breathing loss equation in AP-42, page 4.3-5:

$$L_B = 2.26 \times 10^{-2} M_V \left( \frac{P}{P_A - P} \right)^{0.68} D^{1.73} H^{0.51} T^{0.50} F_p C K_c$$

where:

$L_B$  = Breathing Loss (lb/yr)

$M_V$  = Vapor Molecular Weight (lb/lb mol)

$P$  = True Vapor Pressure at Bulk Storage Conditions (psia)\*  
= 1.306 psia @ 80°C [without vapor condenser]  
= 0.16 psia @ 27°C [with vapor condenser]

---

\*Although any of several different terpene oils may pass through the decanter, alpha pinene is used as a surrogate for this calculation because it has the highest vapor pressure and represents the worst case, i.e., the greatest possible emissions.

$P_A$  = Atmospheric Pressure, psia  
= 14.7 psia

$D$  = Tank Diameter (ft.)

$H$  = Average Vapor Space Height (ft.)

According to AP-42, the vapor space in a cone roof is equal in volume to a cylinder which has the same base diameter as the cone and is one-third the height of the cone.

$T$  = Average Ambient Diurnal Temperature Change ( $^{\circ}\text{F}$ )

Information from National Oceanic and Atmospheric Administration (NOAA) received by telephone on 6-20-88 indicates that the Jacksonville average high temperature is  $78.7^{\circ}\text{F}$  and the average low  $57.2^{\circ}\text{F}$ . The average diurnal change, "Delta T," is therefore  $78.7 - 57.2 = 21.5^{\circ}\text{F}$ .

$F_p$  = Paint Factor from AP-42, Table 4.3-1--Assume that the green tanks at Union Camp are similar to medium gray in the Table. Select  $F_p = 1.58$

$C$  = Small Diameter Tank Adjustment Factor, AP-42, Figure 4.3-4 = 0.665

$K_c$  = product factor, AP-42, Page 4.3-11 = 1.0

The parameters for calculating breathing loss without and with the vent condenser functioning are listed in Table 1 followed by a tabularized calculation of respective breathing losses in Table 2. Note that the only difference is the elevated temperature of the vapors in the unlikely event of vent condenser failure.

TABLE I  
CALCULATION OF BREATHING LOSS

DECANTER TANK NUMBER	FACTOR	MOLECULAR WT. OF VAPOR $M_V$ (LB/ LB MOL)	TRUE VAPOR PRESSURE P (PSIA)	AVERAGE ATMOS. PRESSURE $P_A$ (PSIA)	TANK DIAMETER D (FT.)	AVERAGE VAPOR SPACE HEIGHT H (FT.)	AVERAGE AMBIENT DIURNAL TEMP. CHGE. $\Delta T$ ( $^{\circ}F$ )	PAINT FACTOR $F_p$	ADJUSTMENT FACTOR SMALL TANKS C	PRODUCT FACTOR $K_C$
118	$2.26 \times 10^{-2}$	136	1.306	14.7	8.0	2.33	21.5	1.58	0.42	1.0
118	$2.26 \times 10^{-2}$	136	0.16	14.7	8.0	2.33	21.5	1.58	0.42	1.0

TABLE 2  
CALCULATION OF BREATHING LOSS (Cont'd)

TANK	FACTOR	$M_V$	$\left(\frac{P}{P_A - P}\right)^{0.68}$	$D^{1.73}$	$H^{0.51}$	$\Delta T^{0.50}$	$F_p$	C	$K_C$	$L_B$		
										LBS/YR	T/Y	LBS/HR
118	$2.26 \times 10^{-2}$	136	0.205	36.5	1.54	4.64	1.58	0.42	1.0	109	0.0545	0.012
118	$2.26 \times 10^{-2}$	136	0.047	36.5	1.54	4.64	1.58	0.42	1.0	25	0.0125	0.0029

## PART I: GENERAL

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PART I: GENERAL

17-4.001 Scope of Part I. This Part sets forth procedures on how to obtain a permit from the State of Florida Department of Environmental Regulation. This Part also provides requirements and procedures for the issuance, denial, renewal, extension, transfer, modification, suspension, and revocation of any permit required by the Department. This Part shall not preclude the application of any other permit requirements or procedures for certain types of facilities as contained in other chapters of Title 17.

Specific Authority: 403.021, 403.031, 403.061, 403.088, F.S.

Law Implemented: 403.021, 403.031, 403.061, 403.087, 403.088, F.S.

History: New 5-17-72, Amended 8-31-88, Formerly 17-4.01.

17-4.020 Definitions. When used in this Chapter, unless the context clearly indicates otherwise, the following words shall mean:

- (1) "Commission" is the State of Florida Environmental Regulation Commission.
- (2) "Construction permit" is the legal authorization granted by the Department to construct, expand, modify, or make alterations to any installation and to temporarily operate and test such new or modified installations.
- (3) "Department" is the State of Florida Department of Environmental Regulation.
- (4) "Installation" is any structure, equipment, facility, or appurtenances thereto, operation or activity which is or may be a source of pollution as defined in Chapter 403, F.S. Installation includes dredging and filling as these terms are defined in Section 403.911, F.S.
- (5) "Operation permit" is the legal authorization granted by the Department to operate or maintain any installation for a specified period of time.
- (6) "Temporary operation permit" is the legal authorization limited to a specified time granted by the Department to operate, maintain, construct, modify, expand, or make alterations to any installation in accordance with Section 403.088, F.S.
- (7) "Permit condition" is a statement or stipulation which is issued with a permit and which must be complied with.
- (8) "Permit" is the legal authorization to engage in or conduct any construction, operation, modification, or expansion of any installation, structure, equipment, facility, or appurtenances thereto, operation, or activity which will reasonably be expected to be a source of pollution.
- (9) "Secretary" is the Secretary of the Department.

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**PART I: GENERAL**

Specific Authority: 403.061, 403.805, F.S.

Law Implemented: 403.021, 403.031, 403.061, 403.087, 403.088, 403.802, 403.817, F.S.

History: New 3-4-72, Revised 5-17-72, Amended 6-10-75; Joint Administrative Procedures Committee Objection Filed - See FAW Vol. 1, No. 28, 1-12-76; Joint Administrative Procedures Committee Objection Withdrawn - See FAW Vol. 3, No. 30, 7-29-77, Amended 3-11-81, 12-10-84, 3-18-86, 8-31-88, Formerly 17-4.02.

**17-4.021 Transferability of Definitions.** Definitions in other chapters of the Department's rules may be used to clarify the meaning of terms used in this Chapter unless the terms are defined in Section 17-4.020, F.A.C., or unless transfer of such definition would defeat the purpose or alter the intended effect of the provisions of this Chapter.

Specific Authority: 403.061, 403.062, 403.087, 403.504, 403.704, 403.804, 403.805, F.S.

Law Implemented: 403.021, 403.061, 403.087, 403.088, 403.141, 403.161, 403.182, 403.502, 403.702, 403.708, F.S.

History: New 3-1-79, Amended 8-31-88.

**17-4.022 Determination of the Landward Extent of Surface Waters of the State.**

Specific Authority: 403.061, 403.805, F.S.

Law Implemented: 403.021, 403.031, 403.061, 403.087, 403.088, 403.802, 403.817, F.S.

History: Amended 10-1-84, 10-16-84, Formerly 17-4.02(17), Transferred to 17-3.022.

**17-4.030 General Prohibition.** Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, constructed, expanded, or modified without the appropriate and currently valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.

Specific Authority: 403.021, 403.031, 403.061, 403.088, F.S.

Law Implemented: 403.021, 403.031, 403.061, 403.087, 403.088, F.S.

History: New 3-4-70, Revised 5-17-72, Amended 8-31-88, Formerly 17-4.03.

**17-4.040 Exemptions.**

(1) The following installations are exempted from the permit requirements of this Chapter. The following exemptions do not relieve any installation from any other requirements of Chapter 403, F.S., or rules of the Department. Other installations may be exempted under other chapters of Title 17.

## PART I: GENERAL

(a) Structural changes which will not change the quality, nature or quantity of air and water contaminant emissions or discharges or which will not cause pollution.

(b) Any existing or proposed installation which the Department shall determine does not or will not cause the issuance of air or water contaminants in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified. Such a determination is agency action and is subject to Chapter 120, F.S. Such determination shall be made in writing and filed by the Department as a public record. Such determination may be revoked if the installation is substantially modified or the basis for the exemption is determined to be materially incorrect.

(2) These exemptions do not apply to the discharge to waters of the state from any article, machine, equipment, contrivance or their exhaust system, which contains water-borne radioactive material in concentrations above the natural radioactive background concentration in the receiving water.

Specific Authority: 403.061, 403.805, F.S.

Law Implemented: 403.021, 403.031, 403.061, 403.087, 403.088, 403.802, 403.805, 403.813, F.S.

History: Formerly 17-4.03(2), F.A.C., New 3-4-72, Revised 5-17-72, Amended 8-7-73, 6-10-75, 10-26-75, 7-8-76, 7-13-78, 3-1-79; Joint Administrative Procedures Committee Objection Withdrawn - See FAW Vol. 3, No. 30, 7-29-77; Amended 3-11-81, 7-8-82, 3-31-83, 3-15-84, 12-10-84, 5-8-85, 3-18-86, 8-31-88, Formerly 17-4.04.

#### 17-4.050 Procedure to Obtain Permit; Application.

(1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.

(2) All applications and supporting documents shall be filed in quadruplicate with the Department.

(3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, or of a public drinking water supply, shall be in accordance with good professional engineering practices pursuant to Chapter 471, F.S. Therefore, all applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except when the applicant is a salaried officer of or, a salaried engineer employed by the United States government engaged within the State in the practice of professional engineering solely for the United States government, or where professional engineering is not required by Chapter 471, F.S.

Check Sheet

Company Name: Union Camp Corporation

Permit Number: AC16-104157

PSD Number: \_\_\_\_\_

Permit Engineer: \_\_\_\_\_

**Application:**

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

**Cross References:**

- AC16-055595
- AD16-082845
- 118425
- 119890

**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**

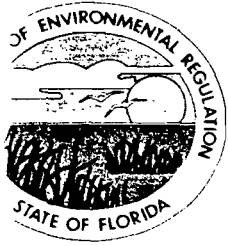
**Determination:**

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

**Post Permit Correspondence:**

- Extensions/Amendments/Modifications
- Other





## Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

February 10, 1989

Mr. William B. Van Duyn  
Manager, Environmental Affairs  
Union Camp Corporation  
P. O. Box 37617  
Jacksonville, Florida 32236

Dear Mr. Van Duyn:

Re: Fuel Restrictions for Boilers Nos. 2 and 3 and Myrcene  
Unit "E".

Your request to amend the permits for the reference sources has been reviewed by the Bureau of Air Quality Management. The Department can amend a permit if the change complies with all applicable regulations and does not increase emissions of any pollutant. A change to a permit that will authorize an increase in emissions is a modification, by definition (F.A.C. 17-2.100(119)), and requires the issuance of a new permit to construct. Any new permit issued for a modification of an existing source must require compliance with all current regulations.

The Bio-Environmental Services Division (BESD) has given Union Camp Corporation as much of your requested changes as the regulation allow. They have agreed to changes to the operation permits, including the use of No. 2 fuel oil with 0.2% sulfur, provided the emissions from the sources do not increase. Where Union Camp's request would result in an increase in emissions, BESD has correctly directed you to submit an application for permit to construct to the Bureau.

Natural gas is considered a very clean fuel. Substitution of the liquid fuels mentioned in your January 10, 1989, letter would be expected to increase emissions. Its higher sulfur contents would increase sulfur dioxide emissions. We would also want to compare the emissions of the other criteria pollutants (particulate matter, NO<sub>x</sub>, VOC, etc.) and would expect the emissions from some of these pollutants to increase.

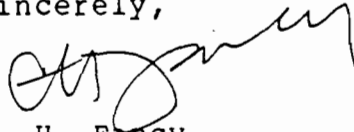
Some relief in the sulfur content and restriction on fuel uses in the three referenced sources may be available, although it is unlikely that we would approve the use of No. 6 fuel oil with 2.5% sulfur. We suggest you submit applications for permits to construct (modify) these three sources that includes a complete BACT recommendation (F.A.C. 17-2.630) for the two

Mr. William B. Van Duyn  
Page 2  
February 10, 1989

boilers, the change in potential emissions (F.A.C. 17-2.500(2)(e)3.) for all criteria pollutants emitted by these sources, and, should there be a significant net emissions increase of any pollutant, the information required in F.A.C. 17-2.500 to determine compliance with the prevention of significant deterioration regulations.

If you have any additional questions on this matter, please write to me or call Willard Hanks at (904) 488-1344. If you wish to pursue this matter, a preapplication meeting at the Department's office in Tallahassee is advisable.

Sincerely,



C. H. Fancy  
Deputy Chief  
Bureau of Air Quality  
Management

CHF/plm

Copy: Bill Stewart, NE Dist.  
Ronald Roberson, BESD

TO: Bill Thomas  
FROM: C Fancy

DATE DUE: 2-10-89

DATE: 1/28/89

DATE COMPLETED: \_\_\_\_\_

SUBJ: Union Camp letter received 1/26/89

Please accomplish the following job assignment by the date due.

prepare response to request for my signature. I prefer not to have meeting in Tax as none of us have the time to do that. Barry can help whoever you assign on the BAET part with regards to % S in Fuel.

1. Probably not a mod.
2. Do not know sizes
3. Has BAET ever been done?
4. Must be fed. enforce -  
to change potential amount
5. No attachments
6. Nat. gas price a function  
of #6 F.O. allowable \$??

Union Camp 1/10/89 letter - Assigned 1/30/89

CF [ Clair wants response by 2/10 for his signature  
No meeting in fax.  
Barry A. can help with BACT

BT [ not modif. - must be Fed. enforceable  
What BACT done?

Nat. gas price a function of % S in oil ← Barry said yes

UC [ 3 sources involved: Boilers no. <sup>2+3</sup> 1+2 and Myrcene Unit 'E'

Request BESD modify 3 operation permits (Ronald Peterson)

Myrcene Unit E permit revised (not fully)

BESD 12/9/88 letter permit boiler no. 2 can be revised (error?)

Other request require AC. Contact BAQM. Hold revision until BAQM acts

### SUMMARY OF REQUESTED CHANGE

#### No. 2+3 boilers

Different permits, allowed to burn natural gas, No. 6 oil + other liq. fuels  
S limit for liq. fuel or amount of fuel burned

Want to burn gas, No. 6 oil alternate (other liq. fuels burned to very best)

Problem No 6 oil - now limit 0.7% (req's special order).

Cost of gas function % S allowed in oil

Other boilers allowed to burn higher % S in oil

→ Request increase % S in oil, lower hrs/yr usage, permitted SO<sub>2</sub> constant. Want 2.5% S oil (maybe 1%).  
? - possible minus from letter

Ratio hrs/yr down so no increase permitted emissions.

Boiler No 2 - No SO<sub>2</sub> std., BESD says they can amend permit.

Boiler No 3 - permit must be modified according to BESD

Myrcene Unit E - allowed use of No. 2  
- permit partially revised still limit liq fuel  
4-fuel (3 liq + gas) burned - see attach 3 of tech eval. - for 4 units  
Permit say gas fuel primary, liq fuel secondary (restricted quantity)

Want to burn primarily liq fuel, same in all units, no restriction on hrs operation on fuel.

Original permit did not limit S (Calc. 1,042 #/yr)

REQUEST - 4 fuels, fuel tank including No. 2 oil

Willing to restrict use No. 2 oil to 920 #  $SO_2$ /yr + S content  
of dipentene + Crude isobutanol to 0.02% S.

BESD said request increased emissions, couldn't amend permit

Union Camp concludes emissions the same. emissions from log.

Probably  
Wrong

→ fuel same as natural gas.

Current permit emissions listed for  $SO_2$ , max  $SO_2 = 1,979 \# / yr$

As performed

Proposed revision, max  $SO_2 = 9,198 \# SO_2 / yr$  (increase!)  
same as original application

Alternate revision, max  $SO_2 = 2,023 \text{ lbs/yr}$

### Fuel Oil Classification

0.2% S #2 Fuel Oil STD(?) - typical 0.5%

Can only meet #2 by blending kerosene, no longer #2

affects all 4 myrcene Unit

### Conclusion

request permits be amended

if not, go thru modifications.

Like to meet DER, BESD to work on solution

CONST  
permit  
did not  
deteriorated  
NO. 2 OIL  
BESD USED  
stick reading  
of res to  
prevent modif  
to side up

Myrcene Unit "E"

AC16-104157 dated 10/15/85

BACT not required

Permitted fuels - natural gas, dipentene + crude isobutanol are permitted fuels.

S.C. #3 fuel consumption shall not exceed:

- Natural gas 38.9 MM FT<sup>3</sup>
- Dipentene 31,600 gal
- Crude isobutanol 43,000 gal

No emission limits in permit for PM, SO<sub>2</sub>!

PD - Steam distillation process, Condensed

Union Camp Major for SO<sub>2</sub>

Source emits SO<sub>2</sub>, PM, NO<sub>x</sub> + VOC - insign. rates

Natural gas used @ least 90% of the time. Liq. fuel 10%

MAX EMISSION IN PD

PM - 0.022 #/hr ~ 0.1 TPY in natural gas (100%)

SO<sub>2</sub> - 1.05 #/hr ~ 0.5 TPY 10% Dipentene

NO<sub>2</sub> - 0.44 #/hr ~ 1.9 TPY in natural gas (100%)

Prod. of Myrcene emits 0.097 #/hr VOC (846 #/yr)

HC-A 0.115 #/hr VOC ~ 1,002 #/yr

HC-B 0.257 #/hr VOC ~ 2,252 #/yr

Total VOC = 0.5 #/hr (2.1 TPY)

} So small, Compliance testing not req'd.

burning by fuel conversion E, applic. per Const. Reg'd modeling. BAQM agrees with BESP on E. emissions.

~~Emission factors for pollutants. Bond on data in applic. Const~~

$$SO_2 \text{ from natural gas} = \frac{0.6 \# SO_2}{10^6 \text{ FT}^3} \times \frac{10^6}{1050 \text{ Btu}} \times 10^6 \approx 0.00057 \# SO_2 / \text{MM Btu}$$

$$SO_2 \text{ Dipentene} = \frac{0.2 \#}{17,500 \text{ Btu}} \times \frac{2 \# SO_2}{10^6} \times 10^6 \approx 22.9 \# SO_2 / \text{MM Btu}$$

$$SO_2 \text{ Isobutanol} = \frac{0.02 \times 2 \times 10^6}{13,400} \approx 3.0 \# SO_2 / \text{MM Btu}$$

APIS - Union Camp Boiler No. 2 and 3

31 DVL 160071

Boiler No. 2 - Zone No 3 AO 16-82845 78 mm BEU/hr, 8760 hr/yr

Boiler No. 2 - Zone No 14 AC 16-11888/AO 16-18425 77.5 MBTU/hr

~~CE Boiler 50 mm BEU/hr Zone No 7 AO 16-48160~~

Myrcene Unit E Zone # 26 AO 16-119890

Boiler No 2

VOC 0.05 #/hr (AP-42)

78 mm BEU/hr

PM 7.7 lb/hr ~ 24.0 TPY

8760 hr/yr

SO<sub>2</sub> 3.8 TPY

NO<sub>x</sub> —

Boiler No 3

77.5 mm BEU/hr

NO<sub>x</sub> —

SO<sub>2</sub> 57.8 lb/hr, 249 TPY

PM 7.38 lb/hr ~ 32.0 TPY

VOC 17.28 lb/hr

Myrcene Unit E

VOC —

NO<sub>x</sub> 0.44 #/hr, 2.0 TPY

SO<sub>2</sub> 1.5 #/hr ~ 1.0 TPY

PM 0.02 #/hr



RECEIVED

JAN 26 1989

BBA DIVISION  
AROMA & TERPENE  
CHEMICALS

P.O. BOX 37617, JACKSONVILLE, FLA. 32236 TELEPHONE 781-2100 TELEX 808561  
January 10, 1989

Mr. Clair Fancy  
Central Air Permitting Section  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: Permits A016-82845 Boiler No.2  
A016-118425 Boiler No.3  
A016-119890 Myrcene Unit 'E'

Dear Mr. Fancy:

We have been in correspondence with Mr. Ronald L. Roberson of Jacksonville's Bio-Environmental Services Division regarding our request for changes to the referenced operating permits. Recently a permit revision was issued on Myrcene Unit E, but not fully in accordance with our request. Mr. Roberson notified us in his letter of December 9 (copy attached) that our request could be granted by permit revision on Boiler #2 (note typographical error), but his opinion was that permit modifications (also requiring amended construction permit applications) would be required to effect the other requested changes. He suggested that we refer the matter to you before proceeding with the applications. He also notified us that the revision for Boiler #2 will not be initiated until the other remaining issues have been resolved.

Following is a summary of our requested changes and the situations pertaining to our requests.

No. 2 and No. 3 Boilers

These two boilers, which were constructed and permitted at different times and under different regulations, are each permitted to burn natural gas, No. 6 fuel oil and other liquid fuels. SO<sub>2</sub> emissions are controlled by limits placed on the sulfur content of the liquid fuels and the rates or amounts that can be burned.

We prefer to burn natural gas in both boilers. No. 6 fuel oil is an alternate fuel in case of a gas outage or curtailment. The other permitted fuels are low-value byproducts, which are occasionally burned for energy recovery. Our problem concerns No. 6 fuel oil.



Mr. Clair Fancy  
January 10, 1989  
Page Two

Both permits limit the sulfur content of No. 6 fuel oil to 0.7%. The lowest-sulfur fuel available locally is 1.0%. The 0.7% grade must be specially ordered and is much more expensive than the higher-sulfur grades.

\* The price of natural gas is pegged to our permitted grade of fuel oil, which is 0.7% sulfur. Consequently, our gas cost is several hundred thousand dollars a year higher than it would be if we were permitted to burn a higher sulfur fuel. Not only are we paying more to use clean-burning natural gas, but we are paying (we believe unfairly) an additional penalty as a result of our fuel oil restrictions.

It is our understanding that other nearby large users burn higher-sulfur fuels, as listed below.

Anheuser Busch	1.2%
Seminole Kraft	1.0%
Container Corp.	2.5%
ITT Rayonier	2.5%
Jefferson Smurfitt	2.5%
Georgia Pacific (Palatka)	2.5%
JEA	1.0-1.8%

In order to obtain relief on our gas rates, we requested revisions to our boiler permits to allow an increase in sulfur content of the No. 6 fuel oil with a corresponding reduction in the number of hours per year it could be burned, such that the maximum annual SO<sub>2</sub> emissions would remain constant.

The current operating limits on each boiler for 0.7% sulfur fuel oil and the proposed limits for 1.0% and 2.5% sulfur fuel oil are listed below:

Current Limits

Boiler #2:	0.7% S:	8,760 hrs/yr
Boiler #3:	0.7% S:	8,616 hrs/yr

Proposed Limits

Boiler #2:	2.5% S:	$0.7/2.5 \times 8,760 = 2,453$ hrs/yr
Boilers #3:	2.5% S:	$0.7/2.5 \times 8,616 = 2,412$ hrs/yr

Mr. Clair Fancy  
January 10, 1989  
Page Three

We would prefer to be permitted to burn 2.5% sulfur fuel, because this would give us the best price break on natural gas, with a provision for burning lower-sulfur fuel for a proportionally increased number of hours.

Our understanding from Mr. Roberson's letter and conversations with him is that our request could be granted by permit revision on Boiler No. 2, since "Boiler No. 2 does not have an allowable emission limit for SO<sub>2</sub>, but Boiler No. 3 will require a permit modification due to the increase in SO<sub>2</sub> emissions, pounds per hour".

#### Myrcene Unit E

Originally, the permit application for this unit anticipated alternate burning of our four candidate fuels: dipentene, crude isobutanol, No. 2 fuel oil and natural gas, as shown on the attached sheet, headed "Attachment I", which was copied from "Attachment 3" of the "Technical Evaluation and Preliminary Determination" document relating to the permit application.

During the processing of the permit application a design change was made which resulted in natural gas being the designated primary fuel, with liquid fuels as backup. The permit was issued on this basis, allowing two alternate liquid fuels, dipentene and crude isobutanol, to be burned in restricted quantities amounting to 10% of a year's time for each fuel.

We have since found it advantageous to operate the unit primarily on liquid fuels. Also, as a result of removing our underground fuel storage tanks and subsequently feeding all four of our myrcene units from a single aboveground fuel tank, we wish to be permitted to burn the same liquid fuels in all four units, with no restriction on the number of hours each fuel can be burned in Myrcene Unit E. (There are no such restrictions on the other three units.)

Recently the operating permit on Myrcene Unit E was revised, but only partially in accordance with our request. A copy of the permit revision is attached.

Restrictions remain on the amount of dipentene and crude isobutanol that can be burned, which amount to limiting the burning of each (at the normal rate) to 876 hours, or 10% of a year. No. 2 fuel oil was added at a rate which would give the same annual SO<sub>2</sub> emissions as burning dipentene for 876 hours a year which is 920 lbs of SO<sub>2</sub>. Thus, the permit, as now revised, allows the annual emissions of 1,979 lbs of SO<sub>2</sub> per year, burning

Mr. Clair Fancy  
 January 10, 1989  
 Page Four

the maximum amount of liquid fuels and assuming permitted sulfur limits or estimated SO<sub>2</sub> emissions from Attachment I.

The original permit did not contain any specific limits on sulfur. But, using the figures in Attachment I, burning the permitted fuels would have resulted in annual emissions of SO<sub>2</sub> of 920 lbs from dipentene and 123 lbs from crude isobutanol (10% of the annual emissions from Attachment I) for a total of 1,043 lbs.

Our request was to allow the burning of any of the four fuels full time (8,760 hrs/yr), including No. 2 fuel oil with a 0.2% sulfur limit. However, if necessary to achieve this with only a permit revision, we would be willing to restrict the hours burning No. 2 fuel oil to generate the same 920 lbs of SO<sub>2</sub> as from dipentene in the original permit, and further limit the sulfur content of dipentene and crude isobutanol to 0.02% sulfur.

Mr. Roberson felt that this request could not be granted by permit revision because these alternate fuels are limited to specific gallons of usage and any increase "... would increase the actual regulated pollutants emitted substantially."

We cannot understand how this could be, since the maximum SO<sub>2</sub> emissions possible in our alternate proposal would be approximately the same as the current permit. The other products of combustion from liquid fuels would be essentially the same as from natural gas.

In summary, the maximum potential SO<sub>2</sub> emissions from our proposal and alternate proposal would compare to the current permit as follows:

<u>Current Permit</u>			
<u>Fuel</u>	<u>Max. Sulfur</u>	<u>Annual Rate</u>	<u>SO<sub>2</sub></u>
Nat. gas	--	38.9 x 10 <sup>6</sup> ft <sup>3</sup> (100% of year)	23 lbs (typ) ✓
Dipentene	0.2%	31.6 x 10 <sup>3</sup> gal (10% of year)	920 lbs
Isobutanol	--	43.0 x 10 <sup>3</sup> gal (10% of year)	123 lbs (typ)
#2 fuel oil	0.2%	31.9 x 10 <sup>3</sup> gal (10% of year)	920 lbs
			<u>1986</u>
		Max. SO <sub>2</sub> (70% gas, 10% each liquid fuel) =	1,979 lbs

AP-42, SO<sub>2</sub> emission from natural gas = 0.6 lb/10<sup>6</sup> FT<sup>3</sup>

Mr. Clair Fancy  
 January 10, 1989  
 Page Five

Proposed Revision  
 (same as original application, Attachment I)

<u>Fuel</u>	<u>Max.Sulfur</u>	<u>Annual Rate</u>	<u>SO<sub>2</sub></u>
Nat. gas	--	38.9 x 10 <sup>6</sup> ft <sup>3</sup> (100% of year)	23 lbs
Dipentene	0.2%	316 x 10 <sup>3</sup> gal (100% of year)	9,198 lbs
Isobutanol	0.02%	430 x 10 <sup>3</sup> gal (100% of year)	1,226 lbs
#2 fuel oil	0.2%	307 x 10 <sup>3</sup> gal (100% of year)	8,848 lbs
Max. SO <sub>2</sub> (100% dipentene, 10% #2 fuel oil) =			9,198 lbs

Alternate Proposed Revision

Nat. gas	--	38.9 x 10 <sup>6</sup> ft <sup>3</sup> (100% of year)	23 lbs
Dipentene	0.02%	316 x 10 <sup>3</sup> gal (100% of year)	920 lbs
Isobutanol	0.02%	430 x 10 <sup>3</sup> gal (100% of year)	1,226 lbs
#2 fuel oil	0.2%	31.9 x 10 <sup>3</sup> gal (10% of year)	920 lbs
Max. SO <sub>2</sub> (90% isobutanol, 10% #2 fuel oil) =			2,023 lbs

We would prefer the "Proposed Revision" (which is equivalent to our original permit application), since this would not restrict our use of #2 fuel oil. If this cannot be granted by a permit revision, we are willing to substitute our alternate proposal, which has essentially the same SO<sub>2</sub> potential as the present permit.

Fuel Oil Classification

Our supplier has informed us that a 0.2% sulfur fuel oil can now be made available only by blending #2 fuel oil, which is typically 0.5% sulfur, with kerosene. However, the resultant blend would no longer be classifiable as #2 grade. We are faced with this dilemma on all four of our myrcene unit permits.

Mr. Clair Fancy  
January 10, 1989  
Page Six

Conclusion

We request that these proposed changes be granted by permit revision, which seems reasonable for the reasons given. However, if this cannot be done, the advantage to us is probably great enough to warrant going through the more burdensome permit modification application process, if necessary.

We would appreciate the opportunity of meeting with you or other representatives of the DER and the Jacksonville Bio-Environmental Services Division, to work out the required solutions to these problems.

Sincerely,

UNION CAMP CORPORATION



William B. Van Duyn  
Manager,  
Environmental Affairs

WBVD/bs

Attachment

cc: Mr. Ronald L. Roberson, BESD  
Mr. Bill Stewart, DER

Myrcene.LD1

PS Form 3811, July 1983

**SENDER: Complete items 1, 2, 3 and 4.**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1.  Show to whom, date and address of delivery.

2.  Restricted Delivery.

3. Article Addressed to:  
Mr. R. L. Webb  
Union Camp Corporation  
P. O. Box 60369  
Jacksonville, FL 32236

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P 408 533 634

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee  
X

6. Signature - Agent  
X *John Tuzo*

7. Date of Delivery  
OCT 25 1985

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

DOMESTIC RETURN RECEIPT

P 408 533 634

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. R. L. Webb	
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	
10/23/85	

PS Form 3800, Feb. 1982

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

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
NOTICE OF PERMIT

Mr. R. L. Webb  
Vice President  
Union Camp Corporation  
Post Office Box 60369  
Jacksonville, Florida 32236

October 22, 1985

Enclosed is Permit Number AC 16-104157 to Union Camp Corporation which authorizes the construction of a myrcene unit designated as unit "E" at Union Camp Corporation's plant in Jacksonville, Duval County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any Party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the clerk of the Department.

Sincerely,

*for Willard Hands*  
C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management

Enclosure

cc: W. J. DeGroot, P.E.  
Johnny Cole  
Jerry Woosley

CERTIFICATION

This is to certify that the foregoing Notice of Permit and all copies requested were mailed before the close of business on October 23, 1985.

for William Hanks  
C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

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

Patricia G. Adams  
Clerk

Oct. 23 1985  
Date



Final Determination

Union Camp Corporation  
Duval County  
Jacksonville, Florida

Myrcene Unit "E"

Permit Number AC 16-104157

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

October 15, 1985

## Final Determination

Union Camp Corporation's application for a permit to construct a myrcene unit designated as unit "E" at their plant in Jacksonville, Duval County, Florida 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 Florida Times Union on August 30, 1985.

Copies of the preliminary determination have been available for public inspection at the Northeast District office in Jacksonville, the Duval County Bio-Environmental Services Division offices in Jacksonville, and the Bureau of Air Quality Management offices in Tallahassee.

Comments on the proposed construction permit were received from J. C. Bowers of Union Camp Corporation. The comments have been reviewed and the following action shall be taken:

Mr. Bowers requests that the standard industrial classification code (SIC) used in the preliminary determination be changed from "Major Group No. 286, Industrial Organic Chemicals, Industry No. 2869, Aromatics Production to Major Group No. 286, Gum and Wood Chemicals No. 2861." This request is approved and the Industry Number will be changed to 2861, Gum and Wood Chemicals.

The final action of the department will be to issue the permit to construct with the change discussed above.



FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }
COUNTY OF DUVAL }

Before the undersigned authority personally appeared George A. Dan

who on oath says that he is Retail Advertising Manager

of The Florida Times-Union, and

Jacksonville Journal, daily newspapers published at Jacksonville in Duval County,

Florida; that the attached copy of advertisement, being a

Legal Notice

Permit Application

in the matter of

in the Court,

was published in The Florida Times Union

in the issues of August 30

Affiant further says that the said The Florida Times-Union and Jacksonville Journal are each newspapers published at Jacksonville, in said Duval County, Florida, and that the said newspapers have each heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, and Jacksonville Journal each day except Sundays, and each has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval 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 said newspaper.

Sworn to and subscribed before me this 30th day of

August A.D. 19 85

Notary Public,

State of Florida at Large

NOTARY PUBLIC, STATE OF FLORIDA

My Commission Expires My commission expires Feb. 19, 1989

Handwritten signature of George A. Dan

DER

SEP 4 1985

BAQM

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 Union Camp Corporation to construct a myrcene unit for the pyrolysis of terpene compounds applicant's facility in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was not required.
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 constitutes 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 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, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.
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
Northeast District
3424 Billis Road
Jacksonville, Florida 32207
Duval County Bio-Environmental Services Division
515 West 6th Street
Jacksonville, Florida 32206
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.



DER

AUG 3 1985

BAQM

TERPENE AND AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

August 28, 1985

Bureau of Air Quality Management  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301-8241

Attn: Mr. Bill Thomas

Re: Permit No. AC16-104157

Dear Mr. Thomas:

This will acknowledge receipt of the Technical Evaluation and Preliminary Determination for the above referenced permit.

We request that one change be made as follows:

E. Standard Industrial Classification Code (SIC)  
The facility is classified as:

Major Group No. 286, Gum and Wood Chemicals No.2861.

The above classification includes facilities engaged in the manufacture of essential oils, terpenes, hydrocarbons, alcohols, or ketones.

Very truly yours,

  
J. C. Bowers  
Environmental Affairs Manager

JCB/nr

cc: Mr. John Brown, DER  
Mr. J. E. Woosley, BES

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:  
Union Camp Corporation  
P. O. Box 60369  
Jacksonville, Florida 32236

Permit Number: AC 16-104157  
Expiration Date: July 31, 1986  
County: Duval  
Latitude/Longitude: 30° 20' 53" N/  
81° 45' 05" W  
Project: Myrcene Unit "E"

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a myrcene unit for the pyrolysis of terpene compounds. Three products will be produced by this unit, myrcene and hydrocarbons A and B. Natural gas, dipentene, and crude isobutanol are the permitted fuels for this process.

Construction shall be in accordance with the attached permit application and additional information except as otherwise noted on pages 5 and 6, Specific Conditions.

**Attachments are as follows:**

1. Application to construct an air pollution source, DER Form 17-1.202(1).
2. C. H. Fancy's letter dated June 12, 1985.
3. Union Camp Corporation's letter dated June 21, 1985.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 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:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 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:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 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:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 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 Myrcene Unit "E" is permitted for continuous operation.
2. Feed rates shall not exceed 3,000 pounds per hour of beta pinene; 3,000 pounds per hour hydrocarbon A; 4,500 pounds per hour hydrocarbon B.
3. Annual fuel consumption shall not exceed:
  - Natural gas - 38.9 MM ft<sup>3</sup>
  - Dipentene - 31,600 gallons
  - Crude isobutanol - 43,000 gallons

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 1986

SPECIFIC CONDITIONS:

4. Visible emissions shall not exceed 5 percent opacity demonstrated in accordance with DER Method 9 (FAC Rule 17-2.700(6)(a)9).
5. There shall be no objectionable odors from this source, FAC Rule 17-2.620.
6. Compliance tests, in accordance with Rule 17-2.700, FAC and 40 CFR 60, Appendix A shall be submitted to DER's Northeast District Office Air Program and Jacksonville BESD within 45 days after completion of the tests.
7. Fifteen (15) days notification of the compliance tests to DER's Northeast District Office Air Program and Jacksonville BESD is required.
8. After satisfactory completion of the initial compliance test and prior to ninety (90) days before the expiration of this permit, a complete application for an operating permit shall be submitted to the Northeast District Office and Jacksonville BESD. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date or the issuance of an operating permit. The department may extend the expiration date of this permit as authorized by Rule 17-2.210(1), FAC.

Issued this 17 day of October,  
1985.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
\_\_\_\_\_  
VICTORIA J. TSCHINKEL, Secretary

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

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION



# Interoffice Memorandum

TO: Victoria J. Tschinkel  
FROM: Clair Fancy  
DATE: October 15, 1985 *Clair Fancy*  
SUBJ: Approval of Attached Air Construction Permit

FOR ROUTING TO OTHER THAN THE ADDRESSEE	
TO: _____	LOCTN: _____
TO: _____	LOCTN: _____
TO: _____	LOCTN: _____
FROM: _____	DATE: _____

**RECEIVED**  
OCT 16 1985

Office of the Secretary

Attached for your approval and signature is one Air Construction Permit to Union Camp Corporation to construct a myrcene unit designated as unit "E" at the company's existing facility in Jacksonville, Duval County, Florida.

Day 90, after which the permit would be issued by default, is October 18, 1985.

The Bureau recommends your approval and signature.

CF/pa

Attachment



DER

AUG 8 1985

BAQM

TERPENE AND AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

August 28, 1985

Bureau of Air Quality Management  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301-8241

Attn: Mr. Bill Thomas

Re: Permit No. AC16-104157

Dear Mr. Thomas:

This will acknowledge receipt of the Technical Evaluation and Preliminary Determination for the above referenced permit.

We request that one change be made as follows:

E. Standard Industrial Classification Code (SIC)  
The facility is classified as:

Major Group No. 286, Gum and Wood Chemicals No.2861.

The above classification includes facilities engaged in the manufacture of essential oils, terpenes, hydrocarbons, alcohols, or ketones.

Very truly yours,

A handwritten signature in cursive script that reads "J. C. Bowers".

J. C. Bowers  
Environmental Affairs Manager

JCB/nr

cc: Mr. John Brown, DER  
Mr. J. E. Woosley, BES

Florida Times Union

August 30, 1985

*Permit No. AC 16-104157*

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 Union Camp Corporation to construct a myrcene unit for the pyrolysis of terpene compounds applicant's facility in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was not required.

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 constitutes 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 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, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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  
Northeast District  
3426 Bills Road  
Jacksonville, Florida 32207  
Duval County Bio-Environmental Services  
Division

515 West 6th Street  
Jacksonville, Florida 32206  
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.



FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }
COUNTY OF DUVAL }

Before the undersigned authority personally appeared George A. Dan

who on oath says that he is
Retail Advertising Manager
of The Florida Times-Union, and

Jacksonville Journal, daily newspapers published at Jacksonville in Duval County,

Florida; that the attached copy of advertisement, being a
Legal Notice

in the matter of
Permit Application

in the Court,

was published in The Florida Times Union

in the issues of August 30

Affiant further says that the said The Florida Times-Union and Jacksonville Journal are each newspapers published at Jacksonville, in said Duval County, Florida, and that the said newspapers have each heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, and Jacksonville Journal each day except Sundays, and each has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval 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 said newspaper.

Sworn to and subscribed before me
this 30th day of
August A.D. 19 85

[Signature]
Notary Public,

State of Florida at Large
NOTARY PUBLIC, STATE

My Commission Expires My commission expires

[Signature]



DER

SEP 4 1985

BAQM

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 Union Camp Corporation to construct a pyrolysis unit for the pyrolysis of terpene compounds applicant's facility in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was not required.

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 constitutes 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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Northeast District
3426 Billis Road
Jacksonville, Florida 32207
Duval County Bio-Environmental Services
Division
515 West 6th Street
Jacksonville, Florida 32206
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.

PS Form 3811, July 1983

**SENDER: Complete items 1, 2, 3 and 4.**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

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

3. Article Addressed to:  
 Mr. R. L. Webb  
 Imopm Camp Corporation  
 P. O. Box 60369  
 Jacksonville, FL 32236

4. Type of Service: Article Number  
 Registered  Insured  
 Certified  COD P 085 152 639  
 Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee  
 X

6. Signature - Agent  
 X *John Tuyen*

7. Date of Delivery  
*8-27-85*

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

DOMESTIC RETURN RECEIPT

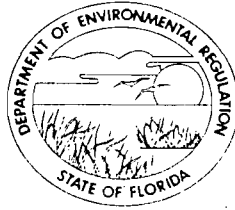
P 085 152 639  
**RECEIPT FOR CERTIFIED MAIL**  
 NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

PS Form 3800, Feb. 1982  
 U.S.G.P.O. 1984-446-014

Sent to Mr. R. L. Webb	
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  8/23/85	

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

August 23, 1985

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. R. L. Webb  
Vice President  
Union Camp Corporation  
Post Office Box 60369  
Jacksonville, Florida 32236

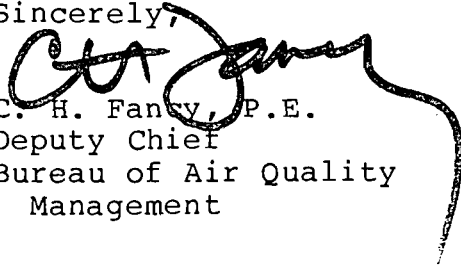
Dear Mr. Webb:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to construct a myrcene unit at your existing facility in Jacksonville, Duval County.

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 Duval 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: W. J. DeGroot, P.E.  
John Brown  
Jerry Woosley



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 Union Camp Corporation to construct a myrcene unit for the pyrolysis of terpene compounds applicant's facility in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was not required.

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515 West 6th Street  
Jacksonville, Florida 32206

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.

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of an                                 )  
Application for Permit by:                     )  
   )  
Union Camp Corporation                         ) DER File No. AC 16-104157  
Post Office Box 60369                         )  
Jacksonville, Florida 32236                 )

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, Union Camp Corporation, applied on May 15, 1985, to DER for a permit to construct a myrcene unit for the pyrolysis of terpene compounds at the applicant's facility in Jacksonville, Duval 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 an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions 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, 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.

Executed the 23 day of August, 1985, 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:

Mr. R. L. Webb  
Vice President  
Union Camp Corporation  
Post Office Box 60369  
Jacksonville, Florida 32236

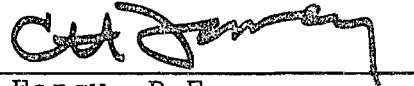
Mr. W. J. DeGroot, P.E.  
Union Camp Corporation  
Post Office Box 2310  
Savannah, Georgia 31402

Mr. John Brown  
DER Northeast District  
3426 Bills Road  
Jacksonville, Florida 32207

Mr. Jerry Woosley  
Duval County Bio-Environmental Services Division  
515 West 6th Street  
Jacksonville, Florida 32206

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on 23 Aug. 1985.



C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

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

Patricia B. Adams      August 23, 1985  
Clerk                              Date

Technical Evaluation  
and  
Preliminary Determination

Union Camp Corporation  
Duval County  
Jacksonville, Florida

Myrcene Unit "E"

Permit Number: AC 16-104157

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

August 22, 1985



I. Project Description

A. Applicant

Union Camp Corporation  
P. O. Box 60369  
Jacksonville, Florida 32236

B. Project and Location

The applicant proposes to construct a myrcene unit which will utilize existing storage tanks for the finished product. The new myrcene unit will be located at the applicant's existing facility at 2051 North Lane Avenue, Duval County, Jacksonville, Florida. The universal transverse mercator (UTM) coordinates of the source are zone 17, 427.7 km East and 3357.4 km North.

C. Process and Controls

Turpentine derivatives (e.g. beta pinene) are fed to the process. Gasses from the combustion of the fuels vaporize the feed and steam is introduced as an inert carrier. The hydrocarbons vapor/steam mixture is passed countercurrently to the combustion gasses and is pyrolyzed to another hydrocarbon (e.g., myrcene). Upon exiting from the furnace, the product/steam mixture is condensed by direct contact with cooled product. The condensing material is cooled by an external shell and tube exchanger. Decantation separates the product from water. The water is pumped to the existing wastewater treatment facility and product to storage through a shell and tube cooler.

D. Sources Reviewed

This application has been submitted for this new source:

<u>Source</u>	<u>Permits Number</u>
Myrcene Unit "E"	AC 16-104157

E. Standard Industrial Classification Code (SIC)

The facility is classified as:

Major Group No. 286, Industrial Organic Chemicals  
Industry No. 2869, Aromatics Production

F. Facility Category

Union Camp Corporation is classified as a major emitting facility for the air pollutant sulfur dioxide.

### G. Application Completeness Date

- (i) Industrial application received: May 15, 1985
- (ii) Application deemed complete: June 25, 1985

## II. Rule Applicability

The proposed project will be located in Duval County. Duval County is designated as a nonattainment area for the air pollutant ozone, FAC Rule 17-2.410(1). The project will also be located in the area of influence, FAC Rule 17-2.100(15), of the downtown Jacksonville particulate matter nonattainment area, FAC Rule 17-2.410(2).

The existing facility is classified as a major emitting facility for the air pollutant sulfur dioxide.

The proposed source will emit sulfur dioxide, particulate matter, nitrogen oxides, and volatile organic compounds in amounts that are less than the significant emission rates for these pollutants as listed in Table 500-2. The proposed source is exempt from the provisions of FAC Rule 17-2.500, Prevention of Significant Deterioration, because of the sulfur dioxide and nitrogen oxides emissions will be less than the significant emission rates. The proposed source is also exempt from the provisions of FAC Rule 17-2.510, New Source Review for Nonattainment Areas, because the emissions of particulate matter and volatile organic compounds are below the significant emission rates.

The proposed source will be subject to the General Pollutant Emission Limiting Standards of FAC Rule 17-2.620.

## III. Summary of Emissions and Air Quality Analysis

### A. Emission Limitations

All emissions of particulate matter, sulfur dioxide and nitrogen oxides will result from the combustion of fuel for the pyrolysis process. Three fuels will be utilized in this process. Natural gas is the preferred fuel and will be used at least 90% of the time (35 MM ft<sup>3</sup> to 38.9 MM ft<sup>3</sup>). The remaining 10% of the time, dipentene and/or crude isobutanol would be used. Annual usage of dipentene could be 31,600 gallons and crude isobutanol could be 43,000 gallons.

The maximum emission rates, for worst case fuel usage, are listed on the following page:

	lb/hr	ton/yr	fuel utilization
Particulate	0.022	0.1	100% Natural Gas
Sulfur Dioxide	1.05	0.5	10% Dipentene
Nitrogen Oxides	0.44	1.9	100% Natural Gas

Emissions of volatile organic compounds will result from the working and breathing losses of the storage tanks. Three products will be produced. Myrcene, at a rate of 3,000 pounds per hour, will produce emissions of 0.097 pounds per hour (846 pounds per year); Hydrocarbon A, at a rate of 3,000 pounds per hour will produce emissions of 0.115 pounds per hour (1,003 pounds per year); and Hydrocarbon B, at a rate of 4,500 pounds per hour, will produce emissions of 0.257 pounds per hour (2,252) pounds per year. The total volatile organic compound emissions from the three products will be 0.5 pounds per hour (2.1 tons per year).

Because the emissions from this source are so small, they are considered insignificant and compliance testing will not be required.

#### B. Air Quality Analysis

Ambient monitoring or modeling is not required to provide reasonable assurance that the ambient air standards will not be violated.

#### IV. Conclusion

The emission limits that will be imposed have been determined to be in compliance with all applicable requirements of FAC 17-2. The permitted maximum allowable emission limits should not cause any violation of Florida's ambient air quality standards.

The General and Specific Conditions listed in the proposed construction permit (attached) will assure compliance with all applicable requirements of FAC 17-2.

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:**  
Union Camp Corporation  
P. O. Box 60369  
Jacksonville, Florida 32236

Permit Number: AC 16-104157  
Expiration Date: July 31, 1986  
County: Duval  
Latitude/Longitude: 30° 20' 53" N/  
81° 45' 05" W  
Project: Myrcene Unit "E"

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a myrcene unit for the pyrolysis of terpene compounds. Three products will be produced by this unit, myrcene and hydrocarbons A and B. Natural gas, dipentene, and crude isobutanol are the permitted fuels for this process.

Construction shall be in accordance with the attached permit application and additional information except as otherwise noted on pages 5 and 6, Specific Conditions.

**Attachments are as follows:**

1. Application to construct an air pollution source, DER Form 17-1.202(1).
2. C. H. Fancy's letter dated June 12, 1985.
3. Union Camp Corporation's letter dated June 21, 1985.

PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 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:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 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:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 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:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 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 Myrcene Unit "E" is permitted for continuous operation.
2. Feed rates shall not exceed 3,000 pounds per hour of beta pinene; 3,000 pounds per hour hydrocarbon A; 4,500 pounds per hour hydrocarbon B.
3. Annual fuel consumption shall not exceed:
  - Natural gas - 38.9 MM ft<sup>3</sup>
  - Dipentene - 31,600 gallons
  - Crude isobutanol - 43,000 gallons



PERMITTEE:  
Union Camp Corporation

Permit Number: AC 16-104157  
Expiration Date: July 31, 1986

**SPECIFIC CONDITIONS:**

4. Visible emissions shall not exceed 5 percent opacity demonstrated in accordance with DER Method 9 (FAC Rule 17-2.700(6)(a)9).
5. There shall be no objectionable odors from this source, FAC Rule 17-2.620.
6. Compliance tests, in accordance with Rule 17-2.700, FAC and 40 CFR 60, Appendix A shall be submitted to DER's Northeast District Office Air Program and Jacksonville BESD within 45 days after completion of the tests.
7. Fifteen (15) days notification of the compliance tests to DER's Northeast District Office Air Program and Jacksonville BESD is required.
8. After satisfactory completion of the initial compliance test and prior to ninety (90) days before the expiration of this permit, a complete application for an operating permit shall be submitted to the Northeast District Office and Jacksonville BESD. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date or the issuance of an operating permit. The department may extend the expiration date of this permit is authorized by Rule 17-2.210(1), FAC.

Issued this \_\_\_\_\_ day of \_\_\_\_\_,  
19\_\_.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

\_\_\_\_\_  
VICTORIA J. TSCHINKEL, Secretary

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



TERPENE AND AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

June 21, 1985

Mr. C. H. Fancy, P.E.  
Deputy Chief - Bureau of Air Quality Management  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301-8241

Re: Permit No. AC16-104157

Dear Mr. Fancy:

Please refer to your letter of June 12, 1985 to Mr. R. L. Webb requesting additional information concerning the above referenced permit.

Since the permit application was filed, additional work has indicated that it should be modified in regard to Section III C and Section III E. These modifications involve a change in feed rate for one process and subsequent increase in VOC emissions and changes in the primary and alternate fuels. Please note revisions in potential emissions of TSP and NO<sub>x</sub>. These are discussed below in the appropriate items.

The additional information in order of your request, is listed below.

DER  
JUN 25 1985  
BAQM

Mr. C. H. Fancy, P.E.

Re: Permit No. AC16-104157

Page 2

1. Turpentine derivatives (e.g., beta pinene) is fed to the process. Gasses from the combustion of the fuels vaporize the feed and steam is introduced as an inert carrier. The hydrocarbons vapor/steam mixture is passed countercurrently to the combustion gasses and in the process is pyrolyzed to another hydrocarbon (e.g., myrcene). Upon exiting from the furnace, the product/steam mixture is condensed by direct contact with cooled product. The condensing material is cooled by an external shell and tube exchanger. Decantation separates the product from water. The water is pumped to the existing wastewater treatment facility and product to storage through a shell and tube cooler.
2. Requested operating time is 8,760 hours per year.
3. See Attachment I for assumptions and calculations. Since filing application, addition pilot plant work has indicated that natural gas is the preferred fuel. Therefore, it is expected that this will be used at least 90% of the time; annual usage - 35MM cubic feet. The remaining 10% of the time, dipentene and crude isobutanol would be used. If 5% each, annual usage would approximate 15,800 gallons and 21,500 gallons, respectively.
4. See Attachment II for assumptions and calculations. Since three different products can be produced, three storage tanks are involved. During the initial operation of the new unit, the older units will also be operated although not necessarily on the same process. Thus, throughput of a given storage tank might be increased for a finite time period, but unlikely for a period of a year. Current expectation is that one or more of the old units will be phased out within a couple of years.
5. The stack configuration is such that the diameter is reduced from three feet at the base to two feet at the top. Velocity calculation was based on the top diameter and firing fuels 1 and 2 at 20% excess air. However, with the change in plans for firing (2 above) velocity has been recalculated for firing natural gas at 15% excess air. This is 9.0 ft/sec for normal operation and 9.6 ft/sec for maximum fuel rate.

Mr. C. H. Fancy, P.E.

Re: Permit No. AC16-104157

Page 3

6. The emergency vent is a safety device required by insurance and protects against an excessive pressure build up. We would not expect this to happen more than once every five years if at all. If a venting did occur, the entire operation could be shutdown within five minutes. Based on maximum feed rate of 4500 #/hr., this would result in 375# of emissions. The material vented would be the hydrocarbon/steam mixture and would be condensed immediately at atmospheric temperature.

7. See Attachment III for VOC emissions decreases.

Operating Permit No. A016-36783 (7/29/81) approved 249 T/yr. SO<sub>2</sub> emissions (burning 0.7% sulfur fuel for a maximum of 359 days/yr).

Actual SO<sub>2</sub> emissions from three boilers at this facility have been as follows:

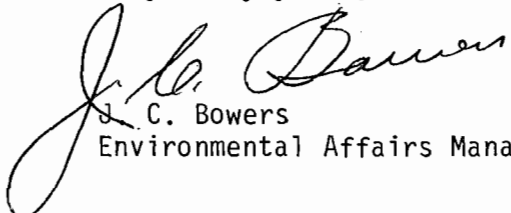
1980	-	46.000 tons
1981	-	26.427 tons
1982	-	31.785 tons
1983	-	48.892 tons
1984	-	23.244 tons

Construction Permit AC16-65833 (modified 12/6/83) approved emissions increases as follows:

TSP	-	4.292 T/yr.
SO <sub>2</sub>	-	0.04 T/yr.
NO <sub>x</sub>	-	9.81 T/yr.

If additional information is required please advise.

Very truly yours,

  
J. C. Bowers  
Environmental Affairs Manager

JCB/nr

cc: Mr. John Brown - DER  
Mr. J. E. Woosley - BES  
Mr. W. J. deGroot

ATTACHMENT I

Maximum Heat Input - 4,590,000 BTU/Hr.

<u>FUEL</u>	<u>HEAT VALUE BTU/#</u>	<u>MAX. CONSUMPTION #/HR.</u>	<u>DENSITY #/GAL.</u>	<u>GALS, GALS/HR.</u>
Dipentene	17,500	262	7.2	36
Crude Isobutanol	13,400	343	7.0	49
#2 Fuel Oil	18,200	252	7.2	35
	<u>HEAT VALUE BTU/CU. FT.</u>	<u>MAX. CONSUMPTION CU. FT./HR.</u>		
Natural Gas	1045	4392(0.0044 MM)		

EMISSIONS CALCULATIONS - SO<sub>2</sub>

<u>FUEL</u>	<u>MAX. % SULFUR</u>	<u>MAX. CONSUMPTION #/HR.</u>	<u># SO<sub>2</sub>/HR.</u>	<u>#/SO<sub>2</sub>/YR.</u>
Dipentene	0.2 max.	262	1.05	9198
Crude Isobutanol	0.02 typical	343	0.14	1226
#2 Fuel Oil	0.2 max.	252	1.01	8848
Natural Gas	*0.6 #/MM Cu.Ft.		0.00264	23

EMISSIONS CALCULATIONS - TSP

<u>FUEL</u>	<u>% ASH</u>	<u>MAX. CONSUMPTION #/HR.</u>	<u># TSP/HR.</u>	<u># TSP/YR.</u>
Dipentene	Nil	262	Hydrocarbons-C <sub>10</sub> H <sub>16</sub>	-
Crude Isobutanol	Nil	343	CH <sub>3</sub> -(CH <sub>2</sub> ) <sub>2</sub> -CHOH	-
#2 Fuel Oil	Nil	252	Distillate oil	-
Natural Gas	* 1 to 5 #/MM Cu.Ft.		0.022	193

EMISSIONS CALCULATIONS - NO<sub>x</sub>

<u>FUEL</u>	<u>% NITROGEN</u>	<u>MAX. CONSUMPTION #/HR.</u>	<u># NO<sub>x</sub>/HR.</u>	<u># NO<sub>x</sub>/YR.</u>
Dipentene	Nil	262	Hydrocarbons-C <sub>10</sub> H <sub>66</sub>	-
Crude Isobutanol	Nil	343	CH <sub>3</sub> -(CH <sub>2</sub> ) <sub>2</sub> -CHOH	-
#2 Fuel Oil	Nil	252	Distillate oil	-
Natural Gas	* 100 #/MM Cu.Ft.		0.44	3854

\* From table 1.4-1 EPA Manual AP-42 Supplement 13  
Commercial Boilers

## ATTACHMENT II

### Assumptions

1. Temperature of material in tank same as product leaving product cooler - 30°C.
2. Air in tank saturated with product.
3. Feed rate - Processes 1 and 2 - 3000 #/hr.  
Process 3 - 4500 #/hr.

### Calculations

#### Process 1

Feed - Beta Pinene

Product - Myrcene

Vapor pressure of 3.6 mmHg at 30°C  
Molecular weight 136 - 6.68#/gal.

Displacement from storage tank

$$D = 3000\#/6.68\#/gal = 449.1 \text{ gals} = 60.04 \text{ cu.ft./hr.}$$

$$C_s = 3.6/760 = 0.00474$$

$$D_p = 60.04 \times 0.00474 = 0.28459 \text{ cu.ft.}$$

$$M = (0.28459)(750)/(998.9)(303) = 0.00071 \text{ mols}$$

$$\text{Lbs product} = 0.00071 \times 136 = 0.09656 \text{ \#/hr.}$$

$$0.09656 \times 8760 = 846 \text{ \#/yr.}$$

#### Process 2\*

Feed - Hydrocarbon A

Product - Hydrocarbon A'

Vapor pressure of 4.5 mmHg at 30°C  
Molecular weight 138 - 7.16#/gal.

$$D = 3000/7.16 = 419.0 \text{ gals} = 56.02 \text{ cu.ft./hr.}$$

$$C_s = 4.5/760 = 0.00592$$

$$D_p = 56.02 \times 0.00592 = 0.33164 \text{ cu.ft.}$$

$$M = (0.33164)(760)/(998.9)(303) = 0.00083 \text{ mols}$$

$$\text{Lbs} = 0.00083 \times 138 = 0.11454 \text{ \#/hr.}$$

$$0.11454 \times 8760 = 1003 \text{ \#/yr.}$$

Process 3\*

Feed - Hydrocarbon B<sup>1</sup>

Product - Hydrocarbon B<sup>1</sup>

Vapor pressure of 6.5 mmHg at 30°C  
Molecular weight 136 - 6.85#/gal.

$$D = 4500/6.85 = 656.93 \text{ gals.} = 87.82 \text{ cu.ft.}$$

$$C_s = 6.5/760 = 0.00855$$

$$D_p = 87.82 \times 0.00855 = 0.75086 \text{ cu.ft.}$$

$$M = (0.75086)(760)/(998.9)(303) = 0.00189 \text{ mols}$$

$$\text{Lbs.} = 0.00189 \times 136 = 0.25704 \text{ \#/hr.}$$

$$0.25704 \times 8760 = 2252 \text{ \#/yr.}$$

\*These processes and products are confidential.

ATTACHMENT III

Pages 1 and 2 submitted with Construction Permit  
Application 5/3/82. Permit No. AC16-55595 issued.

Pages 3 and 4 filed 10/29/82 requesting modification  
of above permit.



## ATTACHMENT II

### Annual Decrease in Emissions Since December 21, 1976

Since the filing of the Construction Permit Application for Phase II Expansion, Part I, certain modifications within the plant have been made which have reduced emissions included in the emissions inventory for the plant and the "potential" emissions of new equipment. At that time "potential" emissions was defined as emissions without control devices in place. This definition has been changed to reflect the use of control devices. Thus, some of the "potential" emissions reported in the above application should now be deleted since the provisos of the construction permit require control of all vacuum system emissions.

In addition to the above, vacuum system emissions of all existing equipment at the time the above permit application was filed have been collected and conveyed to the incinerator since the end of March, 1980. (See Annual Report of Emissions, February 26, 1981).

A vacuum system for M580 Reactor system was installed and emissions collected for incineration. (See letter of December 15, 1980 re A016-34564).

A current project which will be completed by May 31, 1982, will collect and convey to the incinerator the emissions from seven large storage tanks.

Because the calculation methods used in this work tend to estimate on the high side, it is felt that the following represents a reasonable approximation of the decrease in annual emissions.

Increases (adjusted for change in definition of "potential" emissions):

	<u>Tons/Year</u>
1. <u>Previous</u>	
A. Distillation Column	0.712
B. Ionone Production	3.504
2. <u>Concurrent</u>	
A. Storage Tank	0.004
3. <u>Proposed Construction (Part I)</u>	
A. Two Distillation Columns	0.126
B. Nerol Geraniol Modification	0.361
C. Double Ionone Capacity	3.504
D. M580 Conversion	0.806
E. General Purpose Reactor	0.158
4. <u>Proposed Construction (Part II)</u>	
A. M660 Reactor System and Tanks	0.019
TOTAL	<u>9.194</u>

Decreases:

1. <u>Previous</u>	
A. Cooling Towers	16.245
B. Cover Clarifier	4.950
2. <u>Concurrent</u>	
A. Underground Storage Tank	1.883
3. <u>Odor Control Projects</u>	
A. Existing Distillation Columns	29.800
B. Large Storage Tanks	9.089
TOTAL	<u>61.967</u>

Net Decrease      52.773



TERPENE &  
AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32205 TELEPHONE (904) 783-2180 TWX (810) 827-0398

October 29, 1982

Mr. J. E. Woosley  
Assistant Engineer  
Bio-Environmental Services Division  
515 West 6th Street  
Jacksonville, FL 32206

Re: Permit No. AC16-55595

Dear Mr. Woosley:

Due to the current depressed business conditions, an updated assessment of production capability has resulted in a decision that the M660 Reactor system included in the above referenced permit is not needed at this time.

However, in order to take advantage of the available production time of other reactor systems, some of the storage facilities included in the permit will be required. Certain modifications to the storage facilities will be necessary. These modifications are listed below.

1. The two feed stock storage tanks will not be constructed. The existing product storage tanks will be converted to this service. These tanks are included in Permit No.A016-48159.
2. The intermediate product storage tank will be constructed but volume will be reduced from 28,500 gallons to 25,000 gallons.
3. A product storage tank of 17,000 gallons capacity will be constructed.
4. The Isobutyl Alcohol storage tank will be constructed but volume will be increased from 10,000 gallons to 12,000 gallons.
5. The Aluminum Isopropyl Oxide storage tank will be constructed but volume will be increased from 7,000 gallons to 8,000 gallons.
6. The 2,500 gallon process chemical storage tank will not be constructed.

Mr. J. E. Woosley

Re: Permit No. AC16-55595

Page 2

Changes in the VOC emissions/odor control system from that shown in the permit application are as follows:

1. The new product storage tank will be connected to odor control system.
2. The Aluminum Isopropyl Oxide storage tank will be connected to odor control system.

It is anticipated that construction of the Reactor System will be done but a final decision on this will probably not be made until the end of 1983.

Construction on the revised storage facilities will begin November 15, 1982 with completion by April 30, 1983.

We therefore request that the subject permit be revised to reflect the above.

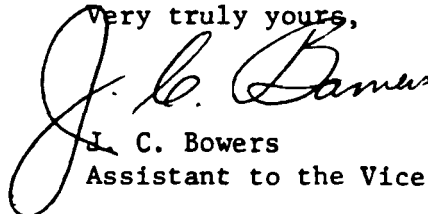
The uncontrolled emissions will still consist entirely of displacement emissions but will be revised downward from the figure shown in Attachment I of the permit application.

1. Charging feed tanks	5.673 lbs/yr.
2. Light ends storage	17.631 lbs/yr.
	<hr/>
	23.304 lbs/yr.
	0.012 tons/yr.

Likewise, the annual decrease in emissions since December 21, 1976 will be revised upward to 52.780 tons from the 52.773 tons shown in Attachment II of the permit application.

Your prompt consideration of this matter will be appreciated. If there are any questions, please advise.

Very truly yours,



J. C. Bowers

Assistant to the Vice President

JCB/nr

cc: W. J. deGroot

PS Form 3811, July 1983

**SENDER: Complete items 1, 2, 3 and 4.**  
 Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

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

3. Article Addressed to:  
 R. L. Webb  
 Union Camp Corporation  
 P.O. Box 60369  
 Jacksonville, FL 32236

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	0155571

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

5. Signature - Addressee  
 X

6. Signature - Agent  
 X *John T. [Signature]*

7. Date of Delivery  
 JUN 14 1985

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

DOMESTIC RETURN RECEIPT



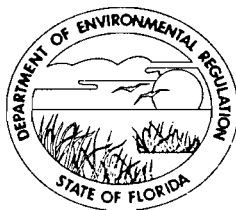
No. 0155571  
 RECEIPT FOR CERTIFIED MAIL  
 NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

SENT TO		R. L. Webb		
STREET AND NO.		P.O. Box 60369		
P.O., STATE AND ZIP CODE		Jacksonville, FL 32236		
POSTAGE			\$	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	\$	
		SPECIAL DELIVERY	\$	
		RESTRICTED DELIVERY	\$	
	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				

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

June 12, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. R. L. Webb, Vice President  
Union Camp Corporation  
P. O. Box 60369  
Jacksonville, Florida 32236

Dear Mr. Webb:

The department has received your application to construct "E" Myrcene Unit, AC 16-104157. After an initial review, the application is deemed to be incomplete. In order to process the application, the following information must be supplied:

1. Provide a description of the process which can be included in a Preliminary Determination and Technical Evaluation.
2. Will the requested operating time be 8,760 hours per year or 7,446 hours per year (85%)?
3. Provide all calculations and assumptions for all emissions from the proposed fuels. What is the expected annual usage of each fuel?
4. Provide all calculations and assumptions for all emissions from the storage tank. Will the addition of this process result in an increase of throughput for this storage tank?
5. The stack velocity does not equate to the other stack parameters. Please recalculate.
6. The pyrolysis flow sheet shows an emergency vent. Describe the venting conditions, estimate the number of ventings per year, and estimate the amount of emissions from venting.
7. Provide a list of all emission increases or decreases that have occurred during the last five years for all pollutants.

Mr. R. L. Webb  
Page Two  
June 12, 1985

When all the requested information is received, we can resume processing your application. If you have any questions, please write to me at the above address or call Edward Svec, Review Engineer, at (904)488-1344.

Sincerely,



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

CHF/ES/s

cc: J. Brown  
J. Woosley  
W. J. DeGroot

DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control



May 21, 1985

DER  
MAY 22 1985  
BAQM

Mr. Clair Fancy, P.E.  
Central Air Permitting Section  
Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8241

Re: Union Camp Corporation

Dear Mr. Fancy:

Enclosed is a construction permit application and PATS sheet for the E Myrcene Unit at the captioned facility. Since this construction is considered a modification to a major facility the application is being forwarded to the Central Air Permitting Section for processing in accordance with guidelines currently available to this office. Comments will follow under separate cover.

Very truly yours,

Jerry E. Woosley  
Assistant Engineer

JEW/cb

Enc.

cc: BESD File/2360-EE  
Mr. John Brown, P.E.

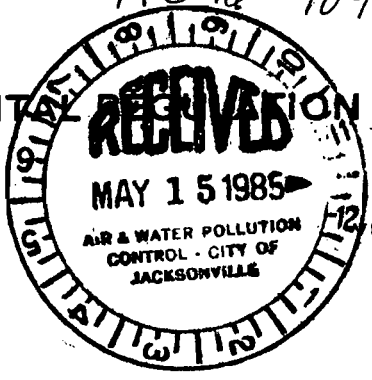
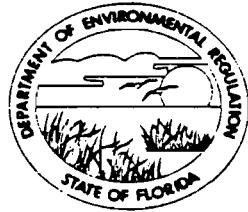




AC 16-104157

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT  
3426 BILLS ROAD  
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY  
G. DOUG DUTTON  
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Oil and/or Gas Fired Burner [X] New<sup>1</sup> [ ] Existing<sup>1</sup>  
APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification  
COMPANY NAME: Union Camp Corporation COUNTY: Duval

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) E Myrcene Unit (vapor Heater) for Pyrolysis of Terpene compounds (4.59 MM BTU/Hr.)  
SOURCE LOCATION: Street 2051 N. Lane Avenue City Jacksonville

UTM: East 7427650 North 3357350  
Latitude 30 ° 20 ' 53 "N Longitude 81 ° 45 ' 05 "W

APPLICANT NAME AND TITLE: R. L. Webb - Vice President  
APPLICANT ADDRESS: P.O. Box 60369 Jacksonville, FL 32236

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of Union Camp Corporation  
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: R. L. Webb  
R. L. Webb, Vice President  
Name and Title (Please Type)

Date: May 10, 1985 Telephone No. (904) 783-2180

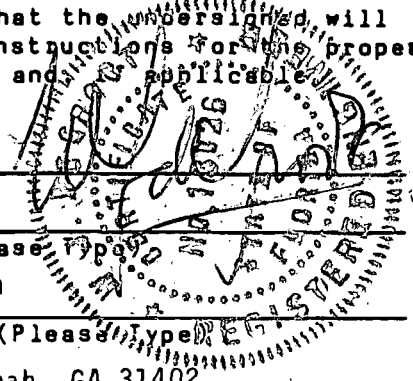
B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

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

<sup>1</sup> See Florida Administrative Code Rule 17-2.100(57) and (604)

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 applicable pollution sources.

Signed \_\_\_\_\_  
W. J. DeGroot  
Name (Please Type)  
Union Camp Corporation  
Company Name (Please Type)  
P.O. Box 2310 Savannah, GA 31402  
Mailing Address (Please Type)



Florida Registration No. 13026 Date: May 10, 1985 Telephone No. (912) 238-6624

**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.

We propose to construct a pyrolysis unit which, because of design and new technology, will produce products of higher quality than current products. Feed stocks, fuels, and products produced will be the same as from current equipment (See D below) except the new unit will have the capability of burning natural gas. Existing storage tanks will be utilized.

B. Schedule of project covered in this application (Construction Permit Application Only)  
Start of Construction August 15, 1985 Completion of Construction March 31, 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.)

Quencher - \$13,600  
Quencher Cooler - \$24,000  
Vent Condenser - \$5,000

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

"B" Myrcene Unit - A016-48022 Expires 10/31/86  
"C" Myrcene Unit - A016-48078 Expires 10/31/86  
"D" Myrcene Unit - A016-93240 Expires 10/31/89

E. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wks/yr 52; if power plant, hrs/yr \_\_\_\_\_; if seasonal, describe: Equipment of this type usually experiences an operating factor of about 85% randomly spaced throughout the year.

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

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

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

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Terpene Hydrocarbons	VOC	100	3000	A

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

- Total Process Input Rate (lbs/hr): 3000
- Product Weight (lbs/hr): 3000

**C. 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	
SO <sub>2</sub> *	1.05	3.91	-	-	9198	4.6	B
TSP **	0.002	-	-	-	19	0.01	B
NO <sub>x</sub> **	0.62	-	-	-	5431	2.72	B
VOC ***	0.12	0.45	-	-	1051	0.53	C

<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).

\* Fuel (1) Section III E

\*\* From table 1.4-1 uncontrolled emission factors for natural gas combustion EPA manual AP-42 Supplement 13.

\*\*\* Storage tank displacement using temperature of product from process and product with highest vapor pressure.

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

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

E. Fuels (1) - (2) principal fuels with capability of using (3) or (4)

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
(1) Dipentene(Terpene Hydrocarbons	34	36	4.59
(2) Crude Isobutanol	46	49	4.59
(3) H2 Fuel oil - 0.2% S max	33	35	4.59
(4) Natural Gas	0.0041	0.0044	4.59

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

Fuel Analysis:

Percent Sulfur: 0.2% max.(1) & (3) 0.0002 Typical (3) Percent Ash: Nil (1) (2) & (3)  
 Density: 7.2#/gal(1) & (3) 7.0#/gal (2) lbs/gal Typical Percent Nitrogen: Nil (1) (2) & (3)  
 Heat Capacity: 17,000/18000(1) & (3) 13400 (3) BTU/lb 122,400/129,000(1) & (2) 88,400 (3) BTU/gal  
 Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

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

Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

4.5 gallons water which will be treated in present wastewater treatment facilities -

D Flow Diagram

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

Stack Height: 60 ft above grade \_\_\_\_\_ ft. Stack Diameter: 3 ft at base \_\_\_\_\_ ft.  
 Gas Flow Rate: 1920 \_\_\_\_\_ ACFM 1040 \_\_\_\_\_ DSCFM Gas Exit Temperature: 510 \_\_\_\_\_ °F.  
 Water Vapor Content: 6.0 \_\_\_\_\_ % Velocity: 14.7 \_\_\_\_\_ FPS

**SECTION IV: INCINERATOR INFORMATION** N/A

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

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

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

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

Manufacturer \_\_\_\_\_

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

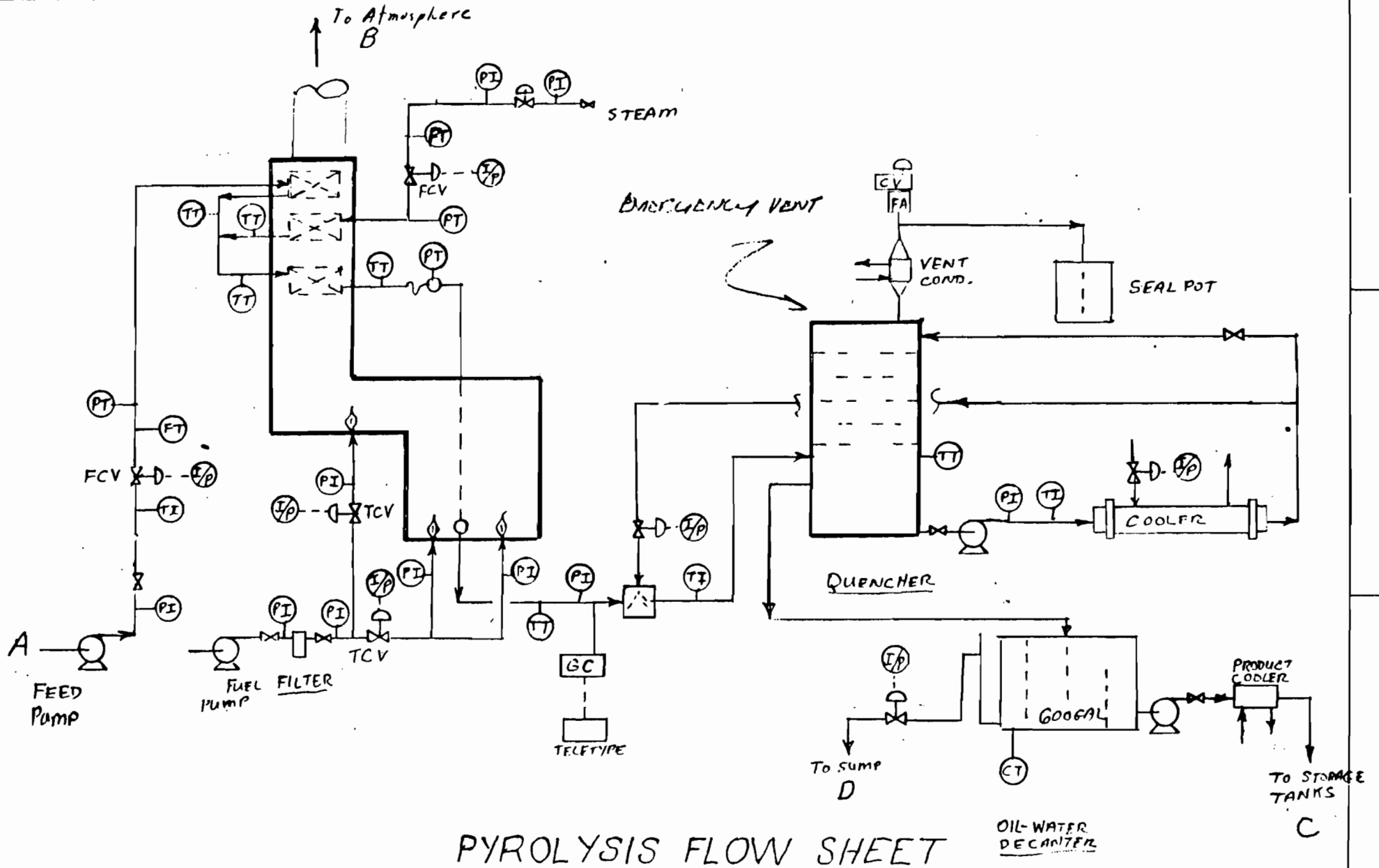
	Volume (ft) <sup>3</sup>	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ Stack Temp. \_\_\_\_\_

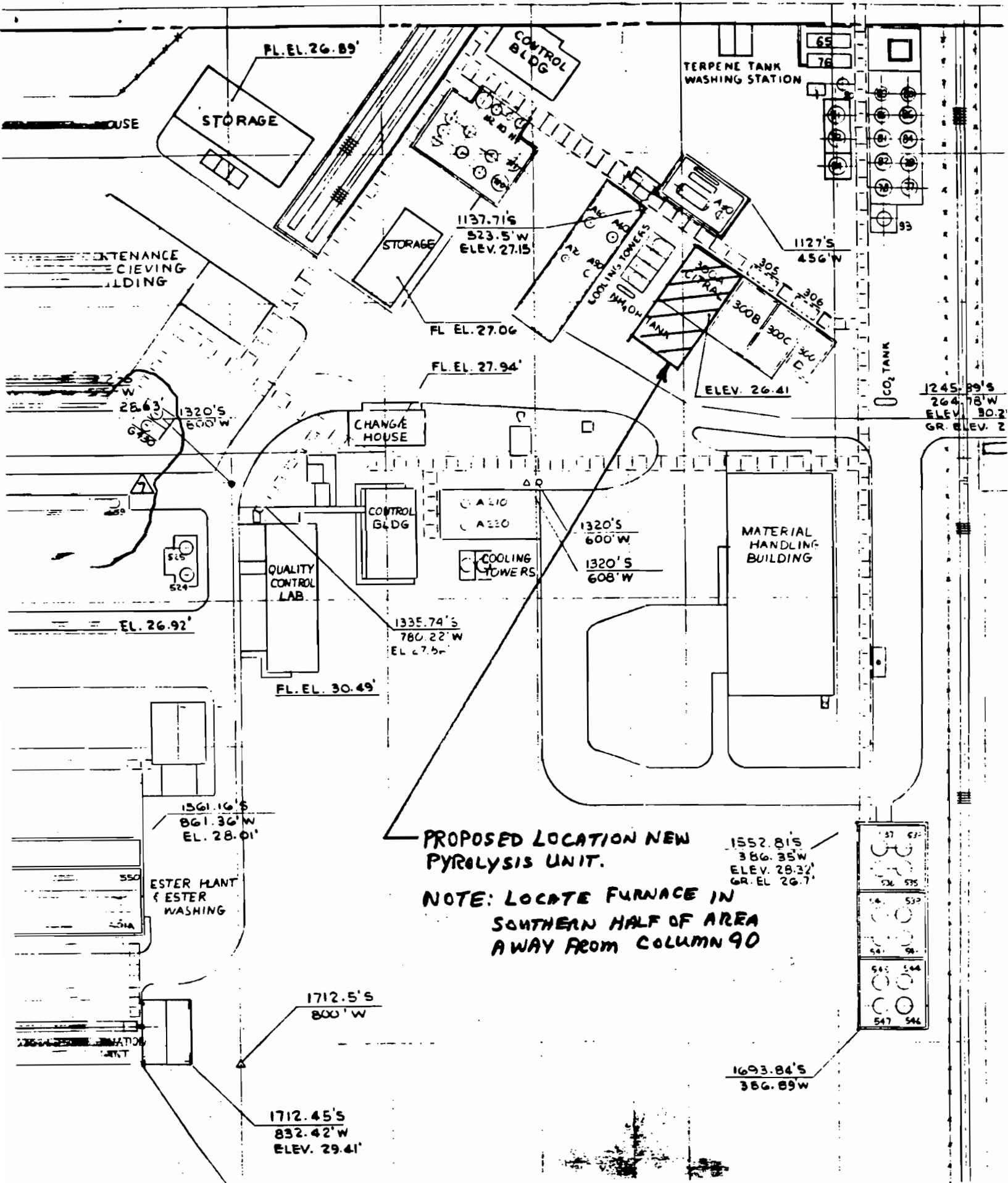
Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM\* Velocity: \_\_\_\_\_ FPS

\*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) \_\_\_\_\_



PYROLYSIS FLOW SHEET





Brief description of operating characteristics of control devices: Condense-  
pyrolysis vapors and cool product before pumping to existing storage tanks.

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

Water from above operations will be returned to cooling towers for recycling.

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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.

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.

(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** N/A

**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).

Check Sheet

Company Name: Union Camp Corporation  
Permit Number: AC 16-065833  
PSD Number: \_\_\_\_\_  
Permit Engineer: \_\_\_\_\_

**Application:**

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

**Cross References:**

- AD16-02084
- AD16-036783
- AD16-~~118~~048160

**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

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

**Folder Name:** Union Camp Corporation

**Permit(s) Numbered:**

AC 16 - 065833
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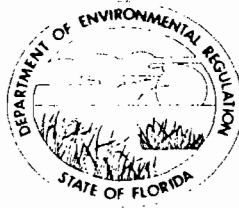
Period during  
which document  
was received:

Detailed Description

Period during which document was received:		Detailed Description
APPLICATION 25 JAN 1983	1.	24"×36" BLUEPRINT: PROPOSED HOT GAS DUCT FOR HUMATE DRYER (DRAWING H-1)
	2.	24"×36" BLUEPRINT: PROPOSED HOT GAS DUCT FOR HUMATE DRYER (DRAWING H-2)

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

August 28, 1984

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. J. C. Bowers, Manager  
Union Camp Corporation  
Post Office Box 60369  
Jacksonville, Florida 32236

Dear Mr. Bowers:

Re: Request to Extend the Expiration Date of the Construction  
Permit: AC 16-65833

The department is in receipt of your request to extend the expiration date of the above referenced construction permit. The department is in agreement with the request and the following shall be added or changed:

Expiration Date:

From: August 31, 1984  
To: February 28, 1985

Attachment to be Incorporated:

10. Jerry Woosley's letter with enclosures dated August 24, 1984.

This letter must be attached to your construction permit, No. AC 16-65833, and shall become a part of that permit.

Sincerely,

  
Victoria J. Tschinkel  
Secretary

VJT/ks

cc: Jerry Woosley  
Doug Dutton  
Nancy Wright

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: C. H. Fancy, Deputy Bureau Chief, BAQM  
DATE: August 28, 1984  
SUBJ: Approval and signature of a modification to the construction permit, No. AC 16-65833, for Union Camp Corporation, for the extension of the expiration date.

Enclosed is a modification to the referenced construction permit and the bureau recommends approval.

CHF/BM/s

enclosure

DER  
SEP 4 1984  
BAQM

RECEIVED

AUG 29 1984

Office of the Secretary

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:  
*J. C. Bowers, manager  
 Union Camp Corp.  
 P.O. Box 60369  
 Jacksonville, Fla 32236*

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	<i>708-530-401</i>	

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE  Addressee  Authorized agent

*Jack [Signature]*

4. DATE OF DELIVERY \_\_\_\_\_ POSTMARK \_\_\_\_\_

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: \_\_\_\_\_ CLERK'S INITIALS \_\_\_\_\_

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

☆GPO : 1979-300-459

P 408 530 401

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982

Sent to <i>J. C. Bowers, mng.</i>	
Street and No. <i>Union Camp Corp.</i>	
<i>P.O. Box 60369</i>	
P.O., State and ZIP Code <i>Jacksonville, Fl 32236</i>	
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	



DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control

August 24, 1984



DER  
AUG 27 1984  
DAQM

Mr. Clair Fancy, P.E.  
Florida Dept. of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32301

REF: UNION CAMP CORPORATION  
HUMATE SPRAY DRIER  
PERMIT AC16-65833

Dear Mr. Fancy:

Enclosed is a request to extend the Construction Permit for the captioned source. Upon review of the information presented, the Bio-Environmental Services Division recommends extension of the permit to February 28, 1985. This extension date will allow sufficient time to complete the necessary modification and compliance testing.

Please direct all comments and questions to the undersigned.

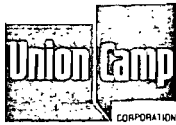
Very truly yours,

Jerry E. Woosley  
Assistant Engineer

JEW/ns  
Enclosure

cc: Mr. Doug Dutton - DER  
Mr. John Bowers - Union Camp Corporation





TERPENE AND AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

August 22, 1984



Mr. J. E. Woosley  
Assistant Engineer  
Bio-Environmental Services Division  
515 West 6th Street  
Jacksonville, FL 32206

Re: Permit No. AC16-65833

Dear Mr. Woosley:

On May 29, 1984 a Certificate of Completion of Construction was submitted for the above referenced permit along with an application fee of \$100.00 for an operating permit.

At that time it was expected that the operating problems which were being experienced would be solved and that tests results indicating compliance with permit conditions while operating at design rate could be submitted.

Another visible emissions test on the bag house stack was conducted on July 25, 1984, and a copy is attached. However, this test was also conducted when the operating rate was less than 90% of the design rate.

You are aware, through correspondence and plant inspection, that operating problems still exist and of the efforts to solve these. Attached is a list of things that have been done and another list of items that are planned to be done or being considered, pending results of certain tests.

Mr. J. E. Woosley

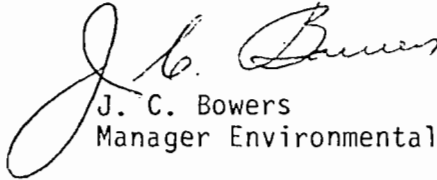
Re: Permit No. AC16-65833

Page 2

As you can see, some of the items will require time that will extend past the expiration date of the referenced permit - August 31, 1984.

Therefore, we request an extension of expiration date of the above referenced permit to December 31, 1984.

Very truly yours,



J. C. Bowers  
Manager Environmental Affairs

JCB/nr

Attachments

Steps Taken to Bring Humate Plant  
to Capacity and Reduce Emissions

1. Replaced bag house stack (increased diameter to 36" and, height to 66'10") to reduce back pressure.  
Cost - \$11,000.
  
2. Made major repairs to the primary bag house.
  - a. Caulked all joints with high temperature compound.
  - b. Repaired and/or replaced damaged bag cages.
  - c. Replaced bags and installed new purge control.Cost - \$35,000.
  
3. Modified product handling system.
  - a. Installed new vent system.
  - b. Modified bucket elevator.
  - c. Modified product tanks.Cost \$71,000.

Additional Steps Planned or Being Considered  
to Bring Humate Plant to Capacity and  
Reduce Emissions

1. Install 100 HP motor and new pulleys on exhaust fan.  
Estimated cost - \$7,000.
  
2. Improved air-conveyor and venting system presently being designed.  
Estimated cost - \$15,000.
  
3. Presently testing loading cover for hopper cars, to be modified as needed.  
Estimated cost - \$3,000.
  
4. Studies being conducted by the manufacturer of the primary bag house to:
  - a. Determine if there are differences in the filtration properties of production humate and the pilot plant humate which they listed.
  - b. Establish the type bag required if differences are determined.

This study is expected to be completed by September 1st. However, if new bags are recommended, it will be about six weeks before delivery can take place.

Estimated cost - \$45,000.
  
5. Replace solenoid valves on air purge system to reduce air purging pressure.  
Estimated cost - \$14,000.



Tel. (904) 253-5761  
103-7 STOCKTON STREET  
P. O. BOX 52329  
JACKSONVILLE, FLORIDA 32201

# TECHNICAL SERVICES, INC.

## VISIBLE EMISSIONS FIELD DATA SHEET

Company Name Union Carbide  
Source HUMANTE

Date 7-25-84  
Time 2:30 - 3:30

Wind Direction and Speed \_\_\_\_\_  
Observer's Signature [Signature]

min. \ sec.	sec.			
	0	15	30	45
0	0	0	0	0
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
11	0	0	0	0
12	0	0	0	0
13	0	0	0	0
14	0	0	0	0
15	0	0	0	0
16	0	0	0	0
17	0	0	0	0
18	0	0	0	0
19	0	0	0	0
20	0	0	0	0
21	0	0	0	0
22	0	0	0	0
23	0	0	0	0
24	0	0	0	0
25	0	0	0	0
26	0	0	0	0
27	0	0	0	0
28	0	0	0	0
29	0	0	0	0

min. \ sec.	sec.			
	0	15	30	45
30	0	5	0	0
31	0	0	0	0
32	0	0	0	0
33	0	0	0	0
34	0	0	0	0
35	0	0	0	0
36	0	0	0	0
37	0	0	0	0
38	0	10	0	0
39	0	0	0	0
40	0	0	0	0
41	0	0	0	0
42	0	0	0	0
43	0	0	0	0
44	0	0	0	0
45	0	0	0	0
46	0	0	0	0
47	0	0	0	0
48	0	0	0	0
49	0	0	0	0
50	0	0	0	0
51	0	0	0	0
52	0	0	0	0
53	0	0	0	0
54	0	0	0	0
55	0	0	0	0
56	0	0	0	0
57	0	0	0	0
58	0	0	0	0
59	0	0	0	0

Height of Stack: 30 ft.  
Distance to Stack: 50 yds  
Color of Plume: clear  
Condensed water: Yes  No   
Point of Opacity Reading: Stack outlet

Background Description:  
Blue Sky

Opacity =  $\frac{\text{Sum of nos. recorded}}{\text{Total nos. readings}}$   
0.18

W + N  
S  
Sun Observer

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

THIS IS TO CERTIFY THAT

John Ellis has completed  
the STATE OF FLORIDA visible emissions evaluation training  
and is a qualified observer of visible emissions as specified by  
EPA reference method 9.  
This certificate expires on December 15, 1984

Judi Sears Certification Officer  
J. E. G. Bearer's Signature

DER Form PERM 5-9 (Jun 79)

No. 0158251

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

SENT TO		Mr. J. C. Bowers	
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		2/17/84	

PS Form 3800, Apr. 1976

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. J. C. Bowers  
 Post Office Box 60369  
 Jacksonville, FL 32236

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 0158251

(Always obtain signature of addressee or agent)

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

4. DATE OF DELIVERY

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

POSTMARK: JACKSONVILLE, FLA. FEB 17 1984

CLERK'S INITIALS: R.E.A.

☆GPO : 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

February 15, 1984

CERTIFIED MAIL - RECEIPT REQUESTED

Mr. J. C. Bowers, Manager  
Union Camp Corporation  
Post Office Box 60369  
Jacksonville, Florida 32236

Re: Request to Extend the Expiration Date of the Construction  
Permit: AC 16-65833

Dear Mr. Bowers:

The department is in receipt of your request to extend the expiration date of the above referenced construction permit. The department is in agreement with the request and the following shall be added or changed:

Expiration Date:

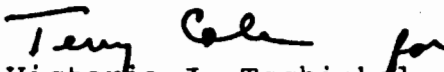
From: April 30, 1984  
To: August 31, 1984

Attachment to be incorporated:

9. Jerry Woosley's letter with enclosures dated January 18, 1984.

This letter must be attached to your construction permit, No. AC 16-65833, and shall become a part of that permit.

Sincerely,

  
Victoria J. Tschinkel  
Secretary

VJT/s

cc: Jerry Woosley  
Doug Dutton  
Nancy Wright

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: C. H. Fancy, Deputy Bureau Chief, BAQM  
*C. H. Fancy*

DATE: February 14, 1984

SUBJ: Approval and signature of a modification to the construction permit, No. AC 16-65833, for Union Camp Corporation, for the extension of the expiration date.

Enclosed is a modification to the referenced construction permit and the bureau recommends approval.

CHF/BM/s  
enclosure

**RECEIVED**  
FEB 16 1984

Office of the Secretary

DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control



1/24  
Bill -  
Please  
handle  
January 18, 1984

Mr. Clair Fancy, P.E.  
Central Air Permitting Section  
Dept. of Environmental Regulation  
2600 Blairstone Road  
Tallahassee, Florida 32301

DER  
JAN 23 1984  
BAQM

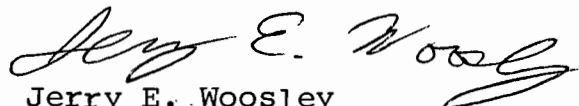
Re: Humate Spray Drier, Union Camp Corp.  
Permit AC16-65833

Dear Mr. Fancy:

Enclosed is a request for an extension of the captioned permit. Bio-Environmental Services Division recommends approval of the permit extension.

If I may be of further assistance in this matter, please advise.

Very truly yours,

  
Jerry E. Woosley  
Assistant Engineer

JEW/vj  
Enclosure

cc: Mr. Doug Dutton - DER  
cc: Mr. John Bowers



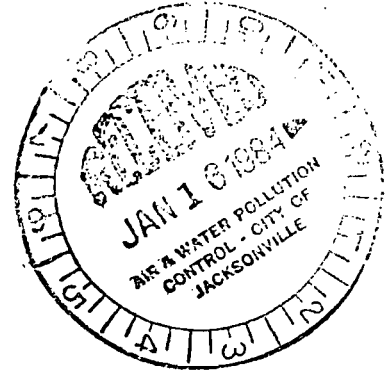


TERPENE AND AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

January 13, 1984

Mr. J. E. Woosley  
Assistant Engineer  
Bio-Environmental Services Division  
515 West 6th Street  
Jacksonville, FL 32206



Re: Construction Permit No. AC16-65833

Dear Mr. Woosley:

I am attaching a copy of a memorandum from our Construction Engineering Department which outlines some problems which have delayed construction of the equipment for the above referenced permit. These, combined with the application for a modification of the permit as originally issued (letter from DER dated December 6, 1983) make it necessary to request an extension of the time for completion of construction and submission of an operating permit application.

We therefore request that pertinent dates relative to this permit be extended as outlined below.

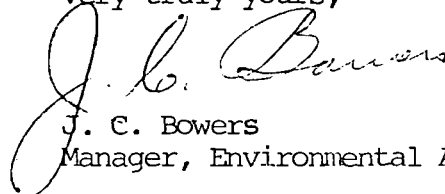
Completion of Construction - April 15, 1984

Submission of Operating Permit Application - May 31, 1984

Expiration of Construction Permit - August 31, 1984.

Your favorable consideration of this request would be greatly appreciated.

Very truly yours,

  
J. C. Bowers  
Manager, Environmental Affairs

JCB/nr

Attachment



TO Mr. J. C. Bowers AT Jacksonville SUBJECT ESTIMATED COMPLETION DATE - HUMATE CONSTRUCTION  
FROM W. J. de Groot AT Savannah DATE January 11, 1984

cc: Mr. J. M. Baggett  
Mr. E. O. Barnes  
Mrs. L. Burgess  
Mr. R. A. Cronin  
Mr. B. B. Galbraith  
Mr. J. F. Hasbrouck  
Mr. G. H. Helmken  
Mr. G. Kirkland  
Mr. E. W. White

As per your request in regard to the estimated completion of the construction for Humate Venture Phase, I offer the following comments.

Realizing the importance of this date for the construction permit schedule from the Florida Department of Environmental Regulations, it seems to me that at this moment, early April, 1984, is fair for Jacksonville. We are dealing here, however, with lots of used equipment, that even when new, has never been operated by T&A before.

The situation at Green Cove Springs, in our Seminole Forest, is entirely different. The approach to these operations are more straight forward.

However, the D.E.R. in Tallahassee has just announced a response deadline of 2/3/84, with respect to the Clay County permit application, handled by the Clay County Engineering Department. This permit will cover replacement of an old wooden bridge across Clarks Creek in the access road towards our site there.

Verbally, we have been assured that this application will pass the agencies involved rather rapidly since a case of improvement is involved here.

Mr. J. C. Bowers  
Page Two  
January 11, 1984

It may be noted however, that this work was agreed upon with the Clay County Engineers during early August, 1983. I have kept a steady friendly pressure on these officials, and there is still a good chance of having a "green light" by late February this year.

As you are well aware, our T&A applications usually take 90 days.



W. J. de Groot

WJdG/dlk

PS Form 3811, Jan 1979

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

1. 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. J. C. Bowers  
 Union Camp Corp.  
 P. O. Box 60369  
 Jacksonville, FL 32236

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 0158234

(Always obtain signature of addressee or agent)

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

4. DATE OF DELIVERY

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CERK'S INITIALS

★GPO : 1979-300-455

No. 0158234

RECEIPT FOR CERTIFIED MAIL

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

PS Form 3800, Apr. 1976

SENT TO  
 Mr. J. C. Bowers  
 STREET AND NO.  
 P.O., STATE AND ZIP CODE

POSTAGE	\$
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	
12/12/83	

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

December 6, 1983

CERTIFIED MAIL - RECEIPT REQUESTED

Mr. J. C. Bowers, Manager  
Union Camp Corporation  
P. O. Box 60369  
Jacksonville, Florida 32236

Re: Modification to Construction Permit No. AC 16-65833, issued  
July 15, 1983, and modified August 10, 1983.

Dear Mr. Bowers:

The bureau is in receipt of your request to modify the above referenced permit to allow the installation of a natural gas burner. This natural gas burner is an integrated part of an existing humate spray dryer, which is to be installed and part of the proposed project contained in the above referenced permit. The natural gas burner will be an exclusive auxiliary heat source when the Nos. 2 and 3 steam generating boilers' flue gas cannot be utilized.

Based on 8760 annual hours of operation, a maximum  $16 \times 10^6$  Btu per hour heat input, and a maximum  $0.016 \times 10^6$  cubic feet of natural gas per hour consumption, the maximum potential pollutant emissions for PSD tracking for the proposed amendment are:

Pollutant	Potential Pollutant Emissions (TPY)
NOx	9.81
PM	0.4

Note: NOx - nitrogen oxides  
PM - particulate matter

Referencing the above information, the bureau finds the modification request acceptable and the conditions are changed and added as follows:



Mr. J. C. Bowers, Manager  
Page Two  
December 6, 1983

Specific Conditions:

From: The HSD will utilize flue gases from Nos. 2 and 3 steam generating boilers for its heat. There are no combustible fuels associated with the HSD.

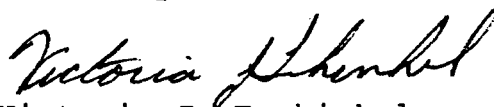
To: The HSD will utilize flue gases from Nos. 2 and 3 steam generating boilers as its primary heat source. An exclusive auxiliary heat source will be a natural gas burner when the boilers are unavailable. For the natural gas burner, maximum heat input shall not exceed  $16 \times 10^6$  Btu per hour and maximum fuel consumption shall not exceed  $16 \times 10^3$  cubic feet per hour.

Attachments to be incorporated are:

7. Mr. J. C. Bower's letter dated September 9, 1983.
8. Mr. C. H. Fancy's letter dated October 5, 1983.
9. Mr. J. C. Bower's letter dated November 1, 1983.

This letter must be attached to your construction permit, No. AC 16-65833, and shall become a part of that permit.

Sincerely,

  
Victoria J. Tschinkel  
Secretary

VJT/s

cc: Jerry Woosley  
Doug Dutton  
Martha Hall

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, Secretary

FROM: C. H. Fancy, Deputy Bureau Chief, BAQM - *Clan Jancy* **RECEIVED** DEC 7 1983  
Office of the Secretary

DATE: December 6, 1983

SUBJ: Approval and signature of a modification to the construction permit, No. AC 16-65833, for Union Camp Corporation, issued July 15, 1983, and modified August 10, 1983.

Enclosed is a modification to the referenced construction permit and the bureau recommends approval.

CHF/BM/s

enclosure



TERPENE AND AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

November 1, 1983

DER  
NOV 07 1983  
BAQM

Bureau of Air Quality Management  
Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32301-8241

Attn: Mr. C. H. Fancy, P.E.  
Deputy Bureau Chief

Re: Construction Permit NO. AC16-65833

Dear Mr. Fancy:

Please refer to your letter of October 5, 1983 regarding an amendment to the above referenced permit to include a natural gas burner as a standby source of heat.

Attached are five copies of an amended application reflecting this. The following sections of the application have been modified.

- II.A. - General description of the project.
- III.C. - Airborne Contaminants Emitted
- III.E. - Fuels
- V.6. - Flow Diagram

Thank you for your cooperation and if additional information is required, please advise.

Very truly yours,

A handwritten signature in cursive script that reads "J. C. Bowers".

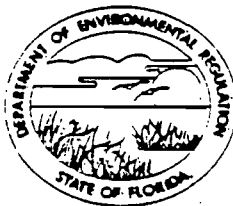
J. C. Bowers  
Manager, Environmental Affairs

JCB/nr

cc: Mr. J. E. Woosley  
Mr. G. D. Dutton

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



DER  
NOV 7 1983  
BAQM

BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Pollution [] New<sup>1</sup> [] Existing<sup>1</sup> Amendment  
AC16-65833

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

COMPANY NAME: Union Camp Corporation COUNTY: Duval

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) Natural gas burner

SOURCE LOCATION: Street 2051 N. Lane Avenue city Jacksonville

UTM: East 7427650 North 3357350

Latitude 30° 20' 53" N Longitude 81° 45' 05" W

APPLICANT NAME AND TITLE: R. L. Webb - Vice President

APPLICANT ADDRESS: P.O. Box 60369 Jacksonville, FL 32236

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of Union Camp Corporation

I certify that the statements made in this application for a Construction Permit 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: R. L. Webb by [Signature]

R. L. Webb - Vice President  
Name and Title (Please Type)

Date: 11/3/83 Telephone No. (904) 783-2180

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

<sup>1</sup> 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 on the proper maintenance and operation of the pollution control facilities and applicable pollution sources.

Signed \_\_\_\_\_

W. J. deGroot

Name (Please Type)

Union Camp Corporation

Company Name (Please Type)

P.O. Box 60369 Jacksonville, FL 32236

Mailing Address (Please Type)

Florida Registration No. 13026 Date: 11/3/83 Telephone No. (904) 783-2180

**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 proposed unit will spray dry Humate, an organic by-product of titanium ore mining operations. Humate is a naturally occurring substance resulting from degradation of plant and animal life. The equipment to be installed was previously used at another location and has a natural gas burner as an integral part. However, in normal operation

continued on next page

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

Start of Construction \_\_\_\_\_ Completion of Construction \_\_\_\_\_

- 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.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

\_\_\_\_\_  
\_\_\_\_\_

heat for the drying will be recovered from boiler flue gasses. Therefore, the gas burner will be used as a standby source of heat. Majority of product will be shipped in covered railroad hopper cars. Any bagging operation will be equipped with hood and fan to minimize fugitive emissions.

E. Requested permitted equipment operating time: hrs/day \_\_\_\_\_; days/wk \_\_\_\_\_; wks/yr \_\_\_\_\_; if power plant, hrs/yr \_\_\_\_\_; if seasonal, describe: \_\_\_\_\_

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

1. Is this source in a non-attainment area for a particular pollutant? \_\_\_\_\_

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? 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. \_\_\_\_\_

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? \_\_\_\_\_

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? \_\_\_\_\_

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? \_\_\_\_\_

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.

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

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

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

2. Product Weight (lbs/hr): \_\_\_\_\_

**C. 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 <sup>2</sup> 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	
TSP	1	3.942	3.81 lbs/hour	3.81	1.514MM	756.86	2
			Table 610-1				
TSP	0.008 (1)	(2)	-	-	701	0.35	2
SO <sub>2</sub>	0.01 (1)	(2)	-	-	88	0.04	2
NO <sub>x</sub>	2.24 (1)	(2)	-	-	19,622	9.81	2

<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).

- (1) From Table 1.4-1 Uncontrolled Emission Factors for Natural Gas Combustion EPA Manual AP-42 Supplement 13
- (2) Standby Use - When operated would use gas normally burned in boiler.



J. 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)

E. Fuels Standby gas burner

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural gas	0.014	0.016	16

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

Fuel Analysis:

Percent Sulfur: \_\_\_\_\_ Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

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

Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

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

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

SECTION IV: INCINERATOR INFORMATION

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

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

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

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

Manufacturer \_\_\_\_\_

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

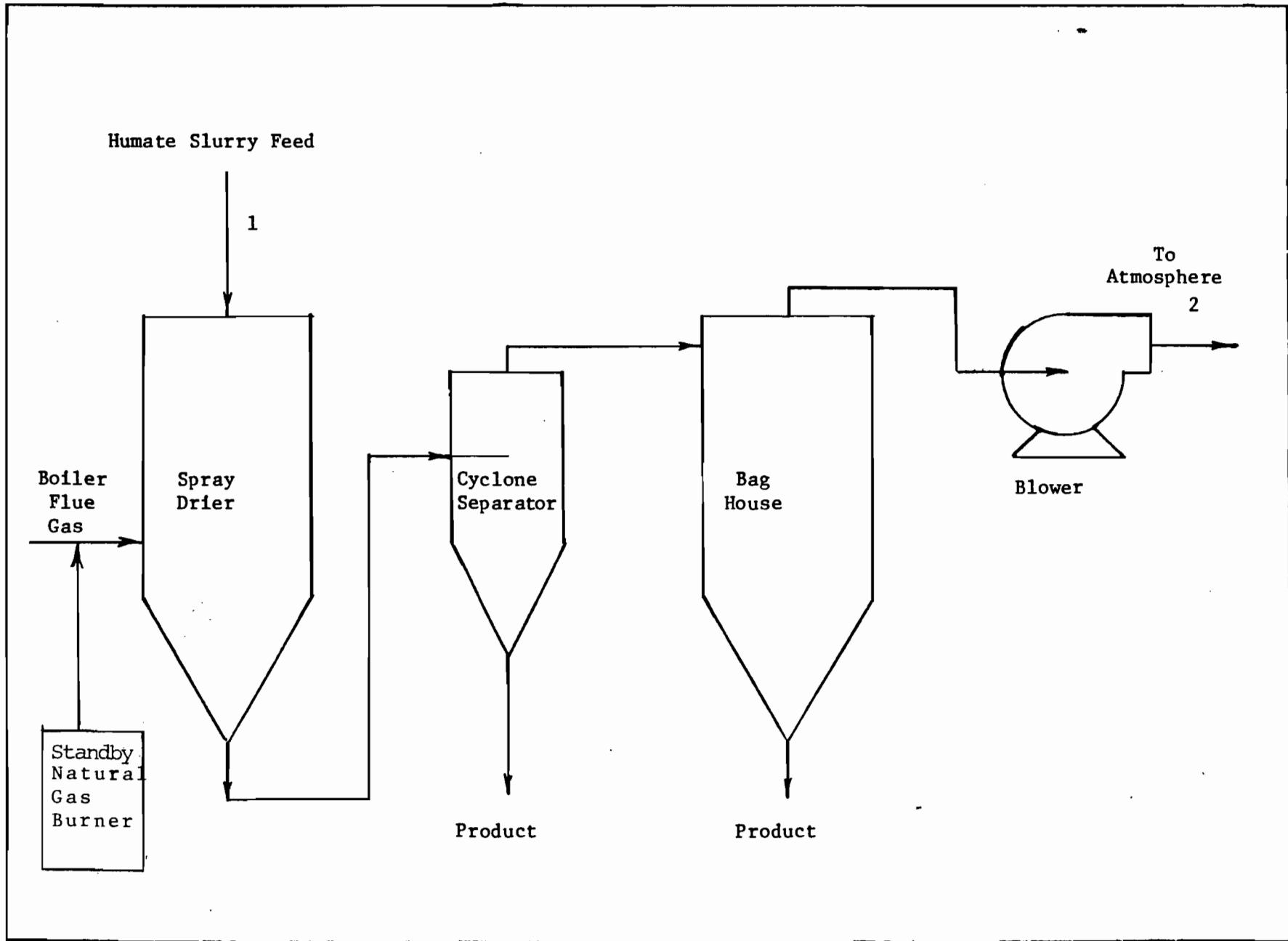
	Volume (ft) <sup>3</sup>	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

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: \_\_\_\_\_

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

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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**

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:
- 7. Energy:
- 9. Emissions:

- 6. Operating Costs:
- 8. Maintenance Cost:

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**

**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).



2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent?  Yes  No

b. Was instrumentation calibrated in accordance with Department procedures?

Yes  No  Unknown

B. Meteorological Data Used for Air Quality Modeling

1. \_\_\_\_\_ Year(s) of data from \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year month day year

2. Surface data obtained from (location) \_\_\_\_\_

3. Upper air (mixing height) data obtained from (location) \_\_\_\_\_

4. Stability wind rose (STAR) data obtained from (location) \_\_\_\_\_

C. Computer Models Used

1. \_\_\_\_\_ Modified? If yes, attach description.

2. \_\_\_\_\_ Modified? If yes, attach description.

3. \_\_\_\_\_ Modified? If yes, attach description.

4. \_\_\_\_\_ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO <sub>2</sub>	_____ grams/sec

E. Emission Data Used in Modeling

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

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

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

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

PS Form 3811, Jan. 1979

● **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. J. C. Bowers  
 P. O. Box 60369  
 Jacksonville, FL 32205

3. **ARTICLE DESCRIPTION:**  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 P408530357  
 (Always obtain signature of addressee or agent)

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

4. **DATE OF DELIVERY** 10-11-83 **POSTMARK** JACKSONVILLE FL 11 1983

5. **ADDRESS** (Complete only if requested)

6. **UNABLE TO DELIVER BECAUSE:** CLERK'S INITIALS *AD 10-11-83*

☆ GPO : 1979-300-459

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

P 408 530 357  
 RECEIPT FOR CERTIFIED MAIL  
 NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

Sent to J. C. Bowers	
Street and No. P. O. Box 60369	
P.O., State and ZIP Code Jacksonville, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
<b>TOTAL Postage and Fees</b>	<b>\$</b>
Postmark or Date  10/6/83	

PS Form 3800, Feb. 1982

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 5, 1983

Mr. J. C. Bowers  
Assistant to the Vice President  
Union Camp Corporation  
P. O. Box 60369  
Jacksonville, Florida 32205

Re: Construction Permit No. AC 16-65833 issued July 15, 1983

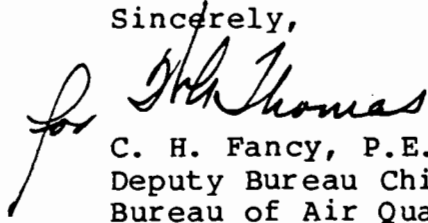
Dear Mr. Bowers:

The bureau is in receipt of your letter dated September 9, 1983, in which it was stated that the proposed spray drying equipment has an associated natural gas burner. This burner is a combustion source and will emit pollutants into the atmosphere. Since no data has been received on this source and the source was not reviewed as part of the proposed project contained in the referenced construction permit, the bureau will require additional information on this source. Complete and submit to the bureau the appropriate parts in Sections II, III, and V of the enclosed permit application, referencing the submittal as an amendment to the original application.

Upon receipt of the additional information, a review for rule applicability will be required. If the change is not significant, then a modification will not be warranted and an amendment will be appropriate.

If there are any questions, please write to me at the above address or call Bruce Mitchell at (904) 488-1344.

Sincerely,

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

CHF/RBM/bjm

cc: Jerry Woosley  
Martha Hall  
Doug Dutton  
Attachment

*Bruce*



TERPENE &  
AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32205 TELEPHONE (904) 783-2180 TWX (810) 827-0398

September 9, 1983

*9/14 Bill*

DER  
SEP 14 1983  
BAQM

Bureau of Air Quality Management  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301

Attn: Mr. C. H. Fancy, P.E.  
Deputy Bureau Chief

Re: Permit No. AC16-65833

Dear Mr. Fancy:

The spray drying equipment which will be constructed under the above permit will be moved from another location where it has been operated. At this former location, the heat for the drying was furnished by a natural gas burner which is an integral part of the equipment.

Thus, when the equipment is constructed at this site, the burner will be part of it. We intended to provide, in the construction, a connection to the burner from the natural gas supply line. The burner will then be fired to check operation of instrumentation. Upon completion of the test, the gas supply line will be disconnected.

If, at any time in the future, because of an emergency or the need to supply additional heat, we will seek amendement to our permit to operate the burner.

Very truly yours,

*J. C. Bowers*  
J. C. Bowers  
Assistant to the Vice President

JCB/nr

cc: W. J. deGroot  
John Ketteringham - DER  
Jerry Woosley - BES

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

August 10, 1983

Mr. R. L. Webb, Vice President  
Union Camp Corporation  
Post Office Box 60369  
Jacksonville, Florida 32236

Dear Mr. Webb:

The bureau is in receipt of your request to extend the expiration date of the construction permit, No. AC 16-65833. Also, the question was raised about the Certificate of Completion being acceptable in lieu of the application to operate an air pollution source as found in "Specific Condition No. 7" of the Permit. The requests will be responded to separately and the changes to the permit will follow immediately:

Expiration Date:

From: December 31, 1983  
To: April 30, 1984

After checking with General Counsel, the department as a policy requires an application to obtain construction and operating permits. Therefore, an application shall be required to obtain an operating permit.

"Specific Condition No. 7":

From: A Certificate of Completion shall be submitted to the DER's Northeast District Office or its designee (Duval County's Bio-Environmental Services) prior to receiving an operating permit or an application for an operating permit shall be submitted prior to 90 days before the expiration date of this permit. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date or the issuance of an operating permit.

To: An application for an operating permit shall be submitted prior to 90 days before the expiration date of this permit to the DER's Northeast District or its designee (Duval County's Bio-Environmental Services). The permittee may continue to operate in compliance with all terms of this

R. L. Webb  
August 4, 1983  
Page Two


construction permit until its expiration date or the  
issuance of an operating permit.

Attachment to be incorporated is:

6. Mr. J. C. Bowers' letter dated August 1, 1983.

This letter and attachment must be attached to your permit, No.  
AC 16-65833, and shall become a part of that permit.

Sincerely,

  
Victoria J. Tschinkel  
Secretary

VJT/bmm

cc: Jerry Woosley  
John Ketteringham  
Nancy Wright

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: C. H. Fancy, Deputy Bureau Chief, BAQM *BT for*  
DATE: August 10, 1983  
SUBJ: Approval and signature of a modification of the  
construction permit, No. AC 16-65833, for Union Camp  
Corporation, issued July 15, 1983.

**RECEIVED**

AUG 15 1983

Office of the Secretary

Enclosed is a modification to the referenced construction permit and the bureau recommends approval.

CHF/bmm

Enclosure



TERPENE AND AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

August 1, 1983

DER  
AUG 03 1983  
BAQM

Bureau of Air Quality Management  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301

Attn: Mr. C. H. Fancy, P.E.  
Deputy Bureau Chief

Re: Permit No. AC16-65833

Dear Mr. Fancy:

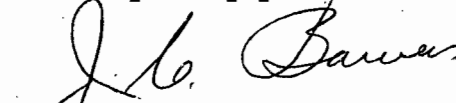
The estimated starting and completion dates in the application for the above referenced permit were predicated upon the permit being issued by the end of May. As you know, the review period was extended by the request for additional information.

Also there were some unforeseen delays internally and actual construction will not start for several weeks.

Therefore, we request that the expiration date be extended to April 30, 1984. An extension to this date will allow enough time for the submission of a Certificate of Completion accompanied by the results of testing to demonstrate compliance with Specific Condition No. 3. It is our understanding that such a submission will be acceptable in lieu of an application for an Operation Permit.

Your favorable consideration of this request will be greatly appreciated.

Very truly yours,

  
J. C. Bowers  
Assistant to the Vice President

JCB/nr

cc: W. J. deGroot  
John Ketteringham  
Jerry Woosley



PS Form 3811, Jan. 1979

**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. Webb, Union Camp Corp.  
 P. O. Box 60369  
 Jacksonville, Florida 32236

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 P408530331

(Always obtain signature of addressee or agent)

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

4. DATE OF DELIVERY  
 7-22-83

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: *POST OFFICE'S INITIALS*

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

☆GPO : 1979-300-459



P 408 530 331

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. R. L. Webb	
Street and No. P. O. Box 60369	
P.O., State and ZIP Code Jacksonville, FL 32236	
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  7/21/83	

PS Form 3800, Feb. 1982

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 19, 1983


Mr. R. L. Webb, Vice President  
Union Camp Corporation  
P. O. Box 60369  
Jacksonville, Florida 32236

Dear Mr. Webb:

Enclosed is Permit Number AC 16-65833 dated July 15, 1983, to Union Camp Corporation, issued pursuant to Section 403, Florida Statutes.

Acceptance of the 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,

*for* 

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

CHF/bjm

Enclosure

cc: W. J. DeGroot, Union Camp Corporation  
John Ketteringham, DER Northeast District  
Jerry Wosley, Duval County Bio-Environmental Services  
Division

FINAL DETERMINATION

Humate Material Processing Project  
Union Camp Corporation  
Jacksonville, Florida

Application Number  
AC 16-65833

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

Final Determination  
Union Camp Corporation  
Humate Spray Drier, Storage, Bagging and Load-out Operation

The construction permit application has been reviewed by the department. Public notice of the department's intent to issue was published in the Florida-Times Union on June 7, 1983. The preliminary determination and technical evaluation was available for public inspection at the Duval County's Bio-Environmental Services (BES) office, the DER's Northeast District office and Bureau of Air Quality Management (BAQM) office.

Comments (Attachment 5) were received from Mr. Jerry E. Woosley with BES on June 27, 1983. The bureau will make the following revisions to the "Specific Conditions" and they will read:

Specific Conditions:

Comment: Chapter 17-2.650(2)(c)12.b., FAC, limits emissions to 5% opacity or 0.03 gr/dscf.

BAQM

Comment: Since there is doubt to the legal interpretation as to whether "or" means inclusive, the humate spray drier emission limits will be issued as drafted.

Comment: Chapter 17-2.650(2)(c)11.b., FAC, limits a loadout sleeve being removed from a ship's hold to 10% opacity.

From:

3. Maximum allowable pollutant emissions from the proposed project are:

<u>Source</u>	<u>Pollutant</u>	<u>Maximum Allowable Emissions</u>
Humate Spray Drier	VE	no visible emissions (no greater than 5% opacity)
Bagging Operation	VE	must be vented to the HSDB
Cyclone Separator	VE	must be vented to the HSDB
Product Storage Tank	VE	must be vented to the HSDB
Vehicle Loading Operation	VE	no visible emissions (no greater than 5% opacity) except 10% opacity when removing the load-out sleeve from the vehicle hold

To:

3. Maximum allowable pollutant emissions from the proposed project are:

<u>Source</u>	<u>Pollutant</u>	<u>Maximum Allowable Emissions</u>
Humate Spray Drier	VE	no visible emissions (no greater than 5% opacity)
Bagging Operation	VE	must be vented to the HSDB
Cyclone Separator	VE	must be vented to the HSDB
Product Storage Tank	VE	must be vented to the HSDB
Vehicle Loading Operation	VE	no visible emissions (no greater than 5% opacity)

From:

4. Compliance tests required shall be EPA Method 9 for VE. Source testing and reporting requirements shall be in accordance with Chapter 17-2.700, FAC. Compliance test reports must be filed with the DER Northeast District office or its designee (Duval County's Bio-Environmental Services). Compliance tests shall be conducted at 95-100 percent of the allowed process input rate.

To:

4. Compliance tests shall be required using EPA Method 9 (DER Method 9) for VE. Source testing and reporting requirements shall be in accordance with Chapter 17-2.700, FAC. Compliance test reports must be filed with the DER's Northeast District office or its designee (Duval County's Bio-Environmental Services). Compliance tests shall be conducted with all operations utilizing the baghouse operating simultaneously at 90-100% of their input feed rates in order to simulate maximum potential loading into the baghouse. Operations not utilizing the baghouse shall compliance test at 90-100% of their maximum input feed rates.

Attachments to be incorporated are:

5. Mr. Jerry E. Woosley's letter dated June 23, 1983.

It is recommended that the construction permit be issued as drafted, with the above revisions and attachments incorporated.

ATTACHMENT 5

DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control

June 23, 1983



Mr. Bill Thomas  
Bureau of Air Quality Management  
Dept. of Environmental Regulation  
2600 Blairstone Road  
Tallahassee, Florida 32301.

DER  
JUN 27 1983

Re: Humate Spray Drier Operation  
Application No. AC16-65833  
Union Camp Corporation

BAQM

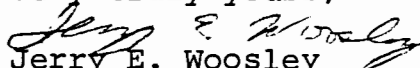
Dear Mr. Thomas:

Bio-Environmental Services Division provides the following comments concerning the referenced application:

- (1) Technical Evaluation and Preliminary Determination, Part II - Rule Applicability, Paragraph 6 states an applicable emission limit of 5% is set in accordance with Chapter 17-2.650(2)(c)12.b, Florida Administrative Code (FAC). It is my understanding from a previous discussion with Nancy Wright of your legal staff, that the appropriate emission limit would include 0.03 gr/dscf and 5% opacity, because the "or" in the referenced section of the FAC is inclusive. Since the mass emission limit is applicable, the appropriate mass emission test is warranted.
- (2) Paragraph 8 of the above mentioned references the loadout arm as being subject to the 5% opacity limit in accordance with Chapter 17-2.650(2)(c)11.b., FAC, and subject to the 10% opacity limit when the loadout sleeve is being removed from the vehicle hold. It is my understanding that the 10% opacity limit is only applicable for loading operations into ships pursuant to the referenced chapter.
- (3) The Construction Permit should specify that during testing (VE, particulate, or both), the spray drier, bagging operation, cyclone separator, and product storage tank be in operation to simulate maximum potential loading into the baghouse. If both compliance tests are required, they should be performed concurrently.

Your consideration of these items is appreciated.

Very truly yours,

  
Jerry E. Woosley  
Assistant Engineer

JEW/vj

cc: Doug Dutton, DER

AREA CODE 904 / AIR POLLUTION — 633-3033 OR 633-3303 / WATER POLLUTION — 633-3415  
515 WEST 6TH STREET / JACKSONVILLE, FLORIDA 32206—4397



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:**  
Union Camp Corporation  
2051 North Lane Ave.  
P. O. Box 60369  
Jacksonville, Florida 32236

Permit Number: AC 16-65833  
Expiration Date: December 31, 1983  
County: Duval  
Latitude/Longitude: 30° 20' 53"N/  
81° 45' 05"W

Project: Humate Spray Drier,  
cyclone separator, storage tanks,  
bagging operation unit, vehicle  
load-out arm, and an associated  
baghouse

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:

For the construction of a humate spray drier using flue gas heat  
from steam generating boilers Nos. 2 and 3, a cyclone separator,  
humate slurry and product storage tanks, a product bagging  
operation, a vehicle load-out arm, and an associated baghouse at  
the permittee's existing facility located at the above address.  
The UTM coordinates are Zone 17-427.65 km East and 3357.35 km  
North.

Construction shall be in accordance with the permit application  
and plans, documents, amendments, and drawings except as otherwise  
noted on pages 5-7 of the "Specific Conditions".

Attachments are as follows:

1. Application to construct Air Pollution Sources, DER Form  
17-1.122(16).
2. Jerry E. Woosley's letter dated February 4, 1983.
3. C. H. Fancy's letter of incompleteness dated March 2, 1983.
4. R. L. Webb's letter of response dated March 25, 1983.
5. Jerry E. Woosley's letter dated June 23, 1983.

Page 1 of 7.



**PERMITTEE:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

**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:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

**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:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

**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:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236  
**GENERAL CONDITIONS:**

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

- 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. Maximum total process input rate into the humate spray drier (HSD) shall not exceed 11,800 pounds per hour (lbs/hr) of humate slurry, which consists of 9600 lbs/hr water and 2200 lbs/hr solids.
2. The HSD will utilize flue gases from Nos. 2 and 3 steam generating boilers for its heat. There are no combustible fuels associated with the HSD.

PERMITTEE:  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

I. D. Number:  
Permit Number: AC 16-65833  
Expiration Date: December 31, 1983

SPECIFIC CONDITIONS:

3. Maximum allowable pollutant emissions from the proposed project are:

<u>Source</u>	<u>Pollutant</u>	<u>Maximum Allowable Emissions</u>
Humate Spray Drier	VE	no visible emissions (no greater than 5% opacity)
Bagging Operation	VE	must be vented to the HSDB
Cyclone Separator	VE	must be vented to the HSDB
Product Storage Tank	VE	must be vented to the HSDB
Vehicle Loading Operation	VE	no visible emissions (no greater than 5% opacity)

4. Compliance tests shall be required using EPA Method 9 (DER Method 9) for VE. Source testing and reporting requirements shall be in accordance with Chapter 17-2.700, FAC. Compliance test reports must be filed with the DER's Northeast District office or its designee (Duval County's Bio-Environmental Services). Compliance tests shall be conducted with all operations utilizing the baghouse operating simultaneously at 90-100% of their input feed rates in order to simulate maximum potential loading into the baghouse. Operations not utilizing the baghouse shall compliance test at 90-100% of their maximum input feed rates.
5. No objectionable odor shall be allowed on off-plant property.
6. If fugitive PM emissions do occur with this modification they must be quantified and shall be used in PSD pollutant emissions inventory.

**PERMITTEE:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

**SPECIFIC CONDITIONS:**

7. A Certificate of Completion shall be submitted to the DER's Northeast District Office or its designee (Duval County's Bio-Environmental Services) prior to receiving an operating permit or an application for an operating permit shall be submitted prior to 90 days before the expiration date of this permit. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date or the issuance of an operating permit.

Issued this 15 day of July, 1983

**STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION**

  
\_\_\_\_\_  
VICTORIA J. TSCHINKEL, Secretary

\_\_\_ pages attached.

Save in case a PM limit is imposed on the Humate Spray Drier

PERMITTEE:  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

I. D. Number:  
Permit Number: AC 16-65833  
Expiration Date: December 31, 1983

SPECIFIC CONDITIONS:

3. Maximum allowable pollutant emissions from the proposed project are:

Source	Pollutant	Maximum Allowable Emissions
Humate Spray Drier	VE	no visible emissions (no greater than 5% opacity)
	PM	0.03 gr/dscf (4.10 lbs/hr)
Bagging Operation	VE	must be vented to the HSDB
Cyclone Separator	VE	must be vented to the HSDB
Product Storage Tank	VE	must be vented to the HSDB
Vehicle Loading Operation	VE	no visible emissions (no greater than 5% opacity)

4. Compliance tests required shall be EPA Method 9 (DER Method 9) for VE and DER Method 5 for PM (particulate matter). Source testing and reporting requirements shall be in accordance with Chapter 17-2.700, FAC. Compliance test reports must be filed with the DER's Northeast District office or its designee (Duval County's Bio-Environmental Services). Compliance tests shall be conducted with all operations utilizing the baghouse operating simultaneously at 90-100% of their input feed rates in order to simulate maximum potential loading into the baghouse. Operations not utilizing the baghouse shall compliance test at 90-100% of their maximum input feed rates.
5. No objectionable odor shall be allowed on off-plant property.
6. If fugitive PM emissions do occur with this modification they must be quantified and shall be used in PSD pollutant emissions inventory.

Final Determination  
 Union Camp Corporation  
 Humate Spray Drier, Storage, Bagging and Load-out Operation

The construction permit application has been reviewed by the department. Public notice of the department's intent to issue was published in the Florida-Times Union on June 7, 1983. The preliminary determination and technical evaluation was available for public inspection at the Duval County's Bio-Environmental Services (BES) office, the DER's Northeast District office and Bureau of Air Quality Management office.

(BAQM)

Comments (Attachment 5) were received from Mr. Jerry E. Wosley with BES on June 27, 1983. The bureau ~~agrees with the comments and the~~ *will make the* revisions to the "Specific Conditions" will read: *Following any they*

Specific Conditions:

Comment: Chapter 17-2.650(2)(c)12.b., FAC, limits emissions to 5% opacity ~~and~~ 0.03 gr/dscf. Therefore,

*BAQM Comment: Since there is doubt to the legal or interpretation as to whether "or" means inclusive, the appropriate part within the comment will be issued as drafted.*

~~28,400 ACFM x 0.03 gr/dscf x 1 lb/7000 gr x 60 min/hr x 528/660 x 0.7(30% moisture) = 4.10 lbs/hr~~

Comment: Chapter 17-2.650(2)(c)11.b., FAC, limits a loadout sleeve being removed from a ship's hold to 10% opacity.

*the humate spray drier emission limits*

From:

3. Maximum allowable pollutant emissions from the proposed project are:

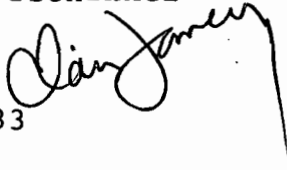
<u>Source</u>	<u>Pollutant</u>	<u>Maximum Allowable Emissions</u>
Humate Spray Drier	VE	no visible emissions (no greater than 5% opacity)
Bagging Operation	VE	must be vented to the HSDB
Cyclone Separator	VE	must be vented to the HSDB
Product Storage Tank	VE	must be vented to the HSDB
Vehicle Loading Operation	VE	no visible emissions (no greater than 5% opacity) except 10% opacity when removing the load-out sleeve from the vehicle hold



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   
DATE: July 13, 1983  
SUBJ: Approval of Attached Air Construction Permit

Attached for your approval and signature is one Air Construction Permit for which the applicant is Union Camp Corporation. The proposed project is for the construction of a humate spray drier, a cyclone separator, humate slurry and product storage tanks, a vehicle load-out arm, and an associated baghouse at the applicant's existing facility in Jacksonville, Duval County, Florida.

Day 90, after which the permit would be issued by default, is July 16, 1983.

The Bureau recommends your approval and signature.

CF/pa

Attachment



TERPENE AND AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32236 TELEPHONE (904) 783-2180 TELEX 808561

July 7, 1983

Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32301

Attn: Mrs. Patty Adams

Dear Mrs. Adams:

Attached is a copy of the Certification of Publication of Notice of Proposed Agency Action relative to the issuance of Permit No. AC16-65833.

As explained to Mr. Bruce Mitchell, I requested the newspaper to provide you with a copy but they apparently failed to do so.

Please advise if you require additional information.

Very truly yours,

A handwritten signature in cursive script that reads "J. C. Bowers".

J. C. Bowers  
Assistant to the Vice President

JCB/nr

Attachment

DER  
JUL 11 1983  
BAQM



FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }
COUNTY OF DUVAL }

Before the undersigned authority personally appeared \_\_\_\_\_

George A. Dan \_\_\_\_\_ who on oath says that he is

Retail Advertising Manager \_\_\_\_\_ of The Florida Times-Union, and

Jacksonville Journal, daily newspapers published at Jacksonville in Duval County,

Florida; that the attached copy of advertisement, being a \_\_\_\_\_

LEGAL NOTICE

in the matter of \_\_\_\_\_ Notice of proposed agency action

in the \_\_\_\_\_ Court,

was published in \_\_\_\_\_ The Florida Times-Union

in the issues of \_\_\_\_\_ June 7, 1983

Affiant further says that the said The Florida Times-Union and Jacksonville Journal are each newspapers published at Jacksonville, in said Duval County, Florida, and that the said newspapers have each heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, and Jacksonville Journal each day except Sundays, and each has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval 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 said newspaper.

Sworn to and subscribed before me
this 7th day of

June A.D. 19 83

Mary C. Kruse
Notary Public,
State of Florida at Large.

My Commission Expires 5/24/87

Handwritten signature of George A. Dan

NOTICE OF PROPOSED AGENCY ACTION
The Department of Environmental Regulation gives notice of its intent to issue a permit to Union Camp Corporation for the construction of a humate spray drier, a cyclone separator, humate slurry and product storage tanks, a bagging operation unit, a vehicle load-out arm, and an associated baphouse at their existing facility in Jacksonville, Duval County, Florida. A determination of Best Available Control Technology (BACT) was not required.
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 Chapters 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 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 a hearing under Section 120.57, Florida Statutes.
The application, technical evaluation and department intent are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:
DER Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32301
DER Northeast District
3426 Bills Road
Jacksonville, Florida 32207
Department of Health, Welfare and Bio-Environmental Services
Bio-Environmental Services Division
Air and Water Pollution Control
515 West 4th Street
Jacksonville, Florida 32206-4397
Comments on this action shall be submitted in writing to Bill Thomas of Tallahassee office within thirty (30) days of this notice.

DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control

June 23, 1983



Mr. Bill Thomas  
Bureau of Air Quality Management  
Dept. of Environmental Regulation  
2600 Blairstone Road  
Tallahassee, Florida 32301

DER  
JUN 27 1983

Re: Humate Spray Drier Operation  
Application No. AC16-65833  
Union Camp Corporation

BAQM

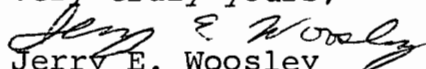
Dear Mr. Thomas:

Bio-Environmental Services Division provides the following comments concerning the referenced application:

- (1) Technical Evaluation and Preliminary Determination, Part II - Rule Applicability, Paragraph 6 states an applicable emission limit of 5% is set in accordance with Chapter 17-2.650(2)(c)12.b, Florida Administrative Code (FAC). It is my understanding from a previous discussion with Nancy Wright of your legal staff, that the appropriate emission limit would include 0.03 gr/dscf and 5% opacity, because the "or" in the referenced section of the FAC is inclusive. Since the mass emission limit is applicable, the appropriate mass emission test is warranted.
- (2) Paragraph 8 of the above mentioned references the loadout arm as being subject to the 5% opacity limit in accordance with Chapter 17-2.650(2)(c)11.b., FAC, and subject to the 10% opacity limit when the loadout sleeve is being removed from the vehicle hold. It is my understanding that the 10% opacity limit is only applicable for loading operations into ships pursuant to the referenced chapter.
- (3) The Construction Permit should specify that during testing (VE, particulate, or both), the spray drier, bagging operation, cyclone separator, and product storage tank be in operation to simulate maximum potential loading into the baghouse. If both compliance tests are required, they should be performed concurrently.

Your consideration of these items is appreciated.

Very truly yours,

  
Jerry E. Woosley  
Assistant Engineer

JEW/vj

cc: Doug Dutton, DER

AREA CODE 904 / AIR POLLUTION — 633-3033 OR 633-3303 / WATER POLLUTION — 633-3415  
515 WEST 6TH STREET / JACKSONVILLE, FLORIDA 32206-4397



P 408 530 320

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. R. L. Webb	
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  6/1/83	

PS Form 3800, Feb. 1982

PS Form 3811, Jan. 1979

● 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. Webb  
P. O. Box 60369  
Jacksonville, FL 32236

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	P408530320	

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE  Addressee  Authorized agent

4. DATE OF DELIVERY

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE

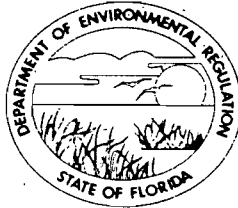
CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

MURRAY HILL STA. JACKSONVILLE, FLA. JUN 1 1983

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

June 1, 1983

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. R. L. Webb  
Vice President  
Union Camp Corporation  
Post Office Box 60369  
Jacksonville, Florida 32236

Dear Mr. Webb:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit for the construction of a humate spray drier and baghouse at your existing facility in Jacksonville, Duval County, Florida.

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 Duval 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 will be grounds for denial of the permits.

The Preliminary Determination and proposed permit constitute a proposed action of the department and are 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. Webb  
June 1, 1983  
Page Two

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to 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: W. J. DeGroot, Union Camp Corporation  
John Ketteringham, DER Northeast District  
Jerry Woosley, Duval County Bio-Environmental Services  
Division

Technical Evaluation  
and  
Preliminary Determination

Humate Material Processing Project  
Union Camp Corporation  
Jacksonville, Florida

Application Number  
AC 16-65833

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



## NOTICE OF PROPOSED AGENCY ACTION

The Department of Environmental Regulation gives notice of its intent to issue a permit to Union Camp Corporation for the construction of a humate spray drier, a cyclone separator, humate slurry and product storage tanks, a bagging operation unit, a vehicle load-out arm, and an associated baghouse at their existing facility in Jacksonville, Duval County, Florida. A determination of Best Available Control Technology (BACT) was not required.

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 Chapters 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 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 a hearing under Section 120.57, Florida Statutes.

The application, technical evaluation and department intent are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

DER Bureau of Air Quality Management  
2600 Blair Stone Road  
Tallahassee, FL 32301

DER Northeast District  
3426 Bills Road  
Jacksonville, Florida 32207

Department of Health, Welfare and Bio-Environmental Services  
Bio-Environmental Services Division  
Air and Water Pollution Control  
515 West 6th Street  
Jacksonville, Florida 32206-4397

Comments on this action shall be submitted in writing to Bill Thomas of Tallahassee office within thirty (30) days of this notice.

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

Union Camp Corporation  
P. O. Box 60369  
Jacksonville, Florida 32236

### B. Project Description and Location

The applicant intends to construct a humate spray drier, a cyclone separator, humate slurry and product storage tanks, a bagging operation unit, a vehicle load-out arm, and an associated baghouse at the Union Camp Corporation's existing major facility.

The new sources will be located at 2051 North Lane Avenue in Jacksonville, Duval County, Florida. The UTM coordinates are Zone 17-742.765 km East and 3357.350 km North.

### C. Process and Controls

The raw material, humate slurry, will be delivered to the existing plant in tank trucks and stored in storage tanks. The humate slurry is slightly greater than 80 percent water and is an organic by-product of titanium ore mining operations. Humate is a naturally occurring substance resulting from the degradation of plant and animal life.

From the storage tanks, the humate slurry will be conveyed in an enclosed device to a completely enclosed drier, which will utilize flue gas heat from the existing boilers No. 2 (AO 16-20814) or No. 3 (AO 16-36783). The humate slurry will be sprayed into the drier chamber and dried by the flue gas heat. Therefore, no combustion fuel will be required for this new source.

The dried product will be conveyed from the drying operation through a cyclone separator and then to a storage tank by an enclosed conveying device. The cyclone separator and storage tank will be vented to the control device, a baghouse. The baghouse will be a modified 2 G 4 Mikro-Pulsaire with a particulate matter (PM) collection efficiency of 99.5 percent.

An enclosed conveying device will also be utilized to load the dried product into bulk carriers. The loading arm, which will be inserted into the vehicle tank, will be equipped with a sleeve that will retain any PM emissions which might result while loading.

Some of the dried product will be packaged in bags. The bagging operation unit will utilize a properly designed hood and

accordance with Chapter 17-2, Table 1, FAC, Applicable Test Procedures For Point Source Compliance Tests. Compliance test procedures shall be in accordance with Chapter 17-2.700, FAC, Stationary Point Source Emissions Test Procedures.

Since the PM emissions from the cyclone separator, the dried humate product storage tank, and the dried humate product bagging operation will be controlled by the HSD baghouse, the emissions limitation, the compliance test method and procedures will be the same as the preceding paragraph.

The dried product humate vehicle load-out arm is subject to Chapter 17-2.650(2)(c)11., FAC, Materials Handling, Sizing, Screening, Crushing and Grinding Operations. Since the applicant assumes the potential PM emissions to be "nil", the emissions limitation shall be "no visible emissions (not greater than 5 percent opacity) during the loading operation except when removing the load-out sleeve from the vehicle hold, then 10 percent opacity will be allowed" in accordance with Chapter 17-2.650(2)(c)11. b., FAC. Compliance test method shall be EPA Method 9 in accordance with Chapter 17-2, Table 1, FAC. Compliance test procedures shall be in accordance with Chapter 17-2.700, FAC.

In accordance with Chapter 17-2.620(2), FAC, no person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance according to Chapter 17-2.100(108), FAC.

### III. SUMMARY OF EMISSIONS

#### A. Emission Limitations

The regulated pollutant emissions from this modification to the existing facility are visible emissions (VE) in accordance with Chapter 17-2.650(2)(c)11., FAC, and Chapter 17-2.650(2)(c)12., FAC.

vented to the baghouse.

## II. RULE APPLICABILITY

The proposed new project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapters 17-2 and 17-4, Florida Administrative Code (FAC).

The proposed project is estimated to emit 3.942 tons per year (TPY) of the pollutant PM, which by definition would be a minor source in accordance with Chapter 17-2.100(101), FAC.

Union Camp Corporation (UCC) is located in the Duval County Nonattainment Area for the pollutant ozone (O<sub>3</sub>) in accordance with Chapter 17-2.410(1)(a)3., FAC. UCC is also located in the area of influence of the Duval County Particulate Matter Nonattainment Area in accordance with Chapter 17-2.100(14), FAC. Therefore, the proposed project will be reviewed in accordance with Chapter 17-2.510, FAC, New Source Review for Nonattainment Areas.

UCC is an existing major facility for the pollutant SO<sub>2</sub> (sulfur dioxide) in accordance with Chapter 17-2.100(95), FAC. The facility is permitted to emit greater than 250 TPY of SO<sub>2</sub>. Therefore, the proposed project will be a minor modification to a major facility and subject to Chapter 17-2.510(2)(d)4.a., FAC, Modifications to Major Facilities. According to this section, the proposed project will be exempt from Chapter 17-2.510(4), FAC, Preconstruction Review Requirements, because the modification will not result in a significant net emissions increase (as set forth in Chapter 17-2.510(2)(e)2., FAC) of the affected pollutant.

Being in a nonattainment area for the pollutant ozone and in an area of influence for the pollutant particulate matter (PM), any emissions increase of the affected pollutant from a proposed modification and new source construction would be subject to any applicable section(s) of Chapter 17-2.650, FAC, Reasonably Available Control Technology (RACT).

The humate spray drier (HSD) is subject to Chapter 17-2.650(2)(c)12., FAC, Miscellaneous Manufacturing Process Operations. The drier will use a modified baghouse as its control device. The potential PM emissions are 1 pound per hour and 3.942 tons per year, based on 2200 lbs/hr total process solids input rate, 8760 annual hours of operation, a cyclone separator, and a modified baghouse with a projected efficiency of 99.5 percent (these emissions will be used for facility PSD pollutant emissions inventory tracking). Therefore, the emissions limitation shall be "no visible emissions (no greater than 5 percent opacity)" in accordance with Chapter 17-2.650(2)(c)12. b., FAC. Compliance test method shall be EPA Method 9 in

Source	Pollutant	Maximum Allowable Emissions
Humate Spray Drier Baghouse (HSDB)	VE	no visible emissions (no greater than 5% opacity)
Bagging Operation	VE	must be vented to the HSDB
Cyclone Separator	VE	must be vented to the HSDB
Product Storage Tank	VE	must be vented to the HSDB
Vehicle Loading Operation	VE	no visible emissions (no greater than 5% opacity) except 10% opacity when removing the load-out sleeve from the vehicle hold

The permitted emissions are in compliance with all requirements of Chapter 17-2, FAC.

#### B. Air Quality Impacts

From a technical review of the application and amendments, the bureau has determined that the construction and operation of this proposed project will not have an impact on Florida's ambient air quality standards.

#### IV. CONCLUSIONS

The maximum allowable emissions from this proposed project should not cause any violation to Florida's ambient air quality standards. However, if problems do occur with the operation of any of the proposed sources, corrective action must be approved by the DER's Northeast District office or its designee (Duval County Bio-Environmental Services) and then implemented by the applicant.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all applicable requirements of Chapter 17-2, FAC.

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:**  
Union Camp Corporation  
2051 North Lane Ave.  
P. O. Box 60369  
Jacksonville, Florida 32236

Permit Number: AC 16-65833  
Expiration Date: December 31, 1983  
County: Duval  
Latitude/Longitude: 30° 20' 53"N/  
81° 45' 05"W  
Project: Humate Spray Drier,  
cyclone separator, storage tanks,  
bagging operation unit, vehicle  
load-out arm, and an associated  
baghouse

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:

For the construction of a humate spray drier using flue gas heat  
from steam generating boilers Nos. 2 and 3, a cyclone separator,  
humate slurry and product storage tanks, a product bagging  
operation, a vehicle load-out arm, and an associated baghouse at  
the permittee's existing facility located at the above address.  
The UTM coordinates are Zone 17-427.65 km East and 3357.35 km  
North.

Construction shall be in accordance with the permit application  
and plans, documents, amendments, and drawings except as otherwise  
noted on pages 5-7 of the "Specific Conditions".

Attachments are as follows:

1. Application to construct Air Pollution Sources, DER Form  
17-1.122(16).
2. Jerry E. Woosley's letter dated February 4, 1983.
3. C. H. Fancy's letter of incompleteness dated March 2, 1983.
4. R. L. Webb's letter of response dated March 25, 1983.

**PERMITTEE:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

**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:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

**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:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

**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:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236  
**GENERAL CONDITIONS:**

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

- 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. Maximum total process input rate into the humate spray drier (HSD) shall not exceed 11,800 pounds per hour (lbs/hr) of humate slurry, which consists of 9600 lbs/hr water and 2200 lbs/hr solids.
2. The HSD will utilize flue gases from Nos. 2 and 3 steam generating boilers for its heat. There are no combustible fuels associated with the HSD.

**PERMITTEE:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

**SPECIFIC CONDITIONS:**

3. Maximum allowable pollutant emissions from the proposed project are:

<u>Source</u>	<u>Pollutant</u>	<u>Maximum Allowable Emissions</u>
Humate Spray Drier	VE	no visible emissions (no greater than 5% opacity)
Bagging Operation	VE	must be vented to the HSDB
Cyclone Separator	VE	must be vented to the HSDB
Product Storage Tank	VE	must be vented to the HSDB
Vehicle Loading Operation	VE	no visible emissions (no greater than 5% opacity) except 10% opacity when removing the load-out sleeve from the vehicle hold

4. Compliance tests required shall be EPA Method 9 for VE. Source testing and reporting requirements shall be in accordance with Chapter 17-2.700, FAC. Compliance test reports must be filed with the DER Northeast District office or its designee (Duval County's Bio-Environmental Services). Compliance tests shall be conducted at 95-100 percent of the allowed process input rate.
5. No objectionable odor shall be allowed on off-plant property.
6. If fugitive PM emissions do occur with this modification they must be quantified and shall be used in PSD pollutant emissions inventory.

**PERMITTEE:**  
Union Camp Corporation  
2051 North Lane Ave.  
Jacksonville, FL 32236

**I. D. Number:**  
**Permit Number:** AC 16-65833  
**Expiration Date:** December 31, 1983

**SPECIFIC CONDITIONS:**

7. A Certificate of Completion shall be submitted to the DER's Northeast District Office or its designee (Duval County's Bio-Environmental Services) prior to receiving an operating permit. An application for an operating permit shall be applied for prior to 90 days before the expiration date of this permit. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date or the issuance of an operating permit.

Issued this \_\_\_\_ day of \_\_\_\_\_, 1983

**STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION**

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VICTORIA J. TSCHINKEL, Secretary

\_\_\_\_ pages attached.



TERPENE &  
AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32205 TELEPHONE (904) 783-2180 TWX (810) 827-0398

March 25, 1983

Bureau of Air Quality Management  
Department of Environmental Regulation  
Twin Towers Office Building  
Tallahassee, FL 32301 - 8241

Attn: Mr. C. H. Fancy, P.E.  
Deputy Chief

DER

MAR 28 1983

BAQM

Dear Mr. Fancy:

Please refer to your letter of March 2, 1983 regarding the completeness review of the Application to Construct an Air Pollution Source, Permit No. AC16-65833.

Following is the additional information in the order you requested in your letter.

1. See attached page 4 of DER Form 17-1.122(16) with Section III-H completed.
2. The 99.5% bag house efficiency indicated in Sections III-C and III-D is the correct number. The 95% shown in the application attachment is a typographical error. Removal of 215 pounds by the bag house from an input of 216 pounds is a 99.5+% removal. A corrected calculation sheet is attached. (See 3 below).
3. The size range of the particulate matter resulting from firing the fuel is not available and inquiries have indicated that to obtain this data would be time consuming and expensive. In a telephone conversation with Mr. Bruce Mitchell on March 7, 1983, he indicated that this information was requested only to substantiate the claim of removal of particulate resulting from the firing of the fuel oil. In view of the above and other factors listed below, the calculation sheet (2 above) has been revised to delete this claim. Section III-B has also been revised to reflect this.

- A. Discharge of the 6 lbs/hr. from the firing of the fuel oil is permitted and represents RACT for the source.
  - B. The primary fuel for the boilers is natural gas and the fuel oil is used considerably less than half the time.
  - C. Particulate emissions from this facility have been demonstrated by modeling to have no significant impact on the non-attainment area of Jacksonville.
4. Either Boiler No. 2 (A016-20814) or Boiler No. 3 (A016-36783) can be used for providing the flue gas heat for the drier. The restriction of 8616 hours of operation for Boiler No. 3 applies only to the use of fuel oil and as pointed out in 3.B above, natural gas is used as fuel the majority of the time.

The requested drawing of the flue gas duct alterations are attached.

- 5. During the past five years there has been one termination. The use of a sodium acetate drier, A016-4714, was discontinued and the equipment was removed from the plant premises.

With the exception of Boiler No. 3 (AC16-11888 and A016-36783) all new construction and modifications have been projects in which VOC or odorous emissions were the pollutants of concern. A tabulation of these follows:

<u>Year</u>	<u>Construction Permit or Operating Permit</u>	<u>Current Operating Permit</u>	<u>Type</u>	<u>Description</u>
1978	A016-2656	A016-48160	Modification	Use of dipentene and distillation residue as fuel for CE Boiler
1978	A016-2356	A016-24848	Modification	Use of dipentene as fuel for "D" pyrolysis unit.
1978	A016-2653	A016-48022	Modification	Use of dipentene as fuel for "B" pyrolysis unit.
1978	A016-2654	A016-48078	Modification	Use of dipentene as fuel for "C" pyrolysis unit.

<u>Year</u>	<u>Construction Permit or Operating Permit</u>	<u>Current Operating Permit</u>	<u>Type</u>	<u>Description</u>
1978	AC16-11888	A016-36783	New construction	No. 3 Boiler
1979	AC16-24123	See revision to A016-4803 below - 1980	New construction	Storage tank No. 18
1979	AC16-16618	A016-34564	New construction	M580 Reactor System for production of Ionones
1980	AC16-21058	Not completed	New construction and modification	Distillation columns and reactors for production of flavor and fragrance chemicals
1980	AC16-25682	See revision to A016-4803 below - 1980	New construction	Tank No. 19
1980	A016-4803	A016-33094	Modification	Vent emissions from Tks 18 and 19 to incinerator
1980	AC16-33094	A016-54957	New construction	Tank No. 4
1980	AC16-33095	See revision to A016-4803 below - 1981	New construction	Tank No. 13
1981	A016-4803	A016-33094	Modification	Vent emissions from additional tanks to incinerator
1981	AC16-4557	A016-57171	New construction	Tank No. 12
1982	A016-20814	same	Modification	Use of turpentine and derivatives as fuel for Boiler No. 2
1982	A016-36783	same	Modification	Use of turpentine and derivatives as fuel for Boiler No. 3
1982	AC16-55595	Not completed	New construction	M660 reactor and six storage tanks. Permit modified by letters of 11/23/82 and 12/7/82.



6. The raw material, humate slurry, will be delivered to the plant in tank trucks and stored in a tank. This material, being slightly over 80% water, will make fugitive emissions from storage facilities nil.
7. The dried product will be conveyed from the drying operation to a storage tank by an enclosed conveying device. The storage tank will be vented to the bag house. Thus, fugitive emissions from the product storage facilities will be nil.
8. An enclosed conveying device will also be utilized to load the product into bulk carriers. The loading arm which will be inserted into the vehicle will be equipped with a sleeve that will retain any emissions which might result from loading. Thus we expect the fugitive emissions from the bulk loading operations to also be nil. As stated in the original application, any bagging operation will have a properly designed hood and exhaust fan.
9. BES comments 1, 2, 3, and 4 have been covered above. In addition, one other comment relative to the operating restriction on Boiler No. 3 is pertinent. Although this permit application is for 8760 hours of operation, experience has shown that only about 90% service factor can be expected because of maintenance, etc. Thus actual operating time is estimated at approximately 7884 hours.

There have been no intensive tests to determine if humate exhibits some very low level of radioactivity or toxicity, but to the best of our knowledge it is neither.

There should be no objectionable odors associated with this operation.

We hope that the above will provide you with the information required to process the application. However, if you have further questions, please advise.

Very truly yours,



R. L. Webb  
Vice President

RLW/nr

cc: Mr. J. E. Woosley  
Mr. G. D. Dutton  
Mr. W. J. deGroot

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Humate Slurry	TSP	18.6	2,200	1

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

1. Total Process Input Rate (lbs/hr): 2,200
2. Product Weight (lbs/hr): 2,199

**C. Airborne Contaminants Emitted:**

Name of Contaminant	Emission <sup>1</sup>		Allowed Emission <sup>2</sup> Rate per Ch. 17-2, F.A.C.	Allowable <sup>3</sup> Emission lbs/hr	Potential Emission <sup>4</sup>		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
TSP	1	3.942	3.81 lbs/hour	3.81	216	756.86	2
			17-2.610 Table 610-1				

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles <sup>5</sup> Size Collected (in microns)	Basis for Efficiency (Sec. V, It <sup>5</sup> )
2G4 Mikro-Pulsaire	TSP	99.5 + %		See
with modified baghouse				Attachment
See attachment				

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

<sup>2</sup>Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. - 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)

<sup>5</sup>If Applicable

E. Fuels N/A

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

\*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: \_\_\_\_\_ Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

F. If applicable, indicate the percent of fuel used for space heating. Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

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

Stack Height: 35 ft Stack Diameter: 2 ft

Gas Flow Rate: 28,400 ACFM Gas Exit Temperature: 200 °F

Water Vapor Content: Relative Humidity- 30 % Velocity: 151 FPS

SECTION IV: INCINERATOR INFORMATION N/A

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

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

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

Approximate Number of Hours of Operation per day \_\_\_\_\_ days/week \_\_\_\_\_

Manufacturer \_\_\_\_\_

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

Section III B.

Feed to process - Humate slurry - 11,800 lbs/hr.

Water - 9,600 lbs/hr.

Solids - 2,200 lbs/hr.

Product - 90%+ removal of solids in cyclone - 2154 lbs/hr.

Water - 169 lbs/hr.

Solids Recovered - 1985 lbs/hr.

Solids to Bag House - 215 lbs/hr.

99.5%+ removal of solids in Bag House - 214 lbs/hr.

Solids emissions to atmosphere - 1 lb/hr.

No. 0157980  
**RECEIPT FOR CERTIFIED MAIL**  
 NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

SENT TO		Mr. R. L. Webb
STREET AND NO.		2051 North Lane Ave.
P.O., STATE AND ZIP CODE		Jacksonville, FL 32236
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		

PS Form 3800, Apr. 1976

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. Webb  
 2051 North Lane Avenue  
 Jacksonville, FL 32236

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0157980	

(Always obtain signature of addressee or agent)

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

4. *Beverly Sutton*  
 DATE OF DELIVERY *3/13/83*

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

CLERK'S INITIALS

POSTMARK  
 1983  
 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

March 2, 1983

Mr. R. L. Webb, Vice President  
Union Camp Corporation  
2051 North Lane Avenue  
Jacksonville, Florida 32236

Re: Completeness Review of the Application to Construct An Air  
Pollution Source: Permit No. AC 16-65833

Dear Mr. Webb:

The Bureau has received the above referenced application package for the construction of a "Humate Spray Drier" at your existing facility in Jacksonville, Duval County, Florida. The application package has been determined to be incomplete. The following data must be submitted to the Bureau before further processing of your request will resume:

1. Complete Section III-H, DER Form 17-1.122(16) Page 4 of 10,
2. The calculations in the application attachment indicates an efficiency for the baghouse system of 95%, yet Section III-D states an efficiency of 99.5% and Section III-C reflects an efficiency of 99.5%. If 95% is the correct efficiency, the projected emissions are 10.10 lbs/hr and 44.24 TPY particulate matter (PM). Correct the inconsistency(ies) and resubmit the corrected appropriate application sections and the calculation attachment,
3. Submit the baghouse collection efficiency as a function of the PM size range and also submit a breakdown of the PM size range of the fuel oil after firing,
4. Which boiler(s) will be used for providing the flue gas heat for the drier and include a blue print of the flue gas duct alterations (show ductings to and from, valves, etc.). Keep in mind that Boiler No. 3, AO 16-36783, has hours of operation restrictions at 8616 and that this request is for 8760 hours of operation,

Mr. R. L. Webb  
March 2, 1983  
Page Two

5. What new construction, modification(s), and terminations at your existing facility have occurred in the last five (5) years? Submit documents showing these facility changes,
6. Calculate and submit the fugitive PM emissions expected from the storage of the raw material,
7. Calculate and submit the fugitive PM emissions expected from the storage of the product material,
8. Calculate and submit the potential emissions from the loading of the product material into transportation vehicles (rail, truck, etc), and
9. Submit answers to the comments, Nos. 1, 2, 4, 5 and 6, from BES (attached) submitted to the Bureau regarding the referenced application.

If there are any questions, please call Bruce Mitchell at (904)488-1344 or write to me at the above address.

Sincerely,



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

CHF/BM/bjm

Attachment

cc: Jerry Woosley  
Doug Dutton  
W. J. deGroot  
Mary Smallwood

ATTACHMENT



BEST AVAILABLE COPY

DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control



February 4, 1983

Bill

DER

FEB 08 1983

BAQM

Mr. Clair Fancy, Deputy Director  
Central Air Permitting Section  
Department of Environmental Regulation  
2600 Blainstone Road  
Tallahassee, Florida 32301

Dear Mr. Fancy:

Enclosed is a Construction Permit application and \$100.00 processing fee (Check No. 36125) for Union Camp Corporation's Humate Spray Drier. The permit application is being forwarded to your office for processing pursuant to the guidelines available to this Agency.

The following comments are provided for your reference:

- (1) Section III H. is not completed.
- (2) Which boiler(s) will be capable of providing flue gases for heat recovery?
- (3) It is noted that boiler #3 is restricted to 8616 operating hours per year in order to avoid PSD review.
- (4) How will emissions generated during the handling of the raw material and finished product be controlled?
- (5) Is humate radioactive and/or toxic?
- (6) Will the handling and/or processing of humate cause or contribute to objectionable odors?

Should you have any questions or comments concerning this matter, please advise.

Very truly yours,

Jerry E. Woosley  
Assistant Engineer

JEW/am

Enc.

cc: Doug Dutton - DER w/enc.



DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control



February 24, 1983

Mr. Bruce Mitchell  
Dept. of Environmental Regulation  
Twin Towers Office Building  
2600 Blairstone Road  
Tallahassee, Florida 32301

DER  
FEB 28 1983  
BAQM

Dear Mr. Mitchell:

Enclosed are copies of Union Camp Corporation boiler permits as we discussed.

If I may be of further assistance, please advise.

Very truly yours,

A handwritten signature in black ink, appearing to read "Jerry E. Woosley".

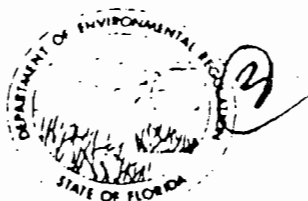
Jerry E. Woosley  
Assistant Engineer

JEW/vj  
Enclosure



BEST AVAILABLE COPY

3428 BILLS ROAD  
JACKSONVILLE, FLORIDA 32207  
Telephone: 904/396-6959



*Page 2  
T.H.  
Woolley*

BOB GRAHAM  
GOVERNOR  
VICTORIA TSCHINKEL  
SECRETARY

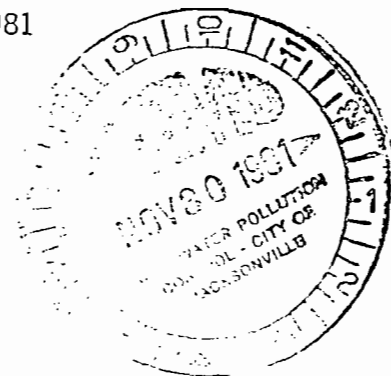
G. DOUG DUTTON  
SUBDISTRICT MANAGER

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
ST. JOHNS RIVER SUBDISTRICT

November 24, 1981

Mr. R. L. Webb, Vice President  
Union Camp Corporation  
Post Office Box 60369  
Jacksonville, Florida 32205

**COPY**



Dear Mr. Webb:

Duval County - AP  
Union Camp Corp.  
CE Boiler

Enclosed is Permit Number A016-48160 , dated November 24, 1981, to operate the subject pollution source, issued pursuant to Section 403.061(14), Florida Statutes.

Should you object to this permit, including any and all of the conditions contained therein, you may file an appropriate petition for administrative hearing. This petition must be filed within fourteen (14) days of the receipt of this letter. Further, the petition must conform to the requirements of Section 28-5.201, Florida Administrative Code (see reverse side). The petition must be filed with the Office of General Counsel, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301.

If no petition is filed within the prescribed time, you will be deemed to have accepted this permit and waived your right to request an administrative hearing on this matter.

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

Sincerely,

Frank Watkins, Jr., P.E.  
Subdistrict Engineer

FW:vk

cc: Jacksonville BES

original typed on 100% recycled paper

3426 BILLS ROAD  
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM  
GOVERNOR

JACOB D. VARN  
SECRETARY

G. DOUG DUTTON  
SUBDISTRICT MANAGER

STATE OF FLORIDA

## DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER SUBDISTRICT

APPLICANT: Union Camp Corporation  
P. O. Box 60369  
Jacksonville, Florida 32205

PERMIT/CERTIFICATION  
NO. A016-48160

COUNTY: Duval

PROJECT: CE Boiler

**COPY**

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2 and 17-4, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and made a part hereof and specifically described as follows:

For the operation of the Natural Gas Fired Combustion Engineering (CE) Steam Generating Boiler. Maximum heat input is 51 MBTU/hr. Number 6 fuel oil, Dipentene, Residue, Turpentine and Turpentine Derivatives may be used as alternate fuels.

Located at 2051 N. Lane Avenue, Jacksonville, Florida.

UTM E - 7427.650 N - 3357.350.

In accordance with the application received on September 28, 1981.

Issued November 24, 1981  
Expires October 31, 1986

SPECIFIC CONDITIONS:

1. Supporting documents are retained in the office file to which they were submitted and not attached as stated in the leading paragraph and General Condition No. 2. They are as follows:

- A. Permit A016-2656
- B. Information received on September 3, 1981
- C. Emission Tests

2. The permitted maximum allowable emission rate for each pollutant is as follows:

<u>Pollutant</u>	<u>Emission Rate (lbs./hr.) (T/yr.)</u>	<u>Opacity</u>
Visible Emissions	17-2.600(6)	20% Continuous 40% 2 min./hr.

COPY

3. Testing of emissions must be accomplished at 90% - 100% of the maximum permitted rate.

4. The City of Jacksonville Bio-Environmental Services Division (BESD) shall be notified 14 days prior to testing and copies of the test report shall be submitted to BESD within 15 days after completion of testing.

5. The following pollutants shall be tested at intervals indicated from the date of October 1, 1981.

<u>Pollutant</u>	<u>Frequency</u>
Visible Emissions	12 Months
Sulphur Dioxide*	On request

\*Dipentene, #6 fuel oil, Residue, Turpentine, Derivatives.

6. Submit an annual operation report to BESD for this source on the form supplied by the Department for each calendar year on or before March 1.

7. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.

8. The maximum sulphur content of the #6 fuel oil shall be 1.5%.

9. The use of the alternate fuels shall not cause or contribute to objectionable odors.

PERMIT NO.: A016-48160  
APPLICANT: Union Camp Corporation

SPECIFIC CONDITIONS:

10. Crude Sulphate Turpentine (CST) shall not be used as a boiler fuel.
11. Operation shall be limited to 8760 hours per year.

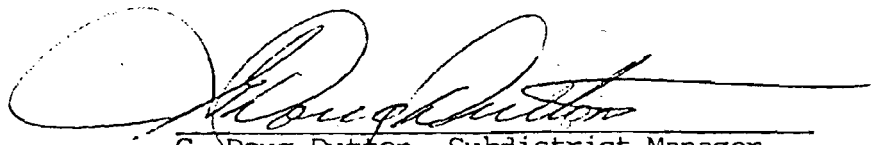
COPY

Expiration Date: October 31, 1986 Issued this 24th day of November 1981

CITY OF JACKSONVILLE  
BIO-ENVIRONMENTAL SERVICES DIVISION

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

  
Donald C. Bayly, Assistant Chief

  
G. Doug Dutton, Subdistrict Manager

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER  
UBDISTRICT

3426 BILLS ROAD  
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

G. DOUG DUTTON  
SUBDISTRICT MANAGER

January 15, 1982

COPY

Mr. R. L. Webb, Vice President  
Union Camp Corporation  
P.O. Box 60369  
Jacksonville, Florida 32205

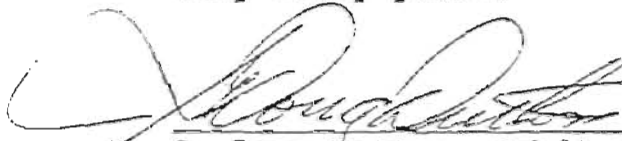
Re: Modification of Conditions  
Permit A016-20814, Boiler 2  
Permit A016-36783, Boiler 3

Dear Mr. Webb:

Bio-Environmental Services has reviewed and recommended approval of the modification of the subject permits to allow the use of turpentine and turpentine derivatives as alternate boiler fuels and the Department of Environmental Regulations has subsequently approved such a modification. The revised permits are attached outlining these changes.

Should Union Camp Corporation have any questions or comments regarding this matter, please contact the Bio-Environmental Services Division.

Very truly yours,

  
G. Doug Dutton, Subdistrict Manager  
Department of Environmental Regulation

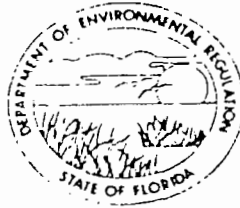
  
Donald C. Bayly, Assistant Chief  
Bio-Environmental Services Division

GDD/DCB/vj

Enclosures

cc: Bio-Environmental Services with enclosures ✓

3426 B'LLS ROAD  
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM  
GOVERNOR

JACOB D. VARN  
SECRETARY

G. DOUG DUTTON  
SUBDISTRICT MANAGER

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
ST. JOHNS RIVER SUBDISTRICT

APPLICANT:

Union Camp Corporation  
P.O. Box 60369  
Jacksonville, Florida 32205

PERMIT/CERTIFICATION  
NO. A016-20814

COUNTY: Duval

PROJECT: Boiler Number 2

ISSUED July 13, 1979

REVISED January 15, 1982

COPY

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2 and 17-4, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and made a part hereof and specifically described as follows:

For the operation of steam generating boiler #2 with a maximum firing rate of 77.5 MBTU/hr. using natural gas. Alternate fuels which may be substituted for natural gas are turpentine, turpentine derivatives, and #6 fuel oil.

Located at 2051 N. Lane Avenue, Jacksonville, Florida 32205  
UTM E-7427.650 N-3357.350.

In accordance with the application dated June 1, 1979 and Union Camp Corporation letters dated September 2 and 22, 1981 and October 2 and 21, 1981.



Permit No. : A016-20814

Applicant : Union Camp Corporation

Specific Conditions :

1. Supporting documents are retained in the office file to which they were submitted and not attached as stated in the leading paragraph and General Condition No. 2. They are as follows :

- A. Plot plans and diagrams
- B. Visible emissions test
- C. Union Camp Corporation letters dated September 2 and 22, 1981 and October 2, and 21, 1981.

2. The maximum allowable emission rate for each pollutant is as follows :

Pollutant	Emission Rate	Maximum Allowable Emission
Visible Emissions	17-2.600(5)	20% continuous 40% 2 minutes/hr.
SO <sub>2</sub>	17-2.600(5)	57.1 lbs/hr. 250 T/yr.
Particulate	17-2.600(5)	0.1 lb/MBTU heat input

COPY

8722

3. Testing of emissions must be accomplished at 90% - 100% of the maximum permitted rate.

4. Notify the Jacksonville Bio-Environmental Services Division (BESD) 14 days prior to source testing. Copies of the test report(s) shall be submitted to BESD within 30 days after completion of testing.

5. The following pollutant(s) shall be tested at intervals indicated from the date of June 1, 1979.

Visible Emissions - 12 months  
SO<sub>2</sub> \* \_\_\_\_\_ 6 months

\* Fuel analysis (#6 fuel oil, turpentine and turpentine derivatives) may be substituted.

6. Submit an annual operation report to BESD for this source on the form supplied for each calendar year on or before March 1.

7. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.

Permit No. : A016-20814  
Applicant : Union Camp Corporation

Specific Conditions :


8. The use of turpentine or turpentine derivatives as boiler fuel shall not cause or contribute to objectionable odors. Crude sulphate turpentine shall not be used as a boiler fuel.
9. Turpentine or turpentine derivatives shall not be used as boiler fuel until the boiler is at normal operating temperature.
10. Operation is limited to 8760 hours per year.
11. Maximum sulphur content of the #6 fuel oil shall be 0.7%.
12. Maximum sulphur content of the turpentine and turpentine derivatives shall be 0.2%.
13. Maximum quantity of turpentine and terpentine derivatives that can be used as boiler fuels at this facility is  $5.5 \times 10^6$  gallons.

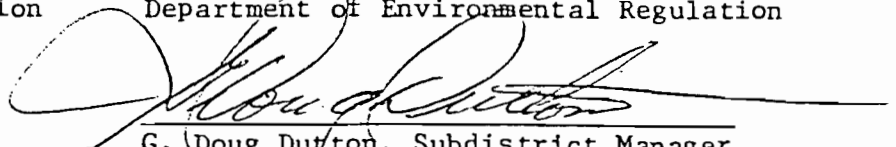
COPY

Expiration Date : May 31, 1984 Issued this 13 day of July 19 79

City of Jacksonville  
Bio-Environmental Services Division

State of Florida  
Department of Environmental Regulation

  
Donald C. Bayly, Assistant Chief

  
G. Doug Dutton, Subdistrict Manager

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER  
BDISTRICT  
3426 BILLS ROAD  
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY  
G. DOUG DUTTON  
SUBDISTRICT MANAGER

January 15, 1982

COPY

Mr. R. L. Webb, Vice President  
Union Camp Corporation  
P.O. Box 60369  
Jacksonville, Florida 32205


Re: Modification of Conditions  
Permit A016-20814, Boiler 2  
Permit A016-36783, Boiler 3

Dear Mr. Webb:

Bio-Environmental Services has reviewed and recommended approval of the modification of the subject permits to allow the use of turpentine and turpentine derivatives as alternate boiler fuels and the Department of Environmental Regulations has subsequently approved such a modification. The revised permits are attached outlining these changes.

Should Union Camp Corporation have any questions or comments regarding this matter, please contact the Bio-Environmental Services Division.

Very truly yours,

  
G. Doug Dutton, Subdistrict Manager  
Department of Environmental Regulation

  
Donald C. Bayly, Assistant Chief  
Bio-Environmental Services Division

GDD/DCB/vj

Enclosures

cc: Bio-Environmental Services with enclosures ✓

26 BILLS ROAD  
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM  
GOVERNOR  
JACOB D. VARN  
SECRETARY  
G. DOUG DUTTON  
SUBDISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER SUBDISTRICT

APPLICANT:

Union Camp Corporation  
P.O. Box 60369  
Jacksonville, Florida 32205

PERMIT/CERTIFICATION  
NO. A016-36783

COUNTY: Duval

PROJECT: Boiler Number 3

COPY

ISSUED July 29, 1981

REVISED January 15, 1982

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2 and 17-4, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and made a part hereof and specifically described as follows:

For the operation of steam generating boiler #3 with a maximum firing rate of 77.5 MBTU/hr. using #6 fuel oil. Alternate fuels which may be substituted for #6 fuel oil are turpentine, turpentine derivatives, and natural gas.

Located at 2051 N. Lane Avenue, Jacksonville, Florida 32205  
UTM E-7427.650 N-3357.350.

In accordance with the application received on November 13, 1980, additional information received on April 29, 1981, and Union Camp Corporation letters dated September 2 and 22, 1981 and October 2 and 21, 1981.

Permit No. : A016-36783  
Applicant : Union Camp Corporation

Specific Conditions :

1. Supporting documents are retained in the office file to which they were submitted and not attached as stated in the leading paragraph and General Condition No. 2. They are as follows :

- A. Plot plans and diagrams
- B. Construction Permit
- C. Emission Test results received on April 29, 1981
- D. Union Camp Corporation letters dated September 2 and 22, 1981 and October 2 and 21, 1981.

2. The maximum allowable emission rate for each pollutant is as follows :

<u>Pollutant</u>	<u>Emission Rate</u>	<u>Maximum Allowable Emission</u>
Visible Emissions	17-2.600 (5)	20% continuous 40% 2 minutes/hr.
SO <sub>2</sub>	17-2.600 (5)	57.8 lb/hr. 249 T/yr.
Particulate	17-2.600 (5)	0.1 lb/MBTU heat input

3. Testing of emissions must be accomplished at 90% - 100% of the maximum permitted rate.

4. Notify the Jacksonville Bio-Environmental Services Division (BESD) 14 days prior to source testing. Copies of the test report(s) shall be submitted to BESD within 30 days after completion of testing.

5. The following pollutant(s) shall be tested at intervals indicated from the date of June 1, 1981.

Visible Emissions - 12 months  
Particulates - on request  
SO<sub>2</sub> \* \_\_\_\_\_ 6 months

\* Fuel analysis (#6 fuel oil, turpentine and turpentine derivatives) may be substituted...

6. Submit an annual operation report to BESD for this source on the form supplied for each calendar year on or before March 1.

7. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.

BEST AVAILABLE COPY

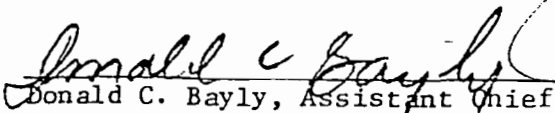
Permit No. : A016-36783  
Applicant : Union Camp Corporation  
Specific Conditions :

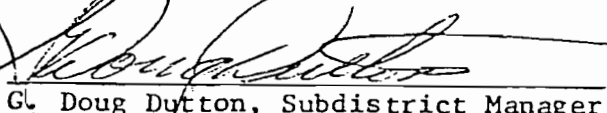
8. The use of turpentine and turpentine derivatives as boiler fuel shall not cause or contribute to objectionable odors. Crude sulphate turpentine shall not be used as a boiler fuel.
9. Turpentine or turpentine derivatives shall not be used as boiler fuel until the boiler is at normal operating temperature.
10. Operation while burning #6 oil is limited to 8616 hours per year.
11. Maximum sulphur content of the #6 fuel oil shall be 0.7%.
12. Maximum sulphur content of the turpentine and turpentine derivatives shall be 0.2%.
13. Annual quantity of turpentine and turpentine derivatives that can be used as boiler fuels at this facility is  $5.5 \times 10^6$  gallons.

Expiration Date : June 30, 1986 Issued this 29 day of July 1981

City of Jacksonville  
Bio-Environmental Services Division

State of Florida  
Department of Environmental Regulation

  
Donald C. Bayly, Assistant Chief

  
G. Doug Dutton, Subdistrict Manager

DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control

February 4, 1983



Bill

DER

FEB 08 1983

BAQM

Mr. Clair Fancy, Deputy Director  
Central Air Permitting Section  
Department of Environmental Regulation  
2600 Blainstone Road  
Tallahassee, Florida 32301

Dear Mr. Fancy:

Enclosed is a Construction Permit application and \$100.00 processing fee (Check No. 36125) for Union Camp Corporation's Humate Spray Drier. The permit application is being forwarded to your office for processing pursuant to the guidelines available to this Agency.

The following comments are provided for your reference:

- (1) Section III H. is not completed.
- (2) Which boiler(s) will be capable of providing flue gases for heat recovery?
- (3) It is noted that boiler #3 is restricted to 8616 operating hours per year in order to avoid PSD review.
- (4) How will emissions generated during the handling of the raw material and finished product be controlled?
- (5) Is humate radioactive and/or toxic?
- (6) Will the handling and/or processing of humate cause or contribute to objectionable odors?

Should you have any questions or comments concerning this matter, please advise.

Very truly yours,

Jerry E. Woosley  
Assistant Engineer

JEW/am

Enc.

cc: Doug Dutton - DER w/enc.





TERPENE &  
AROMATICS  
DIVISION

P. O. BOX 60369, JACKSONVILLE, FLA. 32205 TELEPHONE (904) 783-2180 TWX (810) 827-0398

January 28, 1983



Mr. J. E. Woosley  
Assistant Engineer  
Bio-Environmental Services Division  
515 West 6th Street  
Jacksonville, FL 32206

Dear Mr. Woosley:

Enclosed are the original and four copies of an application to construct a spray drier and bag house.

Also enclosed is a check for the \$100.00 application fee.

If there are any questions concerning this application please advise.

Very truly yours,

A handwritten signature in cursive script that reads "J. C. Bowers".

J. C. Bowers  
Assistant to the Vice President

JCB/nr

Attachments





P. O. BOX 60369  
JACKSONVILLE, FLORIDA 32205

63-2  
630

No. 36125

JAN 24 83

\$ 100.00

PAY TO THE ORDER OF:

1000000

UNION CAMP CORPORATION  
REGULAR ACCOUNT

Department of Environmental Regulation

THE ATLANTIC NATIONAL BANK  
JACKSONVILLE, FLORIDA

*B. J. Pearson*  
AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE



STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

Nº 33649

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Union Camp Corp Date February 15, 1980

Address P.O. Box 100369 Jacksonville, FL 32205 Dollars \$ 100.00

Applicant Name & Address Same as above

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

Revenue Code 0101 Application Number AC 110-10543.3

By Patricia G. Adams

AC 16-65833



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

SOURCE TYPE: Air Pollution  New<sup>1</sup>  Existing<sup>1</sup>  
APPLICATION TYPE:  Construction  Operation  Modification  
COMPANY NAME: Union Camp Corporation COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Humate spray drier equipped with bag house.

SOURCE LOCATION: Street 2051 N. Lane Avenue City Jacksonville  
UTM: East 7427650 North 3357350  
Latitude 30 ° 20 ' 53 "N Longitude 81 ° 45 ' 05 "W

APPLICANT NAME AND TITLE: R. L. Webb - Vice President  
APPLICANT ADDRESS: P.O. Box 60369 Jacksonville, FL 32236

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of Union Camp Corporation

I certify that the statements made in this application for a Construction Permit 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.

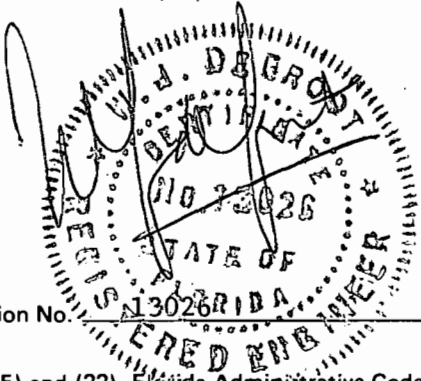
\*Attach letter of authorization

Signed: R. L. Webb  
R. L. Webb - Vice President  
Name and Title (Please Type)  
Date: Jan. 25, 1983 Telephone No. (904) 783-2180

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

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

(Affix Seal)



Florida Registration No. 13026  
Signed: \_\_\_\_\_  
W. J. deGroot  
Name (Please Type)  
Union Camp Corporation  
Company Name (Please Type)  
P.O. Box 60369, Jacksonville, FL 32236  
Mailing Address (Please Type)  
Date: Jan. 25, 1983 Telephone No. (904) 783-2180

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

**SECTION II: GENERAL PROJECT INFORMATION**

- A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.  
The proposed unit will spray dry Humate, an organic by-product of titanium ore mining operations. Humate is a naturally occurring substance resulting from degradation of plant and animal life. Heat for the drying will be recovered from boiler flue gasses. Majority of product will be shipped in covered railroad hopper cars. Any bagging operation will be equipped with hood and fan to minimize fugitive emissions.
- B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June 1, 1983 Completion of Construction December 31, 1983

- 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.)  
\$144,000 - Modified bag house

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

Boiler operating permits: A016-20814 - Issued 7/13/79; expires 5/31/84  
A016-36783 - Issued 7/29/81; expires 6/30/86  
A016-48160 - Issued 11/24/81; expires 10/31/86

- E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code?      Yes   X   No

- F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr      ;  
 if seasonal, describe: Estimated service factor - 90%

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

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

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

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Humate Slurry	TSP	18.6	2,200	1

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

- Total Process Input Rate (lbs/hr): 2206
- Product Weight (lbs/hr): 2205

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission <sup>1</sup>		Allowed Emission <sup>2</sup> Rate per Ch. 17-2, F.A.C.	Allowable <sup>3</sup> Emission lbs/hr	Potential Emission <sup>4</sup>		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
TSP	1	3.942	3.81 lbs/hour	3.81	216	756.86	2
			17-2.610 Table 610-1				

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles <sup>5</sup> Size Collected (in microns)	Basis for Efficiency (Sec. V, It <sup>5</sup> )
2G4 Mikro-Pulsaire	TSP	99.5 + %		See
with modified baghouse				Attachment
See attachment				

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

<sup>2</sup>Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 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)

<sup>5</sup>If Applicable

E. Fuels N/A

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

\*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: \_\_\_\_\_ Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

F. If applicable, indicate the percent of fuel used for space heating. Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ ft.

Gas Flow Rate: \_\_\_\_\_ ACFM Gas Exit Temperature: \_\_\_\_\_ °F.

Water Vapor Content: \_\_\_\_\_ % Velocity: \_\_\_\_\_ FPS

**SECTION IV: INCINERATOR INFORMATION** N/A

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

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

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

Approximate Number of Hours of Operation per day \_\_\_\_\_ days/week \_\_\_\_\_

Manufacturer \_\_\_\_\_

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

Section III B.

Feed to process - Humate slurry - 11,800 lbs/hr.  
Water - 9,600 lbs/hr.  
Solids - 2,200 lbs/hr.

\* Boiler Flue Gas - 39,000 cu.ft./min.

0.1 lbs solids per MM BTU heat input - 6 lbs/hr  

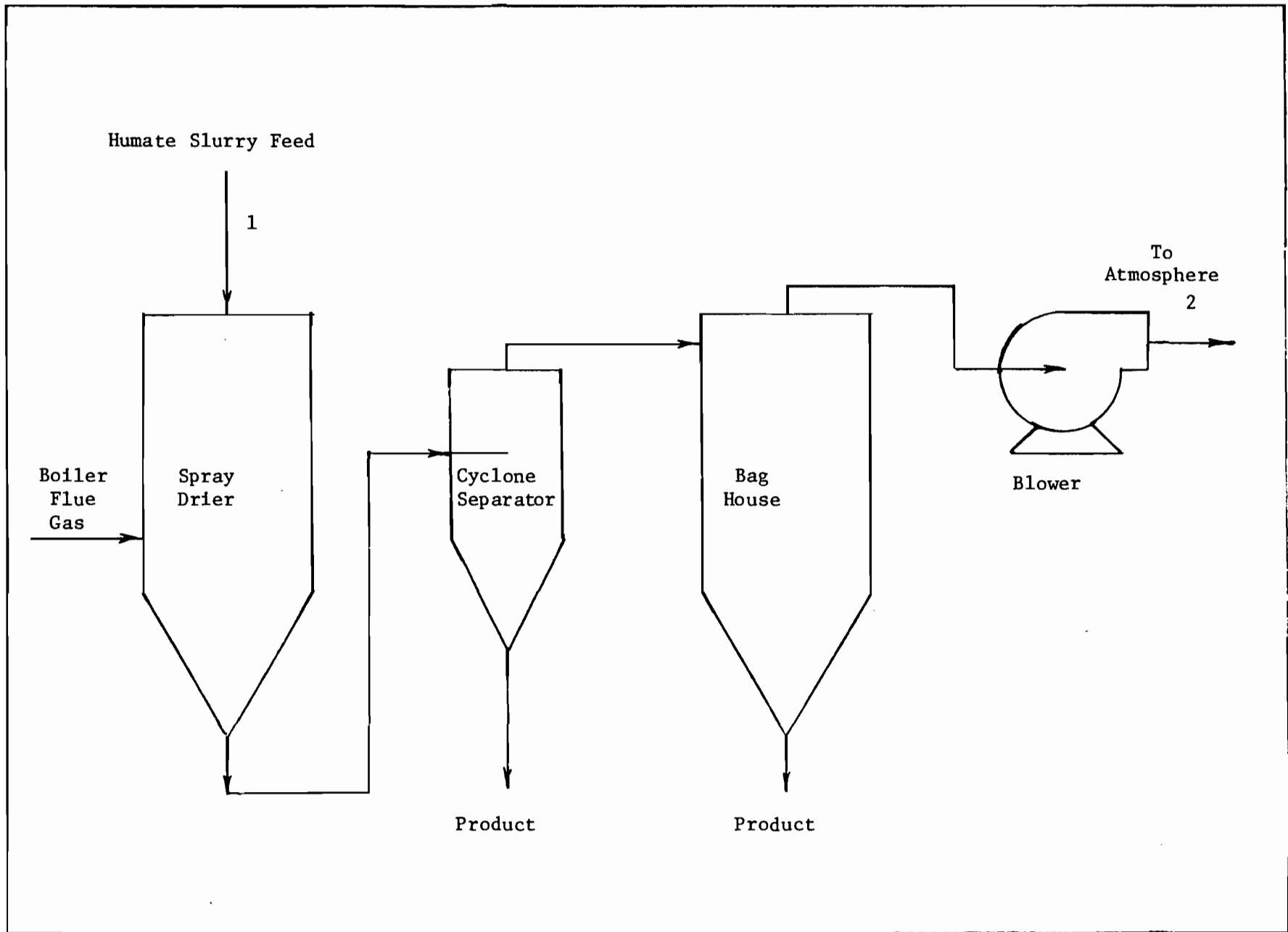
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2206 lbs/hr.

Product - 90%+ removal of solids in cyclone - 2160 lbs/hr.  
water - 170 lbs/hr.  
Solids Recovered - 1990 lbs/hr.  
Solids to Bag House - 216 lbs/hr.  
95%+ removal of solids in Bag House - 215 lbs/hr.  
\*\* Solids emissions to Atmosphere - 1 lb/hr.

\* When firing boiler with No. 6 fuel oil

\*\* This represents net reduction of 5 lbs/hr. TSP emissions over normal boiler operation.





UNION CAMP

Cambon

West Jacksonville

Marietta

Normandy

Murray Hill

Lackawanna

Cedar Hills Estates

Cedar Hills

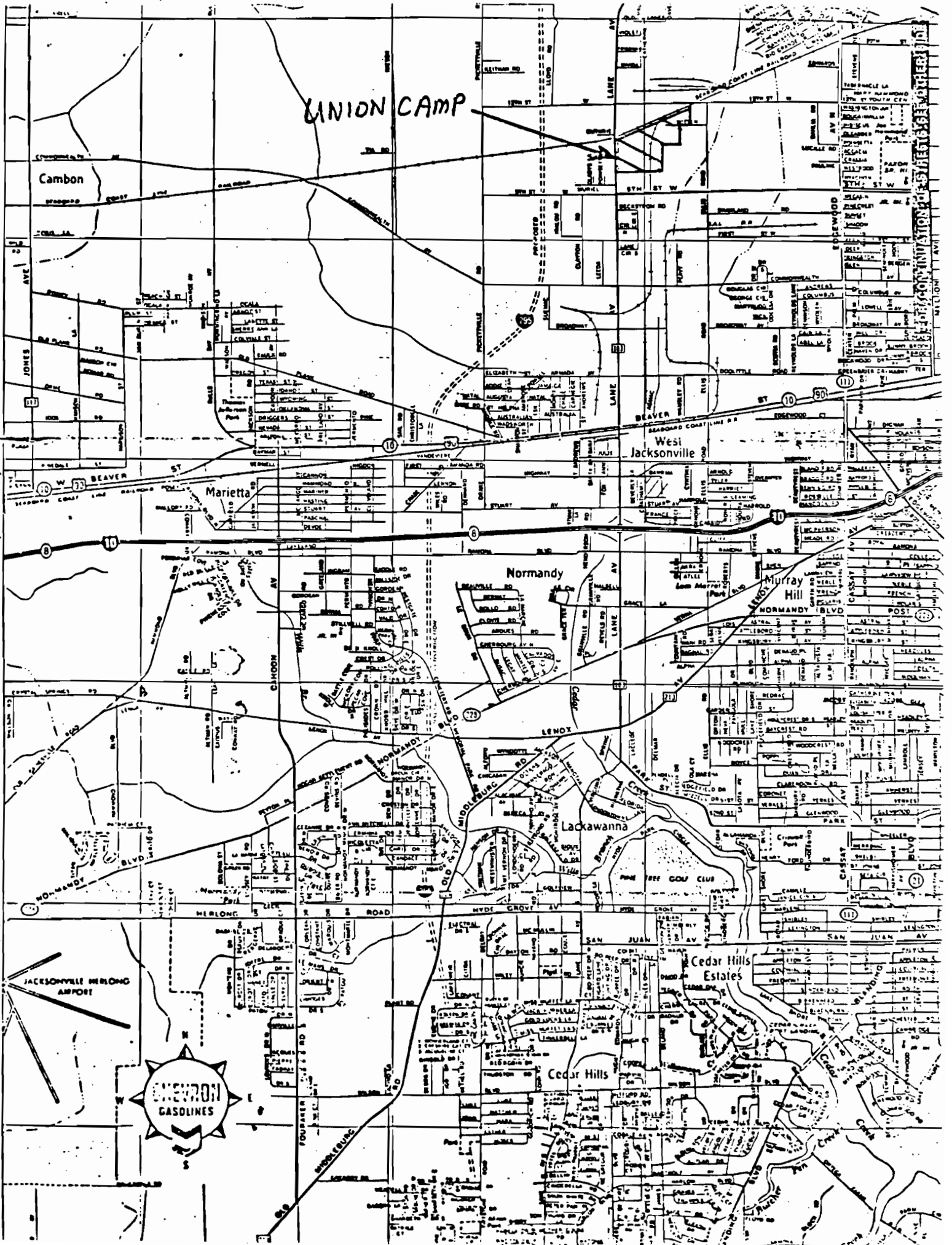


JACKSONVILLE MERLONG AIRPORT

To Lake City

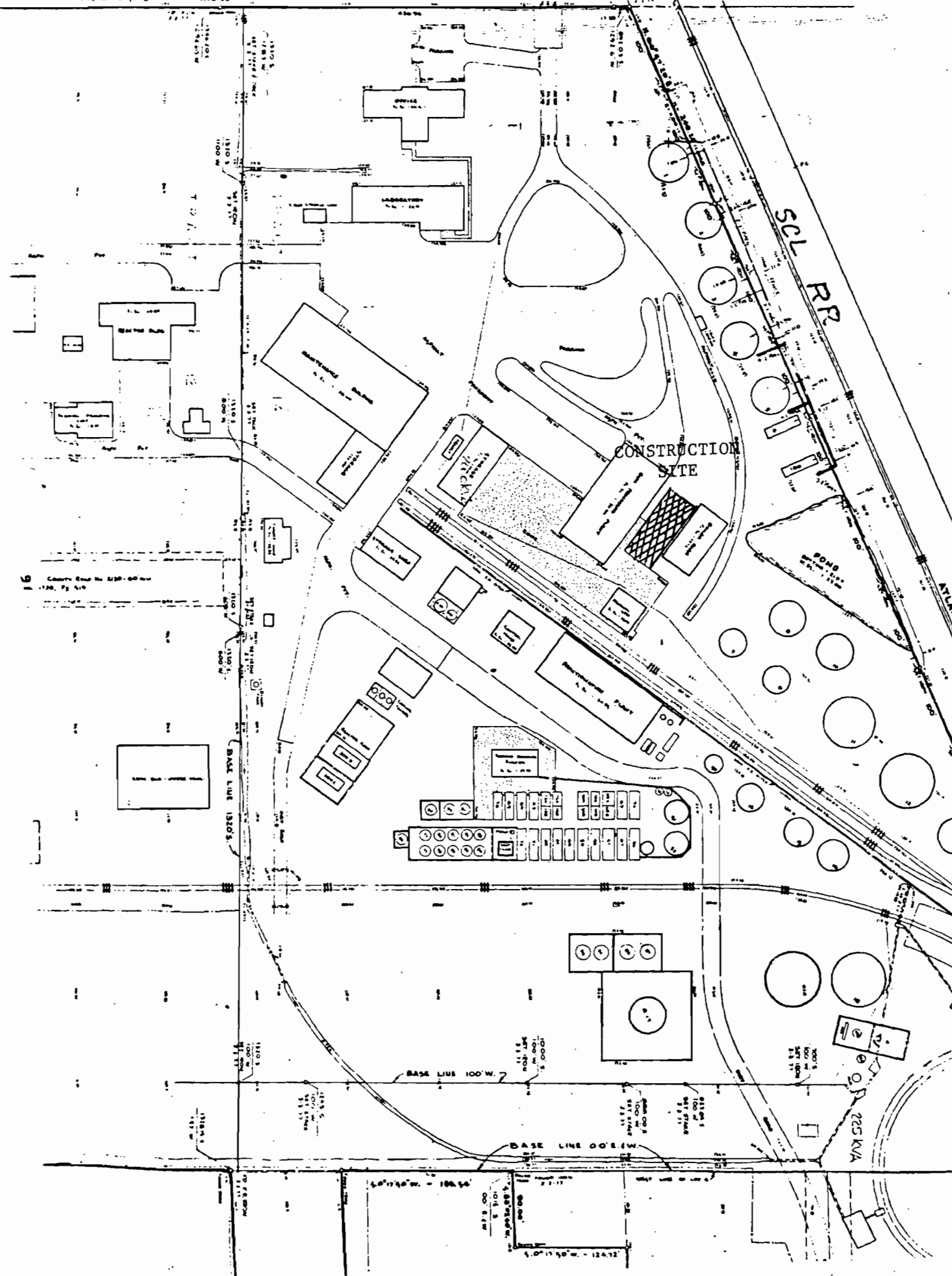
To Marietta

CONFEDERATE NATIONAL BANK



LANE AVENUE

N 0°12'40"E 1116.93'



16 County Road No. 1130-00 NW 130.75' x 110'

1000' S 100' W SET 100' 11.17'

BASE LINE 100' W

1000' S 100' W SET 100' 11.17'

BASE LINE 00' E W

225 KVA

100' S 100' W SET 100' 11.17'

100' S 100' W SET 100' 11.17'

100' S 100' W SET 100' 11.17'

100' S 100' W SET 100' 11.17'

100' S 100' W SET 100' 11.17'

	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: \_\_\_\_\_

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

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### SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
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, 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 8½" 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 8½" 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 8½" 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. An application fee of \$20, unless exempted by Section 17-4.05(3), F.A.C. 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**

- 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: | 4. Capital Costs:    |
| 2. Operating Principles:  | 6. Operating Costs:  |
| 3. Efficiency:*           | 8. Maintenance Cost: |
| 5. Useful Life:           |                      |
| 7. Energy:                |                      |
| 9. Emissions:             |                      |

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____
_____	_____

\*Explain method of determining D 3 above.

**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\*:
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy\*:
- 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\*:
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy\*\*:
- h. Maintenance Costs:
- 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:

\*Explain method of determining efficiency.

\*\*Energy to be reported in units of electrical power – KWH design rate.

3.

- a. Control Device:
- b. Operating Principles:
  
- c. Efficiency\*:
- d. Capital Cost:
- e. Life:
- f. Operating Cost:
- g. Energy:
- h. Maintenance Cost:

\*Explain method of determining efficiency above.

- 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\*:
- d. Capital Cost:
- e. Life:
- f. Operating Cost:
- g. Energy:
- 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\*:
- 3. Capital Cost:
- 4. Life:
- 5. Operating Cost:
- 6. Energy:
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:

a.

- (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:
- (5) Environmental Manager:
- (6) Telephone No.:

\*Explain method of determining efficiency above.

(7) Emissions\*:

Contaminant	Rate or Concentration

(8) Process Rate\*:

b.

- (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions\*:

Contaminant	Rate or Concentration
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

(8) Process Rate\*:

10. Reason for selection and description of systems:

\*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**      N/A

**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.

**2. Instrumentation, Field and Laboratory**

a) Was instrumentation EPA referenced or its equivalent?     Yes     No

b) Was instrumentation calibrated in accordance with Department procedures?     Yes     No     Unknown

**B. Meteorological Data Used for Air Quality Modeling**

1. \_\_\_\_\_ Year(s) of data from \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
    month   day   year     month   day   year

2. Surface data obtained from (location) \_\_\_\_\_

3. Upper air (mixing height) data obtained from (location) \_\_\_\_\_

4. Stability wind rose (STAR) data obtained from (location) \_\_\_\_\_

**C. Computer Models Used**

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

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

**D. Applicants Maximum Allowable Emission Data**

Pollutant	Emission Rate
TSP	_____ grams/sec
SO <sub>2</sub>	_____ grams/sec

**E. Emission Data Used in Modeling**

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

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

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

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

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



Spray Dried Humate  
Union Camp Corporation  
Filter Rate Test #82-4

Introduction

A filter rate test was conducted on spray dried humate. Union Camp has purchased a spray drying system for this product that is equipped with a 2G4 Mikro-Pulsaire (576 eight foot bags, 5,426 sq. ft. of cloth). Union Camp requested the filter rate test to determine if this collector is large enough to handle 28,500 ACFM at 200°F with an anticipated material loading of about 1 grain/SCF. To simulate actual collector operation, the test dust supplied was the fines from a test collector rather than product from the initial cyclone.

Description of Test Equipment

Figure 1 illustrates the schematic of the test set up.

Total Filter Area:	113.12 sq. ft.
Number of Bags:	16
Bag Diameter:	4.5" Nominal
Bag Length:	72"
Bag Material:	Polyester, 16 oz./yd. <sup>2</sup> , HCE II
Cleaning Pulse Pressure:	60 PSIG
Cleaning Cycle:	One Minute
Venturi Type:	1-7/8" D, Long Throat
Average Air Temperature:	65°F.
Relative Humidity:	82%
Dust Dispersion:	Pneumatic
Length of Test Run:	50 hours plus

Results

Figure 2 summarizes the filter rate characteristic of the humate material. The test was straight forward except for seepage of the material through the bags (discussed below). There wasn't any bridging of material between bags nor any material buildup in the hopper.

## Discussion and Recommendations

The performance of a full scale Pulsaire filtering this material will be at a lower filter rate than indicated in Figure 2 since operating conditions cannot be reproduced in the laboratory. Factors such as temperature and the application must be considered.

Based on the data from the Mikro Products Reference Tables, I have selected a temperature factor of 0.75 and an application factor of 0.8 for a combined factor of 0.6. Extrapolating the filter rate curve (Figure 2), we obtain a laboratory filter rate of 5.75. Multiplied by 0.6 results in a design filter rate of 3.45:1. The present 2G4 Mikro-Pulsaire, when filtering 28,500 ACFM, would be operating at 5.25:1. This means that the collector is undersized. Using a less conservative approach in recognition of the anticipated grain loading of 1 grain/SCF or less, the lab filter rate at 5 grains/SCF, 7.0:1, can be used for the design basis.  $7.0 \times 0.6 = 4.2:1$ , still about 20% lower than the collector's operation at 5.25:1. This is too great a difference. However, if the present collector is altered to accept 10 foot bags, resulting in a 25% increase of cloth area, the resulting filter rate will be 4.2:1, right on the button. Unfortunately, such an alteration would be expensive. An additional collector with enough filter area to increase the total area to the required amount would probably cost only \$12-13,000. If the ductwork was arranged to accept this add-on unit, the present collector might be run as is in order to see if its operation is acceptable.

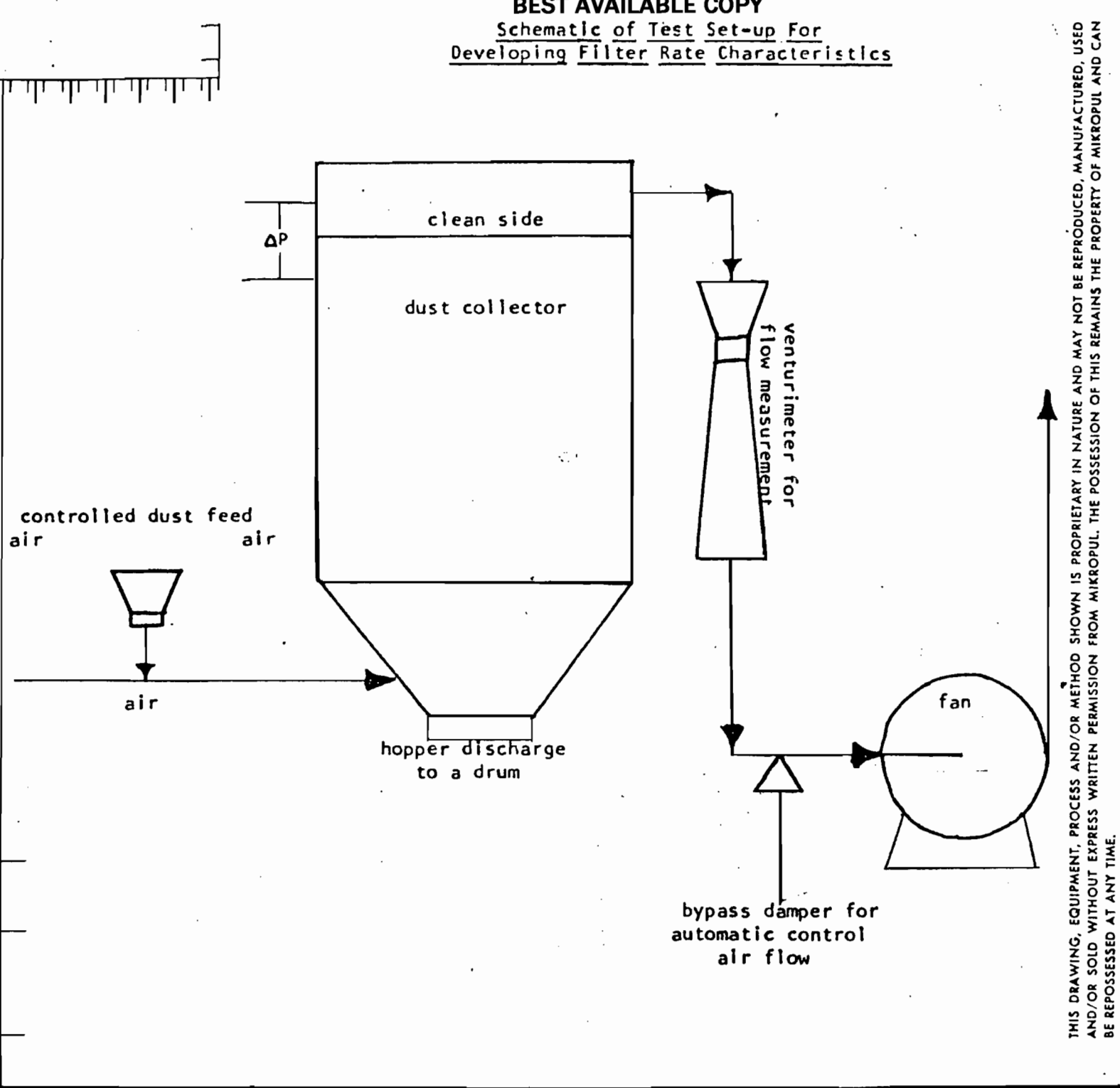
Regarding the problem of material seepage through the filter bags, a comparative efficiency test was conducted using the standard 16 oz./yd.<sup>2</sup> polyester felt (with HCE II) and comparing its humate collection efficiency with the efficiencies produced by a number of other filter medias. Among the medias tested were Nomex E23, Goretex/polyester, polyester/glass, and polyester with Tuflex treatment (see Figure 3 for full results). Of these four, the polyester/glass material had the best efficiency, then Goretex/polyester, Nomex E23, and polyester with Tuflex. The Tuflex treated polyester had half the dust emission that the standard polyester did and the polyester/glass material had less than 1% of the standard polyester's emission. Frankly, I expected better performance from the Goretex material since in previous testing, it has been the most efficient. The other medias performed as expected. Selection of the filter media for this application should be from the four mentioned above, with price a primary concern.

One possible benefit some of these premium filter media provide is the ability to filter at lower pressure drops or at a higher filter rate than standard media. At various times I have seen this tendency from all of the selected four medias though not with all dusts and not at all times. It is possible that with a low dust load and a premium media, the present collector might just work.

## Observations

- A. Bridging of material between bags or in the collector's hopper was not observed.
- B. Material seepage was excessive. Higher efficiency filter media will be necessary for the full scale collector.

NO. DATE BY DESCRIPTION



**BEST AVAILABLE COPY**  
Schematic of Test Set-up For  
Developing Filter Rate Characteristics

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USED ON ASSEMBLY Project no. 770810		TOLERANCES DECIMALS $\pm .005$ FRACTIONS $\pm 1/16$ ANGLES $\pm 1^\circ$ UNLESS OTHERWISE NOTED		DRAWING NO.	SIZE R1
Figure 1 Model Test Set up for Pulsaires		DATE	APPROVED	DATE	Fig. 1 -A-
Mikropul FORMERLY PULVERIZING MACHINERY		DIVISION OF THE SLICK CORPORATION		SUMMIT, NEW JERSEY 07901	
DRAWN	DATE	CHECKED	DATE	APPROVED	DATE

FIGURE 2

Filter Rate Curve

TEST NO. F82-4 DATE \_\_\_\_\_  
COMPANY Unicamp  
MATERIAL Humate TEST BY JS.  
BAG ΔP ("W.G.) 3.5  
REL. HUMIDITY (%) 82 TEMP (°F) 65  
REMARKS \_\_\_\_\_

DUST LOADING (GRAINS/CU. FT.)

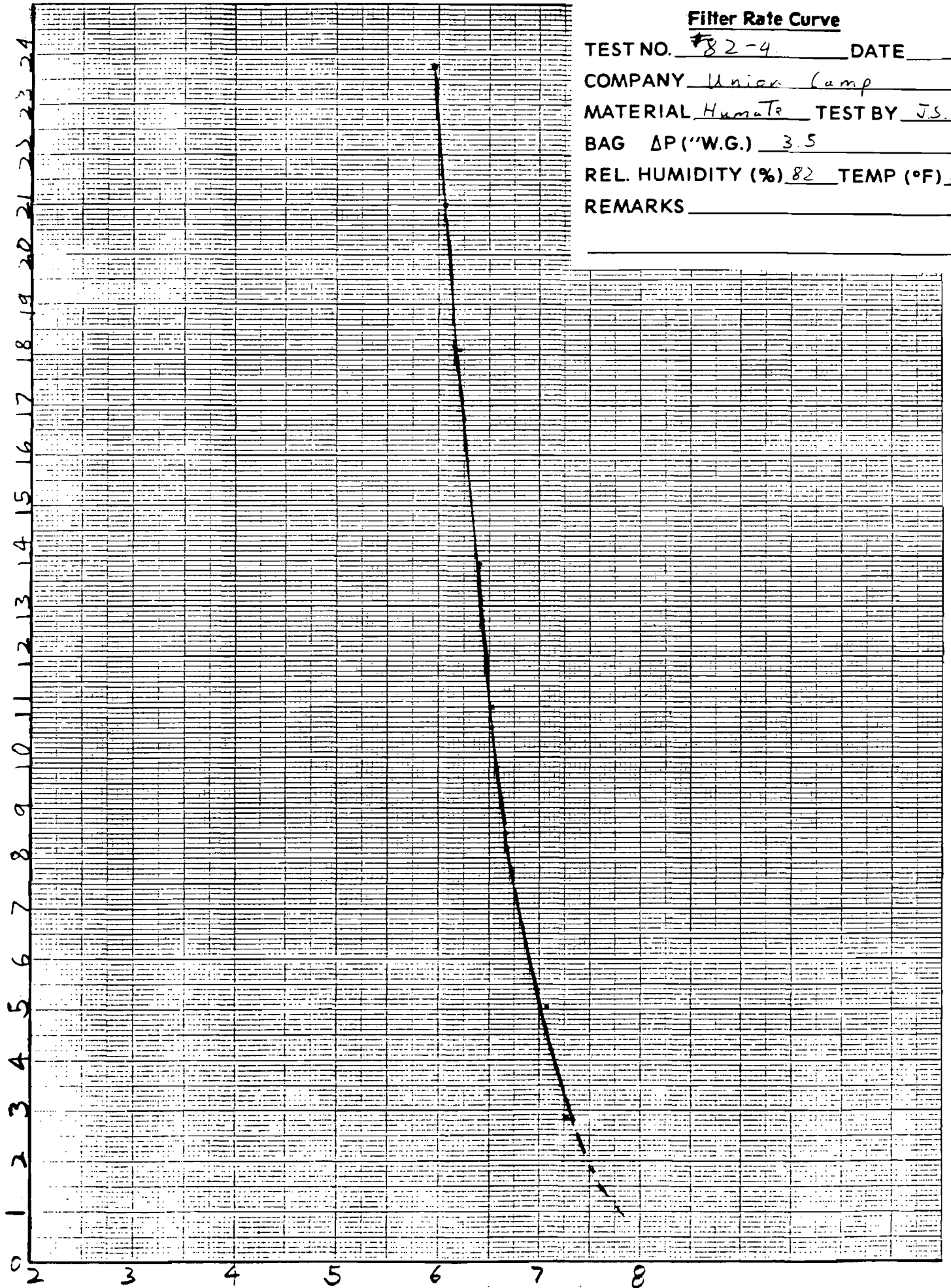


Figure 3  
Filter Media Collection Efficiency Test Results

<u>Media</u>	<u>Average Dust Emission</u>	<u>Average Collection Efficiency</u>	<u>Average Initial Perm</u>	<u>Average Final Perm.</u>	<u>Average Final Perm.</u>
Polyester Felt with HCE	0.000565 GR/ACF	99.9945%	22.64	11.52	.245
Polyester with Tuflex	0.00023 GR/ACF	99.9975%	17.65	7.51	.40
Nomex E23	0.00015 GR/ACF	99.998%	23.27	18.51	.14
Poly-Glass	0.0000020 GR/ACF	99.99999%	6.71	4.07	.89
Poly-Geon	0.00040 GR/ACF	99.9955%	21.03	9.57	.34
Gortex/Polyester	0.00012 GR/ACF	99.9988%	7.26	3.90	1.02
Poly with NEX 90B Teflon	0.00044 GR/ACF	99.9965%	27.51	7.22	.60

Test Dust - Humus  
Perm measured at 0.5" w.g.