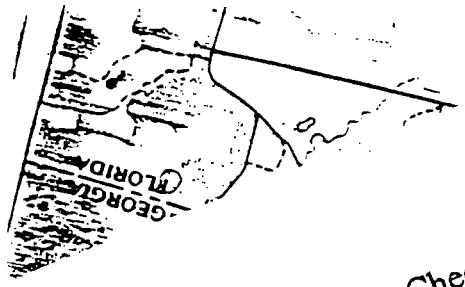


Check Sheet

Company Name: Reichold Chemicals, INC
Permit Number: AC17-115381, -115382
PSD Number:
Permit Engineer:

Cross References:
- ☐
- ☐
- ☐

Application:
- ☑ Initial Application
- ☑ Incompleteness Letters
- ☑ Responses CONFIDENTIAL
- ☐ Waiver of Department Action
- ☐ Department Response
- ☐ Other

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

Final Determination:
- ☑ Final Determination
- ☑ Signed Permit
- ☒ BACT or LAER Determination
- ☐ Other

Post Permit Correspondence:
- ☑ Extensions/Amendments/Modifications
- ☐ Other

Revision #5

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:	4. Article Number
Mr. Daniel B. Smith, P.E. Baskerville-Donovan Engineers, Inc 314 S. Baylen St., Suite 300 P.O. Box 13370 Pensacola, FL 32591	P 274 007 467 Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature – Addressee X	8. Addressee's Address *(ONLY if requested and fee paid)*
6. Signature – Agent X Kenneth Wayne Vannoy	
7. Date of Delivery	

PENS COLA FL DOWNTOWN STA
OCT 13 1988
(VISED)

PS Form **3811**, Mar. 1987 ★ U.S.G.P.O. 1987-178-268 **DOMESTIC RETURN RECEIPT**

P 274 007 467

RECEIPT FOR CERTIFIED MAIL

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

Sent to Mr. Daniel B. Smith	
Street and No. P.O. Box 13370	
P.O., State and ZIP Code Pensacola, FL 32591	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date Mailed: 10-10-88 Permit: AC 17-115381 AC 17-115482	

★ U.S.G.P.O. 1985-480-794

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

October 5, 1988

Mr. Daniel B. Smith, P.E.
Baskerville-Donovan Engineers, Inc.
314 South Baylen Street, Suite 300
P. O. Box 13370
Pensacola, Florida 32591

Dear Mr. Smith:

Re: AC 17-115381
AC 17-115382

The Department is in receipt of your letter dated September 15, 1988, in behalf of Reichhold Chemicals, Inc., requesting and extension of the expiration date of permits No. AC 17-115381 and AC 17-115382 in Pensacola, Florida. This request is acceptable. The expiration date will be changed as follows:

From: August 30, 1988
To: December 31, 1988

This letter must be attached to the above mentioned permit and shall become part of the permit.

Attachment to be Incorporated:

Mr. Daniel B. Smith's letter of September 15, 1988.

Sincerely,

Dale Twachtmann
Secretary

DT/plm

cc: Jack Preece

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

Interoffice Memorandum

TO: Dale Twachtmann

FROM: Steve Smallwood

SUBJ: Extension of Permits

DATE: October 5, 1988

Attached for your approval and signature is a letter extending the expiration date of permits issued to Reichhold Chemical, Inc. for their Pilot Plant in Pensacola, Florida.

I recommend your approval and signature.

SS/TH/s

attachment

Fed Exp. 939074557 1
9-15-88 Pensacola, FL

file copy

BASKERVILLE-DONOVAN ENGINEERS, INC.

A PROFESSIONAL SERVICE ORGANIZATION

• PENSACOLA • TALLAHASSEE • FORT WALTON BEACH •
MILTON • PORT ST. JOE • PANAMA CITY • APALACHICOLA • DAYTONA BEACH

September 15, 1988 "Federal Express"

Mr. C.H. Fancy, P.E.
State of Florida
Department of Environment Regulation
Twin Tower Office Building
2600 Blair Stone Road
Room 306-7
Tallahassee, Florida 32399

Re: Reichhold Chemicals, Inc.
Construction Permits Numbers
AC 17-115381 & AC 17-115382
Our Project Number 077301

Dear Mr. Fancy:

In regards to the above referenced project, I had prepared applications for operating permits prior to the August 30., 1988 extension date. In a conversation with Mr. Willard Hanks of your office, I was informed that the operation permits had to be submitted through the local district office.

During a preliminary review with Mr. Jack Preece of the DER's Pensacola office, it was noted that the sampling data had not been completed. Upon explaining to Mr. Preece that due to the labor strike which Reichhold experienced, the Pilot Plant operations were delayed, he recommended that the best course of action would be to request another construction extension. During this construction extension we will be working with Mr. Preece to develop a VOC test and monitoring program that meets the needs of the operating permit as well as the long range program of assuring the Pilot Plant remains in compliance.

Therefore, Reichhold Chemicals, Inc., requests you grant an extension to December 31, 1988, on permits AC 17-115381 and AC 17-115382 in order to allow us to get the Pilot Plant in operation, and do the testing and monitoring needed to complete the operation permit. I apologize for the mistiming of the request, but I believe this is the proper course of action. Please feel free to call on me if you have any questions.

Very truly yours,

BASKERVILLE-DONOVAN ENGINEERS, INC.

Dan Smith

Daniel B. Smith, P.E.
Manager, Industrial Department

DBS/alk Copied: Teresa Heron
Jack Preece
EHF/BT

c - WFB

AIRBILL

FEDERAL EXPRESS

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.

PACKAGE TRACKING NUMBER 939074557 1

939074557 1

Date 9/15/88

RECIPIENT'S COPY

From (Your Name) Please Print — 1 Mr. C.H. Fancy, P.E.

Your Phone Number (Very Important) (904) 438-9661

Company ASKERVILLE-DONOVAN ENG INC

Department/Floor No.

Street Address 16 S BAYLEN STE 300

City PENSACOLA **State** FL **ZIP Required** 32501

To (Recipient's Name) Please Print — 2 Mr. C.H. Fancy

Recipient's Phone Number (Very Important) ( )

Company Florida Department of Environmental Reg

Department/Floor No.

Exact Street Address *(We Cannot Deliver to P.O. Boxes or P.O. ® Zip Codes.)* 2600 Blair Stone Road Room 306-7

City Tallahassee, Florida **State** **ZIP Required** 32399

YOUR BILLING REFERENCE INFORMATION (FIRST 24 CHARACTERS WILL APPEAR ON INVOICE.) 3 77301

PAYMENT [X] Bill Sender [ ] Bill Recipient's FedEx Acct. No. [ ] Bill 3rd Party FedEx Acct. No. [ ] Bill Credit Card [ ] Cash

IF HOLD FOR PICK-UP, Print FEDEX Address Here — 4 Street Address

City State ZIP Required

4 SERVICES

1 [ ] PRIORITY 1 Overnight Delivery
2 [X] COURIER-PAK OVERNIGHT ENVELOPE*
3 [ ] OVERNIGHT BOX
4 [ ] OVERNIGHT TUBE
5 [ ] STANDARD AIR Delivery not later than second business day
6 [X] OVERNIGHT LETTER*
7 [ ]
8 [ ]
9 [ ]
10 [ ]

*Declared Value Limit $100.

DELIVERY AND SPECIAL HANDLING

1 [ ] HOLD FOR PICK-UP (Fill in Box H)
2 [X] DELIVER WEEKDAY
3 DELIVER SATURDAY (Extra charge) [ ]
4 [ ] DANGEROUS GOODS (Extra charge)
5 [ ] CONSTANT SURVEILLANCE SERVICE (CSS) (Extra charge) (Release Signature Not Applicable)
6 [ ] DRY ICE ___ Lbs.
7 [ ] OTHER SPECIAL SERVICE
8 [ ]
9 [ ] SATURDAY PICK-UP (Extra charge)
10 [ ]
11 [ ]
12 [ ] HOLIDAY DELIVERY (If offered) (Extra charge)

	PACKAGES	WEIGHT	YOUR DECLARED VALUE	OVER SIZE
		LBS		
		LBS		
		LBS		
		LBS		
Total	Total	Total		

Received At
1 [ ] Regular Stop
2 [ ] On-Call Stop
3 [ ] Drop Box
4 [ ] B.S.C.
5 [ ] Station

FEDEX Corp. Employee No.

Date/Time for FEDEX Use

5 Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.

Release Signature

Emp. No. Date

[ ] Cash Received
[ ] Return Shipment
[ ] Third Party [ ] Chg. To Del. [ ] Chg. To Hold

Street Address

City State Zip

Received By: X

Date/Time Received FedEx Employee Number

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

PART #111800
REVISION DATE 1/88
PRINTED IN U.S.A. GBFE
009

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. D. W. Bright
Environmental/Safety Manager
Reichhold Chemicals, Inc.
P. O. Box 1433
Pensacola, FL 32596

4. Article Number
P 702 175 476

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery

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

PENSACOLA, FL DOWNTOWN JUL 12 1988

PS Form **3811**, Mar. 1987 ★ U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

P 702 175 476

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

Sent to Mr. D. W. Bright, Reichhold Chemicals	
Street and No. P.O. Box 1433	
P.O. State and ZIP Code Pensacola, FL 32596	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date Mailed: 7-11-88 Permit: AC 17-115381 & 82	

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

July 5, 1988

Mr. D. W. Bright
Environmental/Safety Manager
Reichhold Chemicals, Inc.
P. O. Box 1433
Pensacola, Florida 32596

Dear Mr. Bright:

Re: AC 17-115381 and 17-115382

The Bureau of Air Quality Management is in receipt of Mr. D. W. Bright's letter dated June 14, 1988, requesting an extension of the expiration date of the above mentioned permits. This request is acceptable. The expiration date will be changed as follows:

From: June 30, 1988
To: August 30, 1988

A copy of this letter must be attached to the referenced construction permits and shall become a part of each permit.

Attachments to be Incorporated

Mr. D. W. Bright's letter of June 14, 1988.

Sincerely,

Dale Twachtmann
Secretary

DT/plm

cc: Jack Preece

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee

To: _____ Location: _____

To: _____ Location: _____

To: _____ Location: _____

From: _____ Date: _____

Interoffice Memorandum

TO: Dale Twachtmann

FROM: Steve Smallwood

SUBJ: Amendment of Reichhold Chemicals, Inc. Permits
State Construction Permit Numbers: AC 17-115381
and AC 17-115382

DATE: July 5, 1988

Attached for your approval and signature is a letter prepared by Central Air Permitting to extend the construction permits issued to the above mentioned company. The facility is located in Pensacola, Escambia County, Florida.

I recommend your approval and signature.

SS/aqm/th

attachments

FEDERAL EXPRESS 761511584 6

CUSTOMER PACKAGE TRACKING NUMBER — PULL UP PURPLE TAB

file copy

no blue sheet

Reichhold Chemicals, Inc.
Chemical Coatings Division
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

June 14, 1988

REICHHOLD

Federal Express

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

RECEIVED
JUN 15 1988
DER - BAQM

Dear Mr. Fancy:

Reichhold Chemicals, Inc., is requesting an extension to our construction permits, Nos. AC 17-115381 and AC 17-115382 which will expire on June 30, 1988. The plant was constructed as noted in the permit application and was running until the plant went on strike. The pilot plant is not operating at the current time due to the need for the pilot plant staff to help keep the production units operating at our main plants. We are also putting a package together to amend the construction permit. This will involve the addition of two 10-gallon reactors in the plant. The total production in the plant will not change nor will the total emissions. Also, we are going to add a continuous VOC monitor on the vent from the carbon absorbers to indicate breakthrough of the carbon.

We would like to extend the existing permits until August 30, 1988, and are looking forward to your reply. I apologize for the short time frame for this request, but the labor strike has not allowed us to run the unit for testing purposes.

Sincerely,

D. W. Bright
Environmental/Safety Manager

DWB/ka

cc: Mr. M. F. Barchie
Mr. J. Preece
Mr. M. A. Reshamwala

copied: Teresa Heron CHF/BT } 6-15-88

Tel.: (904) 433-7621
(800) 874-0868
Telex: 702424

REICHHOLD®

Chemical Coatings Division
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

D. W. BRIGHT

MR C H FANCY, PE
DEPUTY CHIEF
BUREAU OF AIR QUALITY MANAGEMENT
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE FL 32399-2400

P 408 531 179

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to R. P. Aston	
Reichhold Chemicals, Inc.	
P.O, Box 1433	
P.O., State and ZIP Code Pensacola, Florida 32596	
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 4/30/87 AC 17-115381 -115382	

PS Form 3800, Feb. 1982

PS Form 3811, July 1983 447-845

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

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

3. Article Addressed to:
R. P. Aston
Reichhold Chemicals, Inc.
P.O. Box 1433
Pensacola, FL 32596

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 408 531 179

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

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery

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

PENSACOLA, FL DOWNTOWN STA
MAY 1 1987
USPO

DOMESTIC RETURN RECEIPT

File Copy

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMITS

Mr. R. P. Aston
Plant Manager
Reichhold Chemicals, Inc.
Post Office Box 1433
Pensacola, Florida 32596

April 29, 1987

Enclosed is Permit Numbers AC 17-115381 and AC 17-115382 to Reichhold Chemicals, Inc., which authorizes the construction of a pilot plant and a raw material loading station at your existing facility in Pensacola, Escambia 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:

D. Tyner, P.E.
J. Preece

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMITS and all copies were mailed before the close of business on April 30, 1987 to the listed persons.

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.

R Bruce Mitchell
Clerk

4/30/87
Date

Final Determination

Reichhold Chemicals, Inc.
Newport Division
Pensacola, Escambia County, Florida

Pilot Plant Vent System and a
Raw Materials and Loading Station Facility

Permit Numbers:

AC 17-115381
AC 17-115382

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

April 24, 1987

Final Determination

Reichhold Chemical's applications for permits to construct a Pilot Plant and a raw material loading station facility at the Reichhold Chemicals complex in Pensacola, Escambia County, Florida have been reviewed by the Bureau of Air Quality Management.

Public Notice of the Department's Intent to Issue the construction permits was published in the Pensacola News Journal on March 24, 1987.

Copies of the Preliminary Determination have been available for public inspection at the Department's District office in Pensacola and the Bureau of Air Quality Management office in Tallahassee.

The only comments received were from Mr. R. W. Clarke, Senior Environmental Engineer, from Reichhold Chemicals Inc. Mr. Clarke requested that Specific Conditions No. 3 and No. 6 (AC 17-115381) and Specific Condition No. 5 (AC 17-115382) be modified to reflect more the operating conditions of this research facility.

The Department considered the comments and changed the conditions as follows:

Specific Condition No. 3 (AC 17-115381)

From: Not more than 8 batches per week should be processed by this pilot plant.

To: The production rate for this pilot plant shall not exceed 400 lbs of product per hour and 2800 lbs of product per day.

Specific Condition No. 6 AC 17-115381

Specific Condition No. 5 AC 17-115382

From: Compliance with the VOC emission limitations will be determined based on the VOC inventory of the materials being processed.

To: Compliance with the VOC emission standard will be determined by Method 25, 25A, or 25B or any other method approved by the department. Concentration data and calculated mass emission rate will be reported. The district office shall be notified 15 days prior to test.

Specific Conditions No. 8 and 9 (AC 17-115381) and Specific Conditions No. 7 and 8 (AC 17-115382) were reworded to reflect the above changes.

The final action by the Department shall be to issue the permits with the changes noted above.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

PERMITTEE:
Reichhold Chemicals, Inc.
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

Permit Number: AC 17-115381
Expiration Date: June 30, 1988
County: Escambia
Latitude/Longitude: 30° 24' 30" N
87° 14' 45" W
Project: Pilot Plant Vent System

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 Pilot Plant Vent System Facility located at the Reichhold Chemical Complex, Building No. 136 in Pensacola, Escambia County, Florida.

Construction shall be in accordance with the attached permit application except as otherwise noted in the Specific Conditions.

Attachment:

1. Application to construct Air Pollution Sources, DER Form 17-1.122(16).
2. Incompleteness letters dated February 25, 1986 and June 9, 1986.
3. Response to technical descrepancies dated May 14, 1986 and January 13, 1987.
4. Reichhold Chemical's letter dated April 1, 1987.

PERMITTEE:
Reichhold Chemicals, Inc.

Permit Number: AC 17-115381
Expiration Date: June 30, 1988

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.

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.

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.

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:

Pilot Plant

1. This facility shall be allowed to operate continuously 24 hours/day, 7 days/week, and 50 weeks/year.

2. Total VOC emissions from the facility shall not exceed 1.07 lb/hr and 1.07 tons/yr.

3. The production rate for this pilot plant shall not exceed 400 lbs of product per hour and 2800 lbs of product per day.

SPECIFIC CONDITIONS:

4. According to FAC Rule 17-2.620(1)(a), no person shall store, pump, handle, process, load, unload, or use in any process or installation volatile organic compounds or organic solvents without applying known and existing vapor emission control device or systems deemed necessary and ordered by the department. The following procedures shall be utilized to minimize pollutant emissions, but shall not be limited to:

- maintain tightly fitting covers, lids, etc., on all containers of VOC when they are not being handled, tapped, etc.;
- where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, bath, etc., of VOCs that it can be covered when not in use;
- all fittings, valve lines, etc., shall be properly maintained;
- prevent excessive turbulence across exposed VOC;
- all VOC spills shall be attended to immediately and the waste properly disposed of, recycled, etc.

5. No objectionable odors are allowed from this facility.

6. Compliance with the VOC emission standard will be determined by Method 25, 25A, or 25B or any other method approved by the department. Concentration data and calculated mass emission rate will be reported. The district office shall be notified 15 days prior to test.

7. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit.

8. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, test results, and Certificate of Completion to the Department's Northwest District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate.

PERMITTEE:
Reichhold Chemicals, Inc.

Permit Number: AC 17-115381
Expiration Date: June 30, 1988

SPECIFIC CONDITIONS:

9. Upon obtaining an operating permit, the applicant will be required to submit annual reports on the actual operation and emissions of the facility. Annual test results shall be required and sent to the Department's Northwest District office.

10. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application.

Issued this 27 day of April, 1987.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann

Dale Twachtmann, Secretary

____ pages attached

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

PERMITTEE:
Reichhold Chemicals, Inc.
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

Permit Number: AC 17-115382
Expiration Date: June 30, 1988
County: Escambia
Latitude/Longitude: 30° 24' 30" N
87° 14' 45" W
Project: A Raw Materials and Loading Station Facility

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 Raw Materials and Loading Station Facility located at the Reichhold Chemical Complex, Building No. 136 in Pensacola, Escambia County, Florida.

Construction shall be in accordance with the attached permit application except as otherwise noted in the Specific Conditions.

Attachment:

1. Application to construct Air Pollution Sources, DER Form 17-1.122(16).
2. Incompleteness letters dated February 25, 1986 and June 9, 1986.
3. Response to technical descrepancies dated May 14, 1986 and January 13, 1987.
4. Reichhold Chemical's letter dated April 1, 1987.

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.

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.

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.

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:

A Raw Material and Loading Station Facility

1. This facility shall be allowed to operate continuously (24 hrs/day; 7 days/week; 50 weeks/year).

2. This facility and the pilot plant facility will not be allowed to emit more than 1.07 lbs/hr and 1.07 tons/yr of volatile organic compounds (VOC).

SPECIFIC CONDITIONS:

3. According to FAC Rule 17-2.620(1)(a), no person shall store, pump, handle, process, load, unload, or use in any process or installation volatile organic compounds or organic solvents without applying known and existing vapor emission control device or systems deemed necessary and ordered by the department. The following procedures shall be utilized to minimize pollutant emissions, but shall not be limited to:

- o maintain tightly fitting covers, lids, etc., on all containers of VOC when they are not being handled, tapped, etc.;
- o where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, bath, etc., of VOCs that it can be covered when not in use;
- o all fittings, valve lines, etc., shall be properly maintained;
- o prevent excessive turbulence across exposed VOC;
- o all VOC spills shall be attended to immediately and the waste properly disposed of, recycled, etc.

4. No objectionable odors are allowed from this facility.

5. Compliance with the VOC emission standard will be determined by Method 25, 25A, or 25B or any other method approved by the department. Concentration data and calculated mass emission rate will be reported. The district office shall be notified 15 days prior to test.

6. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit.

7. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, test results, and Certificate of Completion, to the Department's Northwest District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate.

PERMITTEE:
Reichhold Chemicals, Inc.

Permit Number: AC 17-115382
Expiration Date: June 30, 1988

SPECIFIC CONDITIONS:

8. Upon obtaining an operating permit, the applicant will be required to submit annual reports on the actual operation and emissions of the facility. Annual test results shall be required and sent to the Department's Northwest District office.

9. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application.

Issued this 27 day of April, 1987.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann

Dale Twachtmann, Secretary

____ pages attached

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ Loctn: _____
To: _____ Loctn: _____
To: _____ Loctn: _____
From: _____ Date: _____

TO: Dale Twachtmann

THRU: Howard Rhodes

FROM: Clair Fancy

DATE: April 23, 1987

SUBJ: Approval of Air Construction Permit

Attached for your approval and signature are the air construction permits for Reichhold Chemicals Inc. to authorize the construction of a pilot plant and a raw material loading station at the applicant's existing facility in Pensacola, Escambia County, Florida. There have been no controversies regarding this permit.

Day 90, after which the permit would be issued by default, is May 17, 1987.

The bureau recommends your approval and signature.

CF/ks

Attachment

RECEIVED
APR 24 1987
Office of the Secretary

PM CM: P 704-543-091
4-6-87
Pensacola, FL

Reichhold Chemicals, Inc.
Newport Division
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

DER
APR 07 1987
BAQM

REICHHOLD

April 3, 1987

Certified-ret.rec.

Mr. Clair Fancy, Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
7600 Blair Stone Road
Tallahassee, FL 32301-8241

Dear Mr. Fancy:

PILOT PLANT VENT SYSTEM FACILITY
AIR PERMITS AC 17-115381 and AC 17-115382

Attached is the certification of the referenced permits FL DER Notice of Intent published in the Pensacola News Journal as required by Florida law.

Please call me at (904) 433-7631, Ext. 543, if you have any additional comments or questions.

Sincerely,

R.W. Clarke

R. W. Clarke
Senior Environmental Engineer

RWC:mab

Attachment

cc: T. Herron - FL DER, Tallahassee
J. Preece - FL DER, Pensacola

Tel.: (904) 433-7621
(800) 874-0868
Telex: 702424

Penso. Bch: 932-8201

LEGAL NOTICE

PENSACOLA
News Journal

PUBLISHED DAILY
PENSACOLA, ESCAMBIA COUNTY, FLORIDA

State of Florida,
County of Escambia.

Before the undersigned authority personally appeared
J. Diane Deal

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

Notice of Intent

in the _____ Court,

was published in said newspaper in the issues of

March 24, 1987

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

J. Diane Deal

Sworn to and subscribed before me this 30th **day of** March **A.D., 19** 87

NOTARY PUBLIC.

My Commission Expires Oct. 18, 1987

State of Florida
Department of
Environmental
Regulation
Notice of Intent

The Department gives notice of its inent to issue permits to Reichold Chemicals, Inc. to construct a pilot plant and a raw material loading station located at the Reichold Chemcial Complex, building No. 136, in Pensacola, Escambia 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 determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Coed, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publications of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the *proposed agency action*. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursant to Rule 28.5.207, Florida Administrative code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009. Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Departmetn's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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

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

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

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

LEGAL NO. 32620 1T
MAR. 24, 1987

PM
4-1-87
Pensacola, FL

[CM: P-704-543-089]

File Copy

Reichhold Chemicals, Inc.
Newport Division
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

DER

REICHHOLD

April 1, 1987

APR 2 1987

Certified-ret.rec.

BAQM

Mr. Clair Fancy, Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
7600 Blair Stone Road
Tallahassee, FL 32301-8241

Dear Mr. Fancy:

PILOT PLANT VENT SYSTEM FACILITY
AIR PERMITS AC 17-115381 and AC 17-115382

We are in receipt of the subject draft permits and hereby request you consider the draft language modifications listed below:

I. Permit No. AC 17-115381

A. Specific Conditions: Item 3

Please change the limit of eight batches per week to the below production rate limitations:
1. 2800 Lbs. of product per day, and
2. 400 Lbs. of product per hour.

Justification

Due to the operating characteristics of this research facility, a limit on the number of batches would severely impair the usefulness of the facility. Since some batches are of short duration and some longer, the above hourly and daily production rate limits will provide the needed flexibility.

Tel.: (904) 433-7621
(800) 874-0868
Telex: 702424

B. Specific Conditions: Item 6

Please change the compliance demonstration from VOC inventory to a VOC emission stack performance test.

Justification

Again, due to the operating characteristics of the research facility, a stack test conducted under typical operating conditions will more clearly demonstrate compliance.

II. Permit No. AC 17-115382

A. Specific Conditions: Item 5

Please change as per I.B. above.

Please call me at (904) 433-7631, Ext. 543 if you have any additional comments or questions.

Sincerely,

R. W. Clarke

R. W. Clarke
Senior Environmental Engineer

RWC:mab

cc: T. Herron - FL DER, Tallahassee
J. Preece - FL DER, Pensacola

PS Form 3811, July 1983 447-845

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) raquested.

1. ☒ Show to whom, [redacted] delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
R.P. Aston
Reichhold Chemicals, Inc.
P.O.Box 1433
Pensacola, FL 32596

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 408 530 530

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery
3-18-87

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

DOMESTIC RETURN RECEIPT

PENSACOLA FLA MAR 18 1987

P 408 530 530

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. R. P. Aston Reichhold Chemicals, Inc. P.O. Box 1433	
P.O., State and ZIP Code Pensacola, FL 32596	
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 3/17/87 AC 17-115381 115382	

PS Form 3800, Feb. 1982

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

March 16, 1987

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. R. P. Aston
Plant Manager
Reichhold Chemicals, Inc.
Post Office Box 1433
Pensacola, Florida 32596

Dear Mr. Aston:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permits to construct a pilot plant and a raw material loading station at your facility in Pensacola, Escambia County, Florida.

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/ks

Attachments

cc: J. P. Krumbein, P.E.
J. Preece

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Applications for Permits by:

Reichhold Chemicals, Inc.
Post Office Box 1433
Pensacola, Florida 32596

DER File Nos. AC 17-115381
AC 17-115382

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, Reichhold Chemicals, Inc., applied on January 28, 1986, to the Department of Environmental Regulation for permits to construct a pilot plant and a raw material loading station at the applicant's existing facility in Pensacola, Escambia County, Florida.

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

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

the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permits with the attached conditions unless petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S. A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. Petitions must comply with the requirement of Florida Administrative Code Rules 17-103.155 and 28-5.201 (copies enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes, concerning the subject permit application. Petitions which are not filed in accordance with the above provisions will be dismissed.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

Copies furnished to:

R. P. Aston
J. P. Krumbein, P.E.
Jack Preece

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 3/17/87.

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.

Kimi Holder 3/17/87
Clerk Date

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department gives notice of its intent to issue permits to Reichhold Chemicals, Inc. to construct a pilot plant and a raw material loading station located at the Reichhold Chemical Complex, building No. 136, in Pensacola, Escambia 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 determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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

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

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

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

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.

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.

Technical Evaluation
and
Preliminary Determination

Reichhold Chemicals, Inc.
Newport Division
Pensacola, Escambia County, Florida

A Pilot Plant Vent System and a Raw Material
Loading Station Facility

Permit Numbers:

AC 17-115381
AC 17-115382

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

March 12, 1987

I. SYNOPSIS OF APPLICATION

I.1 NAME AND ADDRESS OF APPLICANT

Reichhold Chemicals Inc.
Newport Division
P. O. Box 1433
Pensacola, Florida 32596

I.2 REVIEWING AND PROCESS SCHEDULE

Date or Receipt of Application: January 28, 1986

Completeness Review (30 days): Department's Letter of February 25, 1986 and June 9, 1986

Response to Incompleteness Letter: May 14, 1986 and January 13, 1987

Applications Completeness Date: January 13, 1987

II. FACILITY INFORMATION

I.1 FACILITY LOCATION

The proposed facility will be located at the Reichhold Chemical complex, building No. 136, 407 South Pace Boulevard in Pensacola, Escambia County, Florida. The latitude and longitude of this site are 30° 24' 30" North and 87° 14' 45" West, respectively.

II.2 STANDARD INDUSTRIAL CLASSIFICATION CODE (SIC)

Reichhold Chemicals Inc. is classified as follows:

Major Group - Chemicals and Allied Products

Group No. - 282 - Plastics, Materials, and Synthetic Resins, Synthetic Rubbers, Synthetic and Other Man-Made Fibers, Except Glass.

Industry No. - 2821 - Plastics

II.3 FACILITY CATEGORY

Reichhold Chemicals, Inc. is classified as a major emitting facility for particulate matter (PM) and volatile organic compounds (VOC). The proposed project, constructing a pilot plant and a raw material loading station, will increase overall VOC emissions by 1.07 tons/year.

This facility category, chemical process plant, is on the list of the 28 Major Facility Categories, Table 500-1, Chapter 17-2, Florida Administrative Code.

III. PROJECT DESCRIPTION AND POLLUTION CONTROL SYSTEM

The proposed project consists of installing a pilot plant vent system. Three reactors (60,100 and 130 gallons) and one 40 gallon distillation column will vent into one of two carbon absorption drums. These two carbon adsorption drums will have their vents connected together to provide just one vent open to the atmosphere.

Raw Materials Loading Station - A vent system with an activated carbon filters will have five pick-up locations. Three locations will be at the reactor addition ports and two locations will be at drum unloading stations.

IV. RULE APPLICABILITY

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

The proposed facility is located at Reichhold Chemical complex in an area (Escambia County) currently designated attainment for all criteria pollutants in accordance with Florida Administrative Code, Rule 17-2.420.

Reichhold Chemicals, Inc., is a major emitting facility for particulate matter and volatile organic compounds as defined in Rule 17-2.100, FAC.

This facility category, Chemical Process Plant, is in the list of the 28, Table 500-1. Major Facility Category, Rule 17-2.500, FAC.

The proposed project is exempt from provisions of Rule 17-2.500, Prevention of Significant Deterioration because its emissions do not exceed the PSD significance levels.

The proposed project shall be permitted under Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements.

The proposed facility shall comply with Rule 17-2.620(1) and (2), General Pollutant Emission Limiting Standards.

V. SOURCE IMPACT ANALYSIS

V.1 EMISSIONS SUMMARY

The installation of the proposed pilot plant will produce emissions of volatile organic compounds (VOC).

The estimated potential VOC emissions due to the processing of the different raw materials are summarized in Table 1.

All chemical compounds used during the process and their emissions are limited by permit conditions.

These permitted emissions are in compliance with all applicable requirements of Chapter 17-2, FAC.

V.2 AIR TOXICS INFORMATION

Currently, the department is developing acceptable ambient concentrations for toxic substances. Specifically, sources classified as Category A (carcinogens and highly toxic) and Category B (moderately toxic substances).

In the event toxics emission limits are set during the term of this permit or any subsequent permit which are different than the permitted emissions, the department may seek modification pursuant to Rule 17-4.08, FAC.

V.3 AIR QUALITY ANALYSIS

From a technical review of the application, the Department has determined that the construction and operation of this source will not have a detrimental impact on Florida's ambient air quality standards.

VI. CONCLUSIONS

Based on a review of the data submitted by Reichhold, the Florida Department of Environmental Regulation (FDER) concludes that compliance with all applicable state air quality regulations will be achieved, provided certain specific conditions are met. The impact of constructing and operating a pilot plant and a raw material loading facility at the Pensacola plant will not cause or contribute to a violation of any ambient air quality standard.

Table 1

	UNCONTROLLED				CONTROLLED			
	Worst Case		Normal		Worst Case		Normal	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Benzoic Acid	1.07	.214	.214	.214	.0535	.0107	.0107	0.107
Formic Acid	.535	.107	.107	.107	.02675	.0054	.00535	.0054
Acetic Acid	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Triethylene Diamine	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Xylene	21.4	4.28	4.28	4.28	1.07	.214	.214	.214
Glycerine	2.14	.428	.428	.428	.107	.0214	.0214	.0214
Maleic Anhydride	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Phthalic Anhydride	2.14	.428	.428	.428	.107	.0214	.0214	.0214
Toluene	28.89	5.778	5.778	5.778	1.4445	.289	.2889	.289
Isopropyl Alcohol	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Ethyl Alcohol	2.14	.428	.428	.428	.107	.0214	.0214	.0214
VM&P Naptha	21.4	4.28	4.28	4.28	1.07	.214	.214	.214
Butyl Cellosolve	.535	.107	.107	.107	.02679	.0054	.00535	.0054
Cellosolve Acetate	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Mineral Spirits R-66	21.4	4.28	4.28	4.28	1.07	.0214	.214	.0214
Total	107		21.4		5.35		1.07	

Worst Case: All emissions occur in one hour.
Normal Case: Emissions occur over 5-hr cycle.
All Cases: Eight (8) Batches/Week, 50 Weeks/yr.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

PERMITTEE:
Reichhold Chemicals, Inc.
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

Permit Number: AC 17-115381
Expiration Date: June 30, 1988
County: Escambia
Latitude/Longitude: 30° 24' 30" N
87° 14' 45" W
Project: Pilot Plant Vent System

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 Pilot Plant Vent System Facility located at the Reichhold Chemical Complex, Building No. 136 in Pensacola, Escambia County, Florida.

Construction shall be in accordance with the attached permit application except as otherwise noted in the Specific Conditions.

Attachment:

1. Application to construct Air Pollution Sources, DER Form 17-1.122(16).
2. Incompleteness letters dated February 25, 1986 and June 9, 1986.
3. Response to technical descrepancies dated May 14, 1986 and January 13, 1987.

PERMITTEE:
Reichhold Chemicals, Inc.

Permit Number: AC 17-115381
Expiration Date: June 30, 1988

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.

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.

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.

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:

Pilot Plant

1. This facility shall be allowed to operate continuously 24 hours/day, 7 days/week, and 50 weeks/year.

2. Total VOC emissions from the facility shall not exceed 1.07 lb/hr and 1.07 tons/yr.

3. Not more than 8 batches per week should be processed by this pilot plant.

PERMITTEE:
Reichhold Chemicals, Inc.

Permit Number: AC 17-115381
Expiration Date: June 30, 1988

SPECIFIC CONDITIONS:

4. According to FAC Rule 17-2.620(1)(a), no person shall store, pump, handle, process, load, unload, or use in any process or installation volatile organic compounds or organic solvents without applying known and existing vapor emission control device or systems deemed necessary and ordered by the department. The following procedures shall be utilized to minimize pollutant emissions, but shall not be limited to:

- o maintain tightly fitting covers, lids, etc., on all containers of VOC when they are not being handled, tapped, etc.;
- o where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, bath, etc., of VOCs that it can be covered when not in use;
- o all fittings, valve lines, etc., shall be properly maintained;
- o prevent excessive turbulence across exposed VOC;
- o all VOC spills shall be attended to immediately and the waste properly disposed of, recycled, etc.

5. No objectionable odors are allowed from this facility.

6. Compliance with the VOC emission limitations will be determined based on the VOC inventory of the materials being processed.

7. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit.

8. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, and Certificate of Completion to the Department's Northwest District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate.

PERMITTEE:
Reichhold Chemicals, Inc.

Permit Number: AC 17-115381
Expiration Date: June 30, 1988

SPECIFIC CONDITIONS:

9. Upon obtaining an operating permit, the applicant will be required to submit annual reports on the actual operation and emissions of the facility. Annual material balance reports (24-hour) shall be required and sent to the Department's Northwest District office to assess emissions and maintain VOC inventory.

10. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application.

Issued this_____day of_____, 19___.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
Dale Twachtmann, Secretary

____ pages attached

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

PERMITTEE:
Reichhold Chemicals, Inc.
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

Permit Number: AC 17-115382
Expiration Date: June 30, 1988
County: Escambia
Latitude/Longitude: 30° 24' 30" N
87° 14' 45" W
Project: A Raw Materials and Loading Station Facility

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 Raw Materials and Loading Station Facility located at the Reichhold Chemical Complex, Building No. 136 in Pensacola, Escambia County, Florida.

Construction shall be in accordance with the attached permit application except as otherwise noted in the Specific Conditions.

Attachment:

1. Application to construct Air Pollution Sources, DER Form 17-1.122(16).
2. Incompleteness letters dated February 25, 1986 and June 9, 1986.
3. Response to technical descrepancies dated May 14, 1986 and January 13, 1987.

PERMITTEE:
Reichhold Chemicals, Inc.

Permit Number: AC 17-115382
Expiration Date: June 30, 1988

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.

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.

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.

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:

A Raw Material and Loading Station Facility

1. This facility shall be allowed to operate continuously (24 hrs/day; 7 days/week; 50 weeks/year).

2. This facility and the pilot plant facility will not be allowed to emit more than 1.07 lbs/hr and 1.07 tons/yr of volatile organic compounds (VOC).

PERMITTEE:
Reichhold Chemicals, Inc.

Permit Number: AC 17-115382
Expiration Date: June 30, 1988

SPECIFIC CONDITIONS:

3. According to FAC Rule 17-2.620(1)(a), no person shall store, pump, handle, process, load, unload, or use in any process or installation volatile organic compounds or organic solvents without applying known and existing vapor emission control device or systems deemed necessary and ordered by the department. The following procedures shall be utilized to minimize pollutant emissions, but shall not be limited to:

- o maintain tightly fitting covers, lids, etc., on all containers of VOC when they are not being handled, tapped, etc.;
- o where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, bath, etc., of VOCs that it can be covered when not in use;
- o all fittings, valve lines, etc., shall be properly maintained;
- o prevent excessive turbulence across exposed VOC;
- o all VOC spills shall be attended to immediately and the waste properly disposed of, recycled, etc.

4. No objectionable odors are allowed from this facility.

5. Compliance with the VOC emission limitations will be determined based on the VOC inventory. The district office shall be notified 15 days prior to test of the materials being processed.

6. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit.

7. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, and Certificate of Completion, to the Department's Northwest District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate.

PERMITTEE:
Reichhold Chemicals, Inc.

Permit Number: AC 17-115382
Expiration Date: June 30, 1988

SPECIFIC CONDITIONS:

8. Upon obtaining an operating permit, the applicant will be required to submit annual reports on the actual operation and emissions of the facility. Annual material balance reports (24-hour) shall be required and sent to the Department's Northwest District office to assess emissions and maintain VOC inventory.

9. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application.

Issued this_____day of_____, 19___.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
Dale Twachtmann, Secretary

____ pages attached

Reichhold Chemicals, Inc.
Newport Division
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

January 12, 1987

REICHHOLD

Mr. Clair Fancy, Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
7600 Blair Stone Rd.
Tallahassee, FL 32301-8241

Dear Mr. Fancy:

AIR PERMITS NO. AC 17-115381 AND AC 17-115382

As requested by your June 9 letter, the additional information for continuing the processing of our applications follow:

Question: Are the VOC emissions reported (10.66 lb/hr), the total emissions (all VOC compounds) from the pilot plant or is this emission rate for toluene only?

Answer: The values in Section IIIC were incorrect and have been changed. Please replace Page 4 of 12 with the attached page showing the correct values.

The potential emission of 42,800 lb/yr is based on a normal VOC emission rate of 21.4 lbs/hr during an average batch cycle of 5 hrs, 8 batches/week and operating 50 weeks/year. The controlled emission rates are based on a 95% efficiency of the control devices. The reported values are for all VOCs, not just toluene.

Question: Even though toluene is the solvent used to manufacture a majority of Reichhold's products, we need an emission rate of the all VOC compounds used in the process in order to estimate ambient concentration levels for each compound. Please submit an individual emission estimate for all VOC compounds that will be used in your pilot plant. Specify uncontrolled emission and potential (controlled emissions). List the emission rates in lb/hr and ton/yr for normal and worst case operating conditions.

Answer: See attached chart.

DER

JAN 13 1987

BAQM

Tel.: (904) 433-7621
(800) 874-0868
Telex: 702424

Question: There is a discrepancy regarding the number of batches per week. Which one is correct, 4 or 8 batches/week? In addition, two different rates of emission from the 100 gallons vessels are reported, 0.08 lb/min and 2.91 lb/min. Which one is correct?

Answer: The pilot plant will be operating at 8 batches/week. The example on the letter dated May 12, 1986, had broken this down into two different reactions each having 4 batches per week.

The examples on the original calculations submitted with the permit applications were a worst case figure (2.91 lb/min). The example on the letter of May 12 (0.08 lb/min) is an actual process emission of toluene.

Question: Is the 10.66 lb/min the emission rate for a one-hour period (i.e. 640 lb/hr)? Please explain.

Answer: 10.66 Lb/min is a maximum uncontrolled emission rate occurring in a 10-min period. This rate was used to design the control system for the worst case. The actual normal controlled emission rate is 1.07 lbs/hr based on a 95% efficiency.

Question: What is the maximum, minimum, and average processing time.

Answer: Reichhold Chemicals produces a wide variety of products with reaction times ranging from 2 hrs to 12 hrs with an average batch time of 5 hrs.

Sincerely,

R. W. Clarke

R. W. Clarke
Senior Environmental Engineer

JBS:mab

TABLE I

RESPONSE TO QUESTION NO. 2
PILOT PLANT VOC EMISSIONS

VOC	UNCONTROLLED				CONTROLLED			
	Worst Case		Normal		Worst Case		Normal	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Benzoic Acid	1.07	.214	.214	.214	.0535	.0107	.0107	0.107
Formic Acid	.535	.107	.107	.107	.02675	.0054	.00535	.0054
Acetic Acid	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Triethylene Diamine	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Xylene	21.4	4.28	4.28	4.28	1.07	.214	.214	.214
Glycerine	2.14	.428	.428	.428	.107	.0214	.0214	.0214
Maleic Anhydride	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Phthalic Anhydride	2.14	.428	.428	.428	.107	.0214	.0214	.0214
Toluene	28.89	5.778	5.778	5.778	1.4445	.289	.2889	.289
Isoproper Alcohol	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Ethyl Alcohol	2.14	.428	.428	.428	.107	.0214	.0214	.0214
VM&P Naptha	21.4	4.28	4.28	4.28	1.07	.214	.214	.214
Butyl Cellosolve	.535	.107	.107	.107	.02679	.0054	.00535	.0054
Cellosolve Acetate	1.07	.214	.214	.214	.0535	.0107	.0107	.0107
Mineral Spirits R-66	21.4	4.28	4.28	4.28	1.07	.0214	.214	.0214
Total	107		21.4		5.35		1.07	

Worst Case: All emissions occur in one hour.
Normal Case: Emissions occur over 5-hr cycle.
All Cases: Eight (8) Batches/Week, 50 Weeks/Yr.

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		
The raw materials for these operations are associated with a pilot plant operation which will produce alkyd, epoxy, polyester, and terpine resins and other associated experimental products in these fields. See attached list of a representative sample of raw materials.				

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

1. Total Process Input Rate (lbs/hr): Not applicable (pilot plant operation)

2. Product Weight (lbs/hr): Not applicable (pilot plant operation)

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

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Hydrocarbon Vapors	1.07	2140			42,800	21.4	SKA-2050
					See attached		
					calculations.		

[1]See Section V, Item 2.

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

[3]Calculated from operating rate and applicable standard.

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

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 50 ; if power plant, hrs/yr_____; if seasonal, describe: Operations of this unit will be primarily 8-10 hours a day unless experiments carry over into longer hours.

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

1. Is this source in a non-attainment area for a particular pollutant? No

   a. If yes, has "offset" been applied?

   b. If yes, has "Lowest Achievable Emission Rate" been applied?

   c. If yes, list non-attainment pollutants.

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

3. Does the State "Prevention of Significant Deterioriation" (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.

P 408 532 119

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Michael G. Long	
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 6/13/86	

PS Form 3800, Feb. 1982

PS Form 3811, July 1983 447-845

● **SENDER: Complete items 1, 2, 3 and 4.**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

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

3. Article Addressed to:
Mr. Michael G. Long
Reichhold Chemicals, Inc.
407 S. Pace Blvd.
Pensacola, FL 32596

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 408 532 119

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

5. Signature – Addressee
X Lois Haseltine

6. Signature – Agent
X

7. Date of Delivery 6-16-86

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

DOMESTIC RETURN RECEIPT

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 9, 1986

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael G. Long, Process Engineer
Reichhold Chemicals, Inc.
407 South Pace Blvd.
Pensacola, Florida 32596

Dear Mr. Long:

Re: AC 17-115381 and AC 17-115382

We acknowledge receipt of the information you sent on May 14, 1986. Based on a review of the data presented, we have determined that some clarification is needed--specifically, how the proposed emissions were calculated.

Several questions concern the data on page 4 of the application and on pages 1 through 3 of the information submitted.

1. Are the VOC emissions reported (10.66 lb/hr), the total emissions (all VOC compounds) from the pilot plant or is this emission rate for toluene only?

2. Even though toluene is the solvent used to manufacture a majority of Reichhold's products, we need an emission rate of the all VOC compounds used in the process in order to estimate ambient concentration levels for each compound. Please submit an individual emission estimate for all VOC compounds that will be used in your pilot plant. Specify uncontrolled emission and potential (controlled emissions). List the emission rates in lb/hr and ton/yr for normal and worst case operating conditions.

3. There is a discrepancy regarding the number of batches per week. Which one is correct, 4 or 8 batches/week? In addition, two different rates of emission from the 100 gallons vessels are reported, 0.08 lb/min and 2.91 lb/min. Which one is correct?

4. Is the 10.66 lb/min the emission rate for a one-hour period (i.e. 640 lb/hr)? Please explain.

5. What is the maximum, minimum, and average processing time.

When the requested information is received, we will resume processing your application. If you have any questions on the data requested, please call Teresa Heron 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/TH/s

cc: T. Moody

REICHHOLD

Response Received May 14, 1986

CONFIDENTIAL

P 408 533 218

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. A. R. Kulka	
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 2/26/86	

PS Form 3800, Feb. 1982

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. A. R. Kulka
Reichhold Chemicals, Inc.
P. O. Box 1433
Pensacola, Florida 32596

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 408 533 218

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X Karen L. Allor

7. Date of Delivery
2-28-86

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

DOMESTIC RETURN RECEIPT

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 25, 1986

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. A. R. Kulka
Director of Engineering
Reichhold Chemical Inc.
P. O. Box 1433
Pensacola, Florida 32596

Dear Mr. Kulka:

Re: Air Permits No. AC 17-115381 and AC 17-115382

The Bureau of Air Quality Management has received your applications for permits to construct a reactor vent system and a raw material loading station at Reichhold Chemicals complex in Pensacola.

Based in our initial review of your proposal, it has been determined that additional information is needed before we can continue processing your applications. The information needed is as follows:

Application Information - DER Forms 17-1.202 submitted on January 20, 1986.

Since your proposed project is a pilot plant, how long do you estimate this project to operate before going in a commercial scale?

Please describe, in general terms, how the pilot plant will be operated, the studies that will be made with it, and how and in what quantity the various chemicals listed in the application will be used. Why were calculations done only for toluene?

We are especially interested in the maximum quantity of emissions of each solvent that is likely to occur from the pilot plant.

Estimate the maximum ambient concentration levels for emissions of non-criteria pollutants used in this process. Provide a Material Safety Data Sheet (MSDS) for the raw materials used in this process. Identify all toxics chemicals by CAS number. Please see copy attached.

How are the raw materials stored? Estimate VOC evaporation loss (in tons per year) from the storage tanks?

Confidential Records

Pursuant to Section 403.11, Florida Statutes, the review committee will ensure confidentiality of the information as requested. Please indicate and separate all information you consider to be confidential.

As soon as the above information is received, we will resume processing your applications. If you have any questions on this request, please call Teresa M. Heron at (904)488-1344, or write to me at the above address.

Sincerely,

for Clair Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/TH/s

Reichhold Chemicals, Inc.
Resins & Binders Division
407 South Pace Boulevard
P.O. Box 1433
Pensacola, Florida 32596

DER

JAN 28 1986

BAQM

REICHHOLD

January 27, 1986

Mr. Clair Fancy
Bureau of Air Quality Management
2600 Blairstone Road
Tallahassee, FL 32301

Dear Mr. Fancy:

Enclosed are two construction permit applications for a pilot plant at our Pensacola facility. Also included are two checks in the amount of $100 each covering the permit application fees.

If you have any questions or need additional information regarding this application, please contact me at 904-433-7621.

Very truly yours,

Michael G. Long
Process Engineer

MGL:jh
Enclosures

cc: Mr. E. G. Fleming, Reichhold
Mr. A. R. Kulka, Reichhold
Mr. R. V. Kriegel, FL DER, Pensacola
Mr. D. E. Wentworth, Reichhold

Tel: (904) 433-7621
(800) 874-0868
Telex: 702424

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No. 76106

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Reichhold Chemicals, Inc. Date Feb. 6, 1986

Address White Plains, NY 10603 Dollars $ 200.00

Applicant Name & Address Same as above

Source of Revenue

Revenue Code 001031 Application Number AC 17-115381 and AC 17-115382

By Patricia U. Adams

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND – NOT A WHITE BACKGROUND

REICHHOLD

White Plains, N.Y. 10603

04601943

62-26
311

319-09

WHITE PLAINS, N.Y.

CHECK DATE 01 24 86
MO. DAY YR.

DOLLARS	CENTS
*****$100.	00***

PAY

TO THE ORDER OF Florida Dept. of Environmental Regulation
160 Governmental Center
Pensacola, Florida 32501

REICHHOLD CHEMICALS, INC.

Alton Sermon

MANUFACTURERS HANOVER, BANK (DELAWARE)

THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK – HOLD AT AN ANGLE TO VIEW

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND – NOT A WHITE BACKGROUND

REICHHOLD

White Plains, N.Y. 10603

04601942

62-26
311

319-09

WHITE PLAINS, N.Y.

CHECK DATE 01 24 86
MO. DAY YR.

DOLLARS	CENTS
*******$100.	00**

PAY

TO THE ORDER OF Floida Dept. of Environmental Regulation
160 Governmental Center
Pensacola, Florida 32501

REICHHOLD CHEMICALS, INC.

Alton Sermon

MANUFACTURERS HANOVER, BANK (DELAWARE)

THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK – HOLD AT AN ANGLE TO VIEW

AC 17-115381

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

DER

JAN 28 1986

BAQM

NORTHWEST DISTRICT

160 GOVERNMENTAL CENTER
PENSACOLA, FLORIDA 32501

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Reactor Vents [X] New[1] [ ] Existing[1]

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

COMPANY NAME: Reichhold Chemicals, Inc. COUNTY: Escambia

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Building #136

SOURCE LOCATION: Street 407 South Pace Boulevard City Pensacola

UTM: East _____ North _____

Latitude 30 ° 24 ' 30 "N Longitude 87 ° 14 ' 45 "W

APPLICANT NAME AND TITLE: _____

APPLICANT ADDRESS: P. O. Box 1433, Pensacola, FL 32596

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Reichhold Chemicals, Inc.

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: A. Kulka

A. R. Kulka, Director of Engineering
Name and Title (Please Type)

Date: 1/23/86 Telephone No. (904)433-7621

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

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

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

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

Signed David L. Tyner

David L. Tyner
Name (Please Type)

Reichhold Chemicals, Inc.
Company Name (Please Type)

P. O. Box 1433, Pensacola, FL 32596
Mailing Address (Please Type)

Florida Registration No. 32706 Date: 1/23/86 Telephone No. (904)433-7621

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.

Installation of a pilot plant vent system. Three reactors (60, 100, and 130 gallons) and one 40 gallon distillation column will vent into one of two carbon absorption drums. These two carbon adsorption drums will have their vents connected together to provide just one vent open to the atmosphere.

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

Start of Construction 4/16/86 Completion of Construction 5/16/86

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.)

Carbon adsorbers (2)	$2,000
Piping	$2,000
TOTAL	$4,000

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

Not applicable.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 50 ; if power plant, hrs/yr ____; if seasonal, describe: Operations of this unit will be primarily 8-10 hours a day unless experiments carry over into longer hours.

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

1. Is this source in a non-attainment area for a particular pollutant? No

   a. If yes, has "offset" been applied? ____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? ____

   c. If yes, list non-attainment pollutants. ____

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

3. Does the Stats "Prevention of Significant Deterioriation" (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:

Deacription	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
The raw materials for these operations are associated with a pilot plant operation which will produce alkyd, epoxy, polyester, and terpine resins and other associated experimental products in these fields. See attached list of a representative sample of raw materials.				

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

1. Total Process Input Rate (lbs/hr): Not applicable (pilot plant operation)

2. Product Weight (lbs/hr): Not applicable (pilot plant operation)

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

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Hydrocarbon Vapors	10.66	N/A			See attached		SKA-2050
(see attached	calculations)				calculations		

[1]See Section V, Item 2.

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

[3]Calculated from operating rate and applicable standard.

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

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Calgon Vent Sorb Drum w/ IVP Carbon	Hydrocarbon Vapors	95%	Not applicable	Based on typical application experience on VOC's.

E. Fuels

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: _____ 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: 10 feet above grade ft. Stack Diameter: 2 inches ft.

Gas Flow Rate: 4.4 ACFM 4 DSCFM Gas Exit Temperature: 300°F °F.

Water Vapor Content: Negligible % Velocity: 3.4 FPS

SECTION IV: INCINERATOR INFORMATION

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

Description of Waste _____

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

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

Manufacturer _____

Date Constructed _____ Model No. _____

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

Stack Height: _____ ft. Stack Diamter: _____ 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:

Activated carbon removes organic contaminates by the process of adsorption.

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

Carbon will be disposed of in accordance with environmental regulations for solid waste.

See attached vendor literature, when carbon spent drum replaced and disposed of at

Chemical Waste Facility, Emile, Alabama

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:

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:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]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 avsilable space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicsbility to manufacturing processes:

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

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]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^{2}* _____ Wind spd/dir

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

Other data recorded _____

Attach all data or statistical summaries to this application.

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

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from _____/_____/_____ to _____/_____/_____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

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

E. Emission Data Used in Modeling

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

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

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

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

RAW MATERIALS

Ethylene Glycol
Caustic Soda 50%
Furmic Acid
Aluminum Chloride Anhydrous
Boron Trifluoride Etherate
D-Limonene
VM & P Naptha
Nickel Catalyst
Diglycolamine
Toluene
Isopropyl Alcohol 95
Ethyl Alcohol
Mineral Spirits R-66
Crude Sulphate Turpentine
Crude Tall Oil
Acetic Acid
Soda Ash
Mineral 0.1
Phenol
Pentaerythritoc
Glycerine
Bisphenol A
Diethylene Triamine
Benzoic Acid
Trijhenyl Phosphite
Cyclohexonone
Triethlylene Amine
Zinc Oxide

Propylene Oxide
Glyceryl Ether
Epokine 8
Silicone Z-6018
Linseed Oil
Tall Oil
Coconut Oil
Soybean Oil
Maleic Anhydride
Phthalic Anhydride
Butyl Cellosolve
Cellosolve Acetate
Beckosol
Wood Rosin
Diamine Cycle Hexone
Chinawood Oil
Isophorone Diamine
Nitrogen
Hydrated Lime

CALCULATIONS OF ESTIMATED EMISSIONS

Assume

1. All vessels full of organic vapor at vessels maximum pressure.
2. Vapor is toluene.
3. Evacuation rate is 10 minutes.

Vessel T-1

Pressure = 300 psig
Temperature = 300°F
Volume = 60 gallons = 8.02 cu ft

$$\frac{315 \text{ psia } (8.02 \text{ cu ft})}{760°R \ (10.73 \text{ psia} \cdot \text{cu ft}/°R \cdot \text{lb-mole})} = .31 \text{ lb-mole}$$

MW of toluene = 92 lb/lb - mole

.31 lb mole (92 lb/lb mole) = 28.52 lbs

$$\text{Rate} = \frac{28.52 \text{ lb}}{10 \text{ min}} = 2.85 \text{ lb/min}$$

Vessel T-3

Pressure = 150 psig
Temperature = 200°F
Volume = 130 gal = 17.38 cu ft

$$\frac{165 \text{ psia } (17.38 \text{ cu ft}) \ (92 \text{ lb/lb mole})}{650°R \ (10.73 \text{ psia} \cdot \text{cu ft}/°R \cdot \text{lb-mole}) \ (10 \text{ min})} = 3.77 \text{ lb/min}$$

Vessel T-6

Pressure = 150 psig
Temperature = 200°F
Volume = 100 gal = 13.37 cu ft

$$\frac{165 \text{ psia } (13.37 \text{ cu ft}) \ (92 \text{ lb/lb-mole})}{650°R \ (10.73 \text{ psia} \cdot \text{cu ft}/°R \cdot \text{lb-mole}) \ (10 \text{ min})} = 2.91 \text{ lb/min}$$

Distillation Column M-S

Pressure = 150 psig
Temperature = 200°F
Volume = 5.02 cu ft

$$\frac{165 \text{ psia } (5.02 \text{ cu ft}) \ (92 \text{ lb/lb-mole})}{650°R \ (10.73 \text{ psia} \cdot \text{cu ft}/°R \cdot \text{lb-mole}) \ (10 \text{ min})} = 1.10 \text{ lb/min}$$

Total Maximum Rate to Carbon Absorbers

2.85 lb/min + 3.77 lb/min + 2.94 lb/min + 1.10 lb/min = 10.66 lb/min

Total Emission Per Batch 107 lb

The above calculations are an example of an extreme case which is very unlikely to happen. However, the carbon adsorbers will be designed to handle this case.

The annual potential emission for this extreme case is:

Assume

1. 50 weeks of operation a year
2. 8 batches a week

107 lb/batch (8 batches/wk) (50 wk/yr) = 42,800 lb/yr

Total Maximum Rate to Carbon Absorbers

2.85 lb/min + 3.77 lb/min + 2.94 lb/min + 1.10 lb/min = 10.66 lb/min

Total Emission Per Batch 107 lb

The above calculations are an example of an extreme case which is very unlikely to happen. However, the carbon adsorbers will be designed to handle this case.

The annual potential emission for this extreme case is:

Assume

1. 50 weeks of operation a year
2. 8 batches a week

107 lb/batch (8 batches/wk) (50 wk/yr) = 42,800 lb/yr

21.4 TPY

10.66 lb/min × 10 min/hr × 1 hr/day

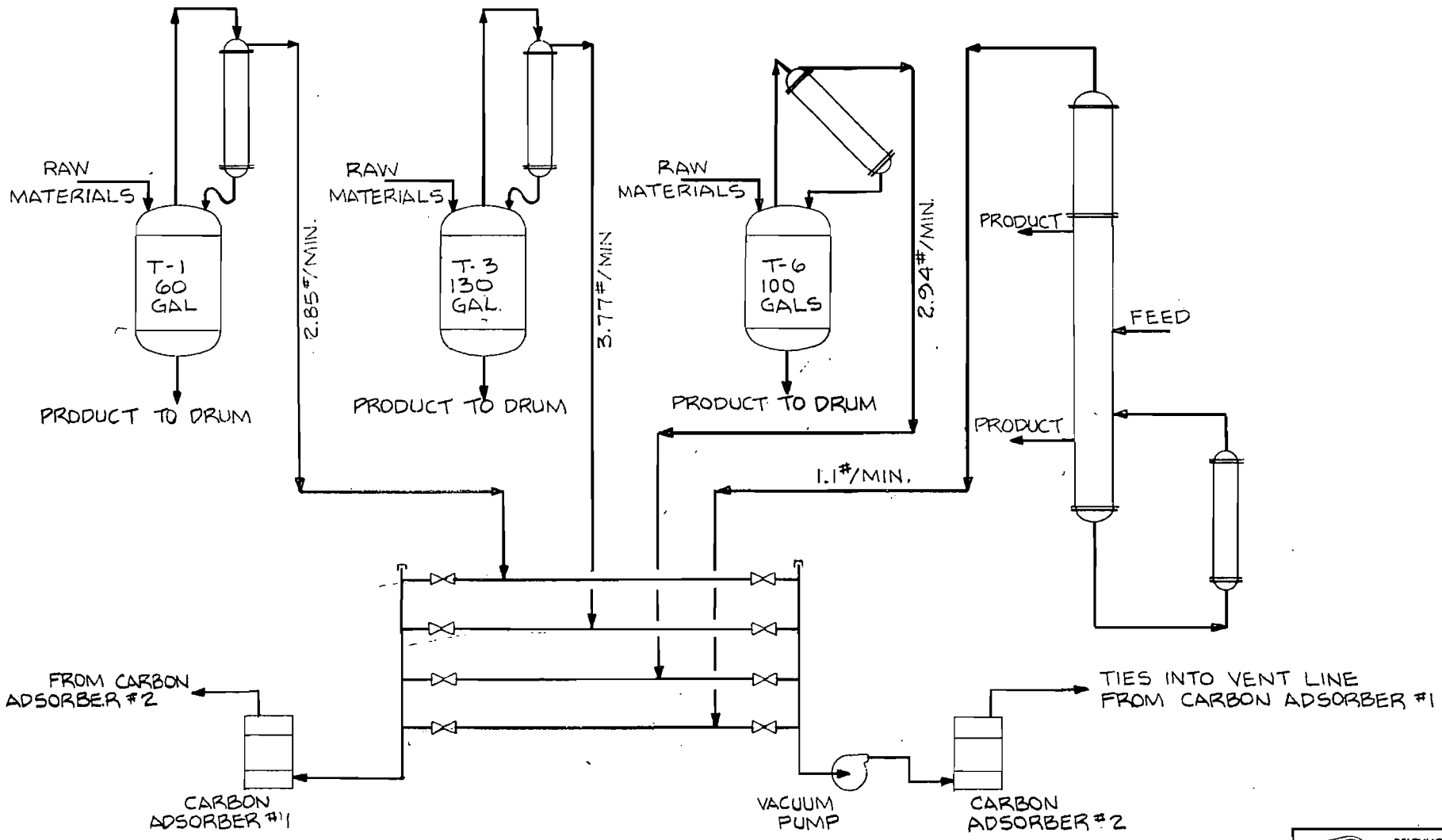
10.66 lb/min × 10 min/hr + 107 lb/batch

10.66

21.4 total plant
15.9 Terpene - pinene
37.3

107 lb/batch

AF 11205



NO.	DATE	REVISIONS	DR.	ENG.	APP.
3					
2					
1					

REICHHOLD CHEMICALS, INC.
PENSACOLA, FLA.

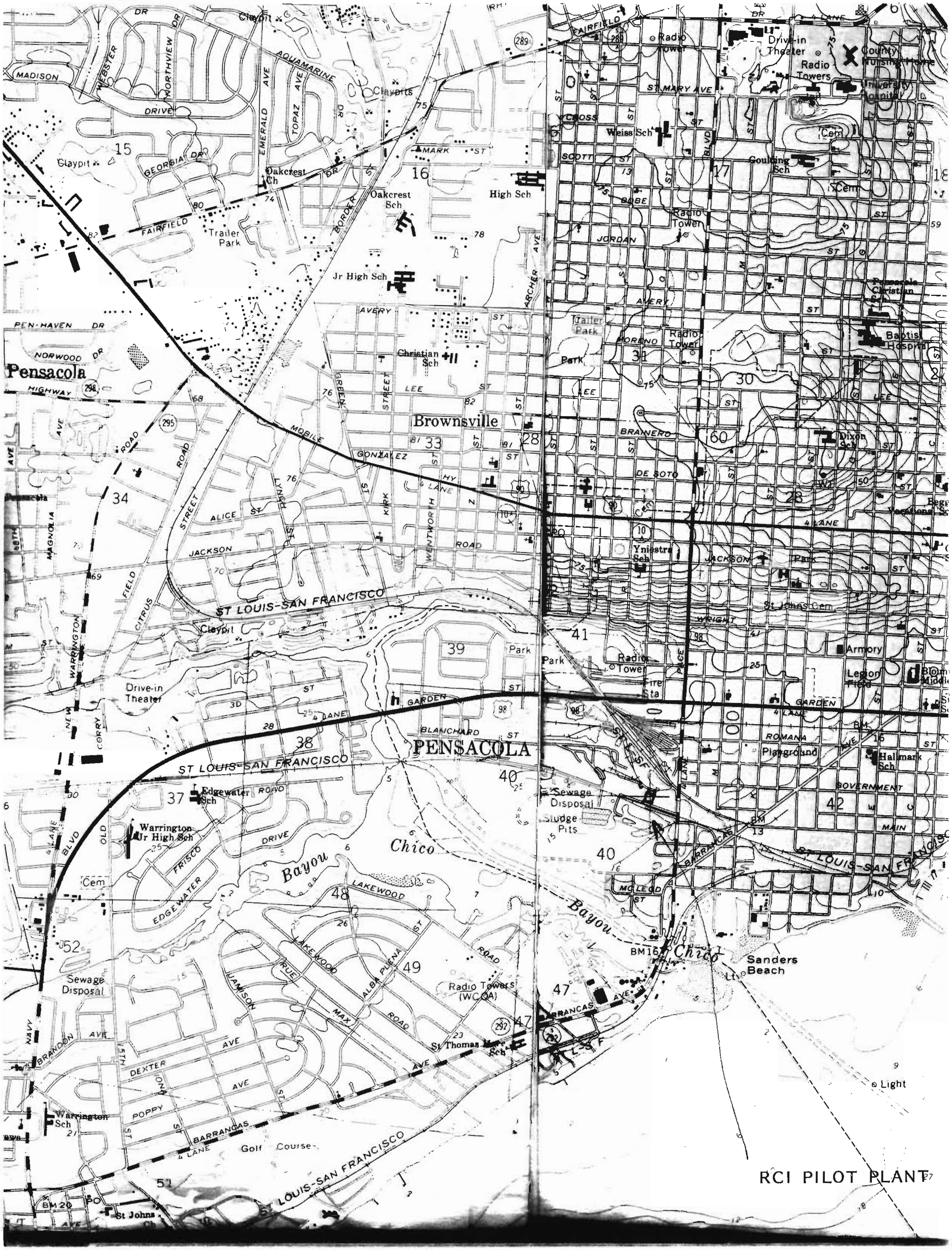
PILOT PLANT REACTOR VENT. SYSTEM

DR. BMW | ENG. | APP'D

DATE 01-23-86 | SCALE ~ | SKA-2050

ATTACHMENTS

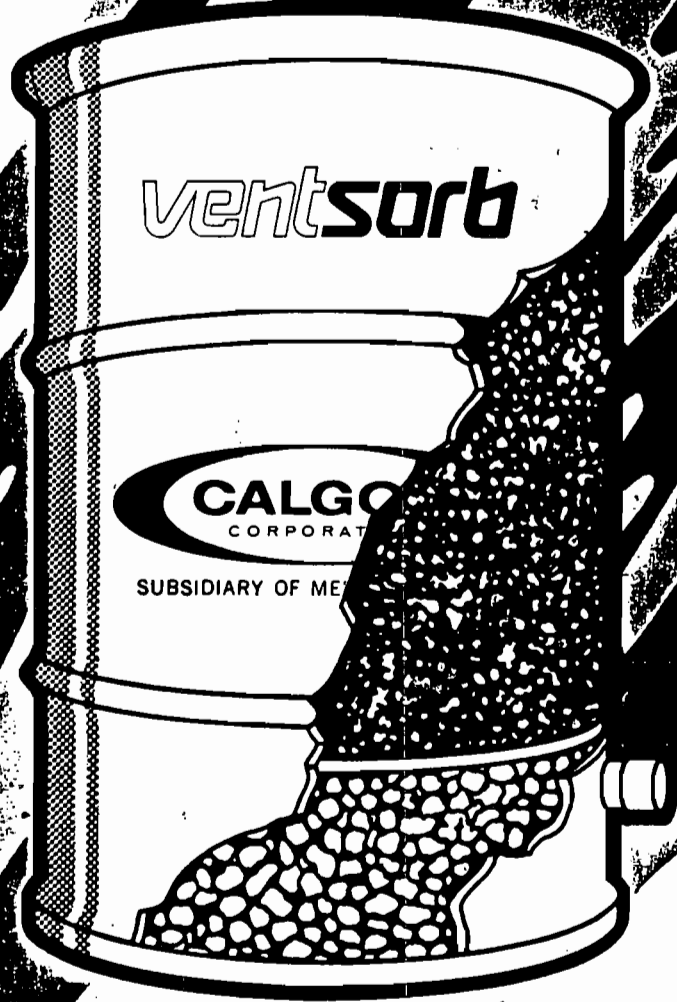
Compliance with the VOC emissions standard will be determined by method 25 or other methods approved by the department. Concentration data and calculated mass emission rate will be reported. Thereafter, compliance with the VOC emission limitations will be maintained based on the VOC inventory.


Pensacola
PENSACOLA
Brownsville
Claypit
Claypits
Oakcrest Ch
Oakcrest Sch
High Sch
Jr High Sch
Christian Sch
Trailer Park
Weiss Sch
Goulding Sch
Radio Tower
Radio Towers
Drive-in Theater
County Nursing Home
University Hospital
Cem
Baptist Hospital
Dixon Sch
Yniestra Sch
St Johns Cem
Armory
Legion Field
Hallmark Sch
Playground
Fire Sta
Park
Sewage Disposal
Sludge Pits
Edgewater Sch
Warrington Jr High Sch
Warrington Sch
Bayou Chico
Sanders Beach
Light
Radio Towers (WCOA)
St Thomas More Sch
Golf Course
ST LOUIS-SAN FRANCISCO
MADISON
WEBSTER
NORTHVIEW
DRIVE
AQUAMARINE
EMERALD AVE
TOPAZ AVE
GEORGIA DR
FAIRFIELD
BORDER
MARK ST
ST MARY AVE
CROSS
SCOTT
DOBE
JORDAN
AVERY
MORENO
LEE
BRAINERD
DE SOTO
GONZALEZ
MOBILE HY
ALICE ST
JACKSON
WENTWORTH
KIRK
LYNCH ST
GREEN STREET
ARCHER AVE
PEN-HAVEN DR
NORWOOD DR
HIGHWAY
MAGNOLIA
CITRUS
FIELD
WARRINGTON
CORRY
NEW
NAVY BLVD
GARDEN
BLANCHARD
ROMANA
GOVERNMENT
MAIN
BARRANCAS AVE
WRIGHT
MC LEOD ST
LAKEWOOD
EDGEWATER
FRISCO
ALBA PLENA
JAMISON
MAX ROAD
BRANDON AVE
DEXTER
POPPY
RCI PILOT PLANT

CALGON

ventsorb®

for INDUSTRIAL AIR PURIFICATION



VentSorb is a unique concept in air purification developed by Calgon Corporation to protect air quality against toxic, unhealthy and unpleasant air streams. It offers an economical way to control vapors vented from storage tanks, reactor vessels and other process equipment, laboratory exhaust hoods, and similar sources of small volume emissions.

The air and gas streams exhausted from these vents usually contain noxious organic materials that should not be emitted into work areas or into the atmosphere—odors, toxic vapors, irritants and corrosive gases, among others. Increasingly, it is a violation of air pollution laws and occupational safety regulations to vent such gas streams without removing these contaminants.

VentSorb is a modular, prefabricated canister containing granular activated carbon. It includes all of the essential items found on a large-scale adsorption system—vessel, activated carbon, inlet connection and distributor leading to the carbon, and an outlet connection for the purified gas stream.

VentSorb was designed by Calgon Corporation for purification of air emitted from vents having flows generally less than 300 CFM and relatively low in organic loading.

Table 1 is a partial list of organic contaminants amenable to adsorption on activated carbon. The useful life of a VentSorb unit in a particular installation will depend upon the type, concentration, and volume of organic contaminants and will therefore vary with each application. The capacities listed in Table 1 are theoretical and can be used as a general guide in estimating the life. Actual life can only be determined through on-stream testing.

The life of a VentSorb for organic compounds not listed in Table 1 can be estimated by finding in Table 1 a material of similar boiling point and molecular weight. Generally, adsorption capacity increases with the boiling point, molecular weight, and concentration of air contaminants. Low molecular weight (less than 50) and/or highly polar compounds such as formaldehyde, methane, and ethanol, will not be readily adsorbed at low concentrations.

Table 1 **Theoretical VentSorb Capacities**

	Boiling Point °C	Molecular Weight	Theoretical VentSorb Capacity, Lb. Adsorbed/VentSorb* 10 ppm	100 ppm	1,000 ppm
Acrylonitrile	77.3	53.1	3	9	21
Benzene	80.1	78.1	20	28	42
n-Butane	- 0.5	58.1	2	5	10
Carbon Tetrachloride	76.8	153.8	30	50	74
Dichloroethylene	37.0	97.0	10	21	40
Methylene Chloride	40.2	84.9	2	4	14
Freon 115	- 37.7	154.5	2	6	11
n-Hexane	68.7	86.2	9	20	28
Styrene	145.2	104.1	39	52	63
Toluene	110.6	92.1	31	40	51
Trichloroethylene	87.2	131.4	28	50	72
Vinyl Chloride	- 13.9	62.5	1	2	4

*Theoretical capacity based on 70° F, atmospheric pressure and 150 pounds of carbon using isotherm data for Type BPL carbon.

Note: The standard VentSorb unit contains 150 pounds of BPL carbon. When removing H_2S and mercaptans from moist air streams, you'll achieve the greatest efficiency by using a VentSorb unit which contains specially impregnated Type IVP carbon. An IVP VentSorb can remove up to 30 pounds of H_2S and 15 pounds of methyl mercaptan. If you need VentSorb units with Type IVP carbon, please specify when ordering your units.

API Separator Vents—Odorous hydrocarbons, mercaptans, and hydrogen sulfide are emitted from settling basins where oil is separated from wastewater that is discharged in condensate streams and from relief valves, blowdown systems, and drain lines. To comply with air pollution control regulations, these API Separators are covered and vented. VentSorb is being used to control the odorous emissions which are vented.

At one location, emissions from a covered separator are vented through PVC piping into a PVC header which feeds two VentSorb units operating in parallel. A 3/4 h.p. blower pulls the stream through the filters, each of which handles 100 CFM. Two additional Vent Sorb units are kept on standby.

Warning Under certain conditions some chemical compounds in air may oxidize, decompose or polymerize when contacted with activated carbon. For this reason, VentSorb should not be used with methyl ethyl ketone. If the reaction of activated carbon is not known, appropriate tests should be performed before putting VentSorb into service.

A routine practice in most cases will be to install a knock-out pot on the vapor inlet line to the VentSorb canister and pass vapors from the unit being controlled through water before directing them to the carbon. If this is not done, Calgon recommends that suitable flame arresting devices be installed. Some users may elect to install flame arrestors in any case as an added safety precaution.

For information regarding incidents involving human and environmental exposure, call (412) 777-8000 and ask for the Regulatory and Trade Affairs Department.

There are no warranties either expressed or implied or any warranty of merchantability or fitness for a particular purpose associated with the sale of this product.

How to Determine Pressure Drop:

Pressure drop through a VentSorb unit is a function of the process air flow as shown in the graph. A VentSorb canister can handle up to 100 CFM at a pressure drop of less than 15 inches water column. If higher flows or lower pressure drop is needed, multiple canisters may be installed in parallel operation. The maximum canister pressure should not exceed 4 psig.

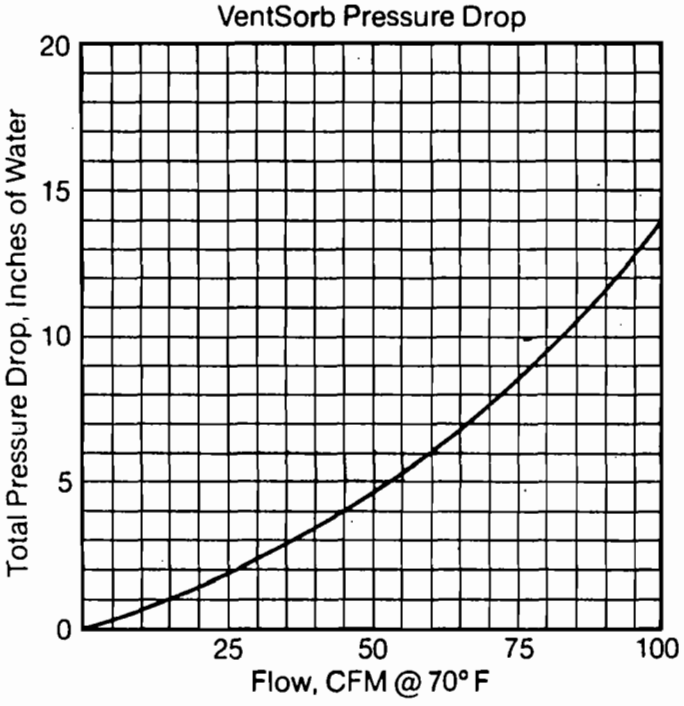


Figure 1

VentSorb Air Purification Unit

For additional information, contact the Activated Carbon Division, Calgon Corporation, Calgon Center, Box 1346, Pittsburgh, PA 15230 Phone: (412) 777-8000.

787-6700

CALGON CORPORATION

SUBSIDIARY OF MERCK & CO., INC.

Printed in U.S.A.

AC 17-115382

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHWEST DISTRICT

160 GOVERNMENTAL CENTER
PENSACOLA, FLORIDA 32501

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Raw Material Loading Station [x] New[1] [ ] Existing[1]

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

COMPANY NAME: Reichhold Chemicals, Inc. COUNTY: Escambia

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

SOURCE LOCATION: Street 407 South Pace Boulevard City Pensacola

UTM: East _____ North _____

Latitude 30 ° 24 ' 30 "N Longitude 87 ° 14 ' 45 "W

APPLICANT NAME AND TITLE: A. R. Kulka, Director of Engineering

APPLICANT ADDRESS: P. O. Box 1433, Pensacola, FL 32596

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Reichhold Chemicals, Inc.

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: A. R. Kulka

A. R. Kulka, Director of Engineering
Name and Title (Please Type)

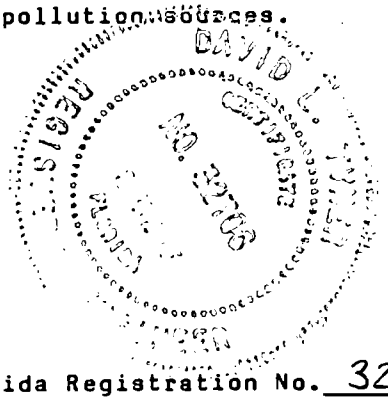
Date: 1/23/86 Telephone No. (904)433-7621

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

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

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

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



Signed David L. Tyner

David L. Tyner
Name (Please Type)

Reichhold Chemicals, Inc.
Company Name (Please Type)

P. O. Box 1433, Pensacola, FL 32596
Mailing Address (Please Type)

Florida Registration No. 32706 Date: 1/23/86 Telephone No. (904)433-7621

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.

A vent system with an activated carbon filter which will have five pick-up locations. Three locations will be at reactor addition ports and two locations will be at drum unloading stations. These vents are associated with a pilot plant operation.

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

Start of Construction 4/16/86 Completion of Construction 5/16/86

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.)

Carbon Filter	$1,000
Fan	$2,000
Ducts	$2,000
TOTAL	$5,000

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

Not Applicable.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 50 ; if power plant, hrs/yr_____; if seasonal, describe: Operation of this unit will be primarily 8 -10 hours a day unless experiments require longer process time.

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

1. Is this source in a non-attainment area for a particular pollutant? No

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

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

3. Does the State "Prevention of Significant Deterioriation" (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		
Raw materials will be associated with a pilot plant operation which will produce alkyd, epoxy, polyester, and terpene resins and other associated experimental products. See attached list of a representative sample of raw materials.				

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

1. Total Process Input Rate (lbs/hr): Not applicable (pilot plant operation)

2. Product Weight (lbs/hr): Not applicable (pilot plant operation)

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

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Hydrocarbon Vapors	Negligible						
(See attached flow sheet).							

[1]See Section V, Item 2.

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

[3]Calculated from operating rate and applicable standard.

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

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Farr CF-4	Hydrocarbon	95%	Not applicable	Based on
Activated Carbon	Vapors			typical
Filter				application
				experience on
				VOC's.

E. Fuels

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: _____ 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: 10' above grade ft. Stack Diameter: 1.541 ft.

Gas Flow Rate: 2000 ACFM 1840 DSCFM Gas Exit Temperature: 95 °F.

Water Vapor Content: Ambient Humidity % Velocity: 22.2 FPS

SECTION IV: INCINERATOR INFORMATION

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

Description of Waste _____

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

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

Manufacturer _____

Date Constructed _____ Model No. _____

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

Stack Height: _____ ft. Stack Diamter: _____ 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:

Activated carbon removes organic contaminants by the process of adsorption. See attached vendor literature. Spent carbon drum will be disposed of at Chemical Waste Facility, Emile, Alabama.

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

Carbon will be disposed of in accordance with environmental regulation for hazardous solid waste.

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:

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:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]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:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and proceas chemicals:

j. Applicability to manufacturing processes:

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

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locationa where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in unita of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]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^2* _____ Wind spd/dir

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

Other data recorded _____

Attach all data or statistical summaries to this application.

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

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

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

E. Emission Data Used in Modeling

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

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

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

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

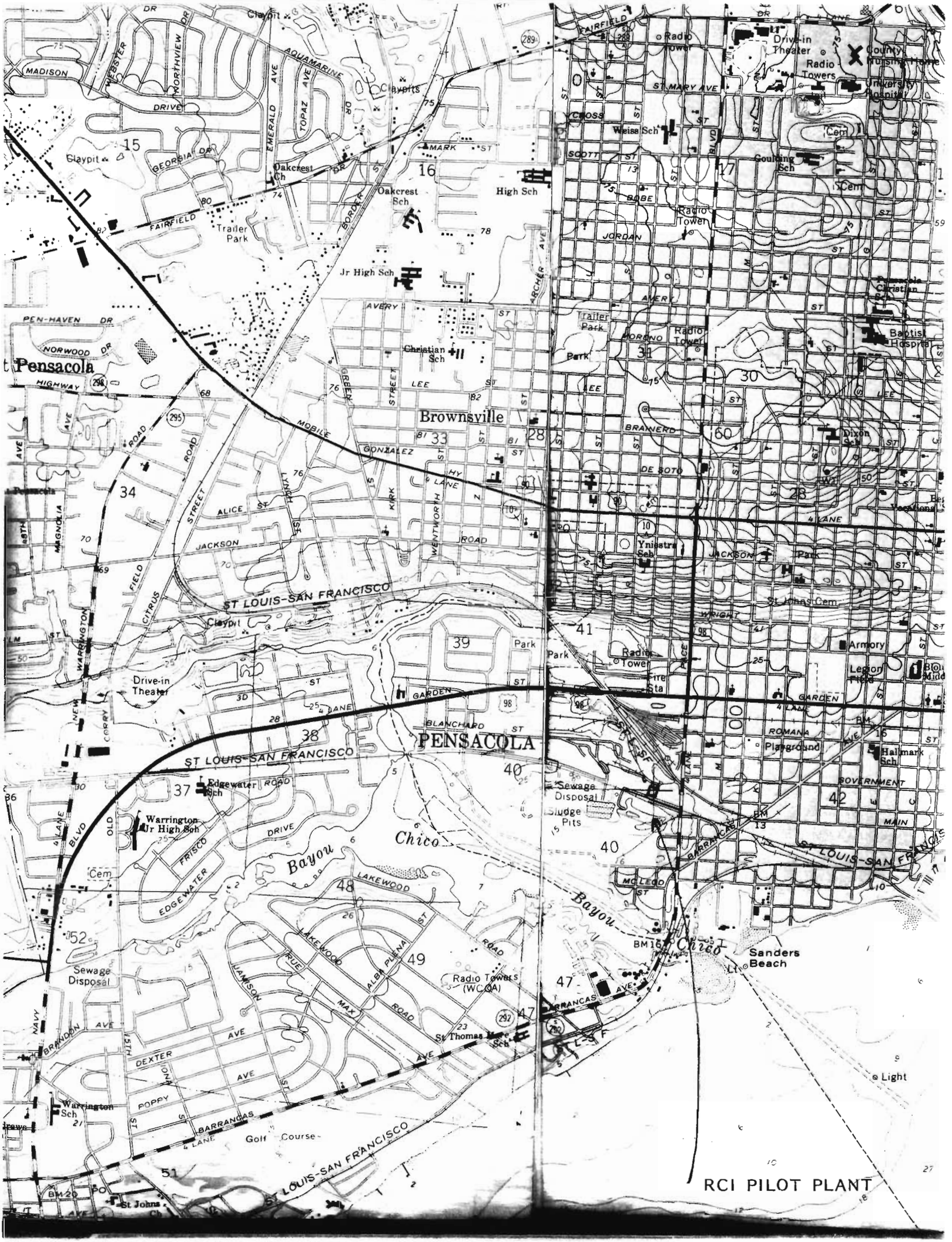
RAW MATERIALS

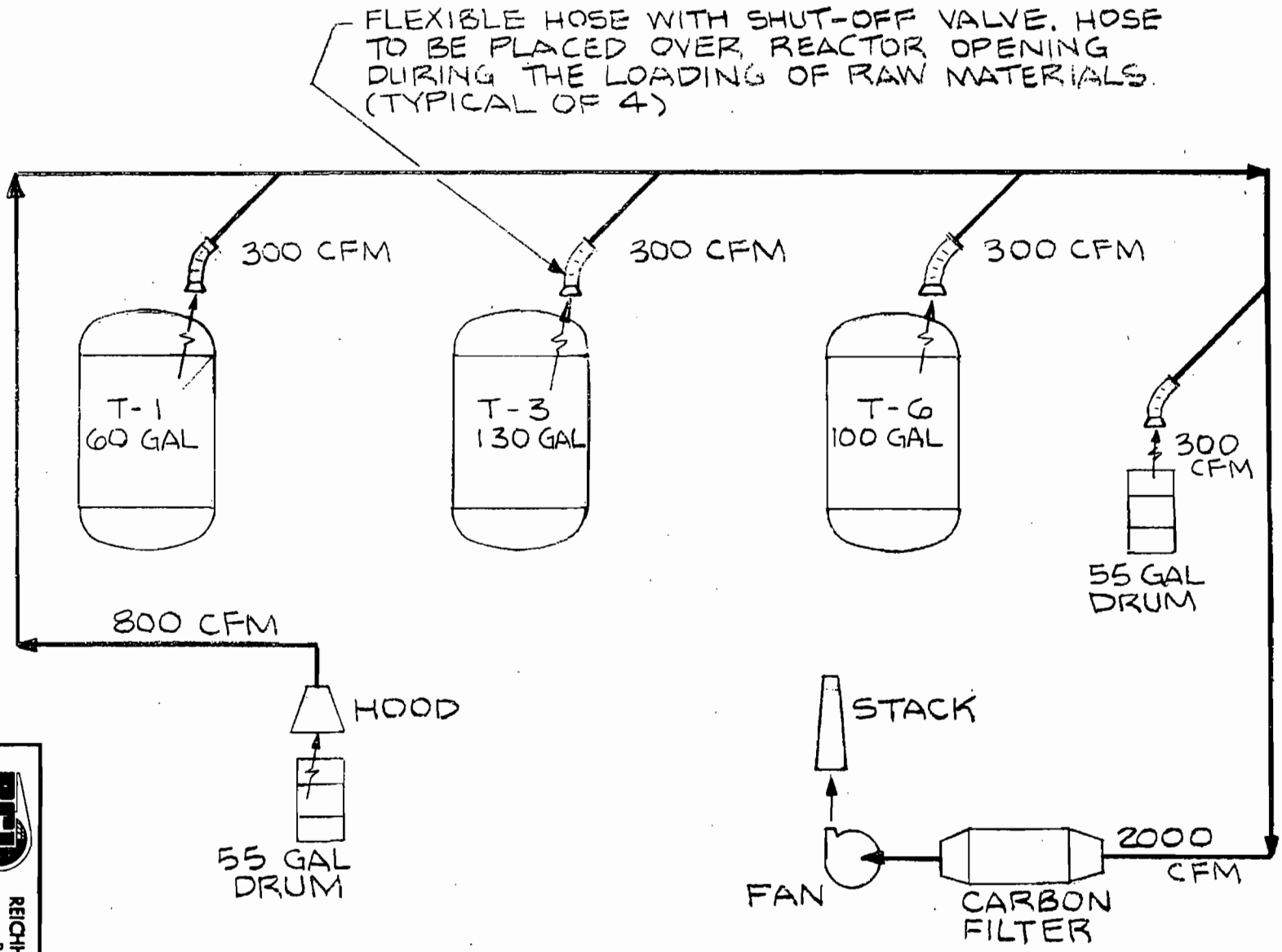
Ethylene Glycol toxic (w.l)
Caustic Soda 50%
Furmic Acid
Aluminum Chloride Anhydrous
Boron Trifluoride Etherate acute toxic
D-Limonene
VM & P Naptha
Nickel Catalyst acute toxic
Diglycolamine
Toluene (w. reproductive toxic)
Isopropyl Alcohol 95 toxic (w.l)
Ethyl Alcohol toxic (w.l)
Mineral Spirits R-66
Crude Sulphate Turpentine
Crude Tall Oil
Acetic Acid toxic (w.l)
Soda Ash
Mineral 0.1
Phenol acute toxic
Pentaerythritoc
Glycerine
Bisphenol A ?
Diethylene Triamine
Benzoic Acid
Trijhenyl Phosphite
Cyclohexonone
Triethlylene Amine
Zinc Oxide

Propylene Oxide toxic (w.l)
Glyceryl Ether
Epokine 8
Silicone Z-6018
Linseed Oil
Tall Oil
Coconut Oil
Soybean Oil
Maleic Anhydride toxic (w.l
Phthalic Anhydride toxic w.l)
Butyl Cellosolve
Cellosolve Acetate
Beckosol
Wood Rosin
Diamine Cycle Hexone
Chinawood Oil
Isophorone Diamine ?
Nitrogen acute ?
Hydrated Lime

ATTACHMENTS

Compliance with the VOC emissions standard will be determined by method 25 or other methods approved by the department. Concentration data and calculated mass emission rate will be reported. Thereafter, compliance with the VOC emission limitations will be maintained based on the VOC inventory.


Pensacola
Brownsville
PENSACOLA
Claypit
Claypits
Oakcrest Ch
Oakcrest Sch
High Sch
Jr High Sch
Christian Sch
Trailer Park
Radio Towers
Radio Tower
Drive-in Theater
County Nursing Home
University Hospital
Weiss Sch
Goulding Sch
Dixon Sch
Baptist Hospital
Yniestra Sch
Armory
Legion Field
Fire Sta
Park
Playground
Hallmark Sch
St Johns Cem
Sewage Disposal
Sludge Pits
Edgewater Sch
Warrington Jr High Sch
Warrington Sch
St Thomas Sch
Golf Course
Sanders Beach
Light
Bayou Chico
ST LOUIS-SAN FRANCISCO
RCI PILOT PLANT



SYSTEM WILL COLLECT HYDROCARBON VAPORS ONLY DURING THE ADDITION OF RAW MATERIALS.

REICHHOLD CHEMICALS, INC.
Resins & Binders Division
Pensacola, Florida

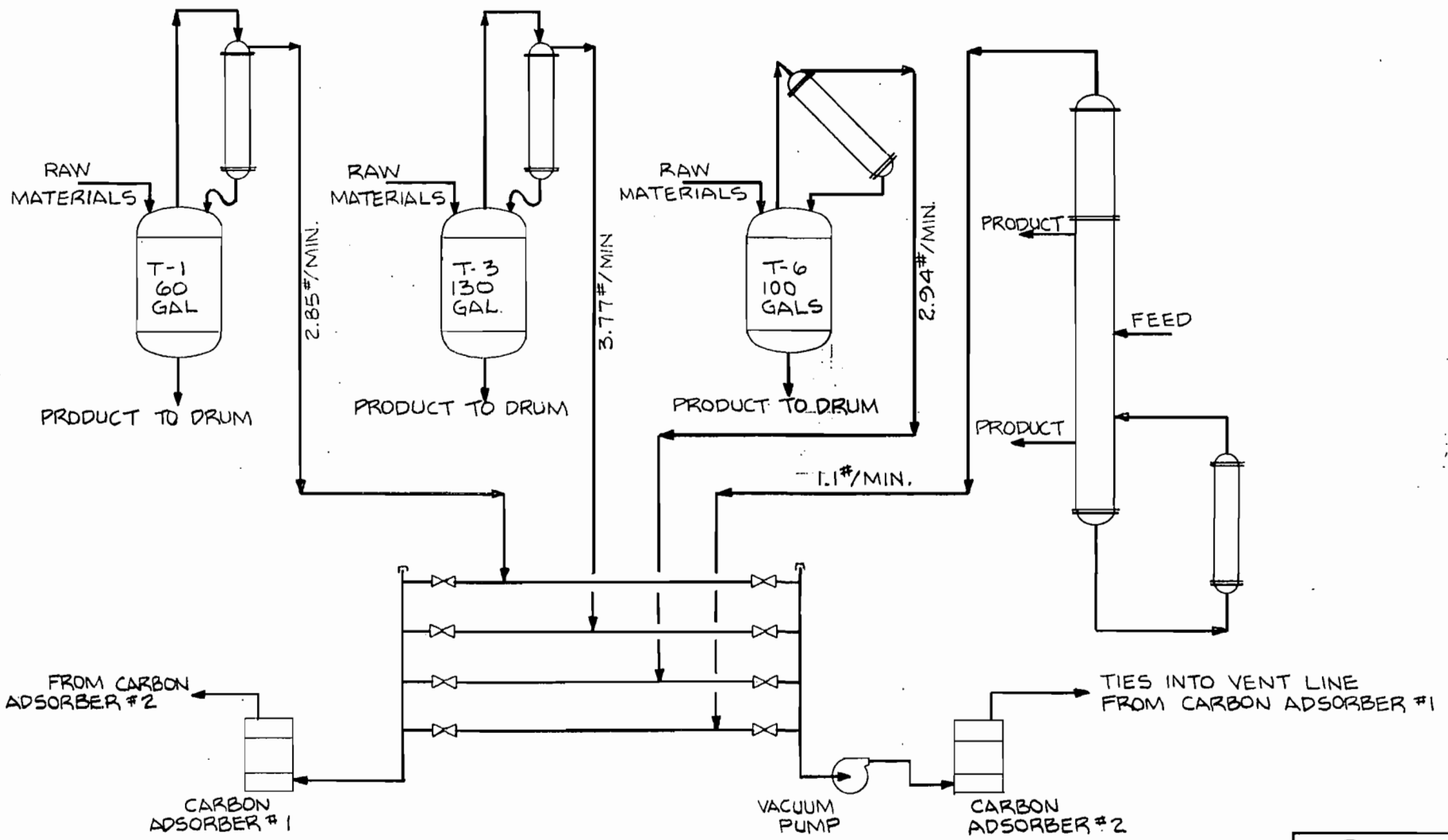
PILOT PLANT DUCT SYSTEM

NO.	DATE	REVISIONS	DR.	ENG.	APP.
1					
2					
3					

DR. BMW | DATE 01-22-86
ENG.
APPD
SCALE ~
SKA-2051

AF 30711A

AF 11205



NO.	DATE	REVISIONS	DR.	ENG.	APP.
3					
2					
1					

REICHHOLD CHEMICALS, INC.
PENSACOLA, FLA.

PILOT PLANT REACTOR VENT. SYSTEM

DR. BMW	ENG.	APPD
DATE 01-23-86	SCALE ~	SKA-2050

FARR

CF-4
Activated Carbon Filter

ADVANTAGES

HIGH VELOCITY

HIGH PERFORMANCE

SAVES SPACE

UNIFORM AIR FLOW

CORROSION RESISTANT HOUSING

RIGID CONSTRUCTION ALLOWS STACKING

FARR

CF-4

. . . a high velocity odor adsorber.

Odor adsorption by activated carbon has long been established as a practical method of odor control. Activated carbon will adsorb up to 50% of its weight with odors and retain them in the vast network of extremely small pores within the body of the carbon. The porous structure of a pound of activated carbon (approx. 50 cubic inches) approximates six million square feet of surface area. 34.56 PCF

The Farr CF-4 carbon filter is a high velocity straight-through complete purification system as opposed to the partial bypass type normally found in general use. By means of its unique design and use of a high grade of activated carbon* it provides the industry for the first time with a high velocity, high performance odor filter.

APPLICATION:

The CF-4 is ideally suited to economically meet the following application requirements:

Remove the stuffiness and objectional odors from high occupancy rooms.

Permit the recirculation (all or part) of ventilating air saving heating costs in the winter and cooling costs in the summer.

Purification and odor removal of outdoor air required for ventilation.

Eliminate odors from exhaust air.

*Standard Government Acceleration Chloropicrin Test – (Adsorptive capacity of the charcoal is at least fifty minutes.)

DESIGN:

Each CF-4 filter cell consists of a sturdy corrosion resistant housing which contains twelve individual carbon panels. Each panel holds 7½ pounds of high quality activated carbon. The carbon panels are constructed of high heat** medium impact polystyrene plastic to withstand corrosive environments. Special molded plastic wedges inside of the filter housing guide and hold the panels for quick and easy slide in.

When the activated carbon in the filter panels has reached its practical saturation the cell may be reactivated by: (1) a factory exchange of the panels; (2) refilling the panels locally with fresh carbon. The CF-4 may be installed to provide upstream or downstream access.

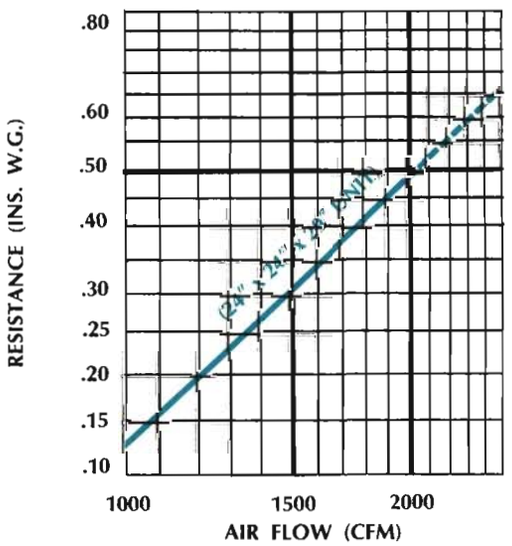
The design of the CF-4 carbon filter provides a filter holding frame at each end of the filter housing. When CF-4 installations are subjected to dust loads it is a simple matter to attach panel type roughing filters to the intake side of the system and/or high efficiency after filters to the air leaving side of the housing.

The rigid construction and design of the CF-4 filter housing permits stacking of the filters one on top of the other like building blocks. The frames of the housing are then bolted together and caulked.

The Farr CF-4 carbon filter is available in two sizes. The full size unit contains twelve carbon panels; half size units hold six carbon panels.

PERFORMANCE:

The CF-4 unit is designed for high velocity flat bank use with air flows up to 2,000 cfm at 0.5" w.g. resistance. Because the Farr high velocity CF-4 carbon filter will handle more air per cell, only one-half as many filters are required to purify any given volume of air. Flat banks of CF-4 filters not only save space they also enable the design of a more uniform air flow and prevent turbulence and dead air spaces.



**Maximum allowable operating temperature with cells mounted vertically as shown is 165° F. Maximum temperature with cells mounted horizontally is 140° F.

CONSTRUCTION:

Corrosion resistant housing.

Filter holding frame at each end.

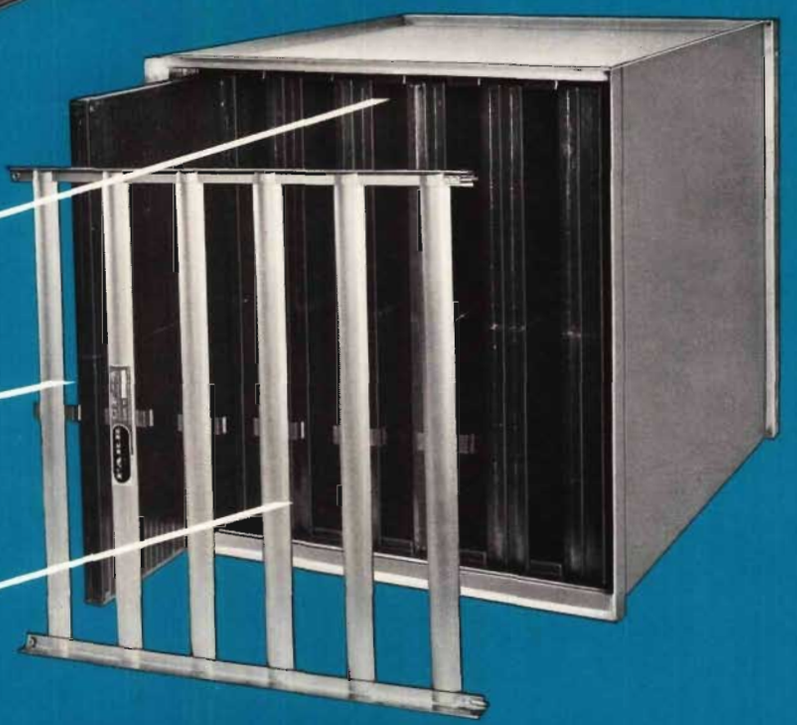
Molded plastic wedges guide and hold carbon panels for easy slide in.

High quality plastic panels withstand corrosive environments. Each contains 7½ pounds of activated carbon.

Rugged construction allows "stacking." Filter holding frame at each end.

Foam seals on front and rear grills.

Over 90 pounds of activated carbon in each full size filter



HOW TO SPECIFY

Activated carbon filters shall be the full flow high velocity type. Each filter shall contain 90# of activated carbon per 2000 CFM.

Filters shall be of size and quantity as indicated on the plans. The casing shall be constructed of galvanized steel or other corrosion resistant material. Provision shall be made for the attachment of dust filters on both entering and leaving air sides.

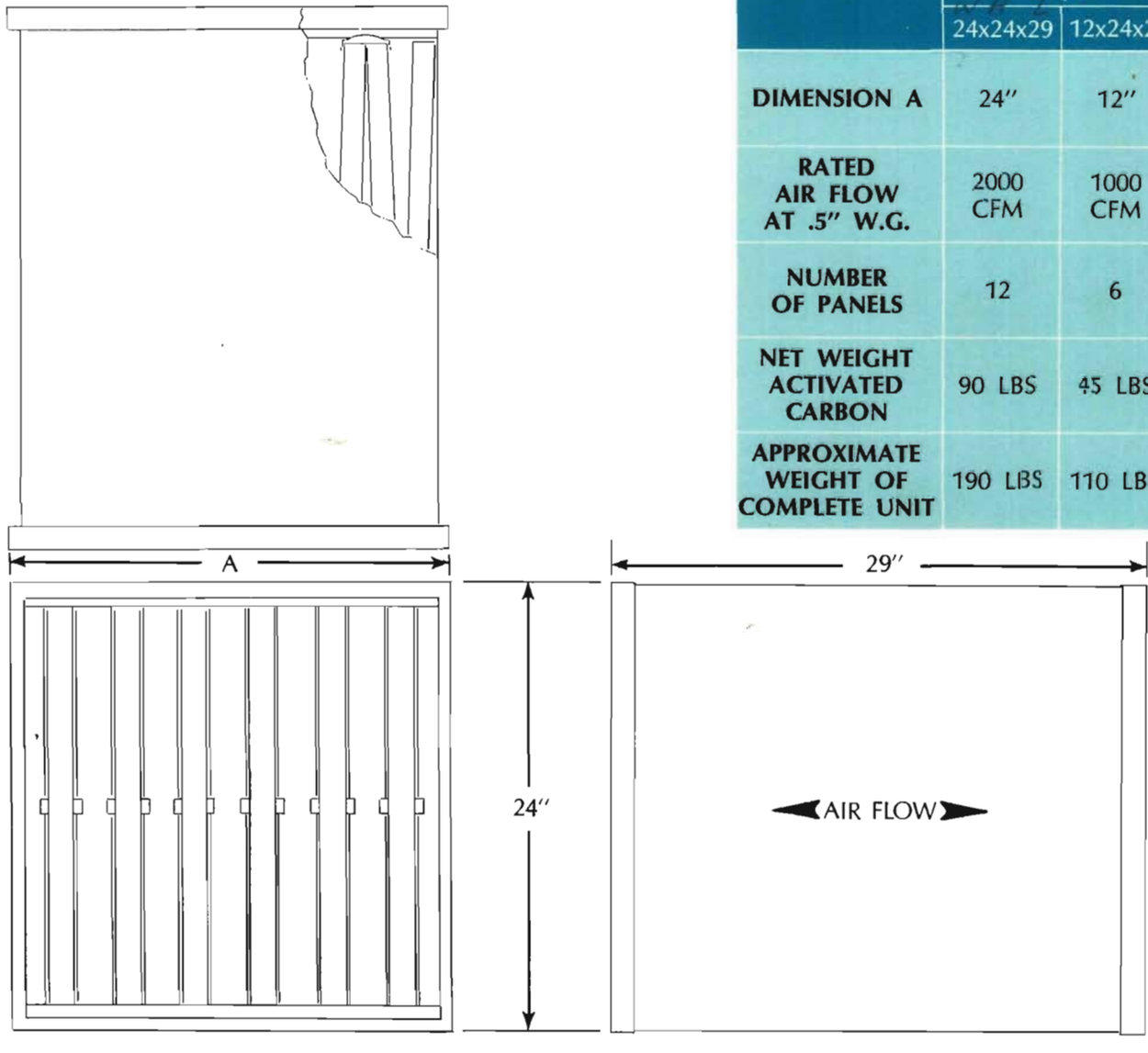
The activated carbon in each filter shall be contained in removable panels constructed of high heat, medium impact polystyrene plastic, to withstand corrosion, and so installed as to preclude the possibility of air bypass. The panels shall contain internal separators to minimize the settling of the carbon and shall be capable of being refilled by the owner.

The activated carbon shall have an activity rating of at least 50 minutes by the Standard Government Accelerated Chloropicrin Test.

The activated carbon filters shall be Model CF-4 as manufactured by Farr Company, Los Angeles, California 90009.

DIMENSIONS

	SIZE	
	24x24x29	12x24x29
DIMENSION A	24"	12"
RATED AIR FLOW AT .5" W.G.	2000 CFM	1000 CFM
NUMBER OF PANELS	12	6
NET WEIGHT ACTIVATED CARBON	90 LBS	45 LBS
APPROXIMATE WEIGHT OF COMPLETE UNIT	190 LBS	110 LBS



FARR

FARR COMPANY, P.O. BOX 92187, AIRPORT STATION, LOS ANGELES, CALIF. 90009 (213) 772-5221 • IN CANADA: FARR CO. LTD., MONTREAL

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