

P 408 532 075
 RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	
Mr. John Z. Randall	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
10/6/86	

PS Form 3800, Feb. 1982

PS Form 3811, July 1983 447-845

<p>SENDER: Complete items 1, 2, 3 and 4.</p> <p>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.</p>	
<p>1. <input type="checkbox"/> Show to whom, date and address of delivery.</p> <p>2. <input type="checkbox"/> Restricted Delivery.</p>	
<p>3. Article Addressed to: Mr. John Z. Randall Citrus Central, Inc. P. O. Box 17774 Orlando, FL 32860</p>	
<p>4. Type of Service:</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail</p>	<p>Article Number</p> <p>P 408 532 075</p>
<p>Always obtain signature of addressee or agent and DATE DELIVERED.</p>	
<p>5. Signature - Addressee</p> <p>X</p>	
<p>6. Signature - Agent</p> <p>X <i>Chris Santiago</i></p>	
<p>7. Date of Delivery</p> <p>10-9-86</p>	
<p>8. Addressee's Address (ONLY if requested and fee paid)</p>	

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

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. John Z. Randall
Executive Vice President
Citrus Central, Inc.
Plymouth Can Division
Post Office Box 17774
Orlando, Florida 32860

October 6, 1986

Enclosed is Permit Number AC 48-118328 to Citrus Central, Inc. which authorizes the construction of a can assembly and end sealing compound facility at the Citrus Central, Inc. complex in Plymouth, Orange County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Barry D. Anderson for C.H. Fancy
C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

Jerome J. Guidry, P.E.
Tom Sawicki

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on Oct. 6, 1946 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.

Patricia G. Adams Oct. 6, 1946
Clerk Date

Final Determination

Citrus Central Inc.
Plymouth, Orange County, Florida

Permit No. AC 48-118328

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

October 2, 1986

Final Determination

Citrus Central Inc.'s application for a permit to construct a can assembly and end sealing compound facility to be located at the Citrus Central Inc. complex in Plymouth, Orange County, Florida, has been reviewed by the Bureau of Air Quality Management.

Public Notice of the Department's Intent to Issue the construction permit was published in the Orlando Sentinel on August 27, 1986.

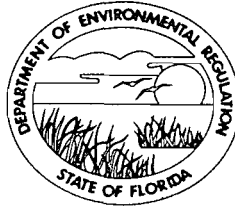
Copies of the preliminary determination have been available for public inspection at the Department's District office in Orlando and the Bureau of Air Quality Management office in Tallahassee.

No comments were received as a result of the public notice period.

The final action of the Department will be to issue the permit as noticed during the public notice period.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
Citrus Central, Inc.
P. O. Box 17774
Orlando, Florida 32860

Permit Number: AC 48-118328
Expiration Date: March 1, 1987
County: Orange County
Latitude/Longitude: 28° 41' 31" N
81° 33' 21" W
Project: Can Assembly and End Sealing
Compound Facility

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

For the construction of a can assembly and end sealing compound facility. This facility will be located at the Citrus Central, Inc., complex in Plymouth, Orange County, Florida. The UTM coordinates of this site are zone 17, 445.6 km E and 3174.0 km N.

Attachments:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16), dated April 1, 1986.
2. Department's letter of May 1, 1986.
3. Citrus Central letter of May 30, 1986.
4. Citrus Central letter of June 10, 1986.
5. Department's letter of June 27, 1986.

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 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 enforceable action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

GENERAL CONDITIONS

6. The permittee shall at all times properly operate and maintain the facility and system 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 the department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

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

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

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

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

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

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

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 reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

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

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

13. This permit also constitutes:

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

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

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

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

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:

Can Assembly and End Sealing Compound Facility

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

SPECIFIC CONDITIONS:

1. The projected and maximum allowable emissions at this facility are listed below:

Table 1
Summary of Emissions

Department	Material	Actual VOC Emissions										TPY VOC
		LB VOC Per Gal Coating Less Water	VOL % Solids	VOL % Solvent	VOL % Water	LB VOC Per Gal Solids	Gals Coating Per Year	Gals Coating Per Day	Gals Solids Applied	LB VOC Emitted Per Day	LB VOC Emitted Per Hour	
Press	9179XHV	3.13	57.3	42.5	0.3	5.46	1650.0	6.5	3.7	20.2	0.84	
	S9372A	3.67	50.0	49.7	0.3	7.32	5500.0	21.6	10.8	78.9	3.29	
	5101	3.23	50.0	39.1	10.9	5.76	2750.0	10.8	5.4	31.0	1.29	
	1108	3.96	45.0	52.4	2.6	8.57	275.0	1.1	0.5	4.2	0.17	
Assembly	17254	4.93	33.0	67.0	0.0	14.94	1650.0	6.5	2.1	31.9	1.33	
Total Actual Emissions										166.2	6.93	21
Allowable VOC Emissions											TPY VOC	
Press	9179XHV	3.7				7.44			3.7	27.6	1.15	
	S9372A	3.7				7.44			10.8	80.2	3.34	
	5101	3.7				7.44			5.4	40.1	1.67	
	1108	3.7				7.44			0.5	3.6	0.15	
Assembly	17254	5.5				21.76			2.1	46.5	1.94	
Maximum Allowable Emissions										198.0	8.25	25

The maximum allowable emissions shall not be exceeded.

2. The maximum operating time of this facility shall not exceed 6120 hours per year.

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

SPECIFIC CONDITIONS:

3. Compliance shall be determined by the procedures described in 45 FR 80824: For any 24-hour period, compliance shall be based on total actual emissions calculated from daily units of production records (number of each type of can, sheet or end), application rates of each coating (gallons/units of production), solvents and solids content of each coating. This would then be compared to the total allowable emissions for that production mix assuming each coating complied with applicable emission limitations. The pounds of solvent per gallon of coating shall be based on a certified analysis of the VOC content of each coating given to the user by the supplier. This analysis must be verifiable by laboratory analyses.

4. This facility shall comply with all the requirements specified in the EPA policy memorandum 40 CFR Part 51, "Compliance with VOC Emission Limitations for Can Coating Operations" Federal Register/Vol 45, No. 237 December 8, 1980/Rules and Regulations (45 FR 80824).

5. This facility shall comply with Rule 17-2.650(f)1 (iii) and (iv), FAC, RACT regulations for Can Coating Operations.

6. 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 devices or systems deemed necessary and ordered by the department. Currently, there are no control strategies associated with this operation other than crew efficiency to minimize pollutant emissions. 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 VOC so that it can be covered when not 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.

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.

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

SPECIFIC CONDITIONS:

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, along with compliance records and Certificate of Completion, to the Department's St. Johns River 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.

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.

10. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility. Annual reports shall be sent to the department's district office in Orlando.

Issued this 2nd day of Oct
1986.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Victoria J. Tschinkel, Secretary

_____ pages attached.

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

TO: Victoria J. Tschinkel
FROM: Clair Fancy *Clair Fancy*
DATE: October 2, 1986
SUBJ: Approval of Air Construction Permit

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ LOCTN: _____
To: _____ LOCTN: _____
To: _____ LOCTN: _____
FROM: _____ DATE: _____

RECEIVED
OCT 2 1986

Office of the Secretary

Attached for your approval and signature is one air construction permit to Citrus Central, Inc. to construct a can assembly and end sealing compound facility at the Citrus Central Inc. complex in Plymouth, Orange County, Florida.

Day 90, after which the permit would be issued by default, is October 6, 1986.

The Bureau recommends your approval and signature.

CF/pa

Attachment

Check Sheet

Company Name: *Citrus Central, Inc.*
Permit Number: *AC 48-118328*
PSD Number:
County: *Orange*
Permit Engineer: *Teresa*
Others involved:

Application:

- Initial Application
- Incompleteness Letters
- Responses
- Final Application (if applicable)
- Waiver of Department Action
- Department Response

Intent:

- Intent to Issue
- Notice to Public
- Technical Evaluation
- BACT Determination
- Unsigned Permit

Attachments:

-
-
-
- Correspondence with:
 - EPA
 - Park Services
 - County
 - Other
- Proof of Publication
- Petitions - (Related to extensions, hearings, etc.)

Final Determination:

- Final Determination
- Signed Permit
- BACT Determination

Post Permit Correspondence:

- Extensions
- Amendments/Modifications
- Response from EPA
- Response from County
- Response from Park Services



POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088
305/423-7275

PM
Jill Goy
CER. Mail # P 609 605-529
2-Oct. 1987
Orlando, FL

DER

OCT 5 1987

BAQM

September 28, 1987

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

Re: Citrus Central, Inc. - Plymouth Can Division
Can Assembly and End Sealing Compounds
Compliance Report
Permit No. AC48-118328

Dear Mr. Fancy:

Enclosed is the compliance report for the above referenced source. This report has been revised to reflect the actual emission rate for the past 12 months and is based on production rather than raw material inventory.

The Certificate of Completion of Construction application was submitted, along with the application fee of \$1000, on April 10, 1987 to the Orlando District Office. A copy is attached for your reference.

If you have any questions, please call me at (305) 423-7275 or Bruno Ferraro at (305) 298-2282.

Sincerely,

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

Jerome J. Guidry, P.E.
Manager, EAD Division

cc: A.T. Sawicki, P.E.
John Z. Randall
Edgar Zysset
Bruno Ferraro

JJG:BAF/syp

Certified Mail No. P 609 605 529

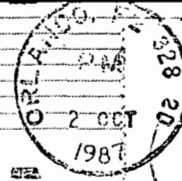
21-028.20

A3:bf



POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088



FDER
Twin Towers Office Bldg.
2600 Blairstone Rd.
Tallahassee, FL 32399-2400

*Please slip wire over top of envelope to the right
of the return address*

CERTIFIED

P-609 609 529

MAIL

ENGINEERING • PLANNING • ARCHITECTURE

Fancy. P.E.



The district
office has a
copy.

Teresa

Citrus Central, Inc.
Plymouth Can Division
Compliance Report 1986
Permit No. AC48-118328

10/5/87
Disposition?
Marked
✓ to see who did it.
Men name (Teresa)
w/ Sawicki (Teresa)

CONDITION 2:

This facility has not exceeded 6120 hrs/yr of operation.

CONDITION 3:

The original Certification-of-Completion Compliance report, dated March 17, 1987, was based on the total quantity of compound purchased in 1986. Our analysis of this purchase data indicated a greater process input rate than was originally applied for in the construction permit application for this facility. The net result was an apparent VOC emission rate of 43.5 tons per year.

Citrus Central, Inc., Plymouth Can Division has conducted intensive research to determine the exact compound usage, over the past 12 months, for the purpose of establishing a detailed emission inventory of VOC's. To accomplish this task, the total number of can ends and cans were inventoried and correlated with the total quantity of each compound used to produce those products. The results of this study are presented below.

The difference between the first analysis, which shows how much compound was purchased, and this analysis, which shows how much compound was used, is in the unused inventory. This analysis is more detailed and more representative of actual emissions than the first analysis.

Attached is the revised RACT Compliance Plan used to calculate VOC emissions. Based on these calculations, the actual VOC emission rate from this facility is 7.18 lbs/hr while the allowable (per the construction permit) is 8.25 lbs/hr.

Based on the actual production, Plymouth Can Division's VOC emission for the past 12 months were 21.97 tons. The original permitted capacity requested in the construction permit application was 21.2 tons per year with an allowable emission rate of 25.25 tons per year. This source is well within the allowable emission rate and in compliance with the air pollution construction permit.

The average usage rate is as follows:

$$95,247 \text{ lbs/year} \times 1 \text{ year}/6120 \text{ hours} = 15.56 \text{ lbs/hr}$$

The original permitted usage rate per the construction application was 15.04 lbs/hr for a net increase of 0.52 lbs/hour increase.

Citrus Central Inc.. Plymouth can division is currently at the above rate of production and will remain at this production rate and in compliance with construction permit AC48-118328. Compliance will be demonstrated in the 1987 annual operation report.



**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
AIR POLLUTION SOURCES
CERTIFICATE OF COMPLETION OF CONSTRUCTION***

PERMIT NO. AC48-118328 DATE: 3/17/87

Company Name: Citrus Central, Inc. Plymouth Can Division Oranje
County: Oranje

Source Identification(s): Can Assembly and End Sealing Compound Facility

Actual costs of serving pollution control purpose: \$ N/A

Operating Rates: 6120 hrs/yr Design Capacity: N/A

Expected Normal N/A During Compliance Test N/A

Date of Compliance Test: N/A (Attach detailed test report)

Test Results:	Pollutant	Actual Discharge	Allowed Discharge
	<u>See compliance report</u>		

Date plant placed in operation: Existing end seal lines, January 1937 for can assembly.

This is to certify that, with the exception of deviations noted**, the construction of the project has been completed in accordance with the application to construct and Construction Permit No. AC48-118328 dated 10/2/86.

A. Applicant:

John Z. Randall, Executive Vice President
Name of Person Signing (Type)

John Z. Randall
Signature of Owner or Authorized Representative and Title

Date: 3/30/87 Telephone: 305-889-4101

B. Professional Engineer:

Jerome J. Guidry, P.E.
Name of Person Signing (Type)

Jerome J. Guidry
Signature of Professional Engineer

Post, Buckley, Schuh & Jernigan, Inc.
Company Name

Florida Registration No. 32589

Date: 4-10-87

(Seal)

889 North Orange Ave., Orlando, FL 32801
Mailing Address

305-423-7275
Telephone Number

*This form, satisfactorily completed, submitted in conjunction with an existing application to construct permit and payment of application processing fee will be accepted in lieu of an application to operate.

**As built, if not built as indicated include process flow sketch, plot plan sketch, and updates of applicable pages of application form.

CITRUS CENTRAL METALS - PLYMOUTH DIVISION
 RACT COMPLIANCE PLAN
 255 OPERATING DAYS PER YEAR

ACTUAL EMISSIONS

DEPARTMENT	MATERIAL	LB VOC PER GAL COATING LESS WATER (A)	VOL % SOLIDS (B)	VOL % SOLVENT (C)	VOL % WATER (D)	LB VOC PER GAL SOLIDS (E)	GALLONS COATING PER YEAR	GALLONS COATING PER DAY (H)	GALLONS SOLIDS (I)	CONTROL EFF. (J)	LB VOC EMITTED PER DAY (K)	LB VOC EMITTED PER HOUR
PRESS	9179XHV	3.13	57.3	42.5	0.3	5.46	2953.0	11.6	6.6	0.0	36.2	1.51
	59372A	3.67	50.0	49.7	0.3	7.32	5649.0	22.2	11.1	0.0	61.0	3.38
	5101	3.23	50.0	39.1	10.9	5.76	2934.0	11.5	5.8	0.0	33.1	1.38
	1108	3.96	45.0	52.4	2.6	6.57	48.0	0.2	0.1	0.0	0.7	0.03
ASSEMBLY	1725A	4.93	33.0	67.0	0.0	14.94	1100.0	4.3	1.4	0.0	21.3	0.89
TOTAL ACTUAL EMISSIONS											172.3	7.16

ALLOWABLE EMISSIONS

PRESS	9179XHV	3.7				7.44			6.6		49.3	2.06
	59372A	3.7				7.44			11.1		62.4	3.43
	5101	3.7				7.44			5.8		42.8	1.78
	1108	3.7				7.44			0.1		0.6	0.03
ASSEMBLY	1725A	5.5				21.76			1.4		31.0	1.29
TOTAL ALLOWABLE EMISSIONS											206.2	8.59

P 274 007 715

RECEIPT FOR CERTIFIED MAIL

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

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

Sent to John Z. Randall	
Citrus Central, Inc.	
Street and No. P.O. Box 17774	
P.O., State and ZIP Code Orlando, FL 32860	
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: 08/11/87 Permit: AC 48-118328	

PS Form 3800, June 1985

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.

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

3. Article Addressed to: John Z. Randall
Executive Vice President
Citrus Central, Inc.
P.O. Box 17774
Orlando, FL 32860

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P 274 007 715

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

5. Signature - Addressee
X

6. Signature - Agent
X *Chris Santiga*

7. Date of Delivery
AUG 14 1987

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

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

August 11, 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John Z. Randall
Executive Vice President
Citrus Central, Inc.
P. O. Box 17774
Orlando, Florida 32860

Dear Mr. Randall:

Re: Citrus Central, Inc.
Can Assembly and End Seal Compounds
AC 48-118328

The Department received Mr. Jerome J. Guidry's letter dated July 31, 1987, on August 3, 1987. As was stated in Mr. C. H. Fancy's letter dated July 15, 1987, an expired construction permit cannot be extended and will have to be reissued, which requires a new application submittal (in quadruplicate) to the Department and accompanied with the appropriate processing fee (in accordance with Florida Administrative Code Rule 17-4.05).

If there are any questions, please call Bruce Mitchell at (904)488-1344 or write to me at the above address.

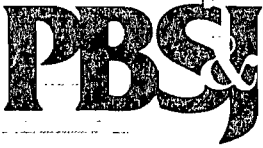
Sincerely,

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

CHF/BM/s

cc: T. Sawicki
J. Guidry

attachments



POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088
305/423-7275

DER

AUG 3 1987

BAQM

July 31, 1987

Clair H. Fancy
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

RE: Citrus Central can assembly and end sealing compounds
Permit No. AC48-118328

Dear Mr. Fancy:

I wish to request an extension to the above referenced construction permit from July 1, 1987 to December 31, 1987. Although we had submitted the Certificate of Completion application prior to the expiration date of the permit, increased emissions from the facility will now require new source review. We will be submitting amendments to the construction permit to comply with your letter dated July 15, 1987.

Please call me if you have any questions.

Very truly yours,

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

Jerome J. Guidry, P.E.
Manager, EAD Division

cc: Bill Thomas
John Randall
Edgar Zysset
Bruno Ferraro

Certified Mail No. P 609 605 036

A2:ad

Copies:

Clair Fancy }
Bill Thomas } wjh
Teresa Heron } 8/4/87

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

July 15, 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John Z. Randall
Executive Vice President
Citrus Central, Incorporated
Post Office Box 17774
Orlando, Florida 32860

Dear Mr. Randall:

Re: AC 48-118328
Can Assembly and End Seal Compounds Permit

The Bureau of Air Quality Management (BAQM) is in receipt of Mr. Jerome J. Guidry's letter of July 2, 1987, on behalf of Citrus Central Inc. This letter requests an increase in the usage rates of the permitted end seal compounds facility.

This request is not acceptable for the following reasons:

This source construction permit was issued on October 2, 1986, and expired on July 1, 1987.

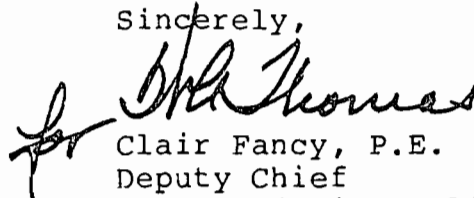
The proposed increase of 18.5 tons of VOC per year over the original permitted emission of 25 tons of VOC per year, represents a net emissions increase of 43.5 tons of VOC per year for this facility. This increase is over the significant emission rate for the pollutant ozone listed in Table 500-2, Regulated Air Pollutants Significant Emission Rates.

Since your facility (Citrus Central Incorporated and Citrus Central Metals) is a major emitting facility for VOC compounds and is located on a nonattainment area, your proposal will be reviewed under Rule 17-2.510. New Source Review for Nonattainment Areas. (FAC) as a major modification to a major facility. Please submit a new application in accordance with the Rule mentioned above.

Mr. John Z. Randall
Page Two
July 15, 1987

If you have any questions, please call Bill Thomas or write to me at the above address.

Sincerely,


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

CHF/TH/s

cc: T. Sawicki
J. Guidry



POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088
305/423-7275

DER

AUG 3 1987

BAQM

July 31, 1987

Clair H. Fancy
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

RE: Citrus Central can assembly and end sealing compounds
Permit No. AC48-118328

Dear Mr. Fancy:

I wish to request an extension to the above referenced construction permit from July 1, 1987 to December 31, 1987. Although we had submitted the Certificate of Completion application prior to the expiration date of the permit, increased emissions from the facility will now require new source review. We will be submitting amendments to the construction permit to comply with your letter dated July 15, 1987.

Please call me if you have any questions.

Very truly yours,

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

Jerome J. Guidry, P.E.
Manager, EAD Division

cc: Bill Thomas
John Randall
Edgar Zysset
Bruno Ferraro

Certified Mail No. P 609 605 036

A2:ad

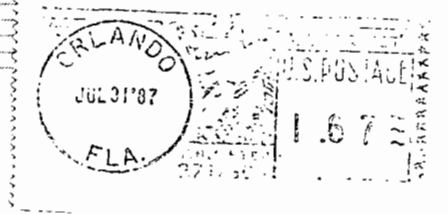
Copies:

Clair Fancy }
Bill Thomas } wmmH
Terese Heron } 8/4/87



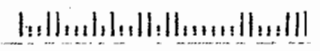
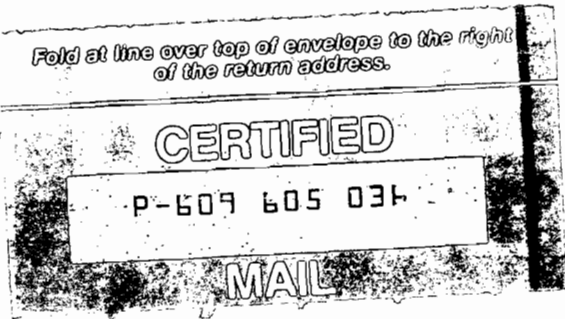
POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088



Clair H. Fancy
FL Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

Copies to:
Clair Fancy
Bill Thomas
Teresa Heron



ENGINEERING • PLANNING • ARCHITECTURE

P 408 531 206

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to John Z. Randall Citrus Central, Inc.	
Street and No. P.O. Box 17774	
P.O., State and ZIP Code Orlando, FL 32860	
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: 07/15/87 AC 48-118328	

300, 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.

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

3. Article Addressed to: John Z. Randall
Executive Vice President
Citrus Central, Incorporated
Post Office Box 17774
Orlando, Florida 32860

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P 408 531 206

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

5. Signature - Addressee
X *Chino Santoro*

6. Signature - Agent
X

7. Date of Delivery
7/20/87

8. Addressee's Address (ONLY if requested and fee paid)
PO Box 607774
Orlando, FL 32860-7774

DOMESTIC RETURN RECEIPT

Jue

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

July 15, 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John Z. Randall
Executive Vice President
Citrus Central, Incorporated
Post Office Box 17774
Orlando, Florida 32860

Dear Mr. Randall:

Re: AC 48-118328
Can Assembly and End Seal Compounds Permit

The Bureau of Air Quality Management (BAQM) is in receipt of Mr. Jerome J. Guidry's letter of July 2, 1987, on behalf of Citrus Central Inc. This letter requests an increase in the usage rates of the permitted end seal compounds facility.

This request is not acceptable for the following reasons:

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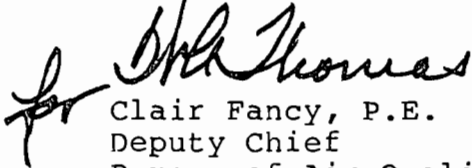
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Since your facility (Citrus Central Incorporated and Citrus Central Metals) is a major emitting facility for VOC compounds and is located on a nonattainment area, your proposal will be reviewed under Rule 17-2.510. New Source Review for Nonattainment Areas. (FAC) as a major modification to a major facility. Please submit a new application in accordance with the Rule mentioned above.

Mr. John Z. Randall
Page Two
July 15, 1987

If you have any questions, please call Bill Thomas or write to me at the above address.

Sincerely,

A handwritten signature in cursive script, appearing to read "Clair Fancy".

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

CHF/TH/s

cc: T. Sawicki
J. Guidry



POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088
305/423-7275

PM
2 Jul
Orlando, FL

CM: P-609-605-021 copy

DER

JUL 6 1987

BAQM

July 2, 1987

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

RE: Citrus Central, Inc., Plymouth Can Division
Permit No. AC48-118328
Compliance Report, permit modification,
Certificate of Completion of Construction application

Dear Mr. Fancy:

As we discussed yesterday, I have enclosed the information submitted previously to the St. John's River District regarding the above referenced permit. We have requested a modification of the permit to allow an increase in the usage rates of the permitted end seal compounds. The requested increases are included in the applicable sections of the permit application and should be included in the operation permit. Citrus Central is discontinuing the use of end seal compound 1108. The emission calculations are referenced in the attached RACT Compliance Plan and will result in full compliance with Chapter 17-2 FAC.

If you have any questions, please call me at (305) 423-7275.

Sincerely,

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

Jerome J. Guidry, P.E.
Manager, EAD Division

JJG:daa

cc: Bruno Ferraro
Edgar Zyssett
John Z. Randall
Tom Sawicki

copy: Teresa Heron 7-6-87
Certified Mail No. P 609 605 021

21-028.20

A1:v



**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
AIR POLLUTION SOURCES
CERTIFICATE OF COMPLETION OF CONSTRUCTION***

PERMIT NO. AC48-118328 DATE: 3/17/87

Company Name: Citrus Central, Inc. Plymouth Can Division Orange
County: Orange

Source Identification(s): Can Assembly and End Sealing Compound Facility

Actual costs of serving pollution control purpose: \$ N/A

Operating Rates: 6120 hrs/yr Design Capacity: N/A

Expected Normal N/A During Compliance Test N/A

Date of Compliance Test: N/A (Attach detailed test report)

Test Results:	Pollutant	Actual Discharge	Allowed Discharge
	<u>See compliance report</u>		

Date plant placed in operation: Existing end seal lines, January 1937 for can assembly.

This is to certify that, with the exception of deviations noted**, the construction of the project has been completed in accordance with the application to construct and Construction Permit No. AC48-118328 dated 10/2/86.

A. Applicant:

John Z. Randall, Executive Vice President John Z. Randall
Name of Person Signing (Type) Signature of Owner or Authorized Representative and Title

Date: 3/30/87 Telephone: 305-889-4101

B. Professional Engineer:

Jerome J. Guidry, P.E. Jerome J. Guidry
Name of Person Signing (Type) Signature of Professional Engineer

Post, Buckley, Schuh & Jernigan, Inc. Florida Registration No. 32589
Company Name

Date: 4-10-87

(Seal)

889 North Orange Ave., Orlando, FL 32801
Mailing Address

305-423-7275
Telephone Number

*This form, satisfactorily completed, submitted in conjunction with an existing application to construct permit and payment of application processing fee will be accepted in lieu of an application to operate.

**As built, if not built as indicated include process flow sketch, plot plan sketch, and updates of applicable pages of application form.

Citrus Central, Inc.
Plymouth Can Division
Compliance Report 1986
Permit No. AC48-118328

Condition 2: This facility has not exceeded 6120 hours/year of operation.

Condition 3: Compliance* has been determined by the total quantity of coatings purchased in 1986.

<u>Coating</u>	<u>lbs/year</u>	<u>VOC Content (lbs/gal less water)</u>	
		<u>By Supplier</u>	<u>VOC Analysis (verified)</u>
9179 x HV	29,640	3.6	2.4670
5101	27,170	3.5	2.4386
S9372A	92,830	3.7	2.8466
1108	None	3.9	N/A
17254	None	4.9	5.4601

Coating 1108 is only used on certain products and was not used in 1986. Side stripe compound 17254 is used on the new can assembly line which recently went on line.

Usage of 17254 has been estimated at 1050 lbs/month. The system has not been in operation long enough to get final production quantities. This usage corresponds with permitted quantities.

*See attached RACT compliance plan and laboratory data sheets verifying the VOC content of the coatings used at Plymouth Can.

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		
9179XHV	VOC	57.3 42.5	4.84	1
9372A	VOC	49.7	15.17	1
5101	VOC	39.1	4.44	1
17254	VOC	67.0	2.21	2

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

1. Total Process Input Rate (lbs/hr): 26.66 plus weight of cans

2. Product Weight (lbs/hr): 13.86 plus weight of cans

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

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
VOC	12.30	37.64	*	14.20	12.30	37.64	3.4.5.6

¹See Section V, Item 2. *Rule 17-2.650(1)(f)1.b(iii)(iv)

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

³Calculated from operating rate and applicable standard.

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

CITRUS CENTRAL METALS - PLYMOUTH DIVISION
 RACT COMPLIANCE PLAN
 255 OPERATING DAYS PER YEAR

ACTUAL EMISSIONS

DEPARTMENT	MATERIAL	LB VOC PER SAL COATING LESS WATER (A)	VOL % SOLIDS (B)	VOL % SOLVENT (C)	VOL % WATER (D)	LB VOC PER GAL SOLIDS (E)	GALLONS COATING PER YEAR	GALLONS COATING PER DAY (H)	GALLONS SOLIDS (I)	CONTROL EFF. (J)	LB VOC EMITTED PER DAY (K)	LB VOC EMITTED PER HOUR
PRESS	9179XHV	3.13	57.3	42.5	0.3	5.46	3782.0	14.8	8.5	0.0	45.3	1.93
	59372A	3.67	50.0	49.7	0.3	7.32	12427.0	48.7	24.4	0.0	176.3	7.43
	5101	3.23	50.0	39.1	10.9	5.75	3422.0	13.4	6.7	0.0	38.5	1.61
	1106	3.96	45.0	52.4	2.6	6.57	0.0	0.0	0.0	0.0	0.0	0.00
ASSEMBLY	17254	4.93	33.0	67.0	0.0	14.94	1650.0	6.5	2.1	0.0	31.9	1.33
TOTAL ACTUAL EMISSIONS											295.1	12.30

ALLOWABLE EMISSIONS

PRESS	9179XHV	3.7				7.44			8.5		53.2	2.63
	59372A	3.7				7.44			24.4		181.3	7.55
	5101	3.7				7.44			6.7		49.9	2.08
	1106	3.7				7.44			0.0		0.0	0.00
ASSEMBLY	17254	5.5				21.76			2.1		46.5	1.94
TOTAL ALLOWABLE EMISSIONS											340.9	14.20

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

COATING SUPPLIER

VOC DATA SHEET

Coating Manufacturer: W. R. Grace & Co., Dewey and Almy Chemical Division

Coating Identification: DAREX Compound S9372A

Batch Identification: ----

Supplied To: Citrus Central, Inc.

Properties of the coating as supplied* to the customer:

A. Coating Density (D_c)_s : 7.47 lb/gal 0.99 kg/l
(ASTM D1475)

B. Total Volatiles (W_v)_s : 50.0 Weight Percent
 ASTM D2369 Other**

C. Water Content: 1. (W_w)_s 0.3 Weight Percent
 ASTM D3792 ASTM D4017 Other**
2. (V_w)_s 0.3 Volume Percent
 Calculated Other**

D. Organic Volatiles (W_o)_s : 49.7 Weight Percent

E. Nonvolatiles Content (V_n)_s : 36.9 Volume Percent

F. VOC Content (VOC)_s : 3.7 lb/gal less water 0.44 kg/l less water
^{AND} 10.0 lb/gal solids 1.20 kg/l solids

Remarks: All values have been calculated based on formulation and processing information. The actual solvent density (5.9 lb/gal) has been used to calculate VOC content in lb/gal solids.

*The subscript "s" denotes each value is for the "as supplied" coating.
**Identify methods used under "Remarks".

Signed: Kayleen M. O'Brien Date 1/27/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

COATING SUPPLIER

VOC DATA SHEET

Coating Manufacturer: W. R. Grace & Co., Dewey and Almy Chemical Division

Coating Identification: DAREX Composite Can Compound 5101

Batch Identification: ----

Supplied To: Citrus Central, Inc.

Properties of the coating as supplied* to the customer:

A. Coating Density (D_c)_s : 7.94 lb/gal 1.0 kg/l
(ASTM D1475)

B. Total Volatiles (W_v)_s : 50.0 Weight Percent
 ASTM D2369 Other**

C. Water Content: 1. (W_w)_s 10 Weight Percent
 ASTM D3792 ASTM D4017 Other**
2. (V_w)_s 10 Volume Percent
 Calculated Other**

D. Organic Volatiles (W_o)_s : 40 Weight Percent

E. Nonvolatiles Content (V_n)_s : 37.5 Volume Percent

F. VOC Content (VOC)_s : 3.5 lb/gal less water 0.4 kg/l less water
AWD 9.3 lb/gal solids 1.1 kg/l solids

Remarks: All values have been calculated based on formulation and processing information. The actual solvent density has been used to calculate VOC content in lb/gal solids.

*The subscript "s" denotes each value is for the "as supplied" coating.
**Identify methods used under "Remarks".

Signed: Kayleen M. O'Brien Date 1/27/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

COATING SUPPLIER

VOC DATA SHEET

Coating Manufacturer: W. R. Grace & Co., Dewey and Almy Chemical Division

Coating Identification: DAREX Compound 9179A HV

Batch Identification: ----

Supplied To: Citrus Central, Inc.

Properties of the coating as supplied* to the customer:

A. Coating Density (D_c)_s : 7.52 lb/gal 0.9 kg/l
(ASTM D1475)

B. Total Volatiles (W_v)_s : 47.5 Weight Percent
 ASTM D2369 Other**

C. Water Content: 1. (W_w)_s 0.3 Weight Percent
 ASTM D3792 ASTM D4017 Other**
2. (V_w)_s 0.3 Volume Percent
 Calculated Other**

D. Organic Volatiles (W_o)_s : 47.2 Weight Percent

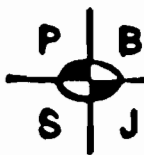
E. Nonvolatiles Content (V_n)_s : 36.5 Volume Percent

F. VOC Content (VOC)_s : 3.6 lb/gal less water 0.4 kg/l less water
AND
9.9 lb/gal solids 1.2 kg/l solids

Remarks: All values have been calculated based on formulation and processing information. The actual solvent density has been used to calculate VOC content in lb/gal solids.

*The subscript "s" denotes each value is for the "as supplied" coating.
**Identify methods used under "Remarks".

Signed: Kathleen M. Brown Date 1/27/87



Post, Buckley, Schuh & Jernigan, Inc.

CONSULTING ENGINEERS and PLANNERS

809 NORTH ORANGE AVENUE, ORLANDO, FLORIDA 32801-1000 • 305/423 7276 • TELEFAX 305/435

VOLATILE CONTENT OF PAINT, VARNISH, LACQUER OR RELATED PRODUCTS

(ASTM Designation: D 2369-73 -- Volatile Content of Paints)

Client Citrus Central, Inc. - Plymouth Can Division Project No. 03-027-00

Material 9179 XHV End Seal Compound

Density, D_m 7.837 lb/gal. Water Content, P 0.16 %

Oven Temp. 110.0 °C Analyst Gene A. Juan Date 2-18-97

Certification by PBS&J Lab Supervisor [Signature] Date 3/20/80

Scott W. Rampenthal
Florida DHRS #83170

	D	W ₁	W ₂	S	C _v
37	9.24780	9.38549	9.33756	0.14769	2.6199
32	9.17015	9.30688	9.26284	0.13673	2.5117
39	9.23369	9.37677	9.32875	0.14308	2.6177
40	9.31156	9.40569	9.37995	0.09413	2.1305

D = Weight of dish, g.

W₁ = Weight of dish plus sample before heat, g.

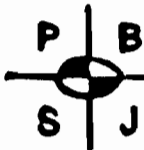
W₂ = Weight of dish plus sample after heat, g.

S = W₁ - D = Weight of sample, g.

C_v = Nonaqueous volatile matter content, lb/gal.

$$C_v = \frac{[W_1 - W_2 - \frac{P \times S}{100}] \times D_m}{S}$$

Remarks Average VOC Content = 2.4670 lbs/gal less water



Post, Buckley, Schuh & Jernigan, Inc.

CONSULTING ENGINEERS and PLANNERS

888 NORTH ORANGE AVENUE, ORLANDO, FLORIDA 32801-1008 • 305/423-7275 • TELEX 808433

VOLATILE CONTENT OF PAINT, VARNISH, LACQUER OR RELATED PRODUCTS

(ASTM Designation: D 2369-73 -- Volatile Content of Paints)

Client Citrus Central, Inc. Plymouth Can Division Project No. 03-027-00

Material 5101 End Seal Compound

Density, D_m 7.94 lb/gal. Water Content, P 10.9 %

Oven Temp. 110.0 °C Analyst Sam A. Jernigan Date 3-18-87

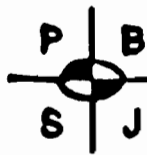
Certification by PBS&J Lab Supervisor [Signature] Date 3/20/87
Scott W. Rampenthal
Florida DHRS #83170

	D	W ₁	W ₂	S	C _v
33	9.29481	9.37694	9.34358	0.08213	2.3597
34	9.24615	9.35338	9.30695	0.10723	2.5725
35	9.28766	9.44034	9.37284	0.15268	2.6448
36	9.28275	9.38582	9.34632	0.10307	2.1774

- D = Weight of dish, g.
- W₁ = Weight of dish plus sample before heat, g.
- W₂ = Weight of dish plus sample after heat, g.
- S = W₁ - D = Weight of sample, g.
- C_v = Nonaqueous volatile matter content, lb/gal.

$$C_v = \frac{[W_1 - W_2 - \frac{P \times S}{100}] \times D_m}{S}$$

Remarks Average VOC Content = 2.4386 lbs/gal less water



Post, Buckley, Schuh & Jernigan, Inc.

CONSULTING ENGINEERS and PLANNERS

888 NORTH ORANGE AVENUE, ORLANDO, FLORIDA 32801-1008 • 805/423-7275 • TELEFAX 808435

VOLATILE CONTENT OF PAINT, VARNISH, LACQUER OR RELATED PRODUCTS

(ASTM Designation: D 2369-73 -- Volatile Content of Paints)

Client Citrus Central, Inc. - Plymouth Can Division Project No. 03-027.00

Material S 9.372 A End Seal Compound

Density, D_m 7.47 lb/gal. Water Content, P 0.3 %

Oven Temp. 110.0 °C Analyst Benn A. Hume Date 3-19-87

Certification by PBS&J Lab Supervisor [Signature] Date 3/20/87

Scott W. Rampenthal
Florida DHRS #83170

	D	W ₁	W ₂	S	C _v
29	9.25210	9.35103	9.31236	0.09893	2.8975
30	9.24130	9.36039	9.31477	0.11909	2.8391
31	9.26685	9.37747	9.33499	0.11062	2.8462
32	9.25914	9.37394	9.33045	0.1147	2.8034

D = Weight of dish, g.

W₁ = Weight of dish plus sample before heat, g.

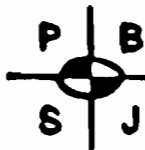
W₂ = Weight of dish plus sample after heat, g.

S = - W₁ - D = Weight of sample, g.

C_v = Nonaqueous volatile matter content, lb/gal.

$$C_v = \frac{[W_1 - W_2 - \frac{P \times S}{100}] \times D_m}{S}$$

Remarks Average VOC Content = 2.8466 lbs/gal less water



Post, Buckley, Schuh & Jernigan, Inc.

CONSULTING ENGINEERS and PLANNERS

889 NORTH ORANGE AVENUE, ORLANDO, FLORIDA 32801-1088 • 305/423-7278 • TELEX 808435

VOLATILE CONTENT OF PAINT, VARNISH, LACQUER OR RELATED PRODUCTS

(ASTM Designation: D 2369-73 -- Volatile Content of Paints)

Client Citrus Central, Inc. Plymouth Cam Division Project No. 03-027.00

Material 17254 Side Stripe

Density, D_m 8.22 lb/gal. Water Content, P 0 %

Oven Temp. 110.0 °C Analyst Benjamin A. Jernigan Date 3-18-97

Certification by PBS&J Lab Supervisor Scott W. Rampenthal Date 3/20/97

Scott W. Rampenthal
Florida DHRS #83170

	D	W ₁	W ₂	S	C _v
41	9.25614	9.31385	9.27478	0.05771	5.5650
42	9.21671	9.31349	9.24877	0.09678	5.4970
43	9.32728	9.44855	9.36912	0.12127	5.3340
44	9.25979	9.36341	9.29541	0.10362	5.3942

D = Weight of dish, g.

W₁ = Weight of dish plus sample before heat, g.

W₂ = Weight of dish plus sample after heat, g.

S = W₁ - D = Weight of sample, g.

C_v = Nonaqueous volatile matter content, lb/gal.

$$C_v = \frac{[W_1 - W_2 - \frac{P \times S}{100}] \times D_m}{S}$$

Remarks Average VOC Content = 5.4601 lbs/gal less water

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ Locn: _____
To: _____ Locn: _____
To: _____ Locn: _____
From: _____ Date: _____

TO: Howard L. Rhodes, Director

FROM: C. H. Fancy, Deputy Chief, BAQM

DATE: January 22, 1987

SUBJ: Modifications of Conditions

C. H. Fancy
RECEIVED
JAN 22 1987

DIRECTOR - PROGRAMS

Attached for your approval and signature are five letters that will extend the expiration dates of the following air construction permits:

- AC 48-118328, Cirtus Central, Inc.
- AC 16-100644, USG Corporation
- AC 05-103832, Kennedy Space Center
- AC 65-115861 and AC 65-109412, Olin Corporation
- AC 17-098127 and AC 17-104265, Reichhold Chemicals Inc.

The bureau recommends these extensions be approved.

CHF/s

attachments

DER

JAN 23 1987

BAQM

P 408 531 148

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Jerome J. Guidry, P.E.	
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 1/28/87	

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. Jerome J. Guidry, P.E.
Post, Bucklye, Schuh & Jernigan, Inc.
889 North Orange Ave.
Orlando, FL 32801-1068

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P 408 531 148

Always obtain signature of addressee or agent and
DATE DELIVERED

5. Signature - Addressee
X *[Signature]*

6. Signature - Agent
X

7. Date of Delivery
FEB 2 1987

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 32399-2400



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

January 21, 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jerome J. Guidry, P.E.
Manager, EAD Division
Post, Buckley, Schuck & Jernigan, Inc.
889 North Orange Avenue
Orlando, Florida 32801-1068

Dear Mr. Guidry:

Re: Modification of Conditions:
Permit No. AC 48-118328
Citrus Central, Inc., Plymouth Can Division

The department received your letter dated January 5, 1987, which requested an extension of the expiration date of the above referenced permit to construct a can assembly source at Citrus Central Inc. facility. This request is acceptable and the expiration date is changed as follows:

From: March 1, 1987
To: July 1, 1987

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

Attachment to be Incorporated:

Mr. Jerome J. Guidry's letter of January 5, 1987.

Sincerely,

Howard L. Rhodes, P.E.
Director, Division of
Environmental Programs

HLR/ks



POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088
305/423-7275

PM
1-6-87
Orlando, FL

DER
JAN 8 1987
BAQM

January 5, 1987

Mr. A. T. Sawicki, P.E.
Air Permitting Section
Florida Department of Environmental Regulation
St. John's River District
3319 Maguire Blvd., Suite 232
Orlando, FL 32801

RE: Citrus Central, Inc.
Plymouth Can Division
AC48-118328

Dear Mr. Sawicki:

We are requesting a four (4) month extension on the expiration date of the above referenced construction permit. Please extend the construction permit to July 1, 1987. The construction of the can assembly source has taken longer than expected.

If you have any questions, please call me at (305) 423-7275.

Sincerely,

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

Jerome J. Guidry, P.E.
Manager, EAD Division

JJG:BAF:daa

cc: Edgar Zysset
George Lawson
Clair Fancy, P.E. Certified Mail # P387 903 540

Certified Mail No. P 387 903 539

21-028.20

AB

JTAG

The Orlando Sentinel

Published Daily
Orlando, Orange County, Florida

State of Florida | ss.
COUNTY OF ORANGE

Before the undersigned authority personally appeared
Catherine Deering _____, who on oath says that

she is the Legal Advertising Representative of the Orlando Sentinel, a Daily newspaper published at Orlando, in Orange County, Florida; that the attached copy of advertisement, being a Notice of Intent in the matter of Permit to Citrus Central, Inc.

_____ in the _____ Court,
was published in said newspaper in the issues of _____
August 27, 1986

Affiant further says that the said Orlando Sentinel is a newspaper published at Orlando, in said Orange County, Florida, and that the said newspaper has heretofore been continuously published in said Orange County, Florida, each Week Day and has been entered as second-class mail matter at the post office in Orlando, in said Orange 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/she 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.

Sworn to and subscribed before me this 29th day
29 August 1986

of _____ A.D. 1986
Notary Public, State of Florida in and for _____
Nancy A. Puglia Notary Public
My Commission Expires May 25, 1987



ADVERTISING CHARGE \$92.27

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF INTENT
The Department gives notice of its intent to issue a permit to Citrus Central, Inc., Plymouth Can Division, to construct a can assembly and end sealing compound facility to be located at the Citrus Central, Inc. complex in Plymouth, Orange 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 32301, 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 Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer, if one has been assigned, at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel.

sel. 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to an administrative determination (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 32301
Dept. of Environmental Regulation
St. Johns River District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803
Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.
CL-366 August 27, 1986

Bonded by American Pioneer Casualty Ins. Co.

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP	ACTION NO.
	ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION) <i>Bill Thomas</i>	INITIAL
	DATE
2. <i>Bureau of Air Quality Manag.</i>	INITIAL
	DATE
3. Department of Environmental Regulations	INITIAL
Twin Towers Office Building	DATE
4. 2600 Blair Stone Road	INITIAL
Tallahassee, FL 32399-2400	DATE

REMARKS:

DER

SEP 5 1986

BAQM

INFORMATION	
<input type="checkbox"/>	REVIEW & RETURN
<input type="checkbox"/>	REVIEW & FILE
<input type="checkbox"/>	INITIAL & FORWARD
<input type="checkbox"/>	
DISPOSITION	
<input type="checkbox"/>	REVIEW & RESPOND
<input type="checkbox"/>	PREPARE RESPONSE
<input type="checkbox"/>	FOR MY SIGNATURE
<input type="checkbox"/>	FOR YOUR SIGNATURE
<input type="checkbox"/>	LET'S DISCUSS
<input type="checkbox"/>	SET UP MEETING
<input type="checkbox"/>	INVESTIGATE & REPT
<input type="checkbox"/>	INITIAL & FORWARD
<input type="checkbox"/>	DISTRIBUTE
<input type="checkbox"/>	CONCURRENCE
<input type="checkbox"/>	FOR PROCESSING
<input type="checkbox"/>	INITIAL & RETURN

FROM: *John Thomas*

DATE: *9-4-86*

PHONE:

P 408 532 090

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982

Sent to Mr. John Z. Randall	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date 8/18/86	

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. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.	
1. <input type="checkbox"/> Show to whom, date and address of delivery.	
2. <input type="checkbox"/> Restricted Delivery.	
3. Article Addressed to: Mr. John Z. Randall Citrus Central, Inc. P. O. Box 17774 Orlando, Florida 32860	
4. Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	Article Number P 408 532 090
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee X <i>Chris Santis</i>	
6. Signature - Agent X	
7. Date of Delivery AUG 21 1986	
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

August 15, 1986

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

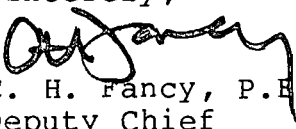
Mr. John Z. Randall
Executive Vice President
Citrus Central, Inc. - Plymouth Can Division
Post Office Box 17774
Orlando, Florida 32860

Dear Mr. Randall:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to construct a can assembly and end seal compounding facility at the Citrus Central, Inc. complex in Plymouth, Orange 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/pa

Attachments

cc: Jerome J. Guidry, P.E.
Tom Sawicki

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department gives notice of its intent to issue a permit to Citrus Central, Inc., Plymouth Can Division, to construct a can assembly and end sealing compound facility to be located at the Citrus Central, Inc. complex in Plymouth, Orange 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 32301, 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 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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

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

Dept. of Environmental Regulation
St. Johns River District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

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

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

Citrus Central, Inc.
Plymouth Can Division
Route 437
Plymouth, Florida 32768

DER File No. AC 48-118328

INTENT TO ISSUE

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

The applicant, Citrus Central, Inc., Plymouth Can Division, applied on April 1, 1986, to the Department of Environmental Regulation for a permit to construct a can assembly and end sealing compound facility to be located at the Centrus Central, Inc. complex in Plymouth, Orange County, Florida.

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

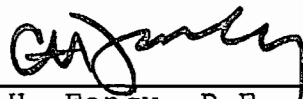
Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit application. The notice must be published one time only in a section of a major local newspaper of general circulation 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 permit.

The Department will issue the permit 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 32301-8241. 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:

John Z. Randall
Jerome J. Guidry, P.E.
Tom Sawicki

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 August 18, 1986.

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

Patricia G. Adams 8/18/86
Clerk Date

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.

DER1985 RULES OF ADMINISTRATIVE PROCEDURE - NON-RULEMAKING 17-103

of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to an administrative determination (hearing) under Section 120.57, F.S.

(4) Notice to substantially affected persons concerning applications for Department permits is an essential and integral part of the state environmental licensing process. Therefore, no application for a permit for which publication of notice is required shall be granted until and unless proof of publication of Notice is furnished to the appropriate Department permitting office.

(5)(a) Any applicant or person benefiting from the Department's action may elect to publish notice of proposed agency action in the manner provided by subsection (2) or (3). Any person who elects to publish notice of proposed agency action, upon presentation of proof of publication to the Department, prior to final agency action, shall be entitled to the same benefits under this rule as a person who is required to publish notice of proposed agency action. Since persons whose substantial interests are affected by a Department decision on a permit application may petition for an administrative proceeding within fourteen (14) days after receipt of notice and since, unless notice is given or published as prescribed in this rule, receipt of notice can occur at any time, the applicant or persons benefiting from the Department's action cannot justifiably rely on the finality of

the Department's decision without the notice having been duly given or published.

(b) The notices required by this rule may be combined with other notices required by the Department pursuant to Chapter 403, 376, or 253, F.S., or Chapter 17, FAC.

(c) The provisions of this section shall also apply to the permitting of hazardous waste facilities, but only to the extent it is consistent with Chapter 17-30, Part IV, FAC. Whenever Chapter 17-30, Part IV, FAC, provides for a different time or notice procedure than that set forth in this section the time and notice provisions of Chapter 17-30 shall govern.

(6) Failure to publish any notice of application, notice of proposed agency action, or notice of agency action required by the Department shall be an independent basis for the denial of a permit. Specific Authority: 120.53, 403.0876, 403.815, F.S. Law Implemented: 120.53, F.S. History: New 9-20-79, Amended 4-28-81, Transferred from 17-1.62 and Amended 6-1-84.

17-103.155 Petition for Administrative Hearing; Waiver of Right to Administrative Proceeding.

(1)(a) Any person whose substantial interests may be affected by proposed or final agency action may file a petition for administrative proceeding. A petition shall be in the form required by this Chapter and Chapter 28-5, FAC, and shall be filed (received) in the Office of General Counsel of the Department within fourteen (14) days of receipt of notice of proposed agency action or within fourteen (14) days of receipt of notice of

DER1985 RULES OF ADMINISTRATIVE PROCEDURE - NON-RULEMAKING 17-103

agency action whenever there is no public notice of proposed agency action. In addition to the requirements of Rule 28-5.201, FAC, the Petition must specify the county in which the project is or will be located.

(b) Failure to file a petition within fourteen (14) days of receipt of notice of agency action or fourteen (14) days of receipt of notice of proposed agency action, whichever notice first occurs, shall constitute a waiver of any right to request an administrative proceeding under Chapter 120, F.S.

(c) When there has been no publication of notice of agency action or notice of proposed agency action as prescribed in Rule 17-103.150, FAC, a person who has actual knowledge of the agency action or has knowledge which would lead a reasonable person to conclude that the Department has taken final agency action, has a duty to make further inquiry within fourteen (14) days of obtaining such knowledge by contacting the Department to ascertain whether action has occurred. The Department shall upon receipt of such an inquiry, if agency action has occurred, promptly provide the person with notice as prescribed by Rule 17-103.150, FAC. Failure of the person to make inquiry with the Department within fourteen (14) days after obtaining such knowledge may estop the person from obtaining an administrative proceeding on the agency action.

(2)(a) "Receipt of notice of agency action" means receipt of written notice of final agency action, as prescribed by Department rule, or the publication, pursuant to Department rule, of notice of final agency action, whichever first

occurs.

(b) "Receipt of notice of proposed agency action" means receipt of written notice (such as a letter of intent) that the Department proposes to take certain action, or the publication pursuant to Department rule of notice of proposed agency action, whichever first occurs.

(3) Notwithstanding any other provision in this Chapter, should a substantially affected person who fails to timely request a hearing under Section 120.57, F.S., administratively appeal the final Department action or order, the record on appeal should be limited to:

(a) the application, and accompanying documentation submitted by the applicant prior to the issuance of the agency's intent to issue or deny the requested permit.

(b) the materials and information relied upon by the agency in determining the final agency action or order;

(c) any notices issued or published; and

(d) the final agency action or order entered concerning the permit application.

(4) In such cases where persons do not timely exercise their rights accorded by Section 120.57(1), Florida Statutes, the allegations of fact contained in or incorporated by the final agency action shall be deemed uncontested and true, and appellants may not dispute the truth of such allegations upon subsequent appeal.

(5) Any applicant may challenge the Department's request for additional information by filing with the Office of General Counsel an appropriate petition for administrative proceeding pursuant to Section 120.60, F.S., following receipt by

the applicant of the Department's notification, pursuant to Section 403.0876, F.S., that additional information is required.

Specific Authority: 120.53, 403.0876, 403.815, F.S. Law Implemented: 120.53, F.S.

History: New 9-20-79, Amended 4-28-81, Transferred from 17-1.62 and Amended 6-1-84.

17-103.160 Uniformity in Approval and Denial of Applications for Department Permits and Certifications. To the extent possible and consistent with the public interest, the Department approves and denies applications for permits and certifications on a uniform and consistent basis. Final Department actions on applications for permits and certifications shall be consistent with prior Department actions, unless deviation therefrom is explained by the Department in writing or the hearing officer who submits a recommended order to the Department for final agency action in accordance with Section 120.57, Florida Statutes.

Specific Authority: 120.53(1), F.S. Law Implemented: 120.53(1), 120.68(12), F.S. History: New 2-6-78, Transferred from 17-1.63, 6-1-84.

17-103.170 Designation, Preparation and Transmittal of Record for Administrative Appeals.

When any Department action or order is the subject of an administrative appeal under Chapter 17-103, Part II, FAC, the following requirements shall apply:

(1) Designation of Record. Within fifteen (15) days of rendition of the Department's final order, the appellant shall designate

to the Department, in writing, with copies to other parties, those documents or things under the control of or in the possession of the Department which the appellant desires to have included in the record, and which were received or considered in the Department proceeding below. If a proceeding was reported by mechanical recording devices, the appellant shall designate those portions of the proceeding for which it requires written transcription or tapes for transcription. Any other party may designate other portions of the record in the manner provided herein. Such cross-designation shall be filed with the Department, with copies provided other parties, within seven (7) days after receipt of the designation by the appellant.

(2) Original Record. The Department shall thereupon include in the record all of the designated portions of the original papers and exhibits in the proceedings or matter from which administrative appeal is taken, together with a copy of any such parts of the proceedings as were stenographically reported or transcribed from tapes, and as have been designated by the parties and certified by a notary public, the reporter, or other officer for inclusion in the record on appeal or review, and certified copies of the order, if any, of which review is sought. The Department may, at its discretion, substitute certified copies for original papers or documents in its possession.

(3) Preparation of Record. Upon tender or deposit by appellant of the estimated cost of preparation, the Department shall prepare the record in accordance with the designations of the parties. The cost of preparation, and reproduction,

Technical Evaluation
and
Preliminary Determination

Citrus Central, Incorporated
Orange County

Permit No. AC 48-118328
Can Assembly and End Sealing
Compound Facility

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

August 15, 1986

I. NAME AND ADDRESS OF APPLICANT

Citrus Central, Inc.
Plymouth Can Division
Route 437
Plymouth, Florida 32768

II. REVIEWING AND PROCESS SCHEDULE

Date of Receipt of Application: April 1, 1986, at
St. Johns River District office.

Completeness Review (30 days): Department's letter of
May 1, 1986.

Response to Request for Additional Information:
May 30, 1986 and June 10, 1986.

Completeness Review: Department's letter of June 27, 1986.

Application Completeness Date: June 10, 1986.

III. FACILITY INFORMATION

III.1 Facility Location

The proposed facility is located on Route 437, in Plymouth, Orange County, Florida. The UTM coordinates are Zone 17, 445.6 E and 3173.8 N.

III.2 Standard Industrial Classification Code (SIC)

This facility is classified as follows:

Major Group No. 34: Fabricated Metal Products except
Machinery and Transportation Equipment.

Group No. 346: Coating, Engraving, and Allied Services.

Industry No. 3476: Coating, Engraving, and Allied
Services, not Classified elsewhere.

III.3 Facility Category

Citrus Central, Incorporated and Citrus Central Metals, Incorporated are considered to be one facility. This facility is a major emitting facility for volatile organic compounds (VOC). The proposed project, a can assembly and end seal compound operation, will increase the overall VOC emissions by 21 tons per year (actual emissions).

IV. PROCESS DESCRIPTION

Citrus Central, Inc., Orlando Can Division, produces metal cans and can ends. Associated with can end manufacturing is the use of an end seal gasketing compound which releases VOCs during the drying phase. These VOCs are emitted at the packaging area while the lids are drying in the ambient air. There is no air pollutant collection or control system associated with this process. This facility operates five press lines, each with an end seal liner. No stacks are associated with these sources.

During the metal can assembly process, the metal is shaped into a cylinder and then welded to hold its shape. A side stripping varnish (17254) is applied on to this side weld to prevent the can from rusting or reacting with the can's contents. When this side stripe varnish dries, it emits VOCs into the atmosphere. This facility operates seven can assembly lines. Only five (5) of these lines have side strippers. Two (2) of these five (5) lines have ovens associated with them to rapidly dry the varnish. These ovens are natural gas fired and are vented to the atmosphere. To cure the varnish, the ovens are maintained at 450°F. The remaining three lines do not use any drying devices; the cans are allowed to air dry.

V. 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 (FAC).

The plant site is in an area, Orange County, designated nonattainment for ozone and attainment for SO₂, PM, and NO_x in accordance with Rule 17-2.410 and 17-2.420, Florida Administrative Code.

Citrus Central Inc., and Citrus Central Metals, Inc., both can manufacturing plants, are considered to be one major facility in accordance with Rule 17-2.100, Florida Administrative Code. These two plants are located on adjacent properties and are under the control of the same person.

The increase of emissions due to the operation of the can assembly and end seal compound facility is in the order of 21 tons per year. For a future modification, this facility may be subject to a New Source Review for Nonattainment Areas, Rule 17-2.510, if the net increase of emissions of any criteria pollutant is equal to or greater than the significant emission rates listed in Table 500-2.

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

The proposed source shall comply with Rule 17-2.650, Reasonably Available Control Technology (RACT). Specifically, Rule 17-2.650(f)1.(iii) and (iv), Can Coating Operations and Rule 17-2.620, General Pollutant Emission Limiting Standards.

VI. SOURCE IMPACT ANALYSIS

VI.1 Emissions Summary

The operation of a can assembly and end seal compounding facility will produce emissions of volatile organic compounds (VOC), particulate matter (PM), nitrogen oxide (NOx), sulfur dioxide (SO₂), and carbon dioxide (CO) to the atmosphere.

Table 1 summarizes the potential to emit all pollutants regulated under the Act which are affected by the proposed project. This table also shows the permitted emissions for this facility. These permitted emissions are in compliance with all applicable requirements of Chapter 17-2, Florida Administrative Code (FAC).

VI.2 Air Quality Analysis

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

VI.3 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, Florida Administrative Code.

VII. CONCLUSION

Based on the review of the data submitted by Citrus Central, Incorporated, 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 installing and operating the can assembly and end sealing compound facility will not cause or contribute to a violation of any ambient air quality standards.

Table 1
Summary of Emissions

Department	Material	Actual VOC Emissions											TPY VOC
		LB VOC Per Gal Coating Less Water	VOL % Solids	VOL % Solvent	VOL % Water	LB VOC Per Gal Solids	Gals Coating Per Year	Gals Coating Per Day	Gals Solids	Control Eff.	LB VOC Emitted Per Day	LB VOC Emitted Per Hour	
Press	9179XHV	3.13	57.3	42.5	0.3	5.46	1650.0	6.5	3.7	0.0	20.2	0.84	
	S9372A	3.67	50.0	49.7	0.3	7.32	5500.0	21.6	10.8	0.0	78.9	3.29	
	5101	3.23	50.0	39.1	10.9	5.76	2750.0	10.8	5.4	0.0	31.0	1.29	
	1108	3.96	45.0	52.4	2.6	8.57	275.0	1.1	0.5	0.0	4.2	0.17	
Assembly	17254	4.93	33.0	67.0	0.0	14.94	1650.0	6.5	2.1	0.0	31.9	1.33	
Total Actual Emissions											166.2	6.93	21
Allowable VOC Emissions												TPY VOC	
Press	9179XHV	3.7				7.44			3.7		27.6	1.15	
	S9372A	3.7				7.44		10.8		80.2	3.34		
	5101	3.7				7.44		5.4		40.1	1.67		
	1108	3.7				7.44		0.5		3.6	0.15		
Assembly	17254	5.5				21.76		2.1		46.5	1.94		
Total Allowable Emissions											198.0	8.25	25
Emissions from the Ovens													
Particulate Matter		0.01 TPY											
NOx		0.30 TPY											
SO2		0.01 TPY											
CO		0.10 TPY											

Note: No owner or operator of can coating lines subject to 17-2.650(1)(f)1. may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of the total discharge that would occur if each coating line complied with the emission limitations contained in 17-2.650(1)(f)1.b.(i) through iv. Specifically, 5.5 pounds per gallon of coating, excluding water, delivered to the coating applicator from three-piece can side seam spray operations and 3.7 pounds per gallon of coating, excluding water delivered to the coating applicator from can side seam and end sealing compound operations.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
Citrus Central, Inc.
P. O. Box 17774
Orlando, Florida 32860

Permit Number: AC 48-118328
Expiration Date: March 1, 1987
County: Orange County
Latitude/Longitude: 28° 41' 31" N
81° 33' 21" W
Project: Can Assembly and End Sealing
Compound Facility

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

For the construction of a can assembly and end sealing compound facility. This facility will be located at the Citrus Central, Inc., complex in Plymouth, Orange County, Florida. The UTM coordinates of this site are zone 17, 445.6 km E and 3174.0 km N.

Attachments:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16), dated April 1, 1986.
2. Department's letter of May 1, 1986.
3. Citrus Central letter of May 30, 1986.
4. Citrus Central letter of June 10, 1986.
5. Department's letter of June 27, 1986.

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 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 enforceable action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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

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

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

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

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

GENERAL CONDITIONS

6. The permittee shall at all times properly operate and maintain the facility and system 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 the department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

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

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

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

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

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

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

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 reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

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

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

13. This permit also constitutes:

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

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

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

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

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:

Can Assembly and End Sealing Compound Facility

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

SPECIFIC CONDITIONS:

1. The projected and maximum allowable emissions at this facility are listed below:

Table 1
Summary of Emissions

Department	Material	Actual VOC Emissions										TPY VOC
		LB VOC Per Gal Coating Less Water	VOL % Solids	VOL % Solvent	VOL % Water	LB VOC Per Gal Solids	Gals Coating Per Year	Gals Coating Per Day	Gals Solids Applied	LB VOC Emitted Per Day	LB VOC Emitted Per Hour	
Press	9179XHV	3.13	57.3	42.5	0.3	5.46	1650.0	6.5	3.7	20.2	0.84	
	S9372A	3.67	50.0	49.7	0.3	7.32	5500.0	21.6	10.8	78.9	3.29	
	5101	3.23	50.0	39.1	10.9	5.76	2750.0	10.8	5.4	31.0	1.29	
	1108	3.96	45.0	52.4	2.6	8.57	275.0	1.1	0.5	4.2	0.17	
Assembly	17254	4.93	33.0	67.0	0.0	14.94	1650.0	6.5	2.1	31.9	1.33	
Total Actual Emissions										166.2	6.93	21
Allowable VOC Emissions											TPY VOC	
Press	9179XHV	3.7				7.44			3.7	27.6	1.15	
	S9372A	3.7				7.44			10.8	80.2	3.34	
	5101	3.7				7.44			5.4	40.1	1.67	
	1108	3.7				7.44			0.5	3.6	0.15	
Assembly	17254	5.5				21.76			2.1	46.5	1.94	
Maximum Allowable Emissions										198.0	8.25	25

The maximum allowable emissions shall not be exceeded.

2. The maximum operating time of this facility shall not exceed 6120 hours per year.

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

SPECIFIC CONDITIONS:

3. Compliance shall be determined by the procedures described in 45 FR 80824: For any 24-hour period, compliance shall be based on total actual emissions calculated from daily units of production records (number of each type of can, sheet or end), application rates of each coating (gallons/units of production), solvents and solids content of each coating. This would then be compared to the total allowable emissions for that production mix assuming each coating complied with applicable emission limitations. The pounds of solvent per gallon of coating shall be based on a certified analysis of the VOC content of each coating given to the user by the supplier. This analysis must be verifiable by laboratory analyses.

4. This facility shall comply with all the requirements specified in the EPA policy memorandum 40 CFR Part 51, "Compliance with VOC Emission Limitations for Can Coating Operations" Federal Register/Vol 45, No. 237 December 8, 1980/Rules and Regulations (45 FR 80824).

5. This facility shall comply with Rule 17-2.650(f)1 (iii) and (iv), FAC, RACT regulations for Can Coating Operations.

6. 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 devices or systems deemed necessary and ordered by the department. Currently, there are no control strategies associated with this operation other than crew efficiency to minimize pollutant emissions. 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 VOC so that it can be covered when not 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.

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.

PERMITTEE:
Citrus Central, Inc.

Permit Number: AC 48-118328
Expiration Date: March 1, 1987

SPECIFIC CONDITIONS:

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, along with compliance records and Certificate of Completion, to the Department's St. Johns River 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.

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.

10. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility. Annual reports shall be sent to the department's district office in Orlando.

Issued this _____ day of _____
19____.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Victoria J. Tschinkel, Secretary

_____ pages attached.

Main File 107

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 27, 1986

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John Z. Randall
Executive Vice President
Citrus Central, Inc. - Plymouth Can Division
P. O. Box 17774
Orlando, Florida 32860

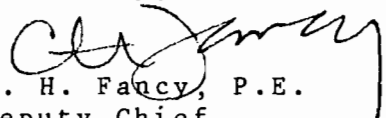
Dear Mr. Randall:

Re: Application No. AC 48-118328

Based on our definition of "Facility (Rule 17-2.100, FAC) and the information contained in your application and in our files, Citrus Central Incorporated and Citrus Central Metals, Incorporated are considered to be one facility. Therefore, your application for permitting an existing can assembly and end seal compound operation will be reviewed as a minor modification to a major facility.

If you have any question on this matter, please call Teresa M. 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: Tom Sawicki ✓
Teresa Heron ✓
Reading File ✓

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP	ACTION NO
	ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION) <i>Bill Thomas</i>	Initial
	Date
2.	Initial
	Date
3.	Initial
	Date
4.	Initial
	Date

REMARKS:

Re: Cetuses Central

Bill;

This letter needs to

today (06/27/86)

clair -

not incomp. - but a

statement up front of our

position

BT

INFORMATION	
<input type="checkbox"/>	Review & Return
<input type="checkbox"/>	Review & File
<input type="checkbox"/>	Initial & Forward
<input type="checkbox"/>	
DISPOSITION	
<input checked="" type="checkbox"/>	Review & Respond
<input type="checkbox"/>	Prepare Response
<input type="checkbox"/>	For My Signature
<input type="checkbox"/>	For Your Signature
<input type="checkbox"/>	Let's Discuss
<input type="checkbox"/>	Set Up Meeting
<input type="checkbox"/>	Investigate & Report
<input type="checkbox"/>	Initial & Forward
<input type="checkbox"/>	Distribute
<input type="checkbox"/>	Concurrence
<input type="checkbox"/>	For Processing
<input type="checkbox"/>	Initial & Return

FROM:

Teresa

DATE *06/27/86*

PHONE

P 408 532 014

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982

Sent to John Z. Randall	
Street and No. P.O. Box 17774	
P.O., State and ZIP Code Orlando, FL 32860	
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	

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~~ *Fee not paid*

2. Restricted Delivery. *10*

3. Article Addressed to:
John Z. Randall
P.O. Box 17774
Orlando, FL 32860

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured	P408532014
<input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD	
<input type="checkbox"/> Express Mail	

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

5. Signature - Addressee
[Signature]

6. Signature - Agent
X

7. Date of Delivery
7-1-86

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

DOMESTIC RETURN RECEIPT



POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088
305/423-7275

June 5, 1986

Mr. C. H. Fancy, P.E.
Deputy Chief, Bureau of Air Quality Management
Twin Towers Building
2600 Blair Stone Road
Tallahassee, FL 32301-8241

*Stats, etc.
Inc. Response -
Copies distributed
Please return
for file Patten*

RE: Citrus Central, Inc. - Plymouth Can Division

Dear Mr. Fancy:

This letter is in response to Teresa Heron's June 5, 1986 telephone conversation with Bruno Ferraro of our staff.

Citrus Central, Inc., Plymouth Can Division, is not the same company as Citrus Central Metals, Inc. (CCMI) a neighboring facility also located in Plymouth, Florida. Each facility is completely independent of each other and manufactures different products. CCMI is a major source and has been permitted and in compliance for many years. Citrus Central, Inc., Plymouth Can Division, is an existing minor source emitting approximately 21.2 tons/year of VOCs. Each of the compounds used at Plymouth Can are in compliance with the RACT limits.

Enclosed is a copy of the RACT compliance publication which we have used to permit all of the can manufacturing facilities in Orange County. It has been prepared by the Can Manufacturers Institute and approved for use by Mr. Sheldon Meyers, Director of Air Quality Planning and Standards USEPA. The tables used for calculating emissions are on pages 29-32 and are specific for each can manufacturing process. The actual computer program for calculating these spread sheets has been prepared by me.

I have included the site maps for each facility for your information. If you require further information, please call Bruno Ferraro or me at (305) 423-7275.

Sincerely,

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

Jerome J. Guidry, P.E.
Manager, EAD Division

cc: Bill Coker
John Z. Randall

21-028.00

Certified Mail No. P 677 497 301

DER

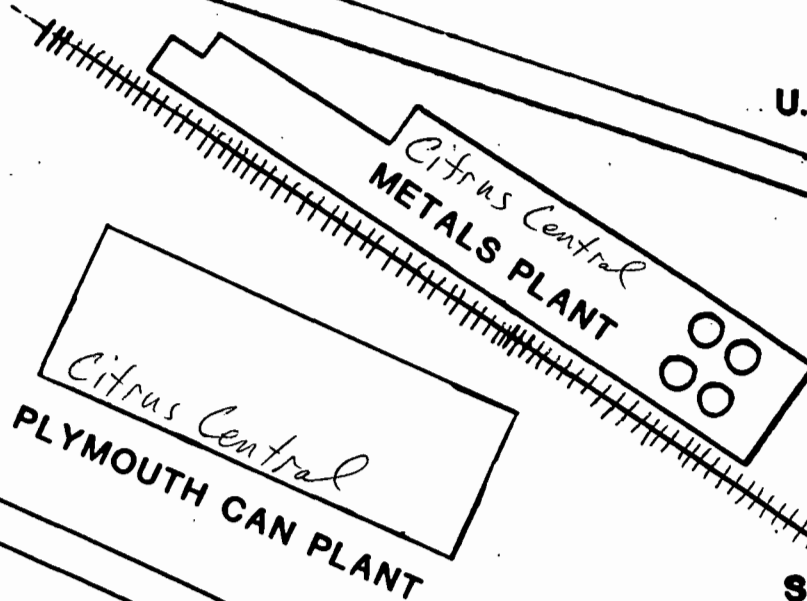
JUN 10 1986

BAQM

S.R. 437

Plymouth Sorrento Rd.

U.S. Highway 441

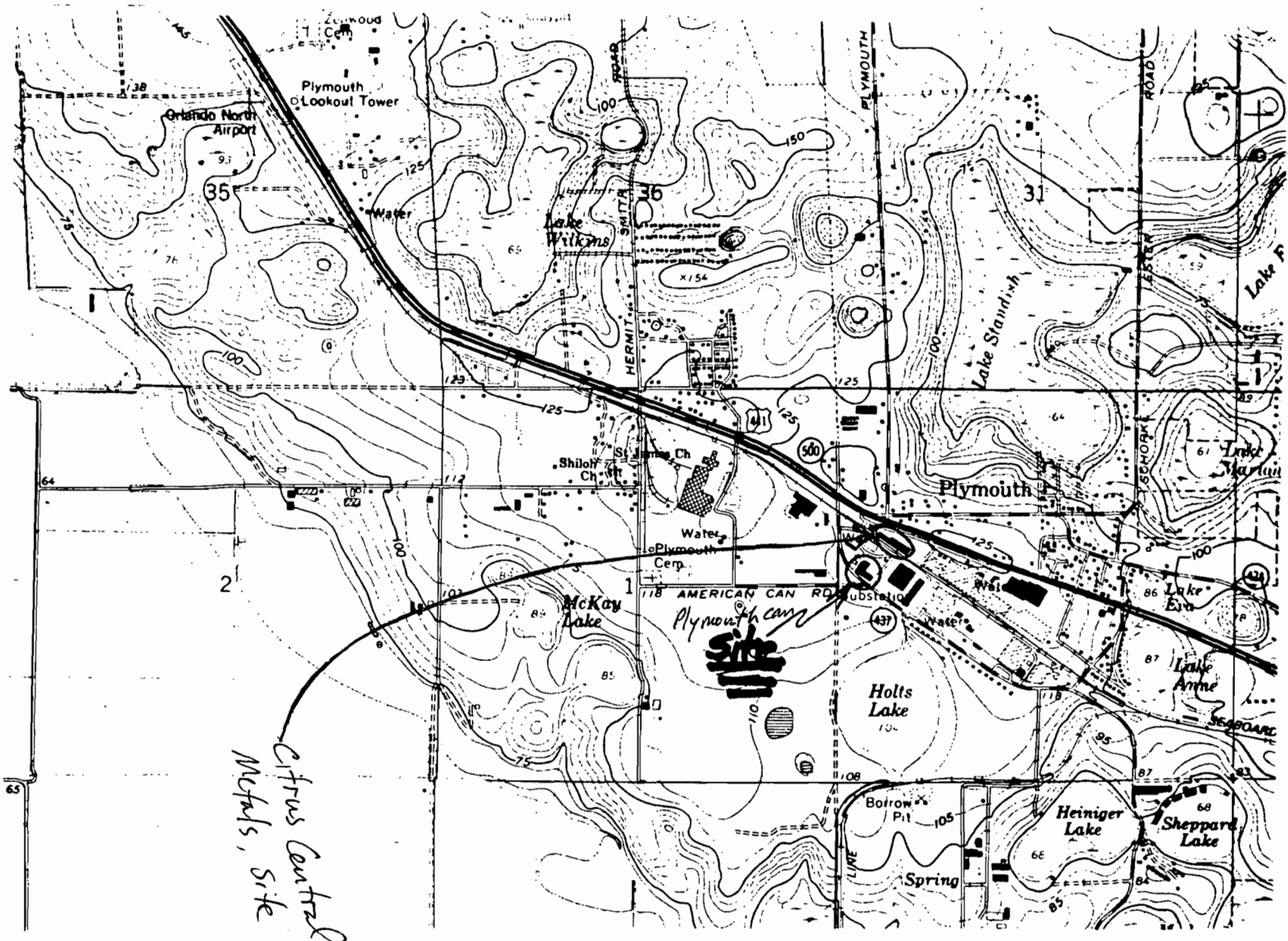


S.C.L.R.R.

*Note: These are
Separate Manufacturing
Facilities and Companies.*

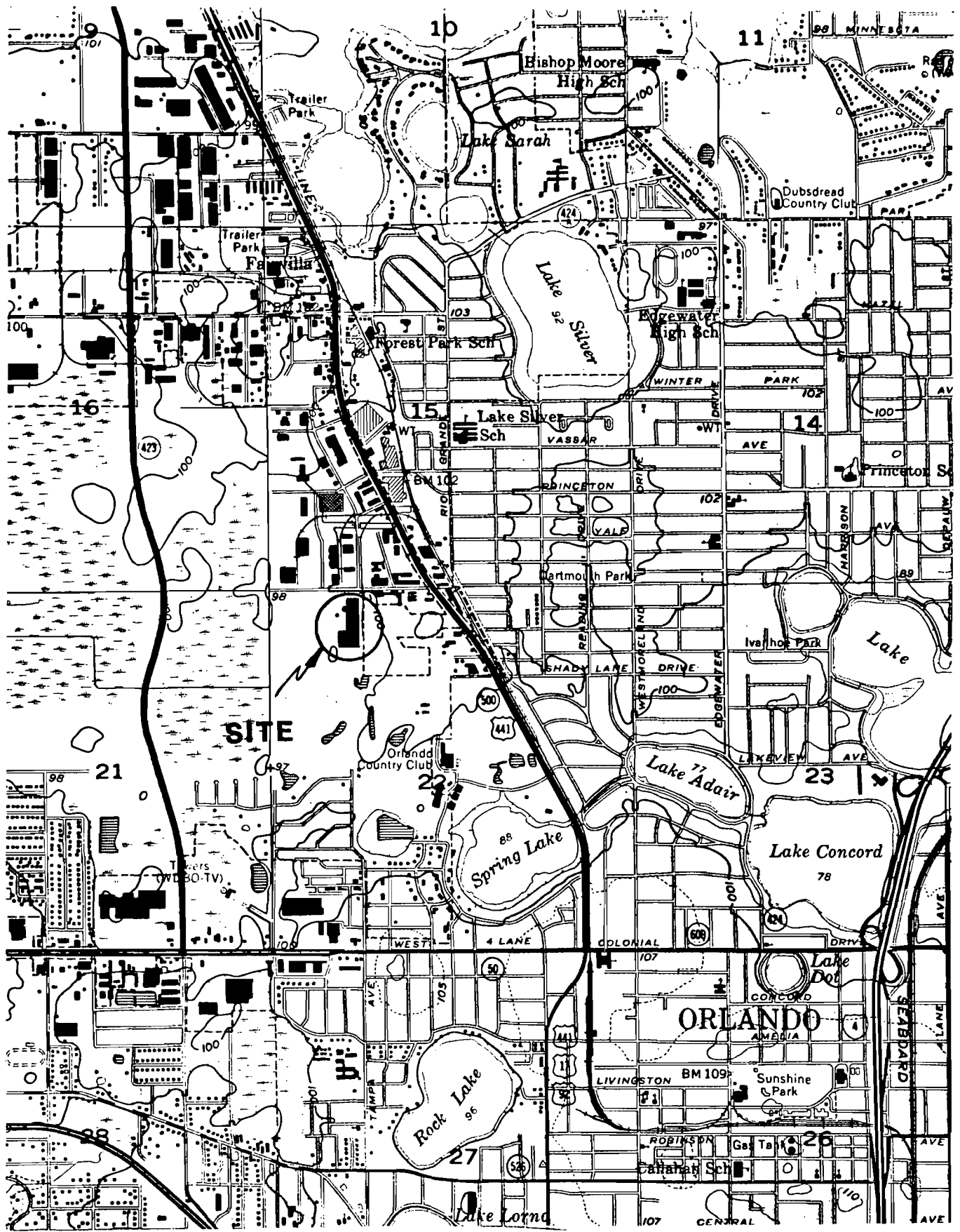
PBSJ

CITRUS CENTRAL, INC PLYMOUTH CAN PLANT SITE PLAN



CITRUS CENTRAL, INC PLYMOUTH CAN PLANT SITE PLAN

Orlando Camp Plan

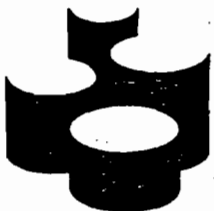


CITRUS CENTRAL INC SITE LOCATION

RACT

(Reasonably Available Control Technology)

AIR REGULATION HANDBOOK FOR CAN MANUFACTURING



**Can
Manufacturers
Institute**

1625 Massachusetts Avenue, NW, Washington, DC 20036

January 1983

F O R E W O R D

The Can Manufacturers Institute (CMI) RACT Handbook was prepared by the Environmental Quality Committee of CMI in response to the recognized need for explanation and guidance in complying with Reasonable Available Control Technology requirements under the Clean Air Act.

This publication is intended as a reference for can manufacturers, can coating suppliers, and Federal, State and local air regulatory agencies. Since individual State requirements may vary widely and may be subject to frequent revision, users of the RACT Handbook are urged to consult with local regulatory officials on specific technical issues. The Handbook will be periodically updated to reflect new or revised information.

CMI gratefully acknowledges the cooperation of all participants, especially members of the CMI Environmental Quality Committee and the U.S. EPA Office of Air Quality Planning and Standards whose support and cooperation have made this publication possible.

Best Available Copy



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR, NOISE, AND RADIATION

9 1982

Mr. George O. Payne
Chairman
Environmental Quality Committee
Can Manufacturers Institute
1625 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Dear Mr. Payne:

At your request, we have reviewed CMI's draft Handbook for Managers and Regulatory Officials in Understanding and Complying With RACT for Can Making, dated October 1982. The handbook should be quite useful to can manufacturers in complying with reasonably available control technology (RACT) requirements. It is generally consistent with control technique guidelines issued by EPA to the States to provide assistance in developing RACT regulations for use in the State Implementation Plans (SIP's) under the Clean Air Act. However, since regulation requirements can vary because of individual SIP needs, consultation with the appropriate States on specific technical issues is recommended. It is also our understanding that the Can Manufacturers Institute will periodically review regulatory changes and update information contained in the handbook.

I also want to commend you for your initiative on this project. I look forward to seeing the final version of the handbook.

Sincerely yours,

A handwritten signature in cursive script that reads "Sheldon Meyers".

Sheldon Meyers
Director
Office of Air Quality Planning
and Standards

HANDBOOK FOR MANAGERS AND REGULATORY OFFICIALS
IN UNDERSTANDING AND COMPLYING WITH
RACT FOR CAN MANUFACTURING

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I. INTRODUCTION

The Clean Air Act Amendments of 1977 required the U.S. EPA to issue guidelines to State agencies limiting hydrocarbon emissions for specific industries. One of the industries for which a Control Technology Guideline (CTG) document was published is the can manufacturing industry. State/local agencies used the CTG as a basis for developing and promulgating regulations.

Previous regulations focused, exclusively, on emissions from exhaust stacks and were intended as general regulations for all hydrocarbon emitting industrial sources. New regulations and emissions limitations are "industry specific".

These new regulations focus on control technology at the "Point of Application" of coating materials on can manufacturing equipment so as to include the evaporative emissions within the plant, as well as those that are exhausted to the atmosphere from stacks on can manufacturing equipment.

For the can manufacturing industry, the new regulations establish Volatile Organic Compounds (VOC) emission limitations for ten specific types of can coating materials, as follows:

<u>Affected Facility</u>	<u>Recommended Limitation</u>	
	<u>Lbs. VOC/Gal. of Coating Less Water</u>	<u>Kg. (VOC)/Liter of Coating Less Water</u>
Sheet basecoat (exterior)	2.8	0.34
Sheet basecoat (interior)	2.8	0.34
Sheet overvarnish	2.8	0.34
2-Piece can basecoat (exterior)	2.8	0.34
2-Piece can overvarnish	2.8	0.34
2-Piece can interior body spray	4.2	0.51
2-Piece can exterior end (spray or roll coat)	4.2	0.51
3-Piece can interior body spray	4.2	0.51
3-Piece can side seam spray	5.5	0.66
End sealing compound	3.7	0.44

Thus, a given can manufacturing plant, depending upon the type of equipment and coating materials used within that plant, may have from one to four coating material (VOC) limitations which are being regulated under State/local regulations.

One of the most energy efficient and cost effective concepts of complying with these new State/local regulations was not clarified in the CTG documents: the "Reasonably Available Control Technology Equivalence" emissions limitations concept. The concept was included in several State/local agencies can coating regulations and, as of December 8, 1980, has been interpreted by the U.S. EPA as a Federally enforceable emission control concept that all State/local agencies can use for enforcing the regulations without requiring State Implementation Plan changes for any further Federal approval.*

The purpose of this handbook is to explain in detail the following concepts that establish the basis for effective VOC emission control in can manufacturing operations:

- o Point of Application (VOC) control concept.
- o Rationale for can manufacturing RACT emission limitations.
- o "Allowable" emissions.
- o RACT compliance options.
- o RACT equivalence emission control.
- o Compliance demonstration.

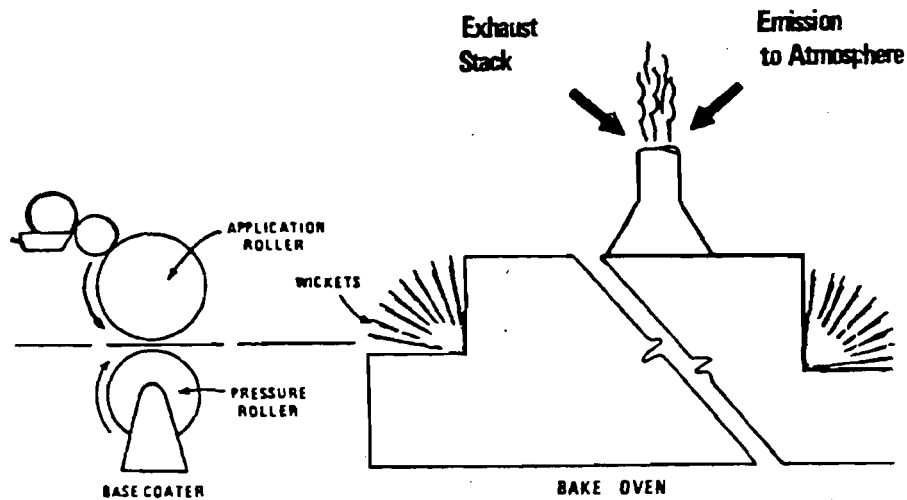
*45 Fed. Reg. 80824-5.

II. POINT OF APPLICATION (VOC) CONTROL CONCEPT

Before the passage of the Clean Air Act Amendments of 1977, State/local regulations focused on only those hydrocarbon emissions from can manufacturing equipment or any other stationary source that were emitted into the atmosphere from an exhaust stack. There were no specific types of industry regulations and evaporative emissions in the plant were not evaluated.

CONTROL CONCEPT

PRIOR TO CAA, 1977



STACK CONTROL

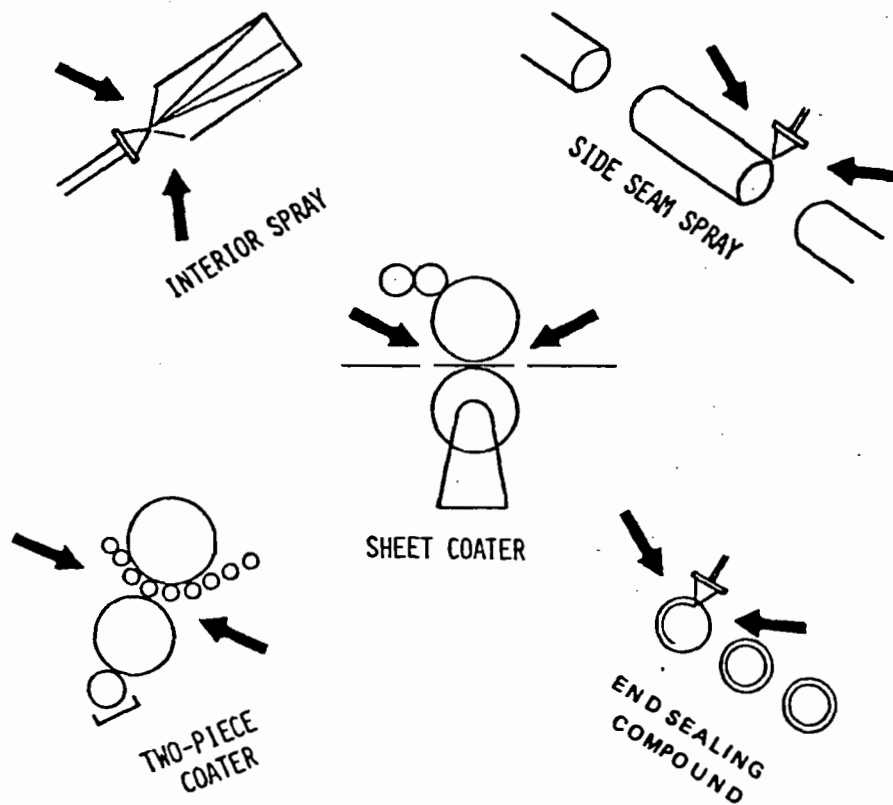
After passage of the Clean Air Amendments of 1977 and in the CTG for can manufacturing, RACT VOC emission limitations for specific types of can coating materials were based upon the concept of controlling VOC emissions from "Point of Application" which includes both evaporative emissions in a plant plus VOC emissions exhausted through stacks.

With this change, we become accountable for the evaporative solvent emissions (VOC) in the plant, in addition to the solvents (VOC) exhausted through stacks to atmosphere.

This same concept of control from "Point of Application" applies to all the types of can coating materials that have emission limitations.

POINT OF APPLICATION

CONTROL



III. RATIONALE FOR RACT EMISSIONS LIMITATIONS FOR CAN

COATING MATERIALS

The U.S. EPA issued a Control Technology Guideline dated May, 1977, for the States with solvent limitations for the specific types of can coatings shown in Table I. Most States have adopted these values in their new regulations:

TABLE I

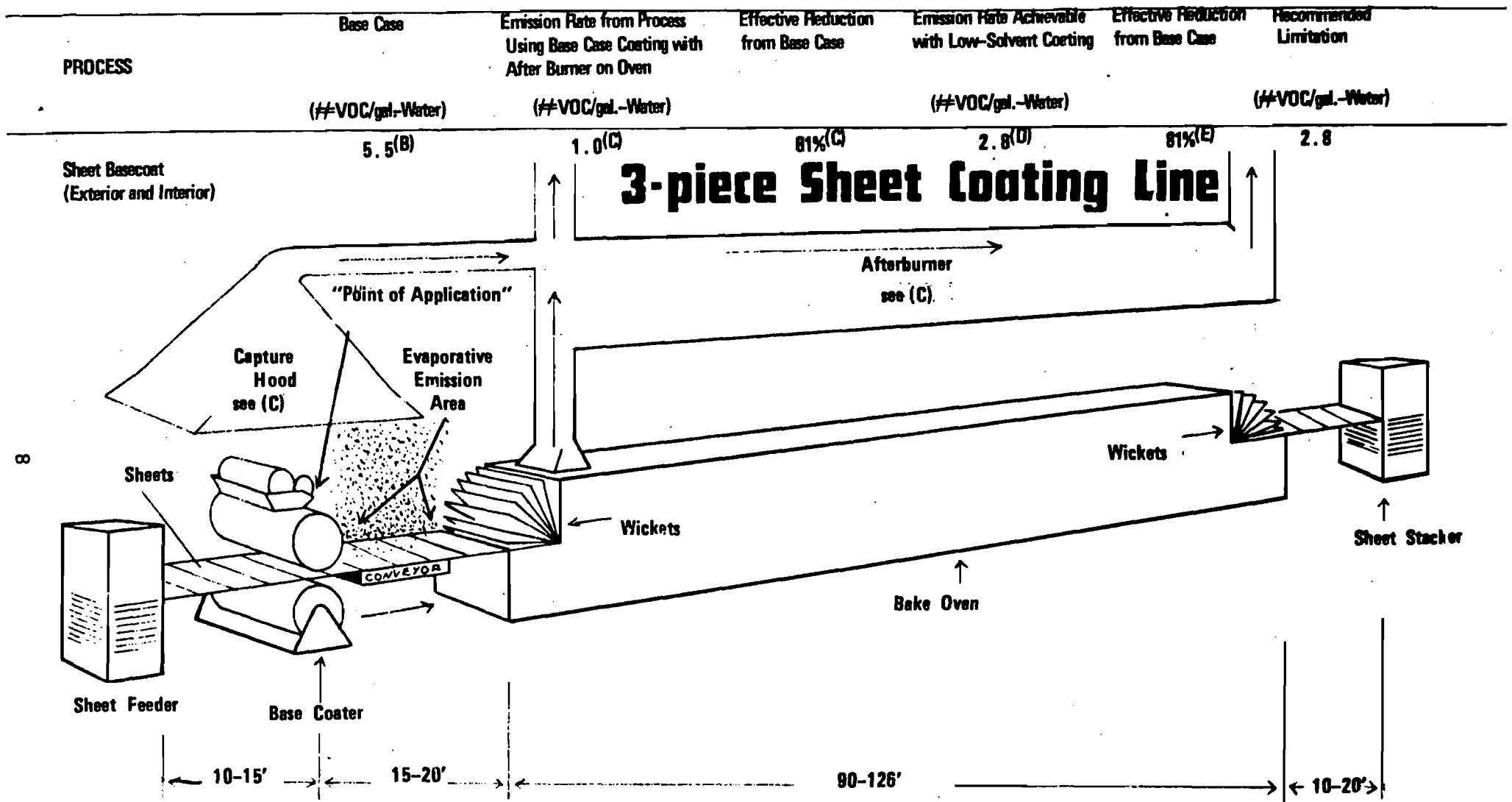
<u>Affected Facility (Type of Coating) (1)</u>	<u>Emission Limitation (2)</u>	<u>Typical Conventional Coating (2)</u>	<u>Percent of Total Can Coatings (3)</u>
<u>Sheet Coating (Exterior & Interior) (Overvarnish)</u>	2.8	5.5	28%
<u>2-Pc. Exterior and Overvarnish</u>	2.8	5.5	18%
<u>2-Pc. & 3-Pc. 1/S Spray (2-Pc. Exterior End-Spray or Roll)</u>	4.2	6.0	39%
<u>3-Pc. Side Seam Stripe</u>	5.5	6.9	1%
<u>End Seam Compound</u>	3.7	4.3	14%
			<u>100%</u>

- (1) In developing the CTG for can coatings, the U.S. EPA determined that the VOC content of can printing inks was so insignificant that it was not considered appropriate for control regulation.
- (2) The unit of pounds of Volatile Organic Compound (VOC)/gal. of coating minus water. The volatile component of coatings is principally the solvent used in the formulation. The subtraction of the weight of water in a water based coating is to eliminate any "credit" for the water in calculating emissions.
- (3) These percentages were applicable at the time the CTG was issued.

Of major significance is the inclusion in these new regulations of a VOC (solvent) limitation for end seam compounds which were not previously regulated. Although a number of conventional compound specifications already meet the limitation, those materials are principally used in general line and aerosol ends and domes. The largest volume of compound is used for beverage ends and the current specifications exceed the new emission limitations.

Several benchmarks were used by U.S. EPA in establishing emission limitations for can coating materials (the information on pages 8 through 18 is based on the CTG as published in May 1977) as follows:

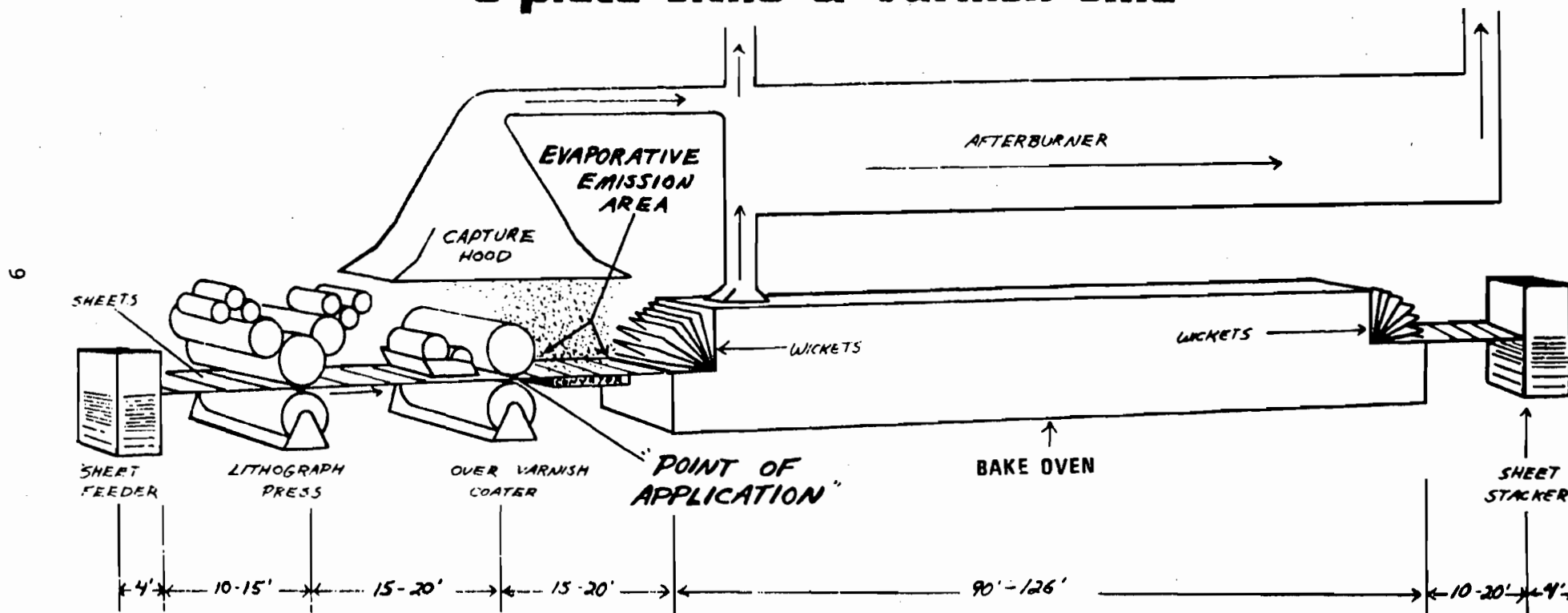
Sheet Coatings and Varnishes - The range of solvent content of conventional sheet coatings and varnishes is 3.8 to 6.7# VOC/gal. coating minus water with a typical value of 5.5# VOC per gallon of coating minus water (U.S. EPA benchmark). The U.S. EPA estimated 90 percent capture efficiency and 90 percent destruction efficiency in the afterburner shows an overall emission reduction of 81 percent for add-on controls. In other words, the U.S. EPA estimated 10 percent evaporative emission from the sheet coater to the bake oven. This was deemed equivalent to a coating with 2.8# VOC (solvent) per gallon of coating minus water. This was the rationale used by the U.S. EPA in establishing the sheet coating and varnish limitation in the CTG (see pages 8 and 9 for the detailed U.S. EPA materials).



- (B) This base case represents a gross average of organic solvent-borne coatings currently in use on can and sheet coating lines or operations. It is equivalent to a 25 volume percent solids organic-borne coating. (Because cans are manufactured for a diversity of end uses, a large variety of coatings are applied which now range from 15 - 35 percent solids by volume.)
- (C) These numbers are based on the assumptions that 90 percent of the organics are emitted in the oven, and 90 percent of the amount is destroyed by an incinerator, resulting in an 81 percent effective reduction in emissions.
- (D) This number presumes the average of all coatings is equivalent to a coating with 25 volume percent solids with a solvent which consists of 80 percent water and 20 percent organics, or a 64 volume percent solids organic-borne coating. Such coatings or their equivalent are used on some cans by some can companies.
- (E) These reductions are based on the assumption that equal volumes of solids are used for the base case and the low organic solvent case. Thus, the organic percent reduction is equal to the reduction in organic solvent emissions per unit of solids, rather than per unit of volume of coating used.

PROCESS	Base Case (#VOC/gal.-Water)	Emission Rate from Process Using Base Case Coating with After Burner on Oven (#VOC/gal.-Water)	Effective Reduction from Base Case	Emission Rate Achievable with Low-Solvent Coating (#VOC/gal.-Water)	Effective Reduction from Base Case	Recommended Limitation (#VOC/gal.-Water)
Sheet Coating Oververnish	5.5 (B)	1.0 (C)	81% (C)	2.8 (D)	81% (E)	2.8

3-piece Litho & Varnish Line



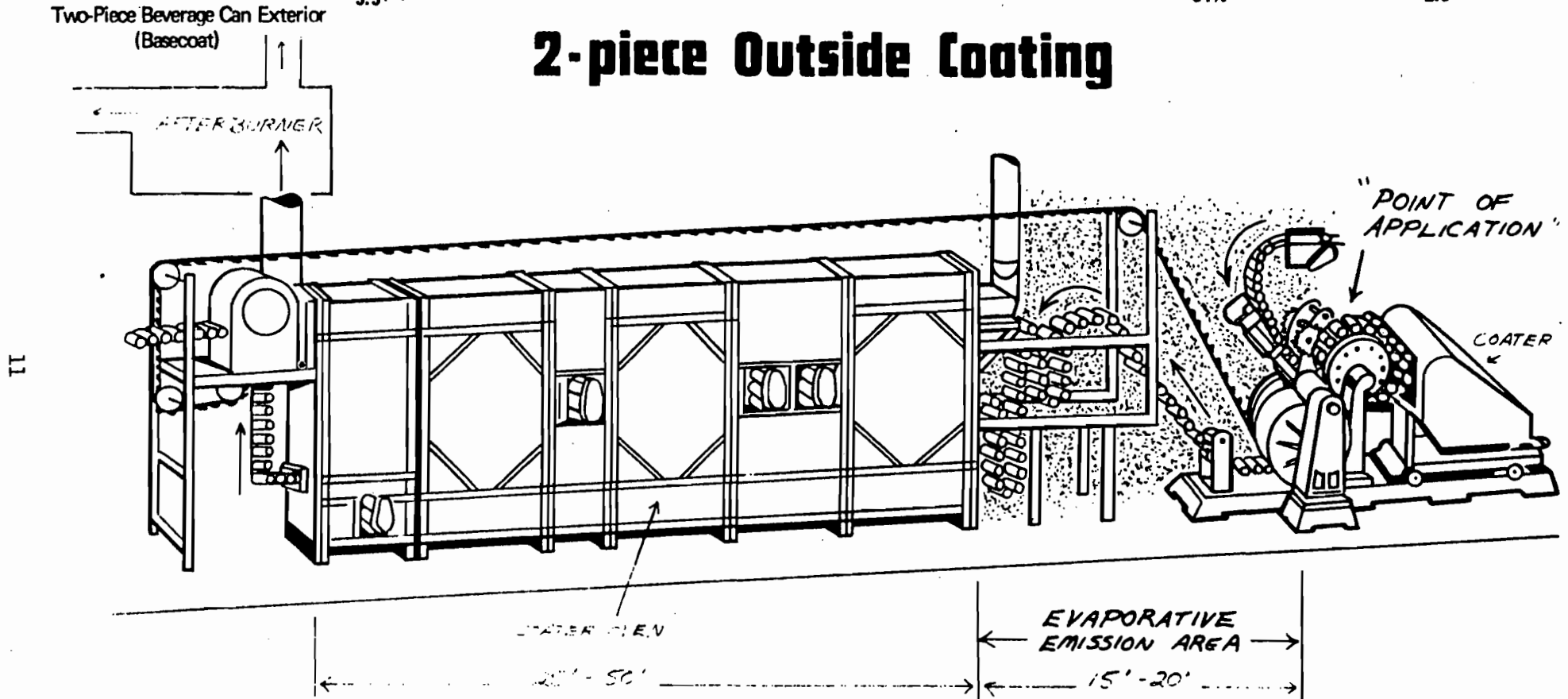
- (B) This base case represents a gross average of organic solvent-borne coatings currently in use on can and sheet coating lines or operations. It is equivalent to a 25 volume percent solids organic-borne coating. (Because cans are manufactured for a diversity of end uses, a large variety of coatings are applied which now range from 15-35 percent solids by volume.)
- (C) These numbers are based on the assumptions that 90 percent of the organics are emitted in the oven, and 90 percent of the amount is destroyed by an incinerator, resulting in an 81 percent effective reduction in emissions.
- (D) This number presumes the average of all coatings is equivalent to a coating with 25 volume percent solids with a solvent which consists of 80 percent water and 20 percent organics, or a 64 volume percent solids organic-borne coating. Such coatings or their equivalent are used on some cans by some can companies.
- (E) These reductions are based on the assumption that equal volumes of solids are used for the base case and the low organic solvent case. Thus, the organic percent reduction is equal to the reduction in organic solvent emissions per unit of solids, rather than per unit of volume of coating used.

2-Pc. Coatings
and Overvarnish

- By the time the U.S. EPA prepared the guideline for 2-piece exterior and overvarnish coating materials for beverage cans, at least one new low solvent material of each type of coating was commercially in use in some can manufacturing operations. (See pages 11 and 12.)

PROCESS	Base Case (#VOC/gal.-Water)	Effective Reduction from Base Case	Recommended Limitation (#VOC/gal.-Water)
Two-Piece Beverage Can Exterior (Basecoat)	5.5(B)	81%(E)	2.8*

2-piece Outside Coating



- (B) This base case represents a gross average of organic solvent-borne coatings currently in use on can and sheet coating lines or operations. It is equivalent to a 25 volume percent solids organic-borne coating. (Because cans are manufactured for a diversity of end uses, a large variety of coatings are applied which now range from 15 - 35 percent solids by volume.)
- (E) These reductions are based on the assumption that equal volumes of solids are used for the base case and the low organic solvent case. Thus, the organic percent reduction is equal to the reduction in organic solvent emissions per unit of solids, rather than per unit of volume of coating used.

* Commercially available in 1977 - 1978.

PROCESS

Base Case

Effective Reduction
from Base Case

Recommended
Limitation

(#VOC/gal.-Water)

(#VOC/gal.-Water)

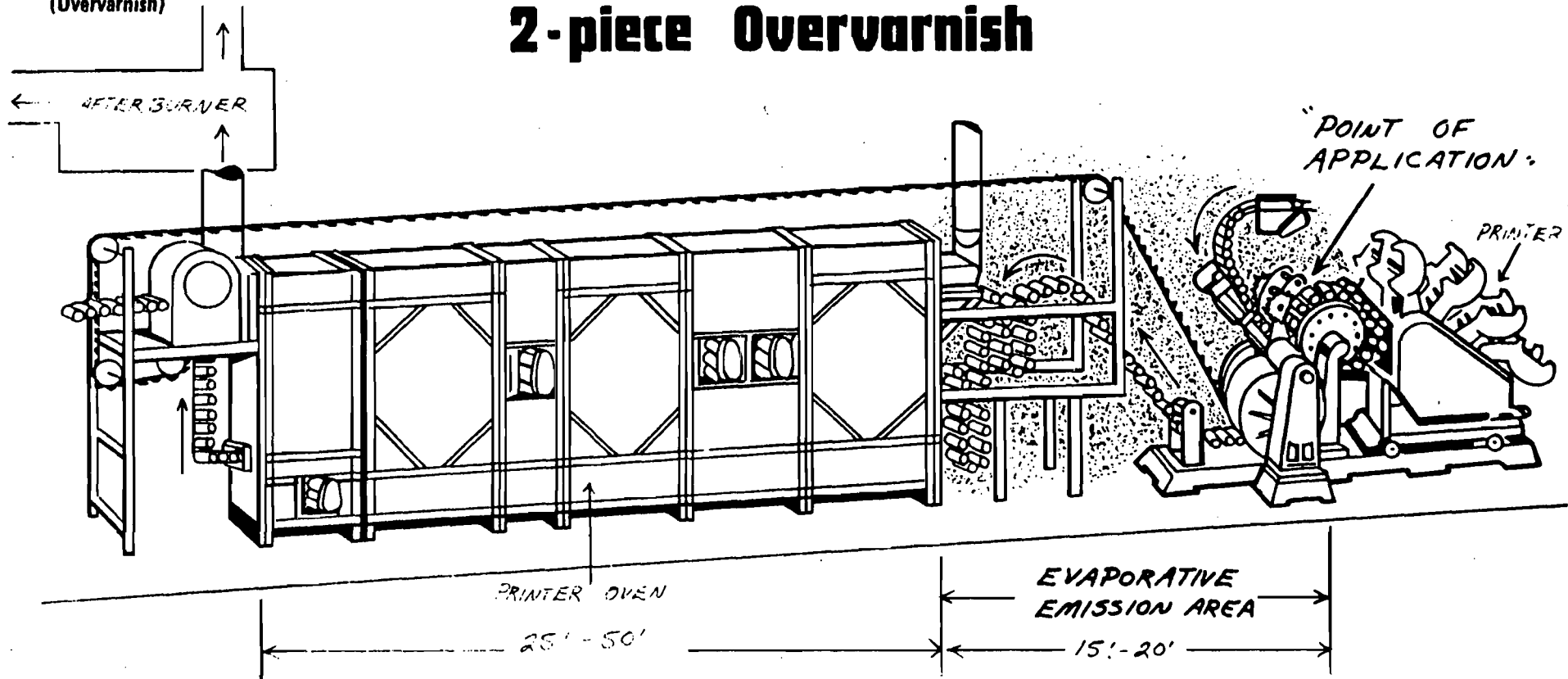
5.5(B)

81%(E)

2.8*

Two-Piece Beverage Can Exterior
(Overvarnish)

2-piece Overvarnish



(B) This base case represents a gross average of organic solvent-borne coatings currently in use on can and sheet coating lines or operations. It is equivalent to a 25 volume percent solids organic-borne coating. (Because cans are manufactured for a diversity of end uses, a large variety of coatings are applied which now range from 15 - 35 percent solids by volume.)

(E) These reductions are based on the assumption that equal volumes of solids are used for the base case and the low organic solvent case. Thus, the organic percent reduction is equal to the reduction in organic solvent emissions per unit of solids, rather than per unit of volume of coating used.

* Commercially available in 1977 - 1978.

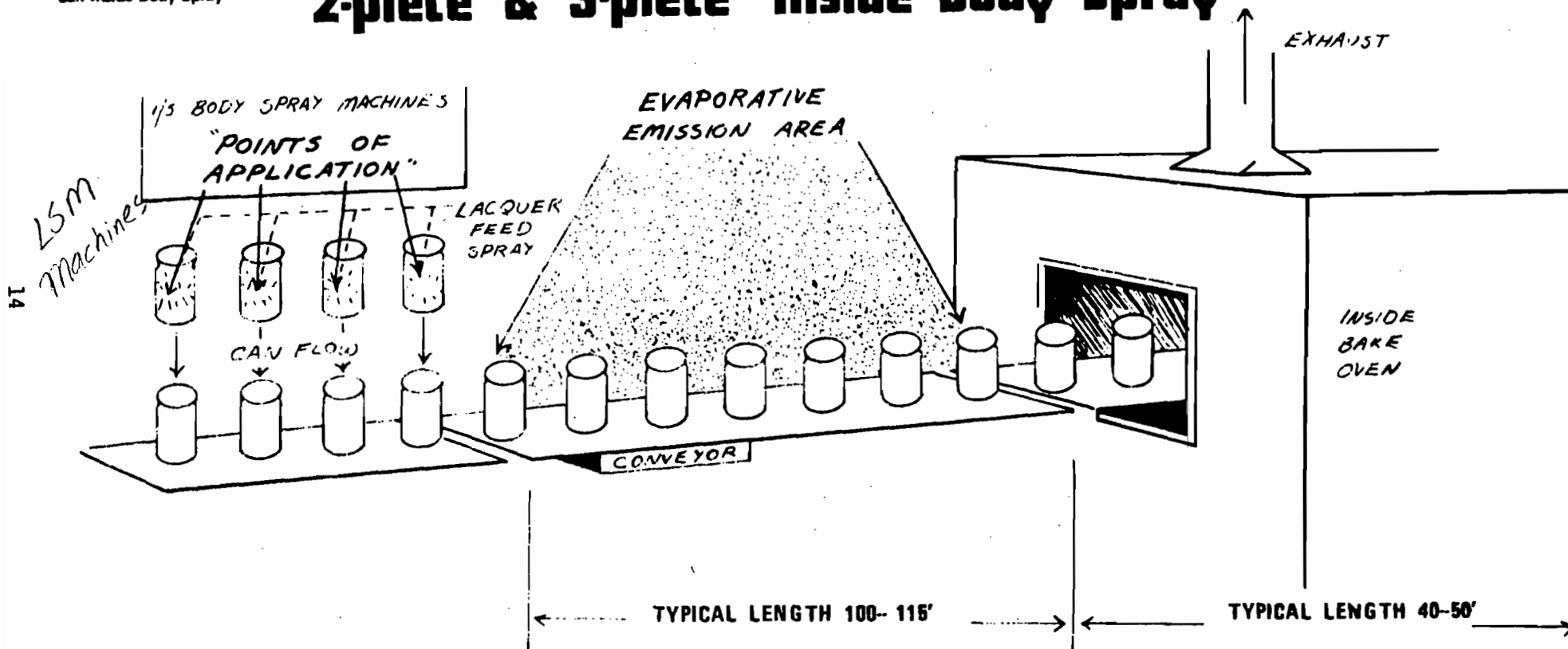
2-Pc. and 3-Pc.
Inside Body Spray

- By the time the U.S. EPA prepared the guideline for 2-piece and 3-piece inside body spray at least one material for this use was commercially used. However, the rationale for VOC limit was based on values obtainable by the use of add-on controls. A combination of insurance requirements and good manufacturing practices required the ovens to be located a substantial distance from the spray machines. The result was that considerable (approximately 70 percent) evaporative emissions occur prior to the can entering the oven with conventional spray materials. This large amount of evaporative emission caused the add-on controls to be relatively ineffective, yielding effectiveness in the range of 22 percent to 27 percent.

The advent of low solvent inside spray coatings obviously results in higher VOC reductions (approximately 78 percent) than add-on controls. See page 14 for additional details.

PROCESS	Base Case (#VOC/gal.-Water)	Emission Rate from Process Using Base Case Coating with (#VOC/gal.-Water)	Effective Reduction from Base Case 22%(G)	Emission Rate Achievable with Low-Solvent Coating (#VOC/gal.-Water)	Effective Reduction from Base Case 78%(E)	Recommended Limitation (#VOC/gal.-Water)
Two and Three-Piece Beverage Can Inside Body Spray	6.0(F)	4.7(G)		4.2(H)		4.2

2-piece & 3-piece Inside Body Spray

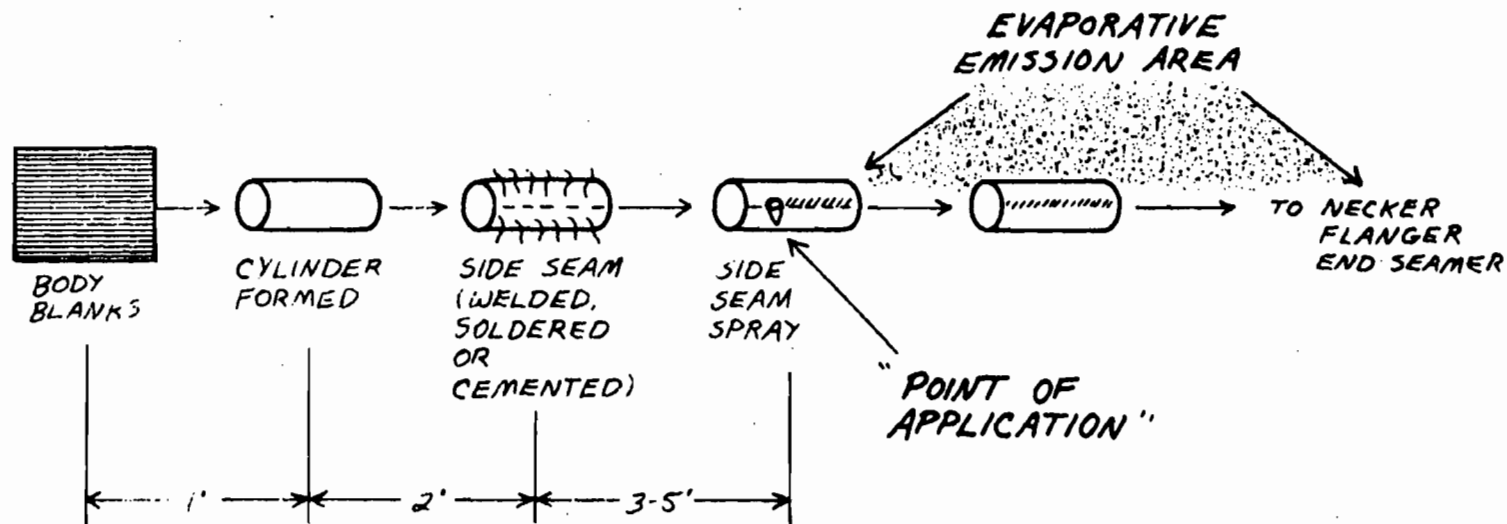


- (E) These reductions are based on the assumption that equal volumes of solids are used for the base case and the low organic solvent case. Thus, the organic percent reduction is equal to the reduction in organic solvent emissions per unit of solids, rather than per unit of volume of coating used.
- (F) This base case represents an average of organic solvent-borne coatings currently in use on beer and beverage can interiors. This number is equivalent to 18 volume percent solids in an organic solvent-borne coating.
- (G) This number is based on the assumption that 30 percent of the organics are emitted in the ovens since this is a spray operation. Of that 30 percent, 90 percent was assumed to be destroyed by the incinerator, resulting in a 22 percent effective reduction in emissions. The amount of organics emitted however will vary in each facility due to line configuration.
- (H) This number presumes the average of all coatings is equivalent to a coating with 18 volume percent solids with a solvent which consists of 80 percent water and 20 percent organics. Such coatings are currently used on some beer and beverage cans, upon customer approval.

3-Pc. Side Seam Stripe - This emission limit was derived principally by inquiries to side seam spray producers in 1977 for their prediction of availability of low solvent materials in 1982. Because of low viscosity requirements and drying by latent heat, these predictions have been shown to be overly optimistic. Add-on control technology was also recognized as being an ineffective solution. In addition, since this source category represents less than 1 percent of the total industry emissions, the impact on total reductions is insignificant. Low solvent technology will be introduced as these materials become commercially available. However, a rigid time frame is not predictable at this time. See page 16 for additional details.

PROCESS	Base Case (#VOC/gal.-Water)	Emission Rate Achievable with Low-Solvent Coating (#VOC/gal.-Water)	Effective Reduction from Base Case	Recommended Limitation (#VOC/gal.-Water)
Three-Piece Can Side Seam Spray	6.9	6.6	81%	6.6*

3-piece Can Assembly - Side Seam Spray



*Estimate of limited number of coating suppliers, no factual basis, and not commercially demonstrated.

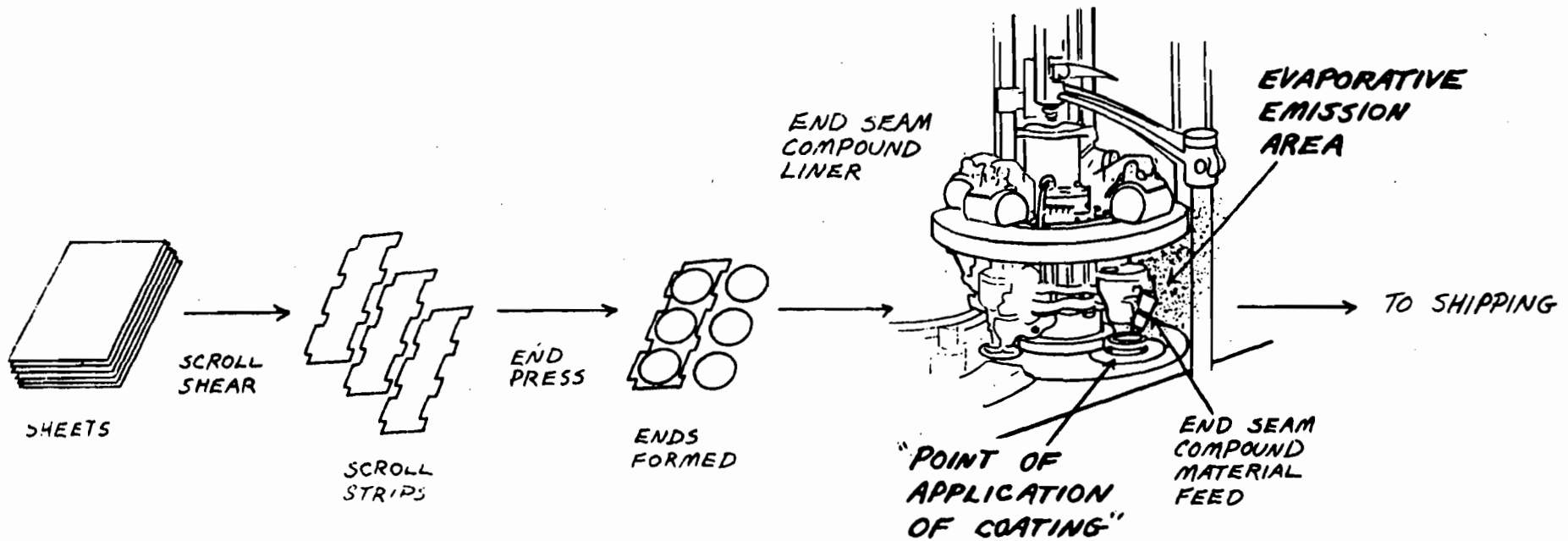
End Seam Compound

- This emission limit was similarly derived by surveying end compound manufacturers for their estimate of low solvent materials being available by 1982. Several materials from R&D laboratories have been recently made available for commercial trials. It is expected that low solvent compounds for large volume applications will be in general use by 1985. See page 18 for additional details.

PROCESS	Base Case (#VOC/gal.-Water)	Emission Rate Achievable with Low-Solvent Coating (#VOC/gal.-Water)	Effective Reduction from Base Case	Recommended Limitation (#VOC/gal.-Water)
End-Seam Compound	4.3	3.7*	29%	3.7*

End Seam Compound Application

8T



*Estimate by limited number of coating suppliers—not commercially demonstrated.

In developing new regulations, many states provided for an exemption from regulation for small plants with a small volume of emissions. A number of 3-piece can assembly plants can thus be exempted from regulation. The specific exemptions are detailed in the Appendix.

Certain geographical areas of the country do not require regulations since they are "attaining the ozone standard". These are principally west of the Mississippi River with smaller metropolitan populations and less industry.

✓ Subsequent to the issuance of the U.S. EPA "guideline", that Agency, and most States' regulations, have concurred in the concept of plant wide solvent emission control which permits a "daily weighted average" of all conventional and low solvent coatings, plus including, if necessary, some afterburner control. That concept has become known as the "RACT Equivalence Emissions Limitation Concept" (see 45 Fed. Reg. 80824).

✓ The use of this concept will be the major means of compliance for many can plants. Page 26 illustrates and enumerates the key features of using the "RACT Equivalence" for compliance. Basically, the "RACT Equivalence relies on plant production records for computing the "actual" emissions for a 24 hour period (only one day) in a plant and comparing that value to a

computed "allowable" emission limit. The "allowable" emissions limit may vary from day to day as a function of the scheduled production in the plant rather than fixing a total daily plant emissions limit that cannot be exceeded.

IV. "ALLOWABLE" VOC EMISSIONS

The definition of "RACT VOC Emission Limitations" establishes the concept of "allowable" VOC emissions which logically implies that "actual" emissions can be compared to regulatory allowable emission values. The significance of the concept in manufacturing is establishing a "baseline" or "norm" for the following regulatory purposes:

1. Reporting "actual" versus "allowable" emissions in State/local emission inventories.
2. Controlled trading, including banking, netting and offsets. See 47 Fed. Reg. 15076.

V. RACT COMPLIANCE OPTIONS

In a specific can plant, the new regulations provide a number of compliance options which are presented below:

- a. Low solvent coating (RACT-VOC limitation only) applied and used on all equipment.

In a given can plant, it is possible that commercially available and customer approved low solvent coating materials can be used to meet the RACT emission limitations to achieve compliance. As a generalization, this option is most likely applied to plants producing 2-piece beverage can bodies.

- b. Conventioanl coatings applied and used on equipment with add-on control devices.

This option is most pertinent to sheet coating operations which would include an afterburner on the sheet oven exhaust and, if appropriate, a capture hood exhaust into the afterburner.

This option is generally not appropriate for other operations in a can plant such as end seam lining operations, side seam spray coatings, 2-piece or 3-piece inside body spray coatings operation, nor 2-piece exterior coating operations.

In these operations, add-on control devices are only 20-40 percent efficient and other technology is not commercially available.

c. RACT Equivalence

Those can plants not achieving compliance by option a. or b. above could utilize the RACT Equivalence concept which can be described as follows:

Combinations of low solvent coatings and conventional coatings applied and used on equipment with or without add-on control devices.

This concept is detailed in Section VI.

VI. RACT EQUIVALENCE

Conceptually, RACT Equivalence is a method of accounting for the "actual" coating materials VOC emissions and comparing that value to the "allowable" VOC emissions for the various types of coating materials.

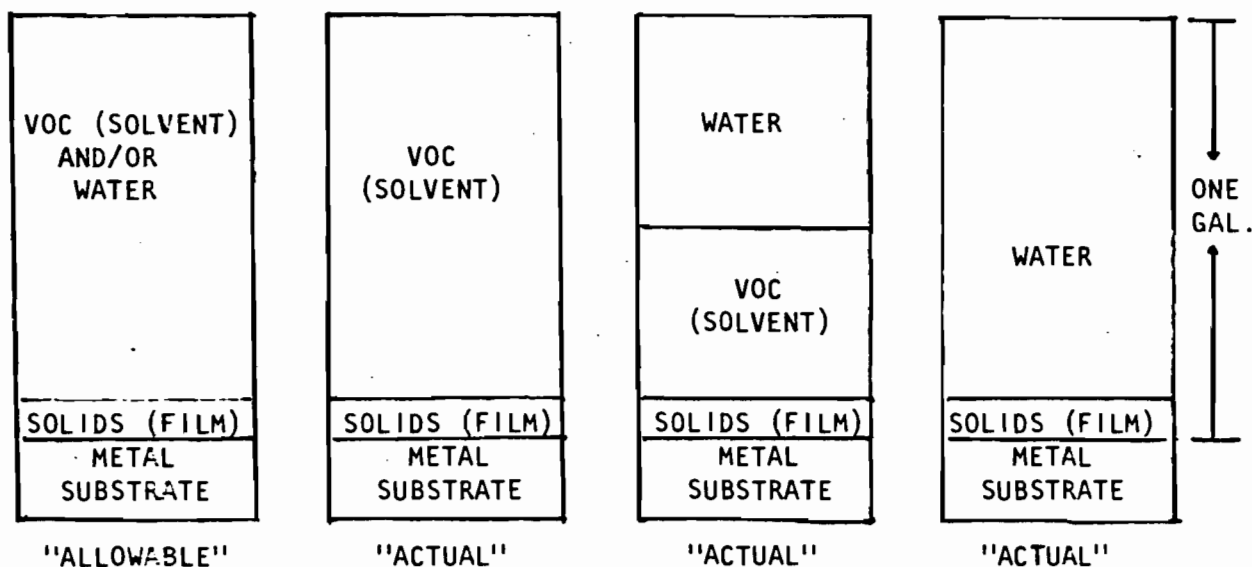
The concept permits the use of low solvent and conventional coatings with or without afterburner controls in a 24 hour production cycle (only one day) in combinations such that the "actual" total emissions are equal to or less than the total "allowable" emissions for all coating operations in a plant.

Further, RACT Equivalence accommodates the variability of "job-by-job" production in can plants that occur on a day-to-day basis. Thus, the "actual" and "allowable" VOC emissions may be quite different from one day to the next in any specific can plant. Thus, it becomes very important for State/local air permitting agencies to recognize this indirect variability in production as operating permits are issued.

To establish the basis for using RACT equivalence for a can plant's compliance, the accountability format from the Federal Register, December 8, 1980, is shown on page 29.

The most important concept is the comparison of the pounds VOC per gallon solids applied per unit of "actual" production to the "allowable" pounds VOC per gallon solids per unit of production. Thus, the unit of evaluating VOC control of a coating is the dominant value to be considered in VOC emission in RACT determinations. In retrospect, if the CTG for can coatings emission limitations and the regulations that ensued had been expressed in this unit, several mathematical and conceptual steps could have been eliminated.

The rationale for pounds VOC/per gallon solids applied can also be illustrated in the following diagram:



This diagram points out that a can coating must have a film weight of essentially the same amount of solids to protect the

metal regardless of the amount of VOC and/or water formulated with solids as the coating is applied on a can coating line.

The conversion of pounds VOC/gallon of coating minus water to pounds VOC/gallon solids is shown graphically and by formula on page 27.

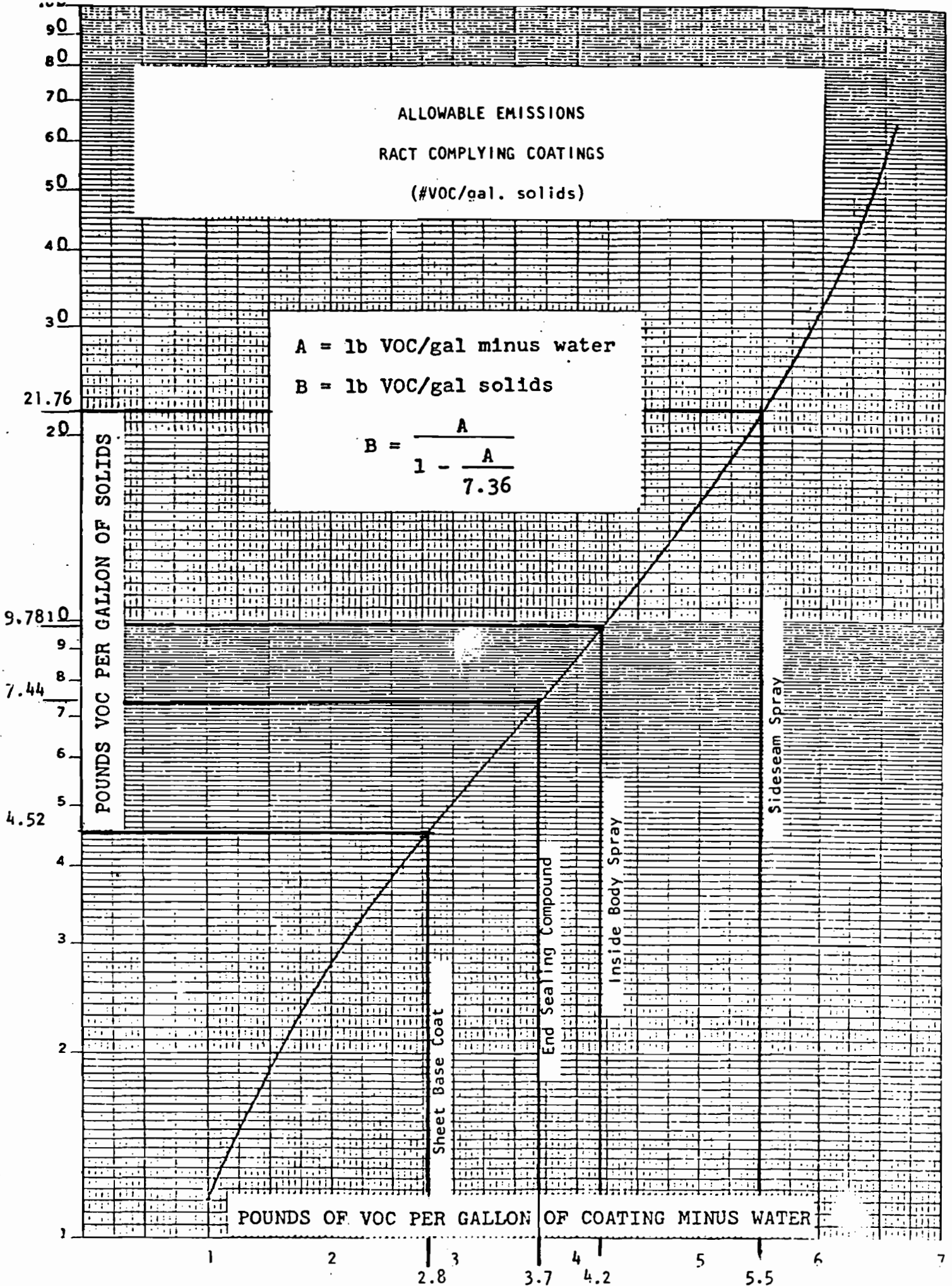
To more completely detail the method for determining compliance by RACT Equivalence in can plants, pages 29, 30, 31, and 32 illustrate reporting formats for a can plant showing the same "actual" emissions compared to differing "allowable" emission limitations that are included in various State/local regulations.

An illustration of a can plant having all the types of can coating emission limitations and coating operations is shown on page 28. The RACT Equivalence concept typical coating application rates/day are shown and are compared to the "allowable" emissions per 24 hour period.

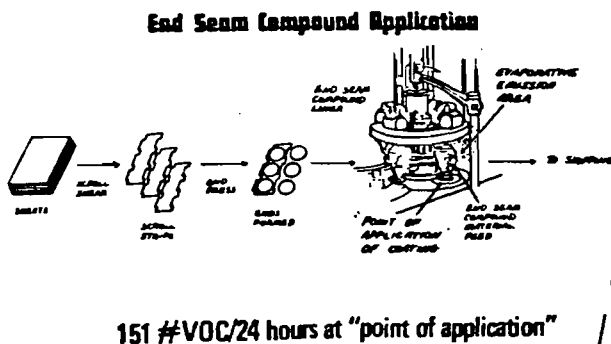
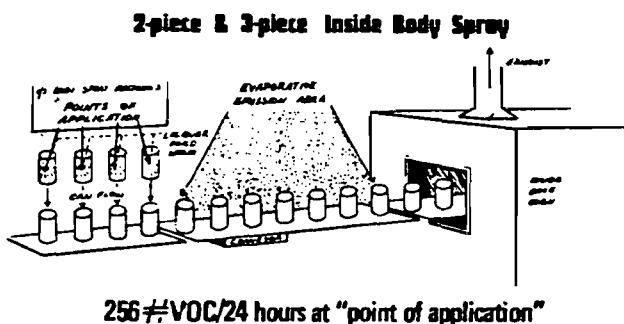
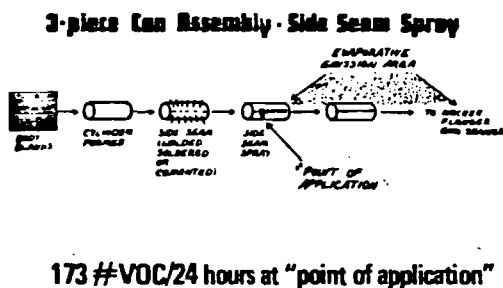
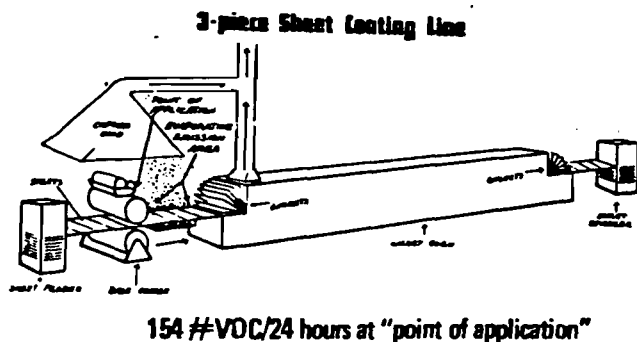
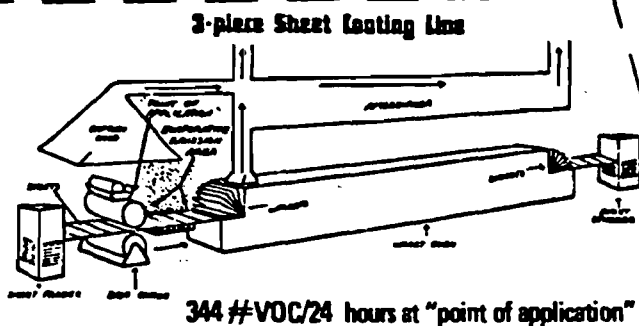
ALLOWABLE EMISSIONS
 FACT COMPLIING COATINGS
 (#VOC/gal. solids)

A = lb VOC/gal minus water
 B = lb VOC/gal solids

$$B = \frac{A}{1 - \frac{A}{7.36}}$$



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CONCEPT OF A PLANT WIDE BUBBLE



TOTAL PLANT (VOC/24 HOURS)

ALLOWABLE	1510
ACTUAL	1078

In many can plants similar types of coating operations or combinations of coating operations are used. Pages 33 through 39 illustrate typical coating rate ranges and the relationships of key pieces of coating line equipment. In addition typical non-productive time values are shown. The derivation of the values on this page is illustrated on page 29.

Note:

There may be unique cases where actual solvent density differs substantially from 7.36 #/gal. and where the actual solvent density could be used for calculating both allowable and actual emissions. The use of actual solvent densities should be restricted to the few cases where use of the average solvent density value (7.36 #/gal.) is inappropriate.

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	A				Pounds (2-1) VOC Per Gal. Solids (e)	B Application Rate (Gal. Per Units Produced) (f)	C Units Produced (g)	D		Control Efficiency (i)	Pounds of VOC Emitted (e x i x (1 - j)) (k)
	Pounds VOC Per Gal. Coating Less Water (a)	Volume Percent Solids (b)	Volume Percent Solvent (c)	Volume Percent Water (d)				Gal. Coating (f x g) (h)	Gal. Solids (b x h ÷ 100) (i)		
Actual Emissions (2)											
Sheet coating	5.42	28.4	73.6		20.52	22.0	5	110	29.0	0.81	113
Sheet coating	1.09	50.0	8.7	41.3	1.28	10.0	24	240	120.0		154
Sheet coating	5.06	31.2	68.8		16.23	10.0	24	240	74.9	0.81	231
Side seam	6.34	13.9	86.1		45.59	1.5	18	27	3.8		173
Inside spray	3.91	16.0	18.1	65.9	8.33	8.0	24	192	30.7		256
End compound	4.20	42.9	57.1		9.80	1.5	24	36	15.4		151
Actual total emissions											1,078
Allowable Emissions (3)											
Sheet coating	2.8				4.52				29.0		131
Sheet coating	2.8				4.52				120.0		642
Sheet coating	2.8				4.52				74.9		339
Side seam	5.5				21.76				3.8		83
Inside spray	4.2				9.78				30.7		300
End compound	3.7				7.44				15.4		115
Allowable total emissions											1,510

(1) **Compliance Concept (RACT Equivalence)** is based on the following principal for comparing actual and allowable emissions: The coating solids deposited on the metal substrate whether a complying or non-complying coating material used will be constant for each category of coating material. RACT Equivalence is: pounds of VOC emitted = pounds of VOC per gallon of solids x gallons of total solids applied per units of daily production (gallons of solids applied will be the same for calculating actual and allowable emissions).

(2) **Actual Emission Data**

The values under columns (a), (b), (c), and (d) are determined from coating supplier data sheets, and plant records including thinning solvents.

(2-1) To determine (e) values use the following equation: $e = \frac{7.36 \times (a)}{(b)} \times (c)$, where 7.36 is average density of coating solvents.

(2-2) Control efficiency varies with emission control devices used. The percent of capture and emission control device efficiency is established by using approved methods on the highest VOC content coating material applied to the specific coating equipment and maintained as a constant emission control efficiency. If no emission control device is used the control efficiency is zero (0).

(3) **Allowable Emission Data**

The values under column (a) are to be consistent with State/Local regulations for the categories of can coating materials (see Appendix). To determine (e) values use the following equation: $e = \frac{7.36 \times (a)}{(b)}$, where 7.36 is average density of coating solvents.

A Coating specifications and values as determined by coating manufacturers and supplied to can manufacturers.

B Can plants have documented "standard" application rates for coatings for each type of product produced.

C The units produced is expressed in "M sheets" for sheet coatings, "M cans" for 2-piece coatings, inside and side seam spray, and "M ends" for end sealing compound. (M = 1,000.)

D Calculated as shown.

E Total plant daily actual and allowable emission comparison.

F As noted in the graph on page 25, the VOC#/gallon solids is the significant comparison to be evaluated for compliance rather than #VOC/gallon coating minus water.

G See Section III for emission limitation rationale.

FORMAT FOR DETERMINING COMPLIANCE FOR CAN COATING OPERATIONS(1)

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	A				B	C	D		Control Efficiency (j)	Pounds of VOC Emitted (e x i x (1 - j)) (k)	
	Pounds VOC Per Gal. Coating Less Water (a)	Volume Percent Solids (b)	Volume Percent Solvent (c)	Volume Percent Water (d)			Pounds (2-1) VOC Per Gal. Solids (e)	Application Rate (Gal. Per Units Produced) (f)			Units Produced (g)
Actual Emissions (2)											
Sheet coating	5.42	26.4	73.8		20.52	22.0	5	110	29.0	.81	113
Sheet coating	1.09	50.0	8.7	41.3	1.28	10.0	24	240	120.0		154
Sheet coating	5.06	31.2	68.8		16.23	10.0	24	240	74.9	.81	231
Side seam	6.34	13.9	86.1		45.59	1.5	18	27	3.8		173
Inside spray	3.91	16.0	18.1	65.9	8.33	8.0	24	192	30.7		256
End compound	4.20	42.9	57.1		9.80	1.5	24	36	15.4		151
Actual total emissions											1,078
Allowable Emissions (3)											
Sheet coating	4.0				8.76				29.0		254
Sheet coating	4.0				8.76				120.0		1,051
Sheet coating	4.0				8.76				74.9		656
Side seam	5.5				21.76				3.8		83
Inside spray	4.2				9.78				30.7		300
End compound	4.2				9.78				15.4		151
Allowable total emissions											2,495

(1) **Compliance Concept (RACT Equivalence)** is based on the following principal for comparing actual and allowable emissions: The coating solids deposited on the metal substrate whether a complying or non-complying coating material used will be constant for each category of coating material. RACT Equivalence is: pounds of VOC emitted = pounds of VOC per gallon of solids x gallons of total solids applied per units of daily production (gallons of solids applied will be the same for calculating actual and allowable emissions).

(2) **Actual Emission Data**

The values under columns (a), (b), (c), and (d) are determined from coating supplier data sheets, and plant records including thinning solvents.

(2-1) To determine (e) values use the following equation: $e = \frac{7.36 \times (c)}{(b)}$, where 7.36 is average density of coating solvents.

(2-2) Control efficiency varies with emission control devices used. The percent of capture and emission control device efficiency is established by using approved methods on the highest VOC content coating material applied to the specific coating equipment and maintained as a constant emission control efficiency. If no emission control device is used the control efficiency is zero (0).

(3) **Allowable Emission Data**

The values under column (a) are to be consistent with State/Local regulations for the categories of can coating materials (see Appendix). To determine (e) values use the following equation: $e = \frac{7.36 \times (a)}{7.36 - (a)}$, where 7.36 is average density of coating solvents.

A Coating specifications and values as determined by coating manufacturers and supplied to can manufacturers.

B Can plants have documented "standard" application rates for coatings for each type of product produced.

C The units produced is expressed in "M sheets" for sheet coatings, "M" cans for 2-piece coatings, inside and side seam spray, and "M ends" for end sealing compound. (M = 1,000.)

D Calculated as shown.

E Total plant daily actual and allowable emission comparison.

F As noted in the graph on page 25, the VOC#/gallon solids is the significant comparison to be evaluated for compliance rather than #VOC/gallon coating minus water.

G See Section III for emission limitation rationale.

FORMAT FOR DETERMINING COMPLIANCE FOR CAN COATING OPERATIONS (1)
(Interim Limitations for Sheet Coating and End Seam Compound)

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FORMAT FOR DETERMINING COMPLIANCE FOR CAN COATING OPERATIONS (Interim Limitations for Sheet Coating and End Seam Compound with Reduced Control Efficiency)

	A				Pounds (2-1) VOC Per Gal. Solids (e)	B Application Rate (Gal. Per Units Produced) (f)	C Units Produced (g)	D		Control Efficiency (j)	Pounds of VOC Emitted (e x i x (1 - j)) (k)
	Pounds VOC Per Gal. Coating Less Water (a)	Volume Percent Solids (b)	Volume Percent Solvent (c)	Volume Percent Water (d)				Gal. Coating (f x g) (h)	Gal. Solids (b x h ÷ 100) (i)		
Actual Emissions (2)											
Sheet coating	5.42	26.4	73.6		20.52	22.0	5	110	29.0	0.75	149
Sheet coating	1.09	50.0	8.7	41.3	1.28	10.0	24	240	120.0		154
Sheet coating	5.06	31.2	68.8		16.23	10.0	24	240	74.9	0.75	303
Side seam	6.34	13.9	86.1		45.59	1.5	18	27	3.8		173
Inside spray	3.91	16.0	18.1	65.9	8.33	8.0	24	192	30.7		256
End compound	4.20	42.9	57.1		9.80	1.5	24	36	15.4		151
Actual total emissions											1,186
Allowable Emissions (3)											
Sheet coating	4.0				8.76				29.0		254
Sheet coating	4.0				8.76				120.0		1,051
Sheet coating	4.0				8.76				74.9		656
Side seam	5.5				21.76				3.8		83
Inside spray	4.2				9.78				30.7		300
End compound	4.2				9.78				15.4		151
Allowable total emissions											2,495

(1) **Compliance Concept (RACT Equivalence)** is based on the following principal for comparing actual and allowable emissions: The coating solids deposited on the metal substrate whether a complying or non-complying coating material used will be constant for each category of coating material. RACT Equivalence is: pounds of VOC emitted = pounds of VOC per gallon of solids x gallons of total solids applied per units of daily production (gallons of solids applied will be the same for calculating actual and allowable emissions).

(2) **Actual Emission Data**
The values under columns (a), (b), (c), and (d) are determined from coating supplier data sheets, and plant records including thinning solvents.

- (2-1) To determine (e) values use the following equation: $e = \frac{7.36 \times (a)}{(b)}$, where 7.36 is average density of coating solvents.
- (2-2) Control efficiency varies with emission control devices used. The percent of capture and emission control device efficiency is established by using approved methods on the highest VOC content coating material applied to the specific coating equipment and maintained as a constant emission control efficiency. If no emission control device is used the control efficiency is zero (0).

(3) **Allowable Emission Data**
The values under column (a) are to be consistent with State/Local regulations for the categories of can coating materials (see Appendix). To determine (e) values use the following equation: $e = \frac{7.36 \times (a)}{(b)}$, where 7.36 is average density of coating solvents.

- A Coating specifications and values as determined by coating manufacturers and supplied to can manufacturers.
- B Can plants have documented "standard" application rates for coatings for each type of product produced.
- C The units produced is expressed in "M sheets" for sheet coatings, "M cans" for 2-piece coatings, inside and side seam spray, and "M ends" for end sealing compound. (M = 1,000.)
- D Calculated as shown.
- E Total plant daily actual and allowable emission comparison.
- F As noted in the graph on page 25, the VOC#/gallon solids is the significant comparison to be evaluated for compliance rather than #VOC/gallon coating minus water.
- G See Section III for emission limitation rationale.

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	A				B	C	D			
Pounds VOC Per Gal. Coating Less Water (a)	Volume Percent Solids (b)	Volume Percent Solvent (c)	Volume Percent Water (d)	Pounds (2-1) VOC Per Gal. Solids (e)	Application Rate (Gal. Per Units Produced) (f)	Units Produced (g)	Gal. Coating (f x g) (h)	Gal. Solids (b x h ÷ 100) (i)	Control Efficiency (j)	Pounds of VOC Emitted (e x i x (1 - j)) (k)
Actual Emissions (2)										
Sheet coating	5.42	26.4	73.6	20.52	22.0	5	110	29.0	.81	113
Sheet coating	1.09	50.0	8.7	41.3	10.0	24	240	120.0		154
Sheet coating	5.06	31.2	68.8	16.23	10.0	24	240	74.9	.81	231
Side seam	6.34	13.9	86.1	45.59	1.5	18	27	3.8		173
Inside spray	3.91	16.0	18.1	65.9	8.0	24	192	30.7		256
End compound	4.20	42.9	57.1	9.80	1.5	24	36	15.4		151
Actual total emissions										1,078
Allowable Emissions (3)										
Sheet coating	2.5			3.79				29.0		110
Sheet coating	2.5			3.79				120.0		435
Sheet coating	2.5			3.79				74.9		284
Side seam	5.5			21.76				3.8		83
Inside spray	4.3			10.34				30.7		317
End compound	4.2			7.44				15.4		151
Allowable total emissions										1,400

(1) **Compliance Concept (RACT Equivalence)** is based on the following principal for comparing actual and allowable emissions: The coating solids deposited on the metal substrate whether a complying or non-complying coating material used will be constant for each category of coating material. RACT Equivalence is: pounds of VOC emitted = pounds of VOC per gallon of solids x gallons of total solids applied per units of daily production (gallons of solids applied will be the same for calculating actual and allowable emissions).

(2) **Actual Emission Data**

The values under columns (a), (b), (c), and (d) are determined from coating supplier data sheets, and plant records including thinning solvents.

(2.1) To determine (e) values use the following equation: $e = \frac{7.36 \times (c)}{(b)}$, where 7.36 is average density of coating solvents.

(2.2) Control efficiency varies with emission control devices used. The percent of capture and emission control device efficiency is established by using approved methods on the highest VOC content coating material applied to the specific coating equipment and maintained as a constant emission control efficiency. If no emission control device is used the control efficiency is zero (0).

(3) **Allowable Emission Data**

The values under column (a) are to be consistent with State/Local regulations for the categories of can coating materials (see Appendix). To determine (e) values use the following equation: $e = \frac{7.36 \times (a)}{7.36 - (a)}$, where 7.36 is average density of coating solvents.

A Coating specifications and values as determined by coating manufacturers and supplied to can manufacturers.

B Can plants have documented "standard" application rates for coatings for each type of product produced.

C The units produced is expressed in "M sheets" for sheet coatings, "M cans" for 2-piece coatings, inside and side seam spray, and "M ends" for end sealing compound. (M = 1,000.)

D Calculated as shown.

E Total plant daily actual and allowable emission comparison.

F As noted in the graph on page 25, the VOC#/gallon solids is the significant comparison to be evaluated for compliance rather than #VOC/gallon coating minus water.

G See Section III for emission limitation rationale.

FORMAT FOR DETERMINING COMPLIANCE FOR CAN COATING OPERATIONS (1)
(California 1982 Emission Limitations)

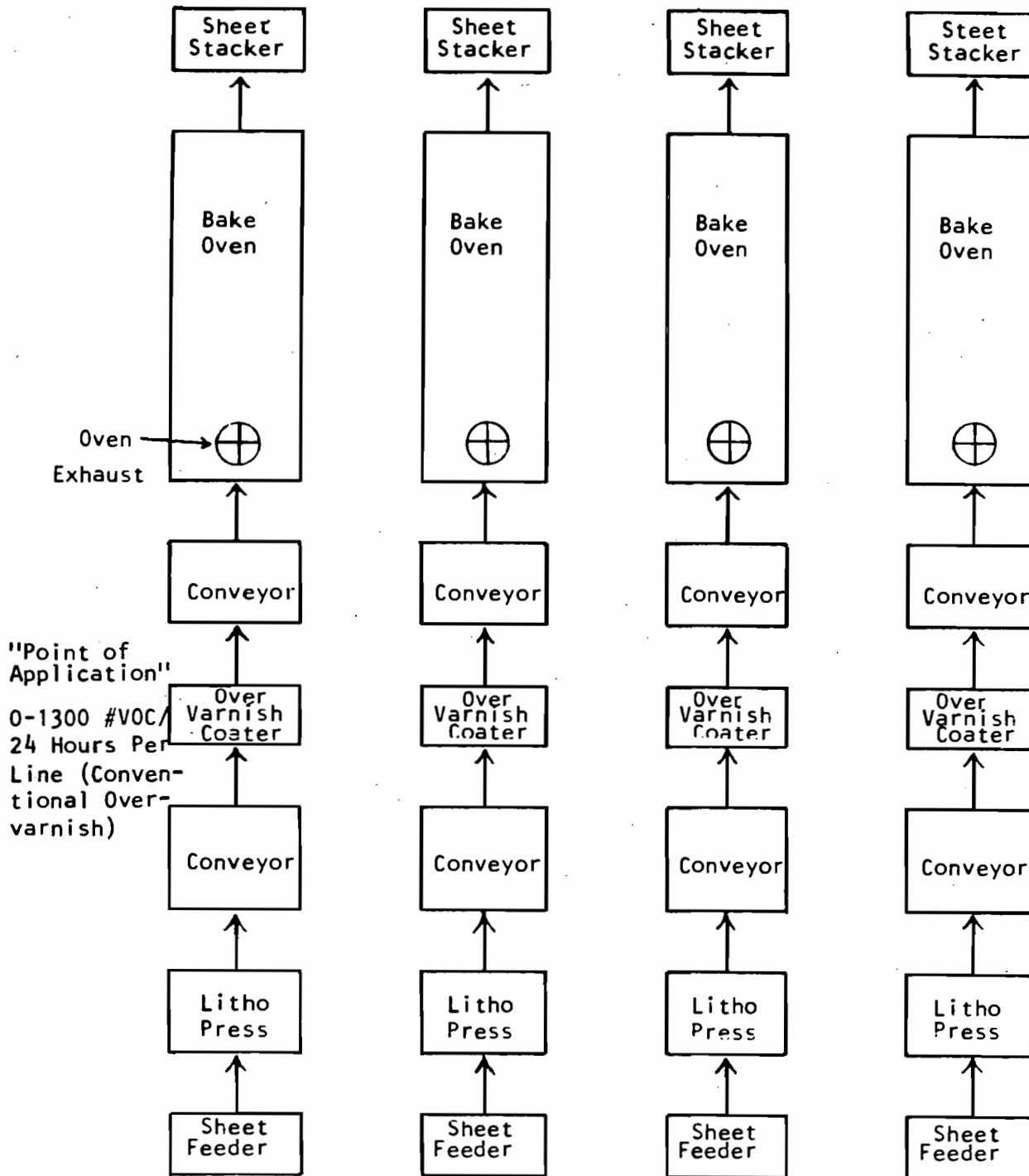
1. REPRESENTATIVE PLANT CONFIGURATIONS

The following six pages of can plant layout schematics are illustrative of the many types of can plant configurations that exist.

The information on the schematics is intended to indicate the key elements in emission evaluations and the variability of emission rates at any time during an operating day.

The type of plant illustrated on page 39 shows a plant layout that includes all of the emission limitations imposed upon can manufacturing. A number of can plants in the U.S. do use all of the can coatings and further exemplify the rationale and necessity for RACT Equivalence as a cost and energy effective method of compliance.

Can Plant Configurations Sheet Litho

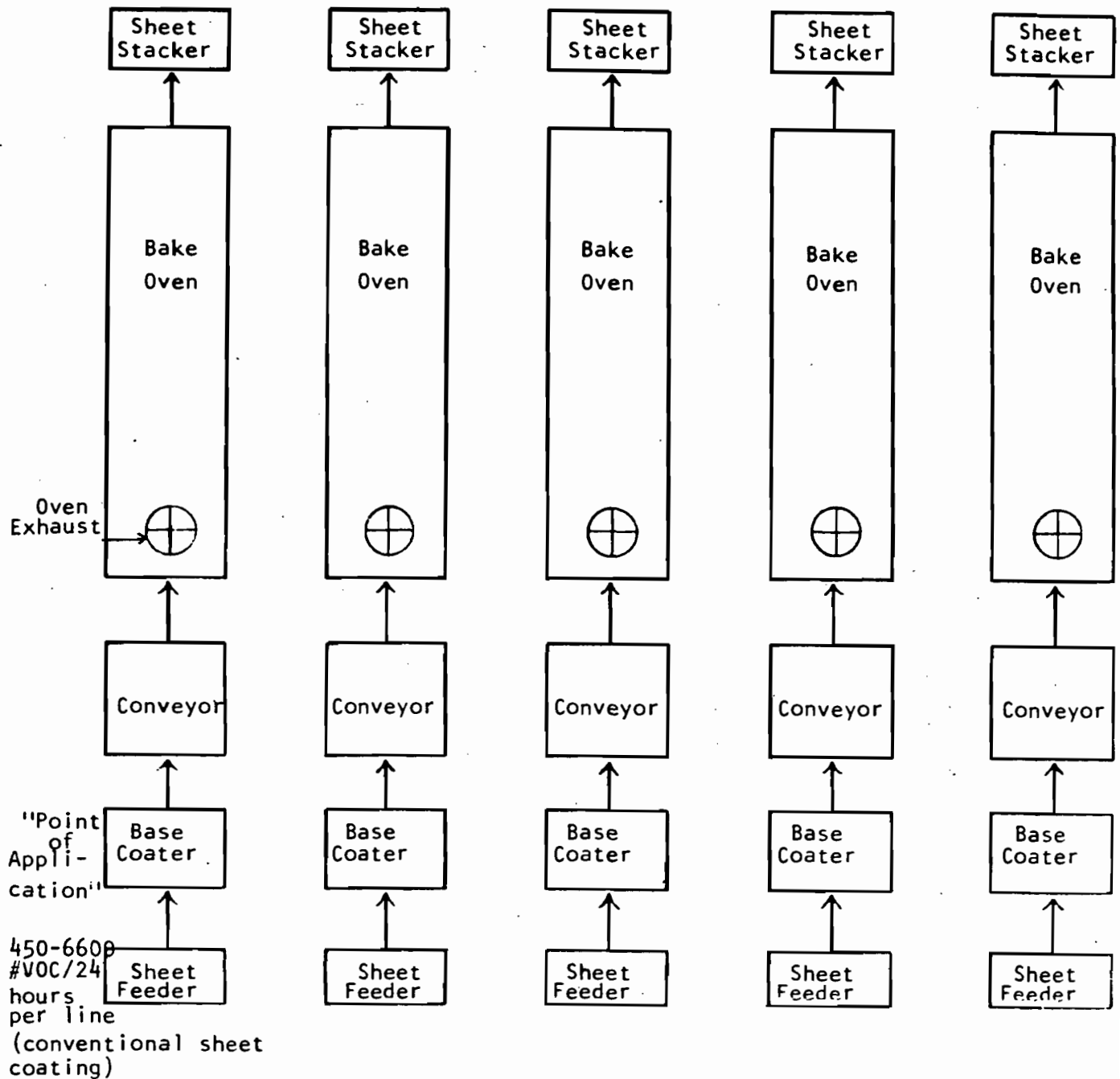


REPRESENTATIVE OPERATING STANDARDS

Non-Productive Time (Overvarnish Coater): 50 - 70%/day for job preparation (no VOC emission during this time).

In printing three or more colors on one sheet, the first pass through the oven does not require overvarnish application. Hence there is no VOC emission at that time.

Can Plant Configurations Sheet Coating

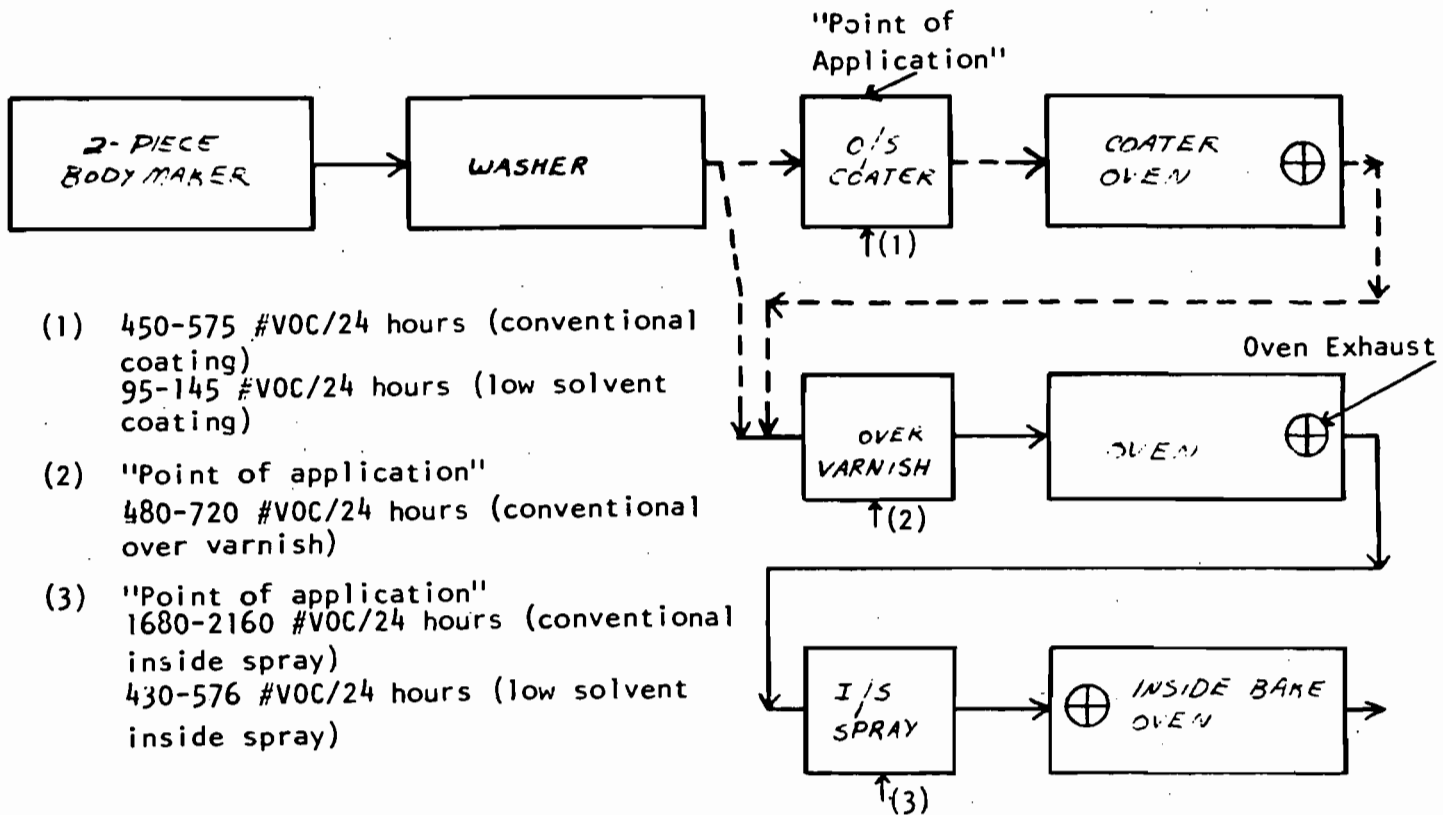


REPRESENTATIVE OPERATING STANDARDS

Non-Productive Time: 20 - 40%/ day for coater roll change, material changes, job preparation, etc. (no VOC emission during this time).

Can Plant Configurations

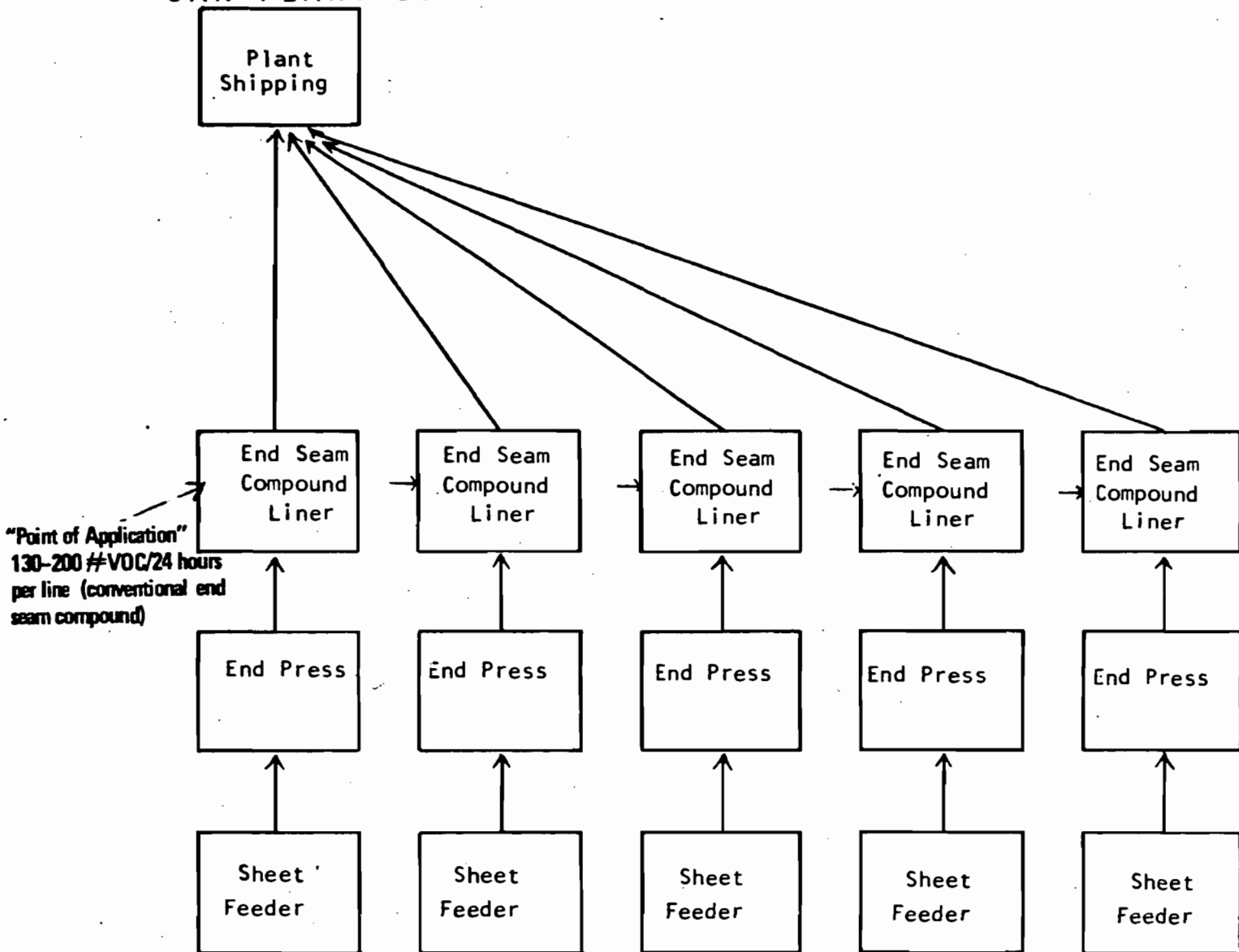
2pc. Body-Coating Can Manufacture with base coating option



REPRESENTATIVE OPERATING STANDARDS

Non-Productive Time: approximately 30%/day for job preparation and maintenance.

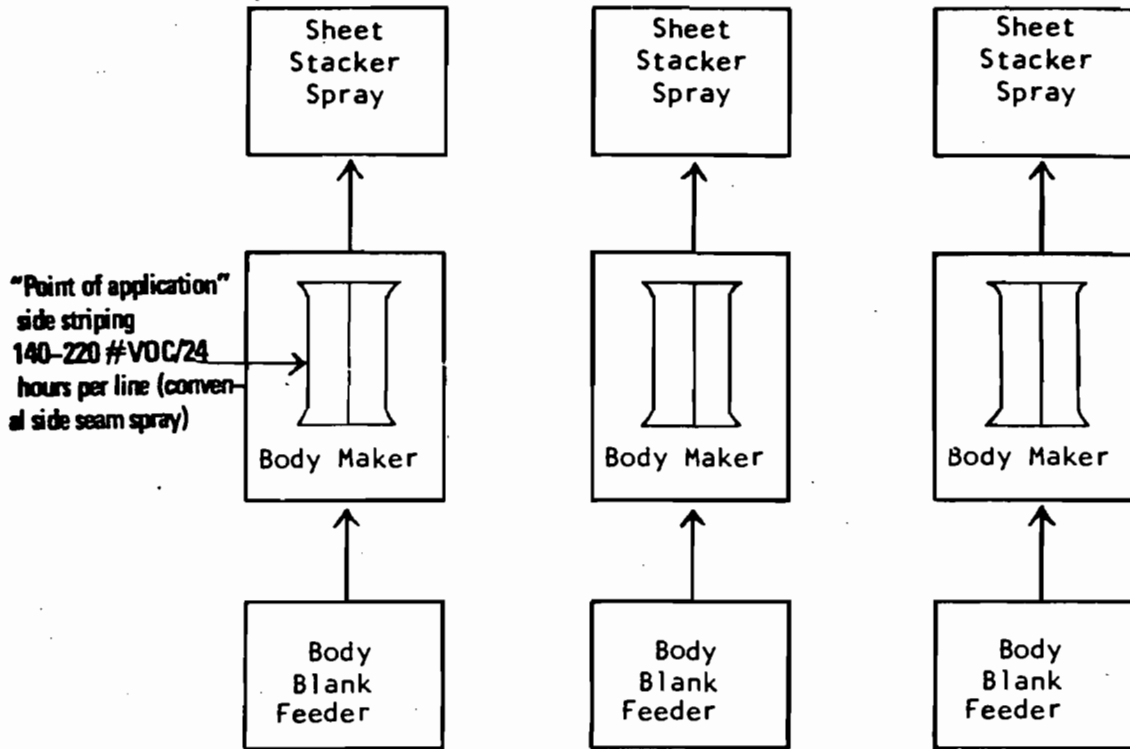
CAN PLANT CONFIGURATIONS END PRESS DEPARTMENT



REPRESENTATIVE OPERATING STANDARDS

Non-Productive Time: approximately 10%/day for tooling changes and maintenance.

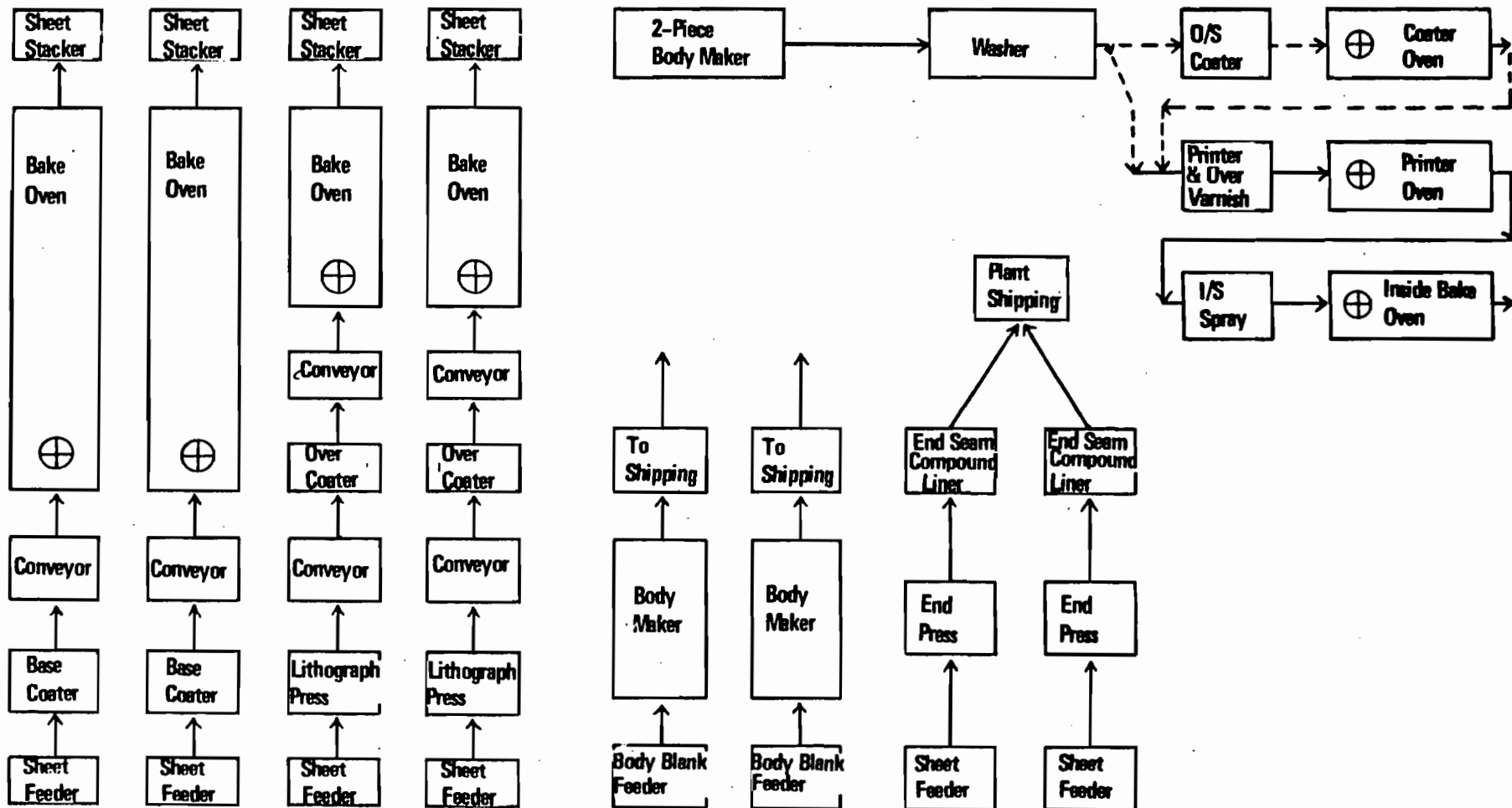
Can Plant Configurations 3pc. Body Assembly



REPRESENTATIVE OPERATING STANDARDS

Non-Productive Time: 20 - 30%/day for job preparation.

CAN PLANT CONFIGURATIONS



2. COMPLIANCE PLANS

A number of methods can be used to forecast compliance at the end of a planning period.

The following format is an example of a method of forecasting on a "typical operating day" in the future, the effect of replacing several conventional coatings with experimental low solvent coatings in a can plant that has sheet coating operations and end seam compound operations.

The format shown is essentially the same as the RACT Equivalence except that gallons per year of coating material to be used replaced the actual product mix in the RACT Equivalence compliance format. Using gallons/year simplifies data handling and is quite adequate for planning purposes.

TYPICAL RACT COMPLIANCE PLAN

ACTUAL
(250 Operating Days/Year)

Dept.	Material Code Std. Lo Solv.	Ann.Vol. Gal. A	Vol.% Solid B	Vol.% Solvent C	#VOC/ Gal.Solid D	Avg.Gal. Per Day E=A/250	Avg.Gal.Solid Per Day Applied F = E x B/100	Cont. Eff. G	#VOC Per Day H=FxD(1-G)
Litho (Sheet Coating)	Exp. 1	20206	30.9	18.2	4.34	81	25	0	109
	Exp. 2	27353	52.7	47.3	6.61	109	57	0	377
	Coat.A	5000	21.3	78.7	27.19	20	4	0	109
	Coat.B	1000	47.6	52.4	8.10	4	2	0	16
	Coat.C	4500	32.3	67.7	15.43	18	6	0	93
	(10% Other Coat)	5806	25.0	75.0	22.08	23	6	0	132
	Thinning Solvent	3193		100.0	7.36	13	0	0	96
Total Act. #VOC									932
Press (End Sealing Compound)	Exp.C1	20187	58.7	41.3	5.17	81	48	0	248
Total Act. #VOC									248
Plant	Total Act. #VOC								<u>1180</u>

ALLOWABLE

								#VOC Per Day H=DxF	
Litho (Sheet Coating)	Exp. 1	20205			8.76		25	219	
	Exp. 2	27353			8.76		57	499	
	Coat.A	5000			8.76		4	35	
	Coat.B	1000			8.76		2	18	
	Coat.C	4500			8.76		6	53	
Total Allow #VOC								824	
Press (End Sealing Compound)	Exp.C1	20187			9.78		48	469	
Total Allow #VOC								469	
Plant	Total Allow #VOC								<u>1293</u>

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3. COMPLIANCE DEMONSTRATION

The following sections contain exhibits of typical plant records that are appropriate for a can plant to establish compliance.

With the exception of the RACT Daily Report, the other types of can plant records may vary in format from one plant to another, but the information and data are essential to normal business-like operation of a plant.

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RACT BUBBLE
ACTUAL DAILY REPORT FOR 03/28/82

LITHO DEPARTMENT		#VOC /GAL CTG	VOL % SLD	VOL % SOL	VOL % H2O	#VOC /GAL SLDS	APPL RATE G/M UNIT	M UNIT MFG	GAL CTG APPL	GAL SLDS APPL*	CTL EFF %	#VOC ACTL*
PRODUCT	SPEC-CD	-H2O (a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)=(f)x(g)	(i)=(b)x(h)/100	(j)	(k)=(e)x(f)x $\left[\frac{100-(j)}{100}\right]$
207.5 END	A	5.27	28.4	71.6		18.56	.075	1000	75	21		395
207.5 END	A	5.27	28.4	71.6		18.56	.075	500	38	11	81	38
207.5 X 401	A	5.27	28.4	71.6		18.56	1.80	500	900	256	81	901
207.5 X 401	B	4.88	33.7	66.3		14.48	1.99	1000	1990	671	81	1845
209.5 END	C	4.93	33.0	67.0		14.94	.080	500	40	13	81	37
300 END	A	5.27	28.4	71.6		18.56	.090	100	9	3	81	9
300 X 404	B	4.88	33.7	66.3		14.48	1.50	500	750	253	81	696
307 END	A	5.27	28.4	71.6		18.56	.090	500	45	13	81	45
307 X 710	A	5.27	28.4	71.6		18.56	2.50	500	1250	355	81	1252
THINNING	SOLVENT					7.36				10		74
THINNING	SOLVENT					7.36				40	81	56
ACTUAL TOTAL EMISSIONS											5348	

RACT BUBBLE
ALLOWABLE DAILY REPORT FOR 03/28/82

LITHO DEPARTMENT		#VOC /GAL CTG	#VOC /GAL SLDS	GAL SLDS APPL*	#VOC ALWD *
PRODUCT	SPEC-CD	-H2O			
207.5 END	A	4.00	8.76	21.3	187
207.5 END	A	4.00	8.76	10.8	95
207.5 X 401	A	4.00	8.76	255.6	2239
207.5 X 401	B	4.00	8.76	670.6	5874
209.5 END	C	4.00	8.76	13.2	116
300 END	A	4.00	8.76	2.6	23
300 X 404	B	4.00	8.76	252.8	2215
307 END	A	4.00	8.76	12.8	112
307 X 710	A	4.00	8.76	355.0	3110
ALLOWABLE TOTAL EMISSIONS					13971

* Calculated values rounded

3. a. STANDARD DATA FOR COATINGS

Coating suppliers provide technical data to can manufacturers as a normal part of their service. VOC data is based upon the coating suppliers direct knowledge of the "material balance" in production of a coating product to specification. In establishing the VOC content of a specific coating, the can manufacturers data will be the most reliable information available. Tests of coating material on a line using the several standard methods are subject to wide variation in precision and can be only considered indicative rather than significant values.

Since a can plant may use 30 to 40 different can coatings, it is common practice to have a tabulation as shown on page 45 for convenience in calculating RACT compliance.

X CAN COMPANY

STANDARD DATA

COATINGS*

<u>CODE</u>	<u>DENSITY LB./GAL.</u>	<u>VOL. % SOLIDS</u>	<u>VOL. % VOC</u>	<u>VOL. % WATER</u>	<u>(VOC) LB./GAL. (LESS WATER)</u>	<u>(VOC) LB./ GAL. SOLIDS</u>
A001	8.0	44.6	55.4	0	4.1	9.1
A002	7.7	14.5	85.5	0	6.3	43.4
A003	11.9	50.1	49.9	0	3.7	7.3
A004	9.0	20.8	79.2	0	5.8	28.0
A005	8.1	54.8	45.2	0	3.3	6.1

A250

*Values derived from suppliers data submissions.

3. b. COATING SUPPLIER INVOICES

Coating suppliers are showing the VOC content of specification coatings on their invoices. Another means of defining the VOC content for compliance reporting.

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ORIGINAL INVOICE

Sample Copy

PPG INDUSTRIES, INC. COATINGS AND RESINS DIVISION

PLEASE REMIT TO PPG INDUSTRIES, INC.

TERMS -

TO INSURE PROPER CREDITING OF YOUR ACCOUNT, RETURN THIS STATE WITH YOUR REMITTANCE.

\$ AMOUNT ENCLOSED

INVOICE NO. DATE

SHIP TO

COLUMBIA CONTAINER DALLAS, TEXAS

SOLD TO

COLUMBIA CONTAINER GENERAL OFFICES CHICAGO, ILLINOIS

Table with columns: OUR ORDER NUMBER, CUSTOMER NUMBER, CUSTOMER ORDER NUMBER, DATE SHIPPED, F.O.B. SHIPPING POINT, B/L NUMBER, REF. NO., ORIGINAL ORDER NO., SALESMAN, BND CLASS, % CREDIT, NO. INV., SHIPPED VIA, HOW SHIPPED.

KEY TO HOW SHIP: PREPAID 1, COLLECT 2, ADDED 3, ALLOWED 4, LOCAL PPG 5

Table with columns: PRODUCT CODE, CONTAINERS ORDERED (QUANTITY, SIZE), CONTS. B/O QUAN., QUANTITY SHIPPED, UNIT PRICE, AMOUNT.

Table with 7 rows for description. Row 1: CR2069 White Coating (CCI 4037) B.N. Q23456. Row 2: VOC 2.8 per (ASTM 2369-81). Large handwritten 'SAMPLE' across the table.

TOTAL THIS ORDER

INVOICE NO.

ORIGINAL INVOICE



CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SECTION 6, 7, AND 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED, AND OF REGULATIONS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR ISSUED UNDER SECTION 14, THEREOF.

3. c. COATING APPLICATION STANDARDS

Since one of the important processes in can manufacturing is application of protective coatings, can companies have maintained industrial engineering standards for the specific coating material for a specific type of can. A sample standards sheet is shown on page 49.

X CAN COMPANY
INDUSTRIAL ENGINEERING COATING APPLICATION STANDARDS

<u>Can Size</u>		<u>No. of Bodies Per Sheet</u>		<u>Material Code</u>	<u>Supplier Code</u>	<u>Base Box Per M Sheets</u>	<u>Gal. Per Base Box @ Specified Coating Weight, mg/4 sq. in.</u>	<u>Coating Weight mg/4 sq. in.</u>
<u>Contr.</u>	<u>Sufx.</u>	<u>#Out</u>	<u>Cl.</u>	<u>Material</u>	<u>Code/Descr.</u>	<u>B Box</u>	<u>Std. Gal.</u>	<u>MGS</u>
00153	205	45	8	082	66	33.149	.097	45
00157	205	45	8	082	66	34.748	.097	45
00645	205	44	8	092	66	35.780	.097	45
01884	205	10	8	082	66	29.765	.097	45
10380	205	15	8	082	66	38.896	.097	45
22427	205	28	8	082	66	33.630	.097	45
22432	205	20	8	082	66	31.805	.097	45
22480	205	12	8	082	66	29.391	.097	45
39584	103	35	8	082	66	44.225	.097	45
22427	205	28	8	083	22-L	33.638	.107	41
22480	205	12	8	083	22-L	29.391	.107	41
M2230	102	35	8	084	46	45.917	.131	41
M2230	102	35	8	085	2-W-159	45.917	.134	40
M2231	102	28	8	085	2-W-159	36.642	.134	40
M2230	102	35	8	086	2-W-158	45.917	.123	40
M2232	102	35	8	086	2-W158	45.834	.123	40
00645	205	44	8	088	161 U	35.790	.119	50
01884	205	10	8	088	161 U	29.765	.119	50
09725	205	40	8	088	161 U	31.314	.119	50
09732	205	35	8	088	161 U	30.823	.119	50
09749	205	30	8	088	161 U	33.581	.119	50
09751	205	20	8	088	161 U	28.495	.119	50
09762	205	24	8	088	161 U	29.005	.119	50
09765	205	20	8	088	161 U	27.355	.119	50
09770	205	20	8	088	161 U	31.965	.119	50
09774	205	16	8	088	161 U	27.232	.119	50
09782	205	28	8	088	161 U	32.028	.119	50
09794	205	20	8	088	161 U	30.404	.119	50
09796	205	20	8	088	161 U	30.808	.119	50
09797	205	16	8	088	161 U	30.687	.119	50
09798	205	16	8	088	161 U	32.942	.119	50
13295	205	20	8	088	161 U	34.575	.119	50
22427	205	28	8	088	161 U	33.638	.119	50
22432	205	20	8	088	161 U	31.805	.119	50
22480	205	12	8	088	161 U	29.391	.119	50
M2230	102	35	8	099	03-1	45.917	.095	40
M2230	104	35	9	090	0-317	45.917	.057	12

Area conversion factor (one base box equals 31,360 square inches).

Production records which are computed in 1,000's sheets are converted to base boxes using the appropriate factor for each sheet size.

Similar conversion factors are available for sideseam spray, inside body spray and end sealing compound.

3. d. PRODUCTION RECORDS

Production records are necessary for every shift in a can plant to record customer orders as completed for shipment.

A sample lithograph department (sheet coating and litho printing) daily record is shown on page 53.

3. e. AFTERBURNER TEMPERATURE RECORDS

Thermal Afterburners

The efficiency of thermal afterburners is determined by the three "T's"--time, temperature, and turbulence. Two of these, residence time and turbulence are governed by the basic design of the afterburner. The third, temperature, is easily monitored and recorded by conventional measuring devices which we all use.

For whatever reason, if excess solvent fumes are generated in the oven beyond the capability of the incinerator, auto-ignition occurs and the high temperature limit switch turns off the oven.

Thus, once the efficiency of a thermal afterburner is established, monitoring of the afterburner temperature is sufficient to assure an adequate destruction efficiency.

Best Available Copy

Catalytic Afterburners

The efficiency of catalytic afterburners are also governed by the same three "T's". However, the surface condition of the catalyst bed adds a fourth variable. The activity of this catalyst bed is affected by aging, high temperatures, inorganic matter and contaminants which cause masking.

The solvents commonly used in the can industry do not normally contain these contaminants and limiting devices can be used to prevent exposure to high temperatures. The presence of inorganics and other masking problems can be controlled readily by routine inspection and periodic cleaning according to the manufacturers's procedures.

By monitoring the operating temperature, the temperature rise across the catalyst bed and the pressure drop across the bed, one can be assured of the optimum performance of the system.

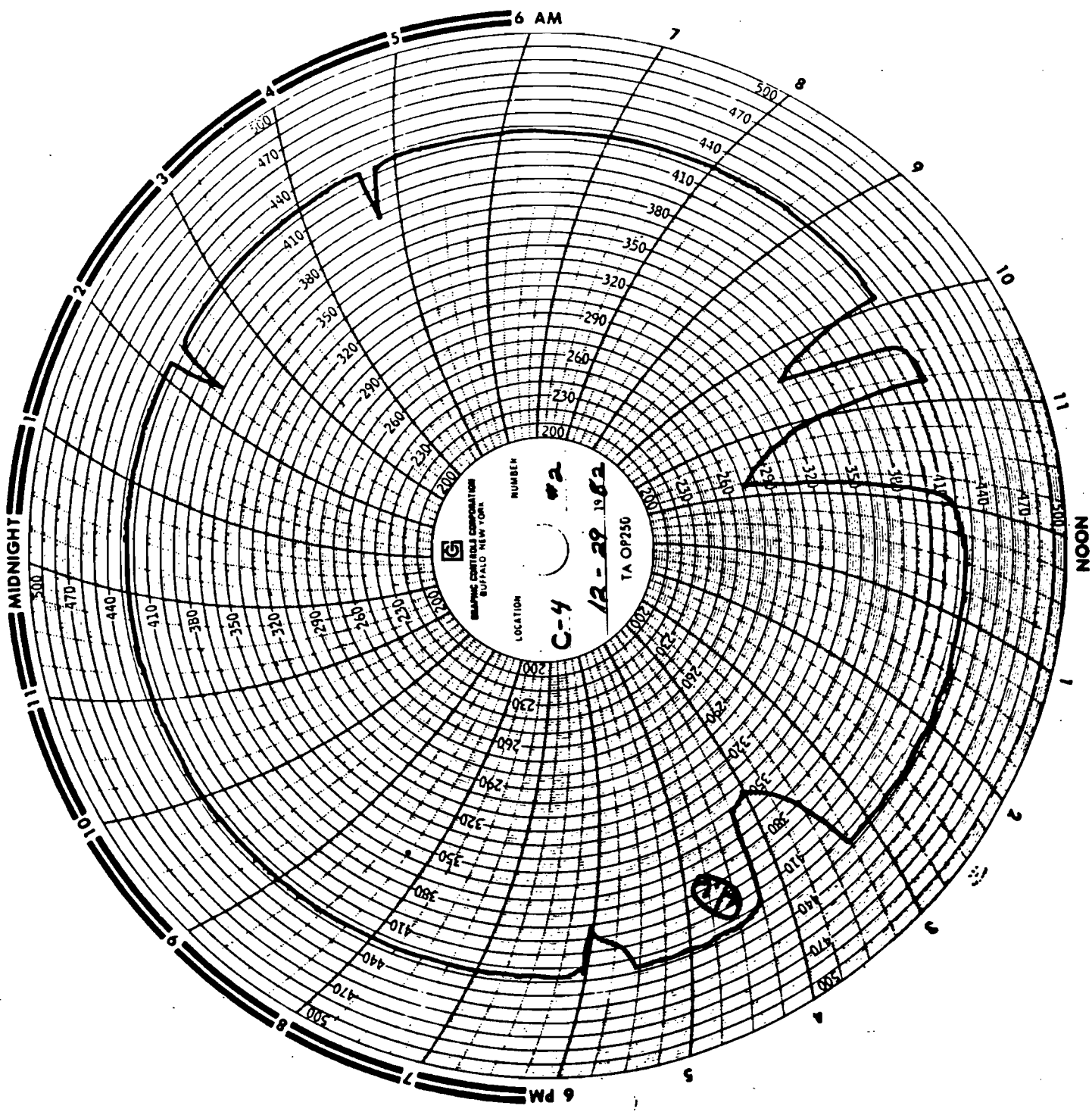
Aging of the bed can be evaluated at the end of the recommended life of the catalyst (usually 25,000 hours) by removing a single catalyst module and sending it for a simple laboratory test. We have experienced destruction efficiencies in excess of 85 percent even after 25,000 hours of use has occurred by utilizing the proper maintenance procedures.

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Conclusion

The above monitoring techniques can be a cost effective means for indicating the performance efficiency of an afterburner.

Afterburner temperature records are required by regulation. Automatic temperature recording devices are normally used and the resulting records are filed and retained as part of the plant compliance record for the period of time required by state regulation. A copy of a typical plant's 24 hour recorder chart from a catalytic afterburner is shown on page 54.



APPENDIX

	<u>Page</u>
State Regulation Summary (by U.S. EPA Region)	56
Bibliography	67

STATE REGULATION SUMMARIES

The following summaries of State/local regulations should be used for guidance only.

For compliance planning, the specific State/local regulations should be used.

REGION I

Connecticut
 Maine
 Massachusetts
 New Hampshire
 Rhode Island
 Vermont

CAN COATING REGULATIONS

Harley F. Laing, Director of Air Management Division
 JFK Federal Building, Room 2303
 Boston, MA 02203
 (617) 223-2226

	<u>Connecticut</u>	<u>Massachusetts</u>
EMISSION LIMITS (lb / VOC / gallon less water)		
Sheet:	2.8	2.8
Two - piece O / S:	2.8	2.8
Sideseam:	5.5	5.5
Interior body spray and exterior end coat:	4.2	4.2
Compound:	3.7	3.7
BUBBLE:	Yes	Yes
AFTERBURNER SHUTDOWN:	Dec. - Feb.	No
EXEMPTION LEVEL:	7.3 tons/year	100 tons/year
APPLICABILITY:	Statewide	Statewide
VARIANCES:	Available	Available
COMPLIANCE:	10/1/80	7/1/80

Remarks:

Must meet compliance
date or have a plan to
comply by 7/1/82.

Must meet compliance
date or have a plan to
comply by 7/1/82.

REGION II

New York
New Jersey
Puerto Rico
Virgin Islands

CAN COATING REGULATIONS

William Baker, Chief Air Programs Branch
Federal Office Building, 26 Federal Plaza
New York, New York 10007
(212) 264-2517

	<u>New Jersey</u>	<u>New York</u>
EMISSION LIMITS (lb / VOC / gallon less water)		
Sheet:	2.8	2.8
Two - piece O / S:	2.8	2.8
Sideseam:	5.5	5.5
Interior body spray and exterior end coat:	4.2	4.2
Compound:	3.7	3.7
BUBBLE:	Yes	Yes
AFTERBURNER SHUTDOWN:	No	No
EXEMPTION LEVEL:	1 gallon/hour, 5 gallons/day	5 gallons/day in NYC Metropolitan Area; 100 tons/year or 30 gallons/day elsewhere
APPLICABILITY:	Statewide	County - specific
VARIANCES:	Available	Available
COMPLIANCE:	1/1/82	7/1/82
Remarks:	Must submit request for time extension.	Winter afterburner shutdown will probably be allowed.

REGION III

Delaware
District of Columbia
Maryland
Pennsylvania
Virginia
West Virginia

CAN COATING REGULATIONS

Harry Hanson, Air Programs and Energy Acting Branch Chief
Curtis Building, Sixth and Walnut Streets
Philadelphia, PA 19106
(215) 587-8175

	<u>Maryland</u>	<u>Pennsylvania</u>	<u>Virginia</u>	<u>West Virginia</u>
EMISSION LIMITS (lb / VOC / gallon less water)				
Sheet:	2.8	2.84	2.8	West Virginia has no surface coating controls.
Two - piece O / S:	2.8	2.84	2.8	
Sideseam:	5.5	5.51	5.5	
Interior body spray and exterior end coat:	4.2	4.25	4.2	
Compound:	3.7	3.87	3.7	
BUBBLE:	Yes	Yes	Yes	
AFTERBURNER SHUTDOWN:	No	Yes	No	
EXEMPTION LEVEL:		500/pounds/day or 50 tons/year	7.3 tons/year, 40 pounds/day and 8 pounds/hour	
APPLICABILITY:	County-specific	Statewide	County-specific	
VARIANCES:	Available	Available	Available	
COMPLIANCE:	12/31/82	4/9/82	11/30/82	

REGION IV

Alabama
 Florida
 Georgia
 Kentucky
 Mississippi
 North Carolina
 South Carolina
 Tennessee

CAN COATING REGULATIONS

Winston Smith, Deputy Chief, Air Management Branch, ANVMD
 345 Courtland Street, NE
 Atlanta, Georgia 30365
 (404) 881-3043

	<u>Alabama</u>	<u>Florida</u>	<u>Georgia</u>	<u>Kentucky</u>	<u>North Carolina</u>	<u>South Carolina</u>	<u>Tennessee</u>
EMISSION LIMITS (lb / VOC / gallon less water)							
Sheet:	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Two-piece O/S:	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Seam:	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Interior body spray and exterior end coat:	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Compound:	3.7	3.7	3.7	3.7	3.7	3.7	3.7
BUBBLE:	Yes	No	No	Yes	Yes	No	No
AFTERBURNER SHUTDOWN:	No	No	No	No	No	No	No
EXEMPTION LEVEL:	100 tons/year	15 pounds/day and 3 pounds/ hour	100 tons/year	100 tons/year for rural counties, no exemption for urban counties	100 tons/year	550 pounds/ day, 150 pounds/hour	100 tons/year for rural counties 25 tons/year for urban counties
APPLICABILITY:	Statewide	County-specific	County-specific	County-specific	Mecklenburg County Available	Statewide	Statewide
VARIANCES:	Available	Available	Available	Available	Available	Available	Available
COMPLIANCE:	12/31/81	3/1/82	11/1/81	8/1/81	5/1/82	12/1/81	9/1/81

Remarks:

Variations granted
by Director.

Compliance
date can be
extended to
12/31/82.

Extension of
time available
through variance
procedure.

Compliance
date can be
extended to
7/1/87.

REGION V

Indiana
 Illinois
 Michigan
 Minnesota
 Ohio
 Wisconsin

CAN COATING REGULATIONS

Steve Rothblatt, Chief of Air Programs Branch
 230 South Dearborn Street
 Chicago, IL 60604
 (312) 353-2211

	<u>Indiana</u>	<u>Illinois</u>	<u>Michigan</u>	<u>Minnesota</u>	<u>Ohio</u>	<u>Wisconsin</u>
EMISSION LIMITS (lb / VOC / gallon less water)						
Sheet:	4.0 (2.8 by 12/31/85)	2.8	2.8	Attainment for ozone no controls	2.8	2.8
Two-piece O/S:	2.8	2.8	2.8		2.8	2.8
Sideseam:	5.5	5.5	5.5		5.5	5.5
Interior body spray and exterior end coat:	4.2	4.2	4.2		4.2	4.2
Compound:	4.2 (3.7 by 12/31/85)	3.7	4.2 (3.7 by 12/31/85)		3.7	3.7
BUBBLE:	Yes	Yes	Yes		Yes	Yes
AFTERBURNER SHUTDOWN:	Yes	Yes	Yes		No	Yes
EXEMPTION LEVEL:	100 tons/year	25 tons/year	100 lbs./day		100 tons/year	100 tons/year except as noted
APPLICABILITY:	County-specific	Statewide	Statewide		County-specific	County-specific
VARIANCES:	Available	Available	Available		Available	Time extension
COMPLIANCE:	12/31/82	12/31/82	12/31/82		4/1/82	12/1/81

Remarks:

Variance regulations will be handled as SIP revisions.

End sealing compound compliance may be extended 12 months.

REGION VII

Iowa
Kansas
Nebraska
Missouri

CAN COATING REGULATIONS

Carl M. Walter, Chief of Air Branch
324 East 11th Street
Kansas City, MO 64106
(816) 374-3791

Missouri

Kansas

EMISSION LIMITS
(lb / VOC / gallon
less water)

Sheet:	4.0 (2.8 by 12/31/85)
Two - piece O / S:	2.8
Sideseam:	5.5
Interior body spray and exterior end coat:	4.2
Compound:	4.2 (3.7 by 12/31/85)

BUBBLE: Yes

**AFTERBURNER
SHUTDOWN:** No

EXEMPTION LEVEL: 50 tons/year

APPLICABILITY: County-specific

VARIANCES:

COMPLIANCE: 12/31/82 Except as noted
above

Remarks:

Kansas regulations not available
at this time.

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REGION VIII

Colorado
Montana
North Dakota
South Dakota
Utah
Wyoming

CAN COATING REGULATIONS

Robert DeSpain, Chief of Air Programs Branch
1860 Lincoln Street
Denver, CO 80295
(303) 837-3471

Colorado

EMISSION LIMITS (lb / VOC / gallon less water)

Sheet:	2.8
Two - piece O / S:	2.8
Side Seam:	5.5
Interior body spray and exterior end coat:	4.2
Compound:	3.7

BUBBLE:

AFTERBURNER SHUTDOWN:

EXEMPTION LEVEL:

APPLICABILITY:

County-specific

VARIANCES:

COMPLIANCE:

12/31/82

REGION IX

American Samoa
 Arizona
 California
 Guam
 Hawaii
 Nevada
 Northern Mariana Islands

CAN COATING REGULATIONS

Dave P. Howekamp, Director, Air Management Division
 215 Fremont Street
 San Francisco, CA 94105
 (415) 556-7882

	<u>Arizona</u>	Bay Area	<u>California</u> South Coast	San Diego
EMISSION LIMITS:	Emission Limits (lb/VOC/gallon less water)	Emission Limits (gVOC/liter coating less water) *	Emission Limits (gVOC/liter coating less water) *	Emission Limits (gVOC/liter coating less water)*
Sheet:	2.8	300 (225 by 1/1/85)	300 (225 by 1/1/85)	180
Two-piece O/S:	2.8	250	250	250
Sideseam:		660	660	660
Interior body spray and exterior end coat:	4.2	510	510	510
Compound:	3.7	500 (440 by 1/1/83 for two-piece, 440 by 1/1/85 for three-piece)	500 (440 by 1/1/83 for two-piece, 440 by 1/1/85 for three-piece)	0 (two-piece) 440 (three-piece)
BUBBLE:	No	Yes	Yes	No
AFTERBURNER SHUTDOWN:	No	No	No	No
EXEMPTION LEVEL:				
APPLICABILITY:	Maricopa County	Entire district	Entire district	Entire district
VARIANCES:				
COMPLIANCE:	12/31/81	1/1/82	3/1/82	4/1/82

Remarks:

CONVERSIONS*

<u>Grams of VOC Coating Less Water</u>	<u>Pounds of VOC Per Gallon of Coating Less Water</u>
180	1.5
225	1.9
250	2.1
300	2.5
440	3.7
500	4.2
510	4.3
660	5.5

REGION X

**Alaska
Idaho
Oregon
Washington**

CAN COATING REGULATIONS

**Clark Gaulding, Chief of Air Program Branch
1200 Sixth Avenue
Seattle, WA 98101
(206) 442-1941**

	<u>Oregon</u>	<u>Washington</u>
EMISSION LIMITS (lb / VOC / gallon less water)		
Sheet:	2.8	2.8
Two-piece O/S:	2.8	2.8
Sideseam:	5.5	5.5
Interior body spray and exterior end coat:	4.2	4.2
Compound:	3.7	3.7
BUBBLE:	Yes	Yes
AFTERBURNER SHUTDOWN:	Yes	Yes
EXEMPTION LEVEL:	100 tons/year	600 lbs./day
APPLICABILITY:	County-specific	County-specific
VARIANCES:	Available	Available
COMPLIANCE:	12/31/82	4/1/82

BIBLIOGRAPHY

Compliance with VOC Emission Limitations for Can Coating Operations--(Bubble Policy) 45 Fed. Reg. 80824, December 8, 1980 (40 CFR Part 51).

Revised Seasonal Afterburner Policy--U.S. EPA letter, W. C. Barber, dated December 1, 1980.

Equivalency Calculations with the CTG Recommendations for Surface Coating--U.S. EPA letter, R. G. Rhoads, dated October 17, 1980.

Procedure to Calculate Equivalency with the CTG Recommendations for Surface Coating--U.S. EPA letter, R. G. Rhoads, dated May 5, 1980 (w/attachment).

Approval of Revised Compliance Schedules for Control of Volatile Organic Compounds from Certain Can Coating Operations--47 Fed. Reg. 10293, March 10, 1982.

Emissions Trading Policy Statement; General Principles for Creation, Banking and Use of Emission Reduction Credits--47 Fed. Reg. 15076, April 7, 1982.

VOC Test Methods:

ASTM D 1475-60. Standard Method of Test for Density of Paint, Lacquer, and Related Products.

ASTM D 2369-81. Provisional Method of Test for Volatile Content of Paints.

ASTM D 3792-79. Standard Method of Test for Water in Water Reducible Paint by Direct Injection into a Gas Chromatograph.

ASTM Provisional Method of Test for Water in Paint or Related Coatings by the Karl Fischer Titration Method.



POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088
305/423-7275

RECEIVED

May 28, 1986

MAY 30 1986

LABORATORY
SECTION

DER

MAY 30 1986

BAQM

*Check, call w/2
Inc. response -
series copied
Please return
for file
Patty*

Mr. C. H. Fancy, P.E.
Deputy Chief, Bureau of Air Quality Management
Twin Towers Building
2600 Blair Stone Road
Tallahassee, FL 32301-8241

RE: Citrus Central, Inc. - Plymouth Can Division
Permit Application form DER 17-1.202 submitted
April 1, 1986.

Dear Mr. Fancy:

The following is in answer to your request for additional information dated May 1, 1986.

- Item 1 There are no previous DER permits, orders, or notices associated with this source.
- Item 2 As of May 15, 1986, the company has not received any construction permits in which there is a change (increase or decrease) in VOC emissions.
- Item 3 Attached are Material Safety Data Sheets for the materials in question. Where available, the CAS number has been written beside the listed compounds. Darex compound S9372A was incorrectly identified as 59372A in your letter.
- Item 4 The RACT compliance plan table is based on the calculational method published in the "Air Regulation Handbook for Can Manufacturing." This method uses an average density of 7.36 pounds per gallon for all coating solvents. Referring to the table, column (E) is calculated as follows:

$$E = \frac{7.36 \times (C)}{(B)}$$

For coating 9179 X HV, this would be

$$E = \frac{(7.36) (0.425)}{(0.573)} = 5.46 \frac{\text{lb VOC}}{\text{gal solids}}$$

Column (A), pounds of VOC per gallon coating less water, is then obtained as follows:

$$A = \frac{E \times B}{B + C}$$

Mr. C. H. Fancy, P.E.
May 28, 1986
Page 2

For coating 9179 X HV, this would be

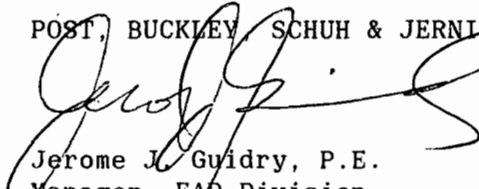
$$A = \frac{(5.46)(0.573)}{(0.573 + 0.425)} = 3.13 \frac{\text{lb VOC}}{\text{gal coating less water}}$$

The calculated values for (A) do not agree precisely with the information supplied by the manufacturer due to the use of an average density of 7.36 in the calculation for (E). Use of the actual densities would result in slightly higher calculated emissions of 7.1 pounds per hour, still well below the allowable emissions of 8.25.

If you have further questions regarding this application, please call me or Bruno Ferraro at (305) 423-7275.

Sincerely,

POST, BUCKLEY, SCHUH & JERNIGAN, INC.



Jerome J. Guidry, P.E.
Manager, EAD Division

JJG:BAF:daa

cc: John Z. Randall
Bill Coker

W. P. GRACE & CO., DEWEY AND ALMY CHEMICAL DIVISION
55 Hayden Avenue
Lexington, MA 02173

Best Available Copy

EMERGENCY PHONE NO. (617)861-6600

-----SECTION I - IDENTIFICATION-----

PRODUCT (TRADE) NAME: DAREX Compound 9179X HV

General Chemical Description: Solvent-based sealant

-----SECTION II - INGREDIENTS-----

<u>Hazardous Ingredients</u>	<u>% by Weight</u>	<u>Maximum Exposure Value (ppm)</u> (8 hour time-weighted average)	
		<u>OSHA PEL*</u>	<u>ACGIH TLV**</u>
n-hexane ^{CAS #} 110-54-3	32	500	50
other hexanes	11	not listed	500

* 29 CFR Section 1910.1000, July 1, 1984

** 1984-1985 recommendation, American Conference of Governmental Industrial Hygienists

Non-hazardous Ingredients

% by Weight

Rubber, resin, filler, pigment, and modifiers (including water). 57

-----SECTION III - PHYSICAL DATA-----

Vapor density of n-hexane (air=1): 3.0 Specific Gravity (water=1): 0.94
Solubility in water: not soluble Volatiles (% by weight): 43
Appearance and Odor: White liquid; petroleum solvent odor

-----SECTION IV - FIRE AND EXPLOSION HAZARD DATA-----

Flash Point: below 20°F (Pensky-Martens)
Flammable Limits (n-hexane): 1.1 - 7.5%
Extinguishing Media: Carbon dioxide, dry chemical, foam.

-----SECTION V - REACTIVITY DATA-----

Product is stable; hazardous polymerization will not occur.
Incompatible with strong oxidizers.

The information contained herein is based upon data considered true and accurate. However, Grace makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or the results to be obtained from the use thereof. This information is offered solely for the user's consideration, investigation and verification. Since the use and conditions of use of this information and the material described herein are not within the control of Grace, Grace assumes no responsibility for injury to the user or third persons. The material described herein is sold only pursuant to Grace's Terms and Conditions of Sale, including those limiting warranties and remedies contained therein. It is the responsibility of the user to determine whether any use of the data

SAFETY DATA

DAREX Compound 9179X HV

SECTION VI-SPILL OR LEAK PROCEDURES

Handling Precautions: See Section VIII.

For small spills: Wipe up, or absorb with vermiculite or other absorbent material. Collect waste in sealed containers.

For large spills: Dike area to prevent spreading. Shovel or pump to drum or salvage tank. Absorb residual material with sand, vermiculite, or other absorbent material.

Use only clean-up equipment approved for flammable materials and areas. Dispose of as a flammable material in accordance with current local, state, and Federal regulations.

EPA Hazardous Waste Number is: D001

SECTION VII-HEALTH HAZARD DATA

Threshold Limit Values: See Section II.

Effects of Overexposure

Emergency First Aid Procedures

Inhalation: Vapors can produce headache, nausea, dizziness, disorientation, numbness in fingers and toes, and irritation of nose and throat.

Remove to fresh air.

Eyes: Irritation upon direct contact.

Immediately flush eyes with water for at least 15 minutes; get medical attention.

Skin: Irritation upon direct contact.

Remove contaminated clothing; wash affected area with water.

Ingestion: Harmful if swallowed.

Dilute with water or milk; do not induce vomiting; get medical attention.

GET MEDICAL ATTENTION IF SYMPTOMS PERSIST

SECTION VIII-SPECIAL PRECAUTIONS

Handling and Storing

- Wear eye protection if direct contact likely.
- Wear gloves and protective clothing if direct contact likely.
- Avoid skin and eye contact. Avoid breathing vapors.
- Treat as flammable material. Keep away from heat, sparks, and open flames.
- Avoid static electricity - ground containers when transferring product.
- Relieve possible internal pressure in container before opening by partially unscrewing bung.
- Vapors are heavier than air and will settle and collect in low areas and pits, displacing breathing air. Provide adequate ventilation to protect from these hazards and to keep below maximum exposure values.
- Empty containers retain hazardous product residues, both liquid and vapor.
- Keep container closed when not in use.

Prepared 06/25/85

Page 2 of 2

SAFETY DATA

W. R. GRACE & CO., DEWEY AND ALMY CHEMICAL DIVISION
55 Hayden Avenue
Lexington, MA 02173

EMERGENCY PHONE NO. (617)861-6600

SECTION I - IDENTIFICATION

PRODUCT (TRADE) NAME: DAREX Compound S9372A

General Chemical Description: Solvent-based sealant

SECTION II-INGREDIENTS

<u>Hazardous Ingredients</u>	<u>CAS #</u>	<u>% by Weight</u>	<u>Maximum Exposure Value (ppm) (8 hour time-weighted average)</u>	
			<u>OSHA PEL*</u>	<u>ACGIH TLV**</u>
n-hexane	110-54-3	29	500	50
other hexanes	—	11	not listed	500
toluene	108-88-3	7	200	100
isopropyl alcohol	67-63-0	less than 4	400	400

* 29 CFR Section 1910.1000, July 1, 1982

** 1983 recommendation, American Conference of Governmental Industrial Hygienists

<u>Non-hazardous Ingredients</u>	<u>% by Weight</u>
Rubber, resin, filler, pigment, and modifiers (including water).	51

SECTION III-PHYSICAL DATA

Vapor density of n-hexane (air=1): 3.0 Specific Gravity (water=1): 0.90
Solubility in water: not soluble Volatiles (% by weight): 50
Appearance and Odor: Gray liquid; petroleum solvent odor

SECTION IV-FIRE AND EXPLOSION HAZARD DATA

Flash Point: Below 20°F(Pensky-Martens)
Flammable Limits (n-hexane): 1.1 - 7.5%
Extinguishing Media: Carbon dioxide, dry chemical, foam.

SECTION V-REACTIVITY DATA

Product is stable; hazardous polymerization will not occur.
Incompatible with strong oxidizers.

SAFETY DATA

DAREX Compound S9372A

SECTION VI-SPILL OR LEAK PROCEDURES

Handling Precautions: See Section VIII.

For small spills: Wipe up, or absorb with vermiculite or other absorbent material. Collect waste in sealed containers.

For large spills: Dike area to prevent spreading. Shovel or pump to drum or salvage tank. Absorb residual material with sand, vermiculite, or other absorbent material.

Use only clean-up equipment approved for flammable materials and areas. Dispose of as a flammable material in accordance with current local, state, and Federal regulations.

EPA Hazardous Waste Number is: F005

SECTION VII-HEALTH HAZARD DATA

Threshold Limit Values: See Section II.

	<u>Effects of Overexposure</u>	<u>Emergency First Aid Procedures</u>
<u>Inhalation:</u>	Vapors can produce headache, nausea, dizziness, disorientation, numbness in fingers and toes, and irritation of nose and throat.	Remove to fresh air.
<u>Eyes:</u>	Irritation upon direct contact.	Immediately flush eyes with water for at least 15 minutes; get medical attention.
<u>Skin:</u>	Irritation upon direct contact.	Remove contaminated clothing; wash affected area with water.
<u>Ingestion:</u>	Harmful if swallowed.	Dilute with water or milk; do not induce vomiting; get medical attention.

GET MEDICAL ATTENTION IF SYMPTOMS PERSIST

SECTION VIII-SPECIAL PRECAUTIONS

Handling and Storing

- Wear eye protection if direct contact likely.
- Wear gloves and protective clothing if direct contact likely.
- Avoid skin and eye contact. Avoid breathing vapors.
- Treat as flammable material. Keep away from heat, sparks, and open flames.
- Avoid static electricity - ground containers when transferring product.
- Relieve possible internal pressure in container before opening by partially unscrewing bung.
- Vapors are heavier than air and will settle and collect in low areas and pits, displacing breathing air. Provide adequate ventilation to protect from these hazards and to keep below maximum exposure values.
- Empty containers retain hazardous product residues, both liquid and vapor.
- Keep container closed when not in use.

Prepared 05/10/84

Page 2 of 2

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME W. R. Grace & Co., Dewey and Almy Chemical Division		EMERGENCY TELEPHONE NO. (617) 861-6500
ADDRESS (Number, Street, City, State, and ZIP Code) 55 Hayden Avenue, Lexington, MA. 02173		
CHEMICAL NAME AND SYNONYMS DAREX Composite Can Compound 5101	TRADE NAME AND SYNONYMS	
CHEMICAL FAMILY	FORMULA Mixture	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Unit)	ALLOYS AND METALLIC COATINGS	%	TLV (Unit)
PIGMENTS		ppm	BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
XXXXXXXXXX MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Unit)
Non-volatile portion is a non-hazardous mixture of rubber, resin, filler, plasticizer and pigments				50	NA *

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1)	0.92
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME BY WEIGHT %	50
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR	gray fluid; petroleum solvent odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) Below 20°F (Pensky-Martens)	FLAMMABLE LIMITS	LeL	UeL
EXTINGUISHING MEDIA Carbon dioxide or dry chemical extinguisher		1.2%	7.5%
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

THRESHOLD LIMIT VALUE

See Section II

EFFECTS OF OVEREXPOSURE

VAPORS CAN produce dizziness, disorientation, and numbness in extremities. Skin or eye irritation upon direct contact.

EMERGENCY AND FIRST AID PROCEDURES

Remove to fresh air. Flush skin or eyes with water for 15 minutes. Remove contaminated clothing. If symptoms persist, contact a physician. If ingested, dilute with water or milk. Do not induce vomiting - get medical attention.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATIBILITY (Materials to avoid)

Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Ventilate - vapors are heavier than air; avoid sparks and open flames; avoid direct contact with liquid and fumes. Use only clean-up equipment approved for flammable materials and

STEPS.

WASTE DISPOSAL METHOD

As for flammable materials in accordance with current governmental regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

VENTILATION	LOCAL EXHAUST To keep below TLV	SPECIAL Vapors are heavier than air. OTHER (See Section IX)
	MECHANICAL (General)	

PROTECTIVE GLOVES

Recommended if direct contact likely.

EYE PROTECTION

Normal chemical eye wear.

Relieve possible internal pressure in container before opening by partially unscrewing bung.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Treat as flammable material. Keep away from heat, sparks, and open flame. Ground

containers when transferring. Avoid static electricity. Keep containers closed.

OTHER PRECAUTIONS

Avoid prolonged or repeated skin contact. Avoid breathing vapors. Vapors are heavier than air, will settle and collect in low areas and pits, displacing oxygen. Provide adequate ventilation to protect from these hazards and to keep below allowable vapor concentrations.

SAFETY DATA

W. R. GRACE & CO., DEWEY AND ALMY CHEMICAL DIVISION
55 Hayden Avenue
Lexington, MA 02173

EMERGENCY PHONE NO. (617)861-6600

SECTION I - IDENTIFICATION

PRODUCT (TRADE) NAME: DAREX Dispersion Concentrate 1108 (44-46)

General Chemical Description: Solvent-based sealant

SECTION II-INGREDIENTS

<u>Hazardous Ingredients</u>	<u>CAS #</u>	<u>% by Weight</u>	<u>Maximum Exposure Value (ppm)</u> (8 hour time-weighted average)	
			<u>OSHA PEL*</u>	<u>ACGIH TLV**</u>
n-hexane	116-54-3	36	500	50
other hexanes		13	not listed	500
ethyl alcohol	64-17-5	less than 2	1000	1000
cyclohexane	110-82-7	less than 2	300	300
isopropyl alcohol	67-63-0	less than 1	400	400

* 29 CFR Section 1910.1000, July 1, 1982

** 1983 recommendation, American Conference of Governmental Industrial Hygienists

<u>Non-hazardous Ingredients</u>	<u>% by Weight</u>
Rubber, resin, filler, pigment, and modifiers (including water).	48

SECTION III-PHYSICAL DATA

Vapor density of n-hexane (air=1): 3.0 Specific Gravity (water=1): 0.84
Solubility in water: not soluble Volatiles (% by weight): 55
Appearance and Odor: Gray liquid; petroleum solvent odor

SECTION IV-FIRE AND EXPLOSION HAZARD DATA

Flash Point: below 20°F(Pensky-Martens)
Flammable Limits (n-hexane): 1.1 - 7.5%
Extinguishing Media: Carbon dioxide, dry chemical, foam.

SECTION V-REACTIVITY DATA

Product is stable; hazardous polymerization will not occur.
Incompatible with strong oxidizers.

Prepared 09/29/83

Page 1 of 2

The information contained herein is based upon data considered true and accurate. However, Grace makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or the results to be obtained from the use thereof. This information is offered solely for the user's consideration, investigation and verification. Since the use and conditions of use of this information and the material described herein are not within the control of Grace, Grace assumes no responsibility for injury to the user or third persons. The material described herein is sold only pursuant to Grace's Terms and Conditions of Sale, including those limiting warranties and remedies contained therein. It is the responsibility of the user to determine whether any use of this data

SAFETY DATA

DAREX Dispersion Concentrate 1108 (44-46)

SECTION VI-SPILL OR LEAK PROCEDURES

Handling Precautions: See Section VIII.

For small spills: Wipe up, or absorb with vermiculite or other absorbent material. Collect waste in sealed containers.

For large spills: Dike area to prevent spreading. Shovel or pump to drum or salvage tank. Absorb residual material with sand, vermiculite, or other absorbent material.

Use only clean-up equipment approved for flammable materials and areas. Dispose of as a flammable material in accordance with current local, state, and Federal regulations.

EPA Hazardous Waste Number is: D001

SECTION VII-HEALTH HAZARD DATA

Threshold Limit Values: See Section II.

	<u>Effects of Overexposure</u>	<u>Emergency First Aid Procedures</u>
<u>Inhalation:</u>	Vapors can produce headache, nausea, dizziness, disorientation, numbness in fingers and toes, and irritation of nose and throat.	Remove to fresh air.
<u>Eyes:</u>	Irritation upon direct contact.	Immediately flush eyes with water for at least 15 minutes; get medical attention.
<u>Skin:</u>	Irritation upon direct contact.	Remove contaminated clothing; wash affected area with water.
<u>Ingestion:</u>	Harmful if swallowed.	Dilute with water or milk; do not induce vomiting; get medical attention.

GET MEDICAL ATTENTION IF SYMPTOMS PERSIST

SECTION VIII-SPECIAL PRECAUTIONS

Handling and Storing

- Wear eye protection if direct contact likely.
- Wear gloves and protective clothing if direct contact likely.
- Avoid skin and eye contact. Avoid breathing vapors.
- Treat as flammable material. Keep away from heat, sparks, and open flames.
- Avoid static electricity - ground containers when transferring product.
- Relieve possible internal pressure in container before opening by partially unscrewing bung.
- Vapors are heavier than air and will settle and collect in low areas and pits, displacing breathing air. Provide adequate ventilation to protect from these hazards and to keep below maximum exposure values.
- Empty containers retain hazardous product residues, both liquid and vapor.
- Keep container closed when not in use.

Prepared 09/29/83

Page 2 of 2

MATERIAL SAFETY DATA SHEET
FOR COATINGS, RESINS AND RELATED MATERIALS
 (Approved by U.S. Department of Labor 'Essentially similar' to Form OSHA-20)

Date of Prep: **FEBRUARY 17, 1983**

8/B

Section I

MANUFACTURER'S NAME: TECHNICAL COATINGS COMPANY

STREET ADDRESS: 25TH AND NORTH AVE'S. MELROSE PARK, IL 60160

EMERGENCY PHONE NO.: (312) 343 - 6000

INFORMATION PHONE NO.: (312) 343 - 6000

PRODUCT CLASS: MODIFIED ACRYLIC **MANUFACTURERS CODE IDENTIFICATION:** 17254A

TRADE NAME: SIDE SEAM SRTIPE

Section II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV	LEL	VAPOR PRESSURE
GLYCOL ETHER	50.3	50	1.1	1.0
GLYCOL ESTER	21.3	5	1.8	2.0

Section III - PHYSICAL DATA

BOILING RANGE 295 - 340 F. **VAPOR DENSITY** X HEAVIER, | LIGHTER THAN AIR

EVAPORATION RATE | FASTER | X ISLOWER, THAN ETHER **PERCENT VOLATILE** 71.6 **WEIGHT PER** 8.22
BY VOLUME **GALLON**

Section IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: COMBUSTABLE LIQUID, CLASS II **FLASH POINT:** 125 F. (SETAFLASH) **LEL** 1.1

EXTINGUISHING MEDIA: The National Fire Protection Association (NFPA) classifies burning liquids to be Class B fires. Therefore, any approved Class B fire extinguisher or extinguishing agent may be used for firefighting purposes.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions over-exposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES: Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: See Section II.

EFFECTS OF OVEREXPOSURE:

ACUTE
INHALATION: Anesthetic. Irritation of the respiratory tract or acute nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma.
SKIN CONTACT: Primary irritation.
EYE CONTACT: Primary irritation.

CHRONIC
None recognized.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Remove from exposure. Restore breathing. Keep warm and quiet. Notify a physician.

SPLASH(EYES): Flush immediately with large amounts of water for at least 15 minutes. Take to a physician for medical treatment.

SPLASH(SKIN): Wash affected areas with water. Remove contaminated clothing. Consult a physician.

Section VI - REACTIVITY DATA

STABILITY: | | UNSTABLE | | X | STABLE | | CONDITIONS TO AVOID: HIGH TEMPERATURES.

INCOMPATIBILITY(Materials to avoid): Unknown

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide in the case of incomplete combustion.

HAZARDOUS POLYMERIZATION: | | MAY OCCUR | | X | WILL NOT OCCUR

CONDITIONS TO AVOID: ELEVATED TEMPERATURES.

Section VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Avoid breathing vapors. Spread absorbent on spill area and remove with non-sparking tools to container filled with water. Keep out of streams and waterways.

WASTE DISPOSAL METHOD: Conventional procedures complying with local, state and federal regulations.

Section VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use Bureau of Mines mask for open, restricted and confined areas.

VENTILATION: Vent fumes emitted on heating. Keep below TLV and LEL levels.

PROTECTIVE GLOVES: Required during repeated contact.

EYE PROTECTION: Safety goggles.

OTHER PROTECTIVE EQUIPMENT: Clothing adequate to protect skin; eye bath; safety shower.

Section IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep away from heat, sparks and open flame.

DOL STORAGE CATEGORY:

OTHER PRECAUTIONS: Avoid prolonged contact with skin.

P 408 533 191

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982

Sent to Mr. John Z. Randall	
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 4/30/86	

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. John Z. Randall
Executive Vice President
Citrus Central, Inc.
P. O. Box 17774
Orlando, FL 32860

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P 408 533 191

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

5. Signature - Addressee
X *Chris Santop*

6. Signature - Agent
X

7. Date of Delivery
5/5/86

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

May 1, 1986

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John Z. Randall
Executive Vice President
Citrus Central, Inc. - Plymouth Can Division
P. O. Box 17774
Orlando, Florida 32860

Dear Mr. Randall:

The Bureau of Air Quality Management has received your application for a permit to construct a can coating operation (assembly and end seal compounding) at your facility in Plymouth, Orange County, Florida.

Based in our initial review of your proposal, it has been determined that the following additional information is needed before we can continue processing your application.

Application information-DER Form 17-1.202 submitted on April 1, 1986.

As stated in your application, the proposed project involves an existing source. Indicate any previous DER permits, orders and notices associated with this source, including permit issuance and expiration dates. Please refer to Florida Administrative Code Rule 17-2.100(58) and (107).

Has your company received any construction permit for any sources since 1980, in which there have been a change (increase or decrease) in volatile organic compounds emissions (VOC)?


What are the chemical constituents of the raw materials identified as 9179 XHV, 59372A, 5101, 1108, 17254? Provide a Material Safety Data Sheet (MSDS) for the chemical compounds used in this process. Please identify each chemical with the CAS number.

It appears there is a discrepancy in the VOC content of the raw materials. Refer to your application (RACT compliance plan table and Grace's letter of February 20, 1986). What is the correct value? Please attach basis for your emission estimate.

Mr. John Z. Randall
Page Two
May 1, 1986

As soon as the above information is received, we will resume processing your application. 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 
C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/TH/s

cc: Tom Sawicki



POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088
305/423-7275
TELEX 808435



March 28, 1986

Mr. A. T. Sawicki, P.E.
Air Permitting
Florida Department of Environmental Regulation
3319 Maguire Blvd., Suite 232
Orlando, FL 32803

RE: Orange County A.P.
Plymouth Can

Dear Mr. Sawicki:

Enclosed are four (4) copies of the above referenced construction permit applications and a check for \$1,000 (\$100 per source) for the application fee.

Please call me at (305) 423-7275 if you have any questions.

Sincerely,

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

Jerome J. Guidry, P.E.
Manager, EAD Division

JJG:BAF:daa

cc: Bill Coker

Enclosures (as stated)

Certified Mail No. P 274 161 321

21-028.20

APPLICATION TRACKING SYSTEM

04/02/86

APPL NO: 118328

APPL RECVD: 04/01/86 TYPE CODE: AC SUBCODE: 99 LAST UPDATE: 04/02/86
DER OFFICE RECVD: ORL DER OFFICE TRANSFER TO: APPLICATION COMPLETE: / /
DER PROCESSOR: T SAWICKI
APPL STATUS: AC DATE: 04/01/86 (ACTIVE/DENIED/WITHDRAWN/EXEMPT/ISSUED/GENERAL)
RELIEF: (SSAC/EXEMPTIONS/VARIANCE)

(Y/N) N MANUAL TRACKING DISTRICT: 30 COUNTY: 48
(Y/N) N DNR REVIEW REQD? LAT/LONG: 28.41.31/81.33.21
(Y/N) N PUBLIC NOTICE REQD? BASIN-SEGMENT:
(Y/N) N GOV BODY LOCAL APPROVAL REQD? COE #:
(Y/N) Y LETTER OF INTENT REQD? (I/ISSUE D/DENY) ALT#:

PROJECT SOURCE NAME: CITRUS CENTRAL/ASSEMBLY & COMPOUND
STREET: ROUTE 437 CITY: PLYMOUTH
STATE: FL ZIP: PHONE:
APPLICATION NAME: RANDALL, JOHN Z.
STREET: POST OFFICE BOX 177774 CITY: ORLANDO
STATE: FL ZIP: 32860 PHONE: 305-889-4101
AGENT NAME: POST BUCKLEY SCHUH & JERNIGAN
STREET: 889 NORTH ORANGE AVENUE CITY: ORLANDO
STATE: FL ZIP: 32801 PHONE: 305-423-7275
FEE #1 DATE PAID: 04/01/86 AMOUNT PAID: 01000 RECEIPT NUMBER: 00099892

Table with columns for event type (B-H, I-N), date, and status. Rows include: B DATE APPLICANT INFORMED OF NEED FOR PUBLIC NOTICE, C DATE DER SENT DNR APPLICATION/SENT DNR INTENT, D DATE DER REQ. COMMENTS FROM GOV. BODY FOR LOCAL APP., E DATE #1-#6 ADDITIONAL INFO REQ--REC FROM APPLICANT, F DATE GOVERNING BODY REQUESTED SURVEY RESULTS/REPORTS, G DATE FIELD REPORT WAS REQ--REC, H DATE DNR REVIEW WAS COMPLETED, I DATE APPLICATION WAS COMPLETE, J DATE GOVERNING BODY PROVIDED COMMENTS OR OBJECTIONS, K DATE NOTICE OF INTENT WAS SENT--REC TO APPLICANT, L DATE PUBLIC NOTICE WAS SENT TO APPLICANT, M DATE PROOF OF PUBLICATION OF PUBLIC NOTICE RECEIVED, N WAIVER DATE BEGIN--END (DAY 90).

COMMENTS:

DER
APR 16 1986
BAQM

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP		ACTION NO.																		
		ACTION DUE DATE																		
1.	TO: (NAME, OFFICE, LOCATION) <i>Bill Thomas - BAQM-CAPS</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">INITIAL</td></tr> <tr><td style="text-align: center;">DATE</td></tr> </table>	INITIAL	DATE																
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REMARKS: <i>Attached is the Citrus Central file we discussed is attached.</i>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">INFORMATION</td></tr> <tr><td style="text-align: center;">REVIEW & RETURN</td></tr> <tr><td style="text-align: center;">REVIEW & FILE</td></tr> <tr><td style="text-align: center;">INITIAL & FORWARD</td></tr> <tr><td style="text-align: center;"> </td></tr> <tr><td style="text-align: center;">DISPOSITION</td></tr> <tr><td style="text-align: center;">REVIEW & RESPOND</td></tr> <tr><td style="text-align: center;">PREPARE RESPONSE</td></tr> <tr><td style="text-align: center;">FOR MY SIGNATURE</td></tr> <tr><td style="text-align: center;">FOR YOUR SIGNATURE</td></tr> <tr><td style="text-align: center;">LET'S DISCUSS</td></tr> <tr><td style="text-align: center;">SET UP MEETING</td></tr> <tr><td style="text-align: center;">INVESTIGATE & REPT</td></tr> <tr><td style="text-align: center;">INITIAL & FORWARD</td></tr> <tr><td style="text-align: center;">DISTRIBUTE</td></tr> <tr><td style="text-align: center;">CONCURRENCE</td></tr> <tr><td style="text-align: center;">FOR PROCESSING</td></tr> <tr><td style="text-align: center;">INITIAL & RETURN</td></tr> </table>	INFORMATION	REVIEW & RETURN	REVIEW & FILE	INITIAL & FORWARD		DISPOSITION	REVIEW & RESPOND	PREPARE RESPONSE	FOR MY SIGNATURE	FOR YOUR SIGNATURE	LET'S DISCUSS	SET UP MEETING	INVESTIGATE & REPT	INITIAL & FORWARD	DISTRIBUTE	CONCURRENCE	FOR PROCESSING	INITIAL & RETURN
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CONCURRENCE																				
FOR PROCESSING																				
INITIAL & RETURN																				
DER APR 16 1986 BAQM																				

FROM <i>Tom Sawicki</i>	DATE <i>4/15/86</i>
	PHONE <i>SC 393-1408</i>

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No 99892

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Citrus Central, Inc. Date April 1, 1986

Address P.O. Box 488 Plymouth 33768 Dollars \$ 1,000.⁰⁰

Applicant Name & Address _____

Source of Revenue same

Revenue Code 001031 CK 014417 Application Number AC48-118308

By S. Coombs

STATE OF FLORIDA

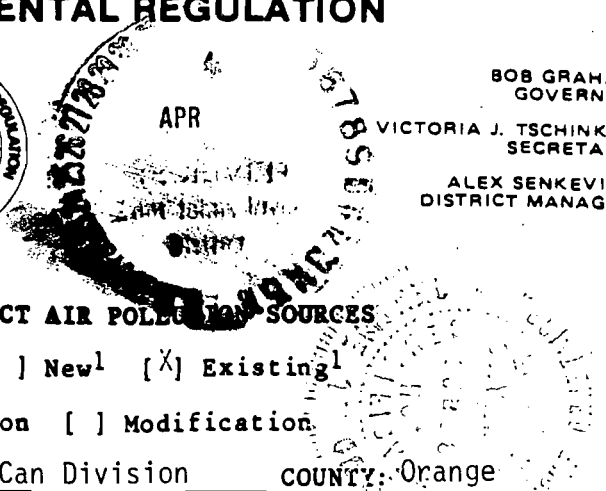
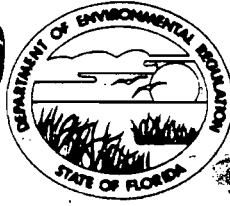
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803

P A I D
4,000

APR 01 1986

SAINT JOHNS RIVER DISTRICT



BOB GRAHAM GOVERNOR

VICTORIA J. TSCHINKEL SECRETARY

ALEX SENKEVICH DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Can Manufacturer [] New¹ [X] Existing¹

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

COMPANY NAME: Citrus Central, Inc. - Plymouth Can Division COUNTY: Orange

Identify the specific emission point source(s) addressed in this application (i.e. Line Can assembly and End Seal Compounding)
Kila No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired)

SOURCE LOCATION: Street Route 437 City Plymouth, 32768

UTM: East 445600 meters North 3174000 meters

Latitude 28 ° 41 ' 31 "N Longitude 81 ° 33 ' 21 "W

APPLICANT NAME AND TITLE: John Z. Randall, Executive Vice President

APPLICANT ADDRESS: P.O. Box 17774, Orlando, FL 32860

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Citrus Central, 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: John Z. Randall

John Z. Randall, Executive Vice President
Name and Title (Please Type)

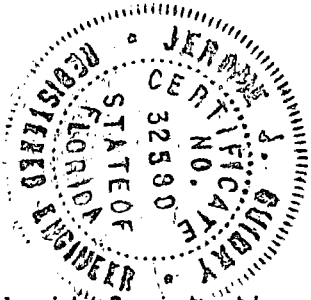
Date: 3/24/86 Telephone No. (305) 889-4101

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 Jerome J. Guidry
 Jerome J. Guidry, P.E.
 Name (Please Type)
 Post, Buckley, Schuh & Jernigan, Inc.
 Company Name (Please Type)
 889 N. Orange Avenue, Orlando, FL 32801-1088
 Mailing Address (Please Type)
 Florida Registration No. 32589 Date: 3-31-86 Telephone No. (305) 423-7275

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.

This application is for permitting an existing can assembly and end seal compounding facility that emits VOCs. This project will result in full compliance with 17-2 FAC.
This application is prepared using the bubble concept.

B. Schedule of project covered in this application (Construction Permit Application Only)
 Start of Construction N/A Completion of Construction N/A

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)
N/A

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

E. Requested permitted equipment operating time: hrs/day 24; days/wk 5; wks/yr 51;
if power plant, hrs/yr _____; if seasonal, describe: _____

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

1. Is this source in a non-attainment area for a particular pollutant? Yes
a. If yes, has "offset" been applied? No
b. If yes, has "Lowest Achievable Emission Rate" been applied? No
c. If yes, list non-attainment pollutants. Ozone

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

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

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

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

H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? Yes

a. If yes, for what pollutants? VOC

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

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

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
9179 x HV	VOC	42.5	2.11	1
9372 A	VOC	49.7	6.71	1
5101	VOC	39.1	3.57	1
1108	VOC	52.4	0.31	1
17254	VOC	67.0	2.21	2

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

1. Total Process Input Rate (lbs/hr): 14.91 plus weight of cans

2. Product Weight (lbs/hr): 7.98 plus weight of cans

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

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
VOC	6.93	21.2	*	8.25	6.95	21.2	3,4,5,6
Particulate	0.0030	0.0090	0	0% Opacity	0.0030	0.0090	5,6
NO _x	0.0840	0.2570	0	Except 20%	0.0840	0.2570	5,6
SO ₂	0.0002	0.001	0	Opacity for	0.0002	0.001	5,6
CO	0.021	0.064	0	3 min. in one hour	0.021	0.064	5,6
Hydrocarbon	0.0018	0.0054	0		0.0018	0.0054	5,6

¹See Section V, Item 2.

*Rule 17-2.650 (1)(f) 1.b (iii)(iv) ⁰Rule 17-2.610(2)(a)

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

³Calculated from operating rate and applicable standard.

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

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

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

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural gas	200 CFH	300 CFH	0.25
Natural gas	200 CFH	300 CFH	0.25

*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 N/A Maximum N/A

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

Scrap metal is sold for recycling, all other solid waste is non-hazardous and sent to a local landfill. Waste oil is sold for recycling. Domestic waste is treated in the on-site waste water treatment facility.

Two Identical Stacks

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

Stack Height: 35 ft. Stack Diameter: 1 ft.
 Gas Flow Rate: 1200 ACFM 825 DSCFM Gas Exit Temperature: 300 °F.
 Water Vapor Content: 1 % Velocity: 25.46 FPS

SECTION IV: INCINERATOR INFORMATION N/A

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

Description of Waste _____

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

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

Manufacturer _____

Date Constructed _____ Model No. _____

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

Stack Height: _____ ft. Stack Diameter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: Cyclone Wet Scrubber Afterburner
 Other (specify) _____

Brief description of operating characteristics of control devices: _____

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

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY N/A

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

Yes No

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

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

Yes No

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

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

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

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

1. Control Device/System:

2. Operating Principles:

3. Efficiency:*

4. Capital Costs:

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

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

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

1.

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

2.

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

¹Explain method of determining efficiency.

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

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

3.

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

4.

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

F. Describe the control technology selected:

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

¹Explain method of determining efficiency.

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

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

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION N/A

A. Company Monitored Data

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

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

Other data recorded _____

Attach all data or statistical summaries to this application.

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

2. Instrumentation, Field and Laboratory

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

b. Was instrumentation calibrated in accordance with Department procedures?

[] Yes [] No [] Unknown

B. Meteorological Data Used for Air Quality Modeling

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

2. Surface data obtained from (location) _____

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

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

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

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

E. Emission Data Used in Modeling

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

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

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

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

PROCESS DESCRIPTION

Citrus Central, Inc., Orlando Can Division, produces metal cans and can ends. Associated with can end manufacturing is the use of an end seal gasketing compound which releases VOCs during the drying phase. These VOCs are emitted at the packaging area while the lids are drying in the ambient air. There is no collection or control system associated with this process. This facility operates five press lines each with an end seal liner. No stacks are associated with these sources.

During the metal can assembly process, the metal is shaped into a cylinder then welded to hold its shape. A side stripping varnish (17254) is applied onto this side weld to prevent the can from rusting or reacting with the can contents. When this side stripe varnish dries, it omits VOCs into the atmosphere. This facility operates seven can assembly lines. Only five (5) of these lines have side strippers. Two (2) of these five (5) lines have ovens associated with them to rapidly dry the varnish. These ovens are natural gas fired and are vented to the atmosphere. To cure the varnish, the ovens are maintained at 450°F. The remaining three lines do not use any drying devices; the cans are allowed to air dry.

SUPPLEMENTAL REQUIREMENTS

Supplement 1: Process input rate was determined from production data. Product weight (less the weight of the metal cans and lids) is the process input weight less the weight of the solvent.

(process input rate)	14.91 lbs/hr
	<u>-6.93</u> lbs/hr solvent
	7.98 lbs/hr product

Supplement 2: Emissions are based on the bubble concept for the can coating industry. Emissions are calculated from the weight of the solvents less water and the weight of the solids. Compliance will be demonstrated by material usage and production data.

Supplement 3: Attached.

Supplement 4&5: N/A

Supplement 6, 7, 8 & 9: Attached.

CITRUS CENTRAL METALS - PLYMOUTH DIVISION
 RACT COMPLIANCE PLAN
 255 OPERATING DAYS PER YEAR

ACTUAL EMISSIONS

DEPARTMENT	MATERIAL	LB VOC PER GAL COATING LESS WATER (A)	VOL % SOLIDS (B)	VOL % SOLVENT (C)	VOL % WATER (D)	LB VOC PER GAL SOLIDS (E)	GALLONS COATING PER YEAR	GALLONS COATING PER DAY (H)	GALLONS SOLIDS (I)	CONTROL EFF. (J)	LB VOC EMITTED PER DAY (K)	LB VOC EMITTED PER HOUR
PRESS	9179XHV	3.13	57.3	42.5	0.3	5.46	1650.0	6.5	3.7	0.0	20.2	0.84
	S9372A	3.67	50.0	49.7	0.3	7.32	5500.0	21.6	10.8	0.0	78.9	3.29
	5101	3.23	50.0	39.1	10.9	5.76	2750.0	10.8	5.4	0.0	31.0	1.29
	1108	3.96	45.0	52.4	2.6	8.57	275.0	1.1	0.5	0.0	4.2	0.17
ASSEMBLY	17254	4.93	33.0	67.0	0.0	14.94	1650.0	6.5	2.1	0.0	31.9	1.33
TOTAL ACTUAL EMISSIONS											166.2	6.93

ALLOWABLE EMISSIONS

PRESS	9179XHV	3.7				7.44			3.7		27.6	1.15
	S9372A	3.7				7.44		10.8			80.2	3.34
	5101	3.7				7.44		5.4			40.1	1.67
	1108	3.7				7.44		0.5			3.6	0.15
ASSEMBLY	17254	5.5				21.76		2.1			46.5	1.94
TOTAL ALLOWABLE EMISSIONS											198.0	8.25

CAN ASSEMBLY - LINE 3A

EMISSION CALCULATIONS FOR FUEL USAGE

THIS REPORT PREPARED ON 12-Mar-86

FUEL TYPE: NATURAL GAS

EMISSION FACTORS FROM AP42 TABLE 1.4-1

PARTICULATE:	5 POUNDS PER MILLION CUBIC FEET
SULFUR DIOXIDE:	0.6 POUNDS PER MILLION CUBIC FEET
NITROGEN OXIDE:	140 POUNDS PER MILLION CUBIC FEET
CARBON MONOXIDE:	35 POUNDS PER MILLION CUBIC FEET
HYDROCARBONS:	3 POUNDS PER MILLION CUBIC FEET

CONTROL EFFICIENCIES

PARTICULATE:	0.0%
SULFUR DIOXIDE:	0.0%
NITROGEN OXIDE:	0.0%
CARBON MONOXIDE:	0.0%
HYDROCARBONS:	0.0%

FUEL USAGE: 0.0003 MILLION CUBIC FEET PER HOUR

OPERATING SCHEDULE: 24 HOURS PER DAY
5 DAYS PER WEEK
51 WEEKS PER YEAR

TOTAL 6120 HOURS PER YEAR

PARTICULATE MATTER

POTENTIAL EMISSIONS = (EMISSION FACTOR) x (FUEL USAGE)
= (5) x (0.0003)
= 0.0015 POUNDS PER HOUR
= 0.0045 TONS PER YEAR

MAXIMUM EMISSIONS = POTENTIAL EMISSIONS x (1 - CONTROL EFFICIENCY)
= (0.0015) x (1 - 0)
= 0.0015 POUNDS PER HOUR

ACTUAL EMISSIONS = MAXIMUM EMISSIONS x OPERATING SCHEDULE
= 0.0015 LB/HR x 6120 HRS/YEAR
x (1 TON / 2000 LB)

SULFUR DIOXIDE

12-Mar-86

$$\begin{aligned} \text{POTENTIAL EMISSIONS} &= (\text{EMISSION FACTOR}) \times (\text{FUEL USAGE}) \\ &= (0.6) \times (0.0003) \\ &= 0.0001 \text{ POUNDS PER HOUR} \\ &= 0.0005 \text{ TONS PER YEAR} \end{aligned}$$

$$\begin{aligned} \text{MAXIMUM EMISSIONS} &= \text{POTENTIAL EMISSIONS} \times (1 - \text{CONTROL EFFICIENCY}) \\ &= (0.0001) \times (1 - 0) \\ &= 0.0001 \text{ POUNDS PER HOUR} \end{aligned}$$

$$\begin{aligned} \text{ACTUAL EMISSIONS} &= \text{MAXIMUM EMISSIONS} \times \text{OPERATING SCHEDULE} \\ &= 0.0001 \text{ LB/HR} \times 6120 \text{ HRS/YEAR} \\ &\quad \times (1 \text{ TON} / 2000 \text{ LB}) \\ &= 0.0005 \text{ TONS PER YEAR} \end{aligned}$$

NITROGEN OXIDE

$$\begin{aligned} \text{POTENTIAL EMISSIONS} &= (\text{EMISSION FACTOR}) \times (\text{FUEL USAGE}) \\ &= (140) \times (0.0003) \\ &= 0.042 \text{ POUNDS PER HOUR} \\ &= 0.1285 \text{ TONS PER YEAR} \end{aligned}$$

$$\begin{aligned} \text{MAXIMUM EMISSIONS} &= \text{POTENTIAL EMISSIONS} \times (1 - \text{CONTROL EFFICIENCY}) \\ &= (0.042) \times (1 - 0) \\ &= 0.042 \text{ POUNDS PER HOUR} \end{aligned}$$

$$\begin{aligned} \text{ACTUAL EMISSIONS} &= \text{MAXIMUM EMISSIONS} \times \text{OPERATING SCHEDULE} \\ &= 0.042 \text{ LB/HR} \times 6120 \text{ HRS/YEAR} \\ &\quad \times (1 \text{ TON} / 2000 \text{ LB}) \\ &= 0.1285 \text{ TONS PER YEAR} \end{aligned}$$

CARBON MONOXIDE

12-Mar-86

$$\begin{aligned} \text{POTENTIAL EMISSIONS} &= (\text{EMISSION FACTOR}) \times (\text{FUEL USAGE}) \\ &= (\quad 35 \quad) \times (0.0003 \quad) \\ &= \quad 0.0105 \text{ POUNDS PER HOUR} \\ &= \quad 0.0321 \text{ TONS PER YEAR} \end{aligned}$$

$$\begin{aligned} \text{MAXIMUM EMISSIONS} &= \text{POTENTIAL EMISSIONS} \times (1 - \text{CONTROL EFFICIENCY}) \\ &= (\quad 0.0105 \quad) \times (1 - \quad 0 \quad) \\ &= \quad 0.0105 \text{ POUNDS PER HOUR} \end{aligned}$$

$$\begin{aligned} \text{ACTUAL EMISSIONS} &= \text{MAXIMUM EMISSIONS} \times \text{OPERATING SCHEDULE} \\ &= \quad 0.0105 \text{ LB/HR} \quad \times \quad 6120 \text{ HRS/YEAR} \\ &\quad \times (1 \text{ TON} / 2000 \text{ LB}) \\ &= \quad 0.0321 \text{ TONS PER YEAR} \end{aligned}$$

HYDROCARBONS

$$\begin{aligned} \text{POTENTIAL EMISSIONS} &= (\text{EMISSION FACTOR}) \times (\text{FUEL USAGE}) \\ &= (\quad 3 \quad) \times (0.0003 \quad) \\ &= \quad 0.0009 \text{ POUNDS PER HOUR} \\ &= \quad 0.0027 \text{ TONS PER YEAR} \end{aligned}$$

$$\begin{aligned} \text{MAXIMUM EMISSIONS} &= \text{POTENTIAL EMISSIONS} \times (1 - \text{CONTROL EFFICIENCY}) \\ &= (\quad 0.0009 \quad) \times (1 - \quad 0 \quad) \\ &= \quad 0.0009 \text{ POUNDS PER HOUR} \end{aligned}$$

$$\begin{aligned} \text{ACTUAL EMISSIONS} &= \text{MAXIMUM EMISSIONS} \times \text{OPERATING SCHEDULE} \\ &= \quad 0.0009 \text{ LB/HR} \quad \times \quad 6120 \text{ HRS/YEAR} \\ &\quad \times (1 \text{ TON} / 2000 \text{ LB}) \\ &= \quad 0.0027 \text{ TONS PER YEAR} \end{aligned}$$

CAN ASSEMBLY - LINE 3B

EMISSION CALCULATIONS FOR FUEL USAGE

THIS REPORT PREPARED ON 12-Mar-86

FUEL TYPE: NATURAL GAS

EMISSION FACTORS FROM AP42 TABLE 1.4-1

PARTICULATE:	5 POUNDS PER MILLION CUBIC FEET
SULFUR DIOXIDE:	0.6 POUNDS PER MILLION CUBIC FEET
NITROGEN OXIDE:	140 POUNDS PER MILLION CUBIC FEET
CARBON MONOXIDE:	35 POUNDS PER MILLION CUBIC FEET
HYDROCARBONS:	3 POUNDS PER MILLION CUBIC FEET

CONTROL EFFICIENCIES

PARTICULATE:	0.0%
SULFUR DIOXIDE:	0.0%
NITROGEN OXIDE:	0.0%
CARBON MONOXIDE:	0.0%
HYDROCARBONS:	0.0%

FUEL USAGE: 0.0003 MILLION CUBIC FEET PER HOUR

OPERATING SCHEDULE: 24 HOURS PER DAY
5 DAYS PER WEEK
51 WEEKS PER YEAR

TOTAL 6120 HOURS PER YEAR

PARTICULATE MATTER

POTENTIAL EMISSIONS = (EMISSION FACTOR) x (FUEL USAGE)
= (5) x (0.0003)
= 0.0015 POUNDS PER HOUR
= 0.0045 TONS PER YEAR

MAXIMUM EMISSIONS = POTENTIAL EMISSIONS x (1 - CONTROL EFFICIENCY)
= (0.0015) x (1 - 0)
= 0.0015 POUNDS PER HOUR

ACTUAL EMISSIONS = MAXIMUM EMISSIONS x OPERATING SCHEDULE
= 0.0015 LB/HR x 6120 HRS/YEAR
x (1 TON / 2000 LB)

SULFUR DIOXIDE

12-Mar-86

$$\begin{aligned} \text{POTENTIAL EMISSIONS} &= (\text{EMISSION FACTOR}) \times (\text{FUEL USAGE}) \\ &= (0.6) \times (0.0003) \\ &= 0.0001 \text{ POUNDS PER HOUR} \\ &= 0.0005 \text{ TONS PER YEAR} \end{aligned}$$

$$\begin{aligned} \text{MAXIMUM EMISSIONS} &= \text{POTENTIAL EMISSIONS} \times (1 - \text{CONTROL EFFICIENCY}) \\ &= (0.0001) \times (1 - 0) \\ &= 0.0001 \text{ POUNDS PER HOUR} \end{aligned}$$

$$\begin{aligned} \text{ACTUAL EMISSIONS} &= \text{MAXIMUM EMISSIONS} \times \text{OPERATING SCHEDULE} \\ &= 0.0001 \text{ LB/HR} \times 6120 \text{ HRS/YEAR} \\ &\quad \times (1 \text{ TON} / 2000 \text{ LB}) \\ &= 0.0005 \text{ TONS PER YEAR} \end{aligned}$$

NITROGEN OXIDE

$$\begin{aligned} \text{POTENTIAL EMISSIONS} &= (\text{EMISSION FACTOR}) \times (\text{FUEL USAGE}) \\ &= (140) \times (0.0003) \\ &= 0.042 \text{ POUNDS PER HOUR} \\ &= 0.1285 \text{ TONS PER YEAR} \end{aligned}$$

$$\begin{aligned} \text{MAXIMUM EMISSIONS} &= \text{POTENTIAL EMISSIONS} \times (1 - \text{CONTROL EFFICIENCY}) \\ &= (0.042) \times (1 - 0) \\ &= 0.042 \text{ POUNDS PER HOUR} \end{aligned}$$

$$\begin{aligned} \text{ACTUAL EMISSIONS} &= \text{MAXIMUM EMISSIONS} \times \text{OPERATING SCHEDULE} \\ &= 0.042 \text{ LB/HR} \times 6120 \text{ HRS/YEAR} \\ &\quad \times (1 \text{ TON} / 2000 \text{ LB}) \\ &= 0.1285 \text{ TONS PER YEAR} \end{aligned}$$

CARBON MONOXIDE

12-Mar-86

$$\begin{aligned} \text{POTENTIAL EMISSIONS} &= (\text{EMISSION FACTOR}) \times (\text{FUEL USAGE}) \\ &= (35) \times (0.0003) \\ &= 0.0105 \text{ POUNDS PER HOUR} \\ &= 0.0321 \text{ TONS PER YEAR} \end{aligned}$$

$$\begin{aligned} \text{MAXIMUM EMISSIONS} &= \text{POTENTIAL EMISSIONS} \times (1 - \text{CONTROL EFFICIENCY}) \\ &= (0.0105) \times (1 - 0) \\ &= 0.0105 \text{ POUNDS PER HOUR} \end{aligned}$$

$$\begin{aligned} \text{ACTUAL EMISSIONS} &= \text{MAXIMUM EMISSIONS} \times \text{OPERATING SCHEDULE} \\ &= 0.0105 \text{ LB/HR} \times 6120 \text{ HRS/YEAR} \\ &\quad \times (1 \text{ TON} / 2000 \text{ LB}) \\ &= 0.0321 \text{ TONS PER YEAR} \end{aligned}$$

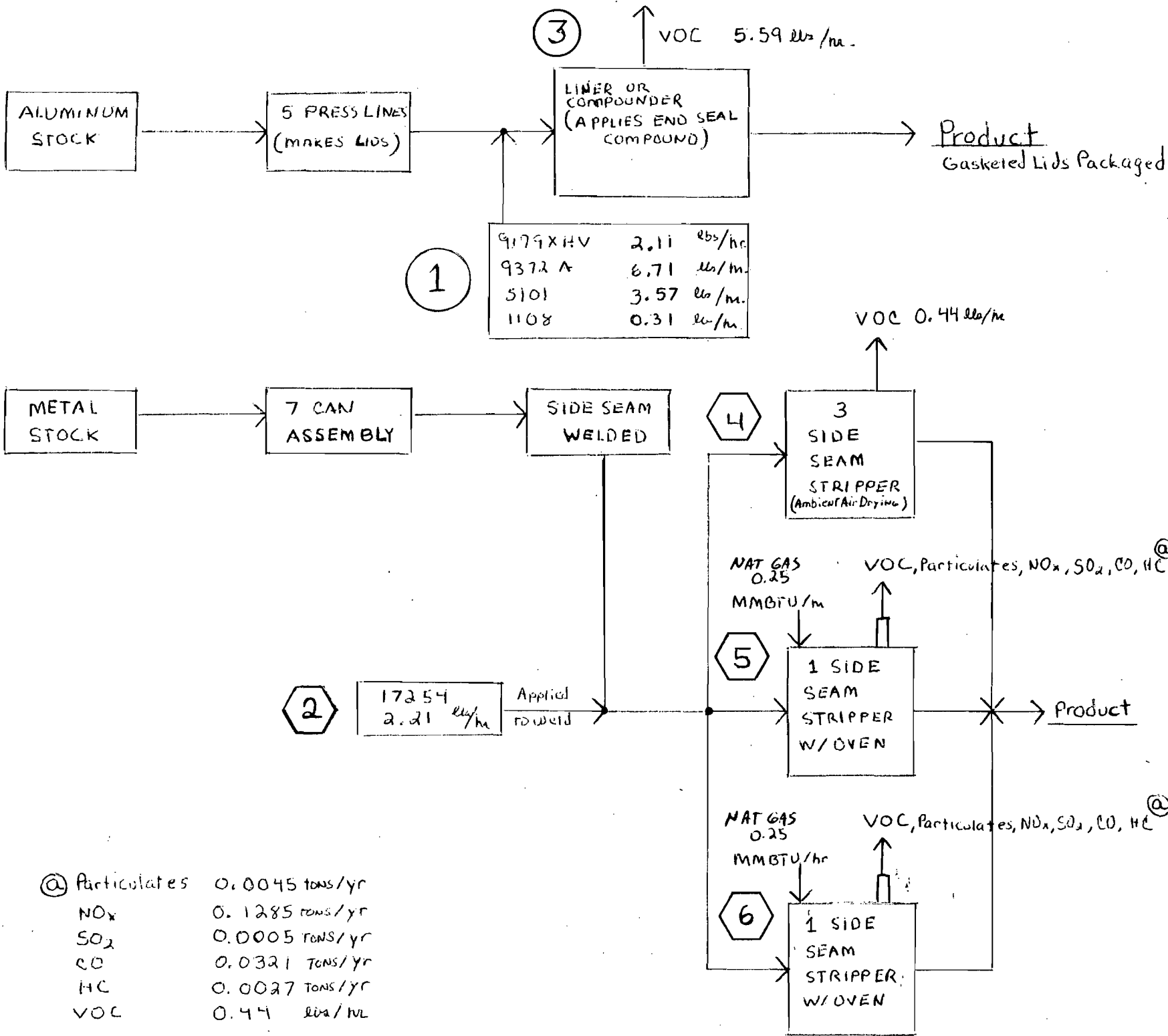
HYDROCARBONS

$$\begin{aligned} \text{POTENTIAL EMISSIONS} &= (\text{EMISSION FACTOR}) \times (\text{FUEL USAGE}) \\ &= (3) \times (0.0003) \\ &= 0.0009 \text{ POUNDS PER HOUR} \\ &= 0.0027 \text{ TONS PER YEAR} \end{aligned}$$

$$\begin{aligned} \text{MAXIMUM EMISSIONS} &= \text{POTENTIAL EMISSIONS} \times (1 - \text{CONTROL EFFICIENCY}) \\ &= (0.0009) \times (1 - 0) \\ &= 0.0009 \text{ POUNDS PER HOUR} \end{aligned}$$

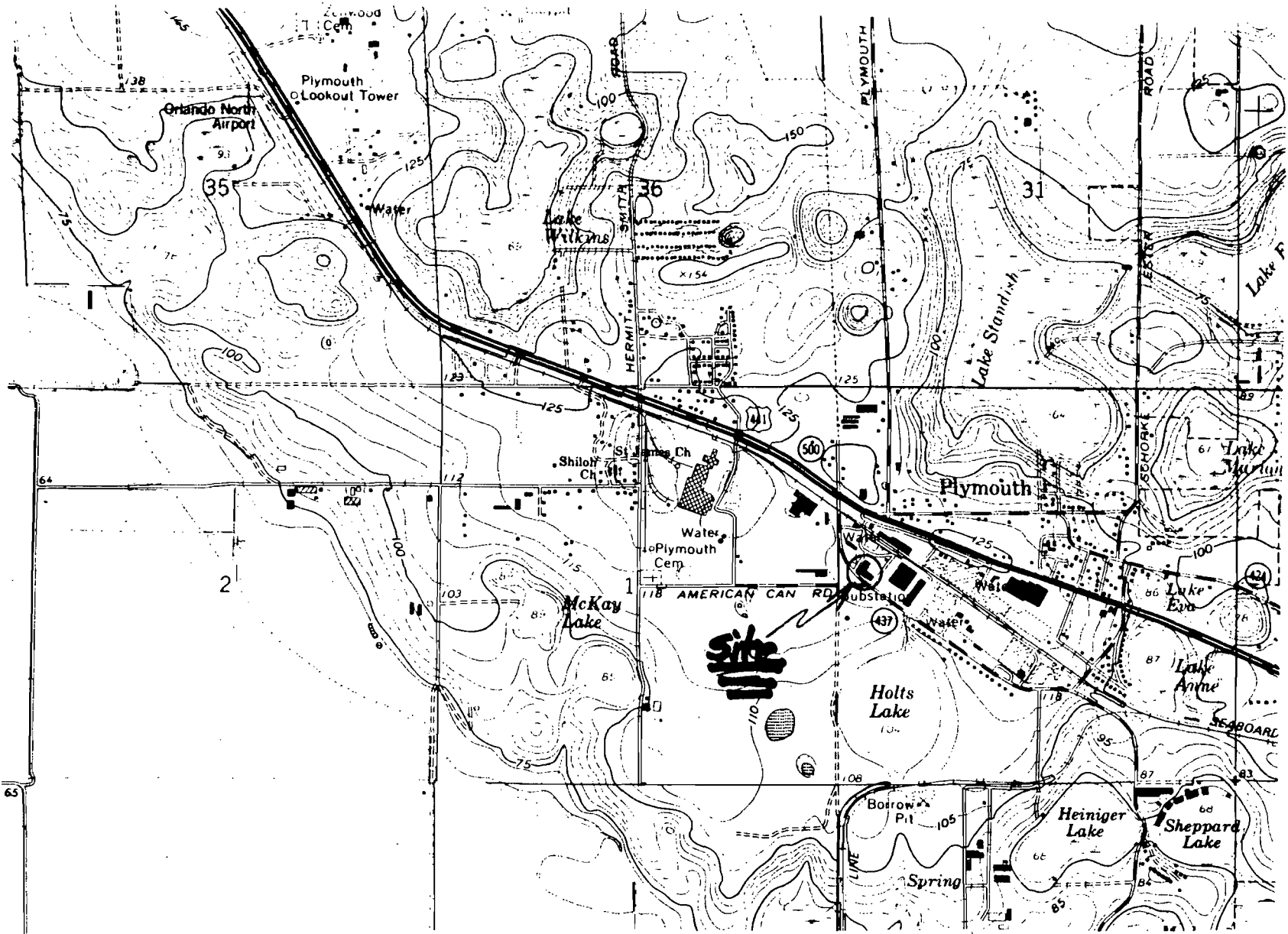
$$\begin{aligned} \text{ACTUAL EMISSIONS} &= \text{MAXIMUM EMISSIONS} \times \text{OPERATING SCHEDULE} \\ &= 0.0009 \text{ LB/HR} \times 6120 \text{ HRS/YEAR} \\ &\quad \times (1 \text{ TON} / 2000 \text{ LB}) \\ &= 0.0027 \text{ TONS PER YEAR} \end{aligned}$$

SUBJECT: Citrus Central - Plymouth Can
 Flow Diagram

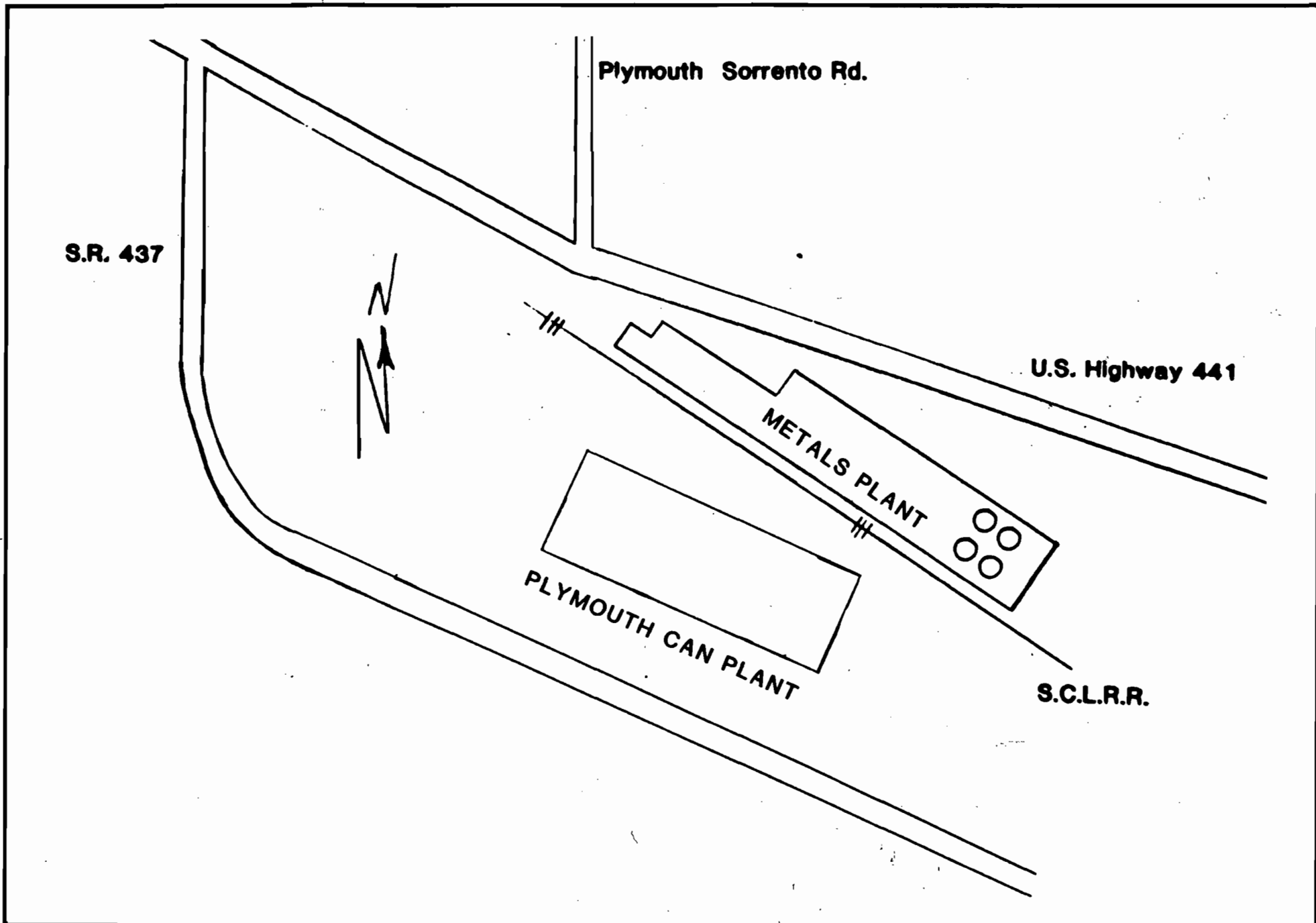


①	Particulates	0.0045 tons/yr
	NO _x	0.1285 tons/yr
	SO ₂	0.0005 tons/yr
	CO	0.0321 tons/yr
	HC	0.0027 tons/yr
	VOC	0.44 lbs/hr

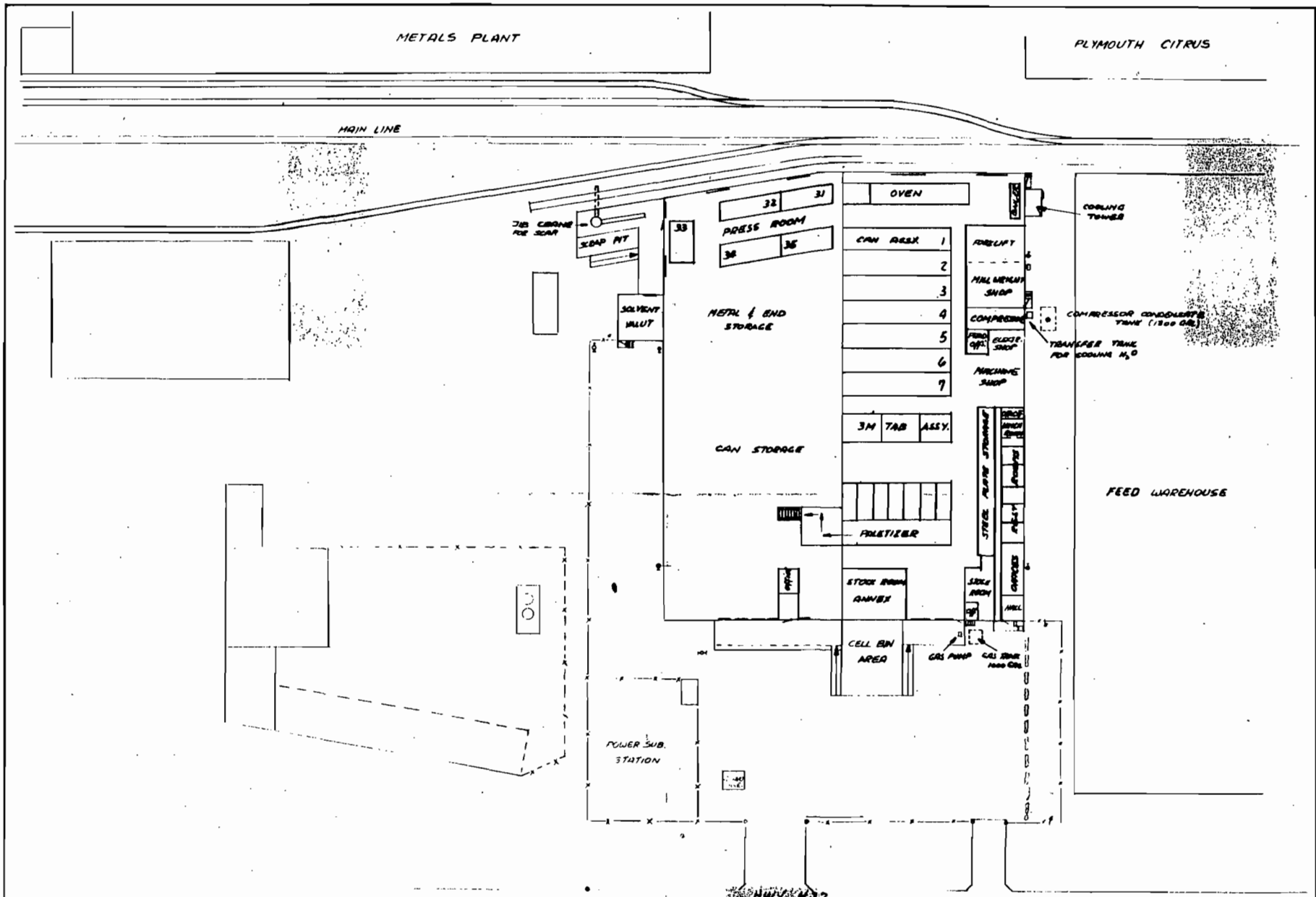
COMP. BY: Morales
 CHK. BY: _____
 DATE: 3/10/86
 SHEET NO. 1 of 1
 JOB NO. 21-038-20



CITRUS CENTRAL, INC PLYMOUTH CAN PLANT SITE PLAN



CITRUS CENTRAL, INC PLYMOUTH CAN PLANT SITE PLAN



45760

LEGEND: SPRINKLER RISER
 HYDRANT
 WIRE LINK FENCE

NAME CITRUS CENTRAL, PLYMOUTH CAN DIV.				
FACILITIES LAY OUT				
ALL DIMENSIONS FUNCTIONAL DIMENSIONS UNLESS OTHERWISE NOTED	DRAWN E	CHECKED	DATE 8-5-86	SCALE 1" = 50'
UNLESS SPECIFIED FINISHED SURFACES, NO DIMENSIONS ARE TO EXCEED 1/4"	MATERIAL			

	AUTOMATED CONTAINER CORPORATION ORLANDO COMPOSITE CAN PLANT 11221 ASTRONAUT BLVD. ORLANDO FLORIDA 32834
	DRAWING NUMBER C-330

Site Plan

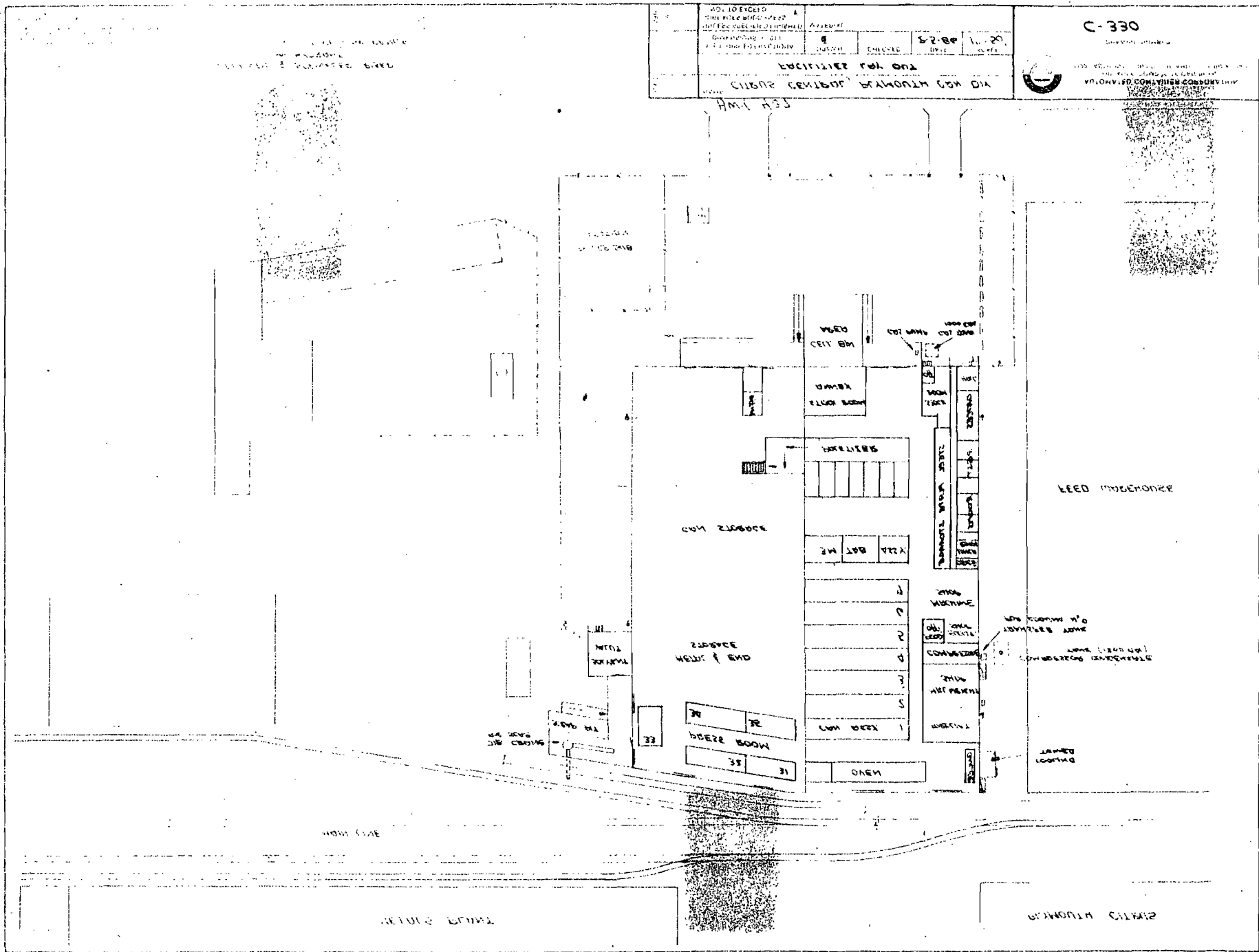
NOTES: 1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. 2. ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. 3. ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. 4. ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. 5. ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. 6. ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. 7. ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. 8. ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. 9. ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. 10. ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE.

NO. INDEXED	4	APPROVED	
DATE INDEXED	5-2-88	CHECKED	11-20
BY	8		

FACILITIES FOR ONE

SIBER CENTER BRANSON COM DIA

C-330



750



Technical Coatings Co.

A SUBSIDIARY OF BENJAMIN MOORE & CO.

Coatings for Industry

- NEWARK
- CHICAGO
- NUTLEY
- SANTA CLARA
- BURLINGTON, ONT.

MIDWEST DISTRICT: NORTH & 25TH AVENUES, MELROSE PARK, ILLINOIS 60160 TELEPHONE: (312) 343-6000

TECHNICAL DATA SHEET

SEE REVERSE SIDE

DATE: JANUARY 1983

COATING DESCRIPTION: 17254A SIDE SEAM STRIPE

RESIN SYSTEM: MODIFIED EPOXY ACRYLIC

SOLVENT SYSTEM: GLYCOL ESTER, GLYCOL ETHER

WEIGHT/GALLON: 8.2 ± 0.1 LBS.

WEIGHT SOLIDS: 33 ± 1.0%

VISCOSITY: 30 ± 2 SECONDS #4 FORD

APPLICATION METHOD: SPRAY OR FLOW COAT

SUBSTRATE: E.T.P.

DRY FILM THICKNESS: 3 -4 MG/LINEAL INCH

CURING CONDITIONS: AUXILIARY HEAT

CLEAN-UP THINNER: AROMATIC/KETONE BLEND

FDA STATUS (175.300): COMPLIES

VOC: 5.49

INSTRUCTIONS: FOR USE ON WELDED CANS

H₂O: 0.0

REMARKS:

PRODUCT LIMITATIONS MAY BE OBTAINED FROM YOUR
TECHNICAL COATINGS REPRESENTATIVE.

RECEIVED

FEB - 4 1986

IS.I. INC. - ORLANDO

Best Available Copy

GENERAL INFORMATION

LOCATION	CONTACT TECHNICAL COATINGS CO. AT:		TELEX
Headquarters: Nutley, NJ	Financial, General Administrative & Personnel	113 E. Centre St. 07110	(201)667-8400 133-505
Newark, NJ	Research & Development Laboratories Flexible Packaging and Coil Tech Service & Development; Polymer Research & Development	134 Lister Ave. 07105	(201)344-1200
Melrose Park, IL	Rigid Packaging - Tech Service & Development Laboratory	North & 25th Aves. 60160	(312)345-1703
Districts: Nutley, NJ	Order Entry - Tech Service, Manufacturing & Sales	57 E. Centre St. 07110	(201)667-4900
Melrose Park, IL	Order Entry - Tech Service, Manufacturing & Sales	North & 25th Aves. 60160	(312)345-6000
Santa Clara, CA	Order Entry - Tech Service, Manufacturing & Sales	1000 Walsh Ave. 95050	(408)727-3400
Canada: Burlington, Ontario	Order Entry - Tech Service, Manufacturing & Sales	1164 Walkers Line L7M 1V2	(416)355-3561 61-8522

Please Read The Following Information:

This product is intended for industrial use only. Before commercial use of this or any other Technical Coatings Co. (TCCo.) product, secure documentation (e.g., MSDS) to ensure your end-product and operational compliance with federal, state and municipal regulations (OSHA, EPA, FDA, etc.). Consult the indicated TCCo. District location for service of your specific needs in this regard.

DISCLAIMER

Neither TCCo. nor its marketing agents shall be responsible for the use of this information, or of any product, method or apparatus mentioned. The customer must make his own determination of product suitability and thoroughly qualify the product for serviceability, for environmental acceptability, and for any impact on the health and safety of all employees and purchasers. TCCo. warrants that the materials themselves do not infringe the claims of any United States patent; no license is implied nor is any further patent warranty made. Except in cases where warranty agreements are in force, TCCo.'s only obligation shall be to replace such quantity of the product which is proven to have been defective. No person is authorized to make any statement or recommendation not contained herein, and any such statement or recommendation so made shall not bind TCCo.

SPECIFICATIONS

The data provided herein, whether tentative or established, represent the typical condition for this product. Such information is not intended to be used for specification limits, certification standards, or other finite acceptance criteria.

STORAGE AND HANDLING

This form indicates whether the product described is flammable, freezable, reactive, or of a composition known to be reactive with metals. In general, products of such nature are treated as follows:

FLAMMABLES (Red Label Assumed)

Store and handle in accordance with acceptable industry practice and comply with regulations as defined by the National Fire Codes, OSHA and local authorities having jurisdiction.

FREEZABLES (No Freeze-Thaw Stability Assumed)

Store at temperatures above 40°F. (4°C.) Storage below this temperature may cause damage. Best storage temperatures are between 60°F. (16°C.) and 80°F. (27°C.). Lower temperatures can cause increased viscosity of a temporary nature. After storage at low temperatures, allow product to warm to room temperature before agitating or using.

REACTIVE (Heat and Light Sensitivity)

Prolong storage life and protect from spontaneous polymerization by storing at temperatures below 77°F. (25°C.) Where noted as UV reactive, the material requires shielding from sunlight and other UV sources (e.g., fluorescent lamps).

METAL REACTIVITY

Many products (esp. hot melts, aqueous and reactive systems) degrade rapidly if exposed to copper, brass, black iron, or aluminum. Utilize stainless steel application and storage equipment where such sensitivity is noted as a product characteristic. Rotate all inventory on a first-in-first-out basis. Request your TCCo. representative to advise you of the anticipated shelf life of specific products under the storage conditions in your plant.

PACKAGING

Product packaging is specified by TCCo. Non-standard packaging is discouraged and can be considered only in cases where warranted by volume and frequency of shipments. TCCo. can assist in developing bulk packaging-shipping methods (portable tanks, bins, tank wagons, tankcars, etc.) to facilitate the needs of customers whose requirements justify such handling.

GRACE

Dewey and Almy Chemical Division

W.R. Grace & Co.
55 Hayden Avenue
Lexington, Mass. 02173

(617) 861-6600

February 20, 1986

Mr. Dart Morales
Post Buckley
889 North Orange Avenue
Orlando, Florida 32801

Dear Mr. Morales:

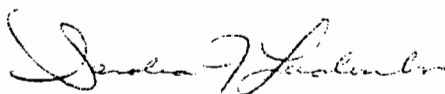
Mr. Richard Walsh has asked me to send you VOC information for five Dewey and Almy products.

The calculated VOC (Volatile Organic Compound) for each of these products, along with the additional data you requested, is attached.

We calculate VOC levels using compound characteristics from our formulation information. Water is introduced into various solvent-based sealants through certain raw materials and processing steps. We use our best estimate of water levels for these calculations.

Please call if you require further information.

Very truly yours,



Sandra J. Ladoulis
Process Chemist
Manufacturing Technical Service

SJL/emm

cc: Mr. R. N. Walsh - Dewey and Almy, Atlanta

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FEB 25 1986

GRACE, INC. - ORLANDO

	<u>VOC</u> <u>(#/gal. less water)</u>	<u>Factor (#/gal.)</u>	<u>% Water</u> <u>(By Weight)</u>	<u>% Solids</u> <u>(By Weight)</u>
DAREX Dispersion Concentrate 1108 (44-46)	3.7	7.0	2.6	45.0
DAREX Composite Can Compound 5101	3.5	7.94	10.9	50.0
DAREX Compound 9179XHV	3.3	7.82	0.3	57.25
DAREX Compound 9372A	3.7	7.47	0.3	50.0