

Check Sheet

Company Name: METAL CONTAINER CORPORATION  
Permit Number: AL01-057752, -057753  
PSD Number: \_\_\_\_\_  
Permit Engineer: \_\_\_\_\_

**Application:**

- Initial Application
- Incompleteness Letters
- Responses
- Waiver of Department Action
- Department Response
- Other

**Cross References:**

- 
- 
- 

**Intent:**

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

**Final Determination:**

- Final Determination
- Signed Permit
- BACT Determination
- Other

**Post Permit Correspondence:**

- Extensions/Amendments/Modifications
- Other

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

October 6, 1986

Mr. John V. Stier  
Manager, Environmental Affairs  
Anheuser-Busch Company  
St. Louis, Missouri 63118-1852

Dear Mr. Stier:

The department received your letter, dated October 1, 1986, which requested an approval of a schedule for start-up and emissions testing of thermal oxidizers Nos. 1 and 2 at the Jacksonville Can Plant.

This request is acceptable. Metal Container Corporation (MCC) shall demonstrate compliance and quantify the emissions reductions as proposed. An emissions testing program shall be required not later than February 1, 1987. MCC shall submit complete applications for operating permits, including application fees, along with compliance records, test results and Certificates of Completion, to the Jacksonville Bio-Environmental Services (BES) office at the completion of this program on or before February 1, 1987.

Sincerely,

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

CHF/TH/s

cc: Khurshid Mehta  
Bill Stewart  
John Brown



**ANHEUSER-BUSCH COMPANIES**

September 30, 1986

**DER**  
**OCT 1 1986**  
**BAQM**

Mr. Clair Fancy  
Central Air Permitting Section  
Department of Environmental Regulation  
2600 Blainstone Road  
Tallahassee, Florida 32301-8241

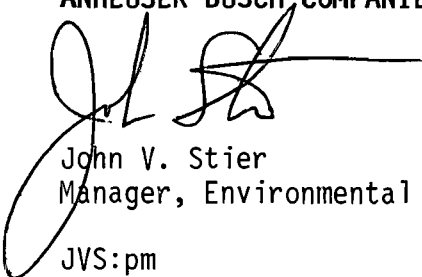
Dear Clair:

Metal Container Corporation (MCC) requests your approval of a schedule for start-up and emissions testing of thermal oxidizers No's 1 and 2 at the Jacksonville Can Plant. The use of these thermal oxidizers is an integral part of MCC's modernization program and future operating plans.

MCC proposes to bring the thermal oxidizers on-line and quantify the emissions reductions through an emissions testing program by February 1, 1987. Operating permit applications will be submitted to the Jacksonville Bio-Environmental Services Division at the completion of this program. Your written approval of this proposal and schedule is requested by October 10, 1986.

Sincerely,

**ANHEUSER-BUSCH COMPANIES, INCORPORATED**



John V. Stier  
Manager, Environmental Affairs

JVS:pm

JS93086



ANHEUSER-BUSCH COMPANIES

DER  
AUG 22 1986  
BAQM

August 18, 1986

Mr. William Thomas  
Bureau of Air Quality Management  
State of Florida  
Department of Environmental Regulation  
2600 Blair Stone Road  
Twin Towers Office Building  
Tallahassee, Florida 32301

METAL CONTAINER CORPORATION - JACKSONVILLE  
CAN LINE NO. 1 AIR PERMITS

Dear Bill:

As we discussed at our meeting on July 31, 1986, Metal Container Corporation (MCC) has reexamined its sales projections for the next several years and requests permits to reinstate line number one from a standby to a full time basis. This line was recently designated as standby in the plant modernization approval.

The current maximum speed of line one will be increased to 1,000 cans per minute and will continue to produce either 12 or 16 ounce cans. Projected worst case VOC emissions from this line are 42.5 tpy (233 lbs/day) using water-based coatings and operating the existing line one thermal oxidizer. The overvarnish and bottom varnish operations from the three modernized lines will be ducted to the line one thermal oxidizer in order to provide an offset of 45.7 tpy (250 lbs/day).

I have attached spreadsheets documenting the emission estimates. The emissions increase is based on a worst case scenario of all 16 ounce soft drink cans. The proposed decrease is a conservative estimate based on actual emissions from projected post-modernization can volumes. The emissions decrease is expected to be much greater in practice than projected in these figures.

Please call me with any questions or comments about the feasibility of this approach. I look forward to working with you again on this project.

Sincerely,

John V. Stier  
Manager, Environmental Affairs

JVS:pm  
Attachments

Anheuser-Busch Companies, Inc.  
Executive Offices  
Schlitz Place  
St. Louis, MO U.S.A. 63118-1852  
Telex 447 117 ANBUSCH STL

*Coatings line #1 and #2 #3 #4  
oxidizer  
over varnish  
bottom varnish*

**METAL CONTAINER CORPORATION  
JACKSONVILLE CAN PLANT  
ACTUAL VOC EMISSIONS**

<u>Scenario</u>	<u>Total Facility VOC Emissions (Tons)</u>
1981 Actual	327.0
1982 Actual	318.0
1983 Actual	339.2
1984 Actual	368.2
1985 Actual	345.7
Modernized Projection 1986	347.3
Permit Limitation	403.5
Maximum Increase in Emissions; Line 1	+42.5
Proposed Emissions Decrease	-45.7

*Projection 2 → 347.3  
Projection 1 → 385.8*

*345.7  
+ 42.5  
-----  
388.2*

METAL CONTAINER CORPORATION  
 JACKSONVILLE CAN PLANT  
 PROPOSED VOC EMISSIONS REDUCTION

Actual Emissions (tpy)

<u>Process Operation</u>	<u>Uncontrolled</u>	<u>Controlled</u>	<u>Net Decrease</u>
<b>All Beer Cans</b>			
12 Ounce			
Bottom Varnish	<del>6.63</del>	<del>3.64</del>	2.99
Overvarnish	<del>74.83</del>	<del>41.16</del>	33.67
16 Ounce			
Bottom Varnish	<del>1.26</del>	<del>0.69</del>	0.57
Overvarnish	<del>18.96</del>	<del>10.43</del>	8.53
<b>TOTALS</b>	<b>101.68</b>	<b>55.92</b>	<b><u>45.76</u></b>
<b>All Soft Drink Cans</b>			
12 Ounce			
Bottom Varnish	<del>6.69</del>	<del>3.68</del>	3.01
Overvarnish	<del>102.90</del>	<del>56.59</del>	46.31
16 Ounce			
Bottom Varnish	<del>1.27</del>	<del>0.70</del>	0.57
Overvarnish	<del>26.07</del>	<del>14.34</del>	11.73
<b>TOTALS</b>	<b>136.93</b>	<b>75.31</b>	<b><u>61.62</u></b>

*from 2 line  
from 1 line*

*decrease*

*from 1 line  
from 1 line*

*107.38*

METAL CONTAINER CORPORATION  
 JACKSONVILLE FLORIDA BEVERAGE CAN MANUFACTURING FACILITY  
 CAN LINE NUMBER 1 AIR PERMITTING ANALYSIS  
 AUGUST 9, 1986

*Can line No 1  
 16 ounce cans*

CAN LINE NUMBER ONE OPERATING ON ALL 16 OUNCE CANS  
 65% OF ALL BEER CANS ARE WHITE BASECOATED  
 80% OF ALL CANS ARE OVERVARNISHED

*65%  
 80%*

MAXIMUM CAN PRODUCTION  
 PER MINUTE: 1000  
 PER HOUR: 60000  
 PER DAY (875% EFF): 1.080E+06  
 PER YEAR (875% EFF): 3.942E+08

\*\*\*\*\*  
 COATINGS/SOLVENT    MANUFACTURERS    USAGE    DENSITY    VOC FRACTION    UNCONTROLLED VOC EMISSIONS    CAPTURE    \*    FUGITIVE    T.O. INLET    T.O. OUTLET    TOTAL    \*    USAGE RATE  
 IDENTIFICATION    (GALLONS)    (LBS/GAL)    (BY WEIGHT)    (TONS/YEAR)    (BY WEIGHT)    \*    (TONS/YEAR)    (TONS/YEAR)    (TONS/YEAR)    (TONS/YEAR)    \*    (GALS/1000 CANS)  
 \*\*\*\*\*

100 % BEER CAN PRODUCTION

WHITE BASECOAT	PPG CE3606	33,310	11.10	0.089	16.45	0.80	*	3.29	13.16	1.32	4.61	*	0.130
							*					*	
INSIDE SPRAY	CELANESE 3500-C	83,965	8.45	0.150	53.21	0.80	*	10.64	42.57	4.26	14.90	*	0.213
							*					*	
BOTTOM VARNISH	INMONT Z125-3	3,942	8.65	0.114	1.94	0.50	*	0.97	0.97	0.10	1.07	*	0.010
							*					*	
OVERVARNISH	INMONT S145-121A	41,943	8.70	0.160	29.19	0.50	*	14.60	14.60	1.46	16.06	*	0.133
							*					*	
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	1,971	6.71	0.777	5.14	0.00	*	5.14	0.00	0.00	5.14	*	0.005
							*					*	
					SUBTOTALS			34.64	71.30	7.13	41.77		

100 % SOFT DRINK CAN PRODUCTION

INSIDE SPRAY	CELANESE 3500-C	104,956	8.45	0.150	66.52	0.80	*	13.30	53.21	5.32	18.62	*	0.266
							*					*	
BOTTOM VARNISH	INMONT Z125-3	3,981	8.65	0.114	1.96	0.50	*	0.98	0.98	0.10	1.08	*	0.010
							*					*	
OVERVARNISH	INMONT S145-121A	46,137	8.70	0.160	32.11	0.50	*	16.06	16.06	1.61	17.66	*	0.146
							*					*	
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	1,971	6.71	0.777	5.14	0.00	*	5.14	0.00	0.00	5.14	*	0.005
							*					*	
					SUBTOTALS			35.48	70.25	7.02	42.50		

*41.77  
 42.50  
 -----  
 84.27*

*Increase*

METAL CONTAINER CORPORATION  
 JACKSONVILLE FLORIDA BEVERAGE CAN MANUFACTURING FACILITY  
 MODERNIZED PROJECTED EMISSIONS  
 AUGUST 9, 1986

*from 2 lines*

NOTE: ASSUMES 65% OF BEER CANS ARE WHITE BASECOATED AND 80% OVERVARNISHED

TWELVE OUNCE CAN PRODUCTION FROM TWO LINES  
 PER MINUTE: 2800  
 PER HOUR: 168000  
 PER YEAR: 1.344E+09

*uncontrolled*

*controlled*  
 12oz

\*\*\*\*\*  
 COATING/SOLVENT    MANUFACTURERS    USAGE    DENSITY    VOC FRACTION    UNCONTROLLED VOC EMISSIONS    CAPTURE EFFICIENCY    FUGITIVE    VOC EMISSIONS T.O. INLET    T.O. OUTLET    TOTAL    USAGE RATE  
 IDENTIFICATION    (GALLONS)    (LBS/GAL)    (BY WEIGHT)    (TONS/YEAR)    (BY WEIGHT)    (TONS/YEAR)    (TONS/YEAR)    (TONS/YEAR)    (TONS/YEAR)    (TONS/YEAR)    (GALS/1000 CANS)

100 % BEER CAN PRODUCTION

WHITE BASECOAT	PPG CE3606	87,360	11.10	0.089	43.15	0.80 *	8.63	34.52	3.45	12.08 *	0.100
INSIDE SPRAY	CELANESE 3500-C	215,040	8.45	0.150	136.28	0.80 *	27.26	109.03	10.90	38.16 *	0.160
BOTTOM VARNISH	INMONT Z125-3	13,440	8.55	0.114	6.63	0.50 *	3.31	3.31	0.33	3.64 *	0.010
OVERVARNISH	INMONT S145-121A	107,520	8.70	0.160	74.83	0.50 *	37.42	37.42	3.74	41.16 *	0.100
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	6,720	6.71	0.777	17.52	0.00 *	17.52	0.00	0.00	17.52 *	0.005
SUBTOTALS					278.41		94.13	184.28	18.43	112.56 ?	

100 % SOFT DRINK CAN PRODUCTION

INSIDE SPRAY	CELANESE 3500-C	268,800	8.45	0.150	170.35	0.80 *	34.07	136.28	13.63	47.70 *	0.200
BOTTOM VARNISH	INMONT Z125-3	13,574	8.65	0.114	6.69	0.50 *	3.35	3.35	0.33	3.68 *	0.010
OVERVARNISH	INMONT S145-121A	147,840	8.7	0.160	102.90	0.50 *	51.45	51.45	5.14	56.59 *	0.110
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	6,720	6.71	0.777	17.52	0.00 *	17.52	0.00	0.00	17.52 *	0.005
SUBTOTALS					297.46		106.38	191.08	19.11	125.49 ?	

*112.56  
 125.49  
 -----  
 238.05*



SIXTEEN OUNCE CAN PRODUCTION FROM ONE LINE  
 PER MINUTE: 1400  
 PER HOUR: 84000  
 PER YEAR: 2.560E+08

*uncontrolled*

*from 1 line*

*Controlled*

*16 oz*

\*\*\*\*\*  
 COATING/SOLVENT    MANUFACTURERS    USAGE    DENSITY    VOC    UNCONTROLLED    CAPTURE    \*    VOC EMISSIONS    \*  
 IDENTIFICATION    (GALLONS)    (LBS/GAL)    (BY WEIGHT)    (TONS/YEAR)    (BY WEIGHT)    \*    (TONS/YEAR)    T.O. INLET    T.O. OUTLET    TOTAL    \*    USAGE RATE  
 \*\*\*\*\*  
 (TONS/YEAR)    (TONS/YEAR)    (TONS/YEAR)    (GALS/1000 CANS)

100 % BEER CAN PRODUCTION

COATING/SOLVENT	MANUFACTURERS IDENTIFICATION	USAGE (GALLONS)	DENSITY (LBS/GAL)	VOC FRACTION (BY WEIGHT)	UNCONTROLLED VOC EMISSIONS (TONS/YEAR)	CAPTURE EFFICIENCY (BY WEIGHT) *	FUGITIVE (TONS/YEAR)	T.O. INLET (TONS/YEAR)	T.O. OUTLET (TONS/YEAR)	TOTAL (TONS/YEAR)	USAGE RATE (GALS/1000 CANS)
WHITE BASECOAT	PPG CE3606	21,632	11.10	0.089	10.69	0.80 *	2.14	8.55	0.85	2.99 *	0.130
INSIDE SPRAY	CELANESE J500-C	54,528	8.45	0.150	34.56	0.80 *	6.91	27.65	2.76	9.68 *	0.213
BOTTOM VARNISH	INMONT Z125-3	2,560	8.65	0.114	1.26	0.50 *	0.63	0.63	0.06	0.69 *	0.010
OVERVARNISH	INMONT S145-121A	27,238	8.70	0.160	18.96	0.50 *	9.48	9.48	0.95	10.43 *	0.133
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	1,280	6.71	0.777	3.34	0.00 *	3.34	0.00	0.00	3.34 *	0.005
SUBTOTALS					68.80		22.50	46.30	4.63	27.13	

100 % SOFT DRINK CAN PRODUCTION

INSIDE SPRAY	CELANESE J500-C	68,160	8.45	0.150	43.20	0.80 *	8.64	34.56	3.46	12.09 *	0.266
BOTTOM VARNISH	INMONT Z125-3	2,586	8.65	0.114	1.27	0.50 *	0.64	0.64	0.06	0.70 *	0.010
OVERVARNISH	INMONT S145-121A	37,453	8.70	0.160	26.07	0.50 *	13.03	13.03	1.30	14.34 *	0.146
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	1,280	6.71	0.777	3.34	0.00 *	3.34	0.00	0.00	3.34 *	0.005
SUBTOTALS					73.88		25.65	48.23	4.82	30.47	

*27.13*  
*30.47*  
*57.60*

*238.05*  
*57.60*  
*395.65*

varnish  
over varnish tile { printer

Coating  
line #1

Coating  
line #2

Coating  
line #3

Coating  
line #4

T.O

↑  
oven



test method

base coating  
printer oven  
in cell spray

method

1989

shutdown

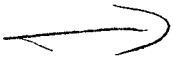
method  
2 of  
coating

*August 1986*

METAL CONTAINER CORPORATION (MCC)  
JACKSONVILLE LINE NUMBER 1

*See letter  
of*

- RETAINED AS BACK-UP UPON COMPLETION OF CONSTRUCTION OF THE MODERNIZATION PROJECT.
  - CONSTRUCTION COMPLETE BY OCTOBER 15, 1986.
  
- REQUEST TO REINSTATE ON A FULL TIME BASIS DISCUSSED WITH FDER ON JULY 31 AND SUBMITTED ON AUGUST 18, 1986.
  
- THE ADDITIONAL CAPACITY IS REQUIRED FOR SEVERAL REASONS:
  - BEER CAN REQUIREMENTS IN FLORIDA INCREASED DRAMATICALLY DUE TO ALL CAN MAKERS CONVERTING TO SPIN NECKED CANS AND INCREASED DEMAND FOR ANHEUSER-BUSCH PRODUCTS.
  - MCC HAS SIGNED CONTRACTS TO SUPPLY SOFT DRINK CANS.
  - CONSTRUCTION DURING MODERNIZATION PROGRAM RESULTED IN LOST CAN PRODUCTION.



- IF SHUT-DOWN IS REQUIRED ON OCTOBER 15 AND START-UP IS NOT PERMITTED UNTIL JANUARY 1, 1987, THE LOSSES WILL BE CATASTROPHIC.
  - LOST PROFIT OF \$1,570,000.
  - OVER 70 MM CANS WILL HAVE TO BE SHIPPED FROM OTHER LOCATIONS TO SATISFY CONTRACTUAL OBLIGATIONS.
  - LAYOFF OF 40 HOURLY EMPLOYEES WITH ASSOCIATED \$70,000 UNEMPLOYMENT BENEFITS TO BE ABSORBED BY THE STATE OF FLORIDA.
  
- POSSIBLE SOLUTIONS:
  - EXPEDITE PERMIT REVIEW TO ALLOW ISSUANCE BY OCTOBER 15.
  - LETTER OF NON-ENFORCEMENT; PROCEED WITH CONSTRUCTION/OPERATION AT MCC RISK OF NOT OBTAINING A PERMIT.

365  
physical ties  
line 4 → collector

P 408 533 650

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. John V. Steir	
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  1/8/86	

PS Form 3800, Feb. 1982

PS Form 3811, July 1983

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

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

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

3. Article Addressed to:  
Mr. John V. Steir  
Anheuser-Busch Companies  
One Busch Place  
St. Louis, Missouri 63118-1852

4. Type of Service: <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail	Article Number P 408 533 650
--	---------------------------------

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


5. Signature - Addressee  
*John V. Steir*

6. Signature - Agent  
X

7. Date of Delivery

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

January 6, 1986

Mr. John V. Stier  
Supervisor, Environmental Affairs  
Anheuser-Busch Companies  
St. Louis, Missouri 63118-1852

Dear Mr. Stier:

Re: Metal Container Corporation, Jacksonville  
Modification of Conditions Permit Nos. AC 16-57752  
AC 16-57753

The department received your letter, dated October 10, 1985, which requested a modification of the Specific Conditions of the referenced permits. This request is acceptable and the specific conditions are changed or added as follows:

Specific Condition No. 2

From: The amounts and formulas, of each coating and solvent shall be recorded on, at least, a monthly basis. The formula should include pounds of VOC per gallon of coating, less water, and should be based on a certified analysis of each coating given by the supplier. These records and certifications shall be made available for Department inspection upon request.

To: The amounts and formulas of each coating and solvent shall be recorded on a daily basis. The formula should include pounds of VOC per gallon of coating, less water, and should be based on a certified analysis of each coating given by the supplier. These records and certifications shall be made available for Department inspection upon request.

Specific Condition No. 4

From: Compliance with the standards of Specific Condition No. 3 shall be verified annually in the form of a compliance report submitted to the Jacksonville Bio-Environmental Services (JBES) office. This report shall include test results, manufacturer's certifications and coating usage records.

Mr. John V. Stier  
Page Two  
January 6, 1986

To: Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emission of the facility. Quarterly material balance reports (24-hour) shall be required and sent to the Jacksonville Bio-Environmental Services (JBES) office to assess emissions and maintain VOC inventory. The quantity of cans processed during that quarter shall be included in the report. This report shall also include manufacturer's certifications, coating usage records, and hours of operation.

The following specific conditions will be added to the permits:

The amount of cans processed shall not exceed 1400 cans per minute. Three out of four lines will be operating continuously (8760 hour per year). The fourth line will remain as a back-up line.

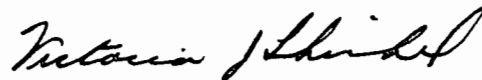
No objectionable odors are allowed from this facility.

Attachment to be Incorporated:

Mr. John V. Stier's letter of October 10, 1985.

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

Sincerely,

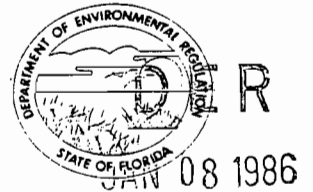


Victoria J. Tschinkel  
Secretary

VJT/ks

cc: J. Woosley  
DER Northeast District

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION



# Interoffice Memorandum

BAQM

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
To: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
To: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
FROM: \_\_\_\_\_ DATE: \_\_\_\_\_

TO: Victoria J. Tschinkel  
FROM: Clair Fancy *Clair Fancy*  
DATE: January 6, 1986

SUBJ: Metal Container Corporation, Jacksonville  
Request to Modify Permit Nos. AC 16-57752  
AC 16-57753

Attached for your signature is a letter modifying the specific conditions of Permit Nos. AC 16-57752 and AC 16-57753 to Metal Container Corporation in Jacksonville, Florida. The Bureau of Air Quality Management recommends that the modification be approved.

CHF/pa

Attachment



**DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES**  
Bio-Environmental Services Division  
Air and Water Pollution Control



December 18, 1985

Ms. Teresa Heron  
Bureau of Air Quality Management  
Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, Fl. 32301

Re: Metal Container Corp.  
Permit AC 16-57753 and AC 16-57753

Dear Ms. Heron:

Receipt of your memorandum dated November 8, 1985, is acknowledged. The proposals for the permit modification are generally acceptable. It is noted however, that Specific Condition No. 2 needs to be clarified so that it is clear that the analysis submitted reflects the solvent content of the coating (including added solvent) which is applied to the coating applicator. The Reasonably Available Control Technology (RACT) rules are written in terms of Volatile Organic Compounds (VOC) per gallon of coating (minus water) delivered to the coating applicator. In addition, the applicable test method as specified by Rule 17-2.700 Table I, Florida Administrative Code (FAC) is Environmental Protection Agency (EPA) Reference Method No. 24. If a reasonable relationship can be established between EPA Method 24 tests on each coating as applied and the suppliers analysis, then an alternate compliance method might be feasible.

The cans per minute limitation should be expressed as cans per minute per line or cans per minute per 3 lines.

Your consideration of these comments is appreciated.

Please direct further questions to the undersigned.

Very truly yours,

A handwritten signature in black ink, appearing to read "Jerry E. Woosley".

Jerry E. Woosley  
Associate Engineer

JEW/ecr

cc: Mr. Mort Benjamin, DER  
BESD File 1860 E

DER

DEC 20 1985

BAQM



DEPARTMENT OF ENVIRONMENTAL REGULATION

*Com/minute is covered.*

**ROUTING AND TRANSMITTAL SLIP**

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)

*Bill*

Initial

Date

2.

Initial

Date

3.

Initial

Date

4.

Initial

Date

REMARKS:

*Modifications of Conditions  
Re: Metal Container*

INFORMATION

Review & Return

Review & File

Initial & Forward

*Specific Condition No 2 and method was already discussed during the permitting process. Final determination addressed the Company's request.*

DISPOSITION

Review & Respond

Prepare Response

For My Signature

For Your Signature

Let's Discuss

Set Up Meeting

Investigate & Report

Initial & Forward

Distribute

Concurrence

For Processing

Initial & Return

*Do you think we should change it now?*

*I just changed from monthly to daily as we discussed during the meeting.*

*The other comments are o.k, I can do those changes.*

*- Please return this package to me -*

FROM:

*Texas*

DATE

*Dec 23, 01*

PHONE

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION



# Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
To: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
To: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
FROM: \_\_\_\_\_ DATE: \_\_\_\_\_

TO: Jerry Woosley  
Bio-Environmental Services (JBES)  
Jacksonville - Duval County

FROM: Teresa Heron, BAQM *T.H.*

THRU: Bill Thomas, BAQM *BT*

SUBJ: Metal Container Corporation Jacksonville Permits  
No. AC 16-57752 and AC 16-57753

DATE: November 8, 1985

Attached I am including a copy of the referenced construction permits, a draft letter modifying the specific conditions of the construction permits and the company's request.

Since the total emission from the entire facility will not exceed the 403.5 tons of VOC per year already permitted and a "modification" does not apply in this case, the submission of a new application was not required.

In order to make the permits federally enforceable, we are modifying the specific conditions of the construction permits (as drafted) for the Secretary's signature.

If you have any comments, questions or a better wording, please call or send us a memo.

After amendment is signed by the Secretary, you may proceed to amend the operating permits.

TH/ks



**ANHEUSER-BUSCH COMPANIES**

October 10, 1985

Mr. William Thomas  
Bureau of Air Quality Management  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Re: Metal Container Corporation Jacksonville

Dear Bill:

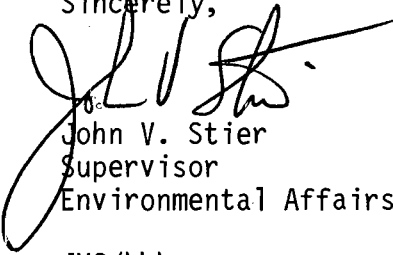
As discussed at our meeting on October 9, 1985, Metal Container Corporation (MCC) proposes to modernize its Jacksonville can manufacturing facility by increasing the speeds on three of its four lines from approximately 950 to 1400 cans per minute. The fourth line will not be modernized but may remain in the plant as a back-up line.

The conditions in the air permits issued for the plant on June 22, 1982 are still valid and acceptable for the modernized facility. Specifically, each line still consists of a basecoater, inside spray machine, bottom varnisher, overvarnisher and necker lubricator. The facility annual emission limitation of 403.5 tons per year can still be met with the three modernized and one back-up line.

Attached is a summary sheet outlining the historical and expected annual VOC emissions. As shown, a decrease in actual emissions is expected after the modernization. Since there is not projected to be an increase in actual emissions, it is requested that the permits be amended in an administrative manner.

We appreciated the opportunity to meet with you again and discuss this issue. Please let me know if I can provide any additional information.

Sincerely,

  
John V. Stier  
Supervisor  
Environmental Affairs

JVS/bkb

Enc.

Anheuser-Busch Companies, Inc.  
Executive Offices  
One Busch Place  
St. Louis, MO U.S.A. 63118-1852  
Telex 447 117 ANBUSCH STL

DER

OCT 15 1985

BAQM

METAL CONTAINER CORPORATION  
JACKSONVILLE FACILITY  
EXPANSION/MODERNIZATION ANALYSIS

<u>Scenario</u>	<u>Total Facility VOC Emissions (tons)</u>
1981 Actual	327.0
1982 Actual	318.0
1983 Actual	339.2
1984 Actual	368.2
1986 Projection	347.3
Permit Limitation	403.5

JVS 10/10/85

DER

OCT 15 1985

BAQM

METAL CONTAINER CORPORATION  
 JACKSONVILLE FACILITY  
 EXPANSION/MODERNIZATION ANALYSIS

4 lines

Scenario	Total Facility VOC Emissions (tons)	
1981 Actual	314	327.0
1982 Actual		318.0
1983 Actual		339.2
1984 Actual		368.2
1986 Projection 1		385.8
1986 Projection 2		347.3
Permit Limitation		403.5
1984 Necker/Flanger Lube Reduction		-76.1

total pollutants use.

double 20 hours

+32.1  
-20.9

(3 lines)

(4 lines)

1.6  
1984

no change equipment (lines)

federal enforceable

JVS 10/8/85

84.7

change

METAL CONTAINER CORPORATION  
 JACKSONVILLE FLORIDA BEVERAGE CAN MANUFACTURING FACILITY  
 MODERNIZATION PROJECTED EMISSIONS

ONE 16-OUNCE 1400 CPM LINE PRODUCTION: 5.64480E+08  
 TWO 12-OUNCE 1400 CPM LINE PRODUCTION: 1.12896E+09  
 TOTAL PRODUCTION: 1.69344E+09

NOTE: ASSUMES 65% OF CANS ARE WHITE BASECOATED AND 80% ARE OVERVARNISHED

\*\*\*\*\*

COATING/SOLVENT	MANUFACTURERS IDENTIFICATION	USAGE (GALLONS)	USAGE RATE (GALS/1000 CANS)	DENSITY (LB/GAL)	VOC FRACTION (BY WEIGHT)	VOC EMISSIONS (TONS)
-----------------	------------------------------	-----------------	-----------------------------	------------------	--------------------------	----------------------

\*\*\*\*\*

12-OUNCE CAN LINES

WHITE BASECOAT	PPG DE3606	73,382	0.100	11.10	0.089	36.25
INSIDE SPRAY	CELANESE 3500C	180,634	0.160	8.45	0.150	114.48
BOTTOM VARNISH	INMONT Z125-3	11,290	0.010	8.65	0.114	5.57
OVERVARNISH	INMONT S145-121A	90,317	0.100	8.70	0.160	62.86
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	5,645	0.005	6.71	0.777	14.72
SUBTOTALS						233.87

16-OUNCE CAN LINE

WHITE BASECOAT	PPG 3606	47,699	0.130	11.10	0.089	23.56
INSIDE SPRAY	CELANESE 3500C	120,422	0.213	8.45	0.150	76.32
BOTTOM VARNISH	INMONT Z125-3	5,645	0.010	8.65	0.114	2.78
OVERVARNISH	INMONT S145-121A	50,211	0.133	8.70	0.160	41.91
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	2,822	0.005	6.71	0.777	7.36
SUBTOTALS						151.93

TOTAL FACILITY VOC EMISSIONS

385.79

=====

METAL CONTAINER CORPORATION  
 JACKSONVILLE FLORIDA BEVERAGE CAN MANUFACTURING FACILITY  
 MODERNIZATION PROJECTED EMISSIONS

ONE 16-OUNCE 1400 CPM LINE PRODUCTION: 2.56000E+08  
 TWO 12-OUNCE 1400 CPM LINE PRODUCTION: 1.34400E+09  
 TOTAL PRODUCTION: 1.60000E+09

NOTE: ASSUMES 65% OF CANS ARE WHITE BASECOATED AND 80% ARE OVERVARNISHED

\*\*\*\*\*

COATING/SOLVENT	MANUFACTURERS IDENTIFICATION	USAGE (GALLONS)	USAGE RATE (GALS/1000 CANS)	DENSITY (LB/GAL)	VOC FRACTION (BY WEIGHT)	VOC EMISSIONS (TONS)
-----------------	------------------------------	-----------------	-----------------------------	------------------	--------------------------	----------------------

\*\*\*\*\*

12-OUNCE CAN LINES

WHITE BASECOAT	PPG CE3606	87,360	0.100	11.10	0.089	43.15
INSIDE SPRAY	CELANESE 3500C	215,040	0.160	8.45	0.150	136.28
BOTTOM VARNISH	INMONT Z125-3	13,440	0.010	8.65	0.114	6.63
OVERVARNISH	INMONT S145-121A	107,520	0.100	8.70	0.160	74.83
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	8,720	0.005	6.71	0.777	17.52
SUBTOTALS						278.41

16-OUNCE CAN LINE

WHITE BASECOAT	PPG 3606	21,532	0.130	11.10	0.089	10.69
INSIDE SPRAY	CELANESE 3500C	54,613	0.213	8.45	0.150	34.61
BOTTOM VARNISH	INMONT Z125-3	2,560	0.010	8.65	0.114	1.26
OVERVARNISH	INMONT S145-121A	27,307	0.133	8.70	0.160	19.01
CLEAN-UP SOLVENTS	METHYL ETHYL KETONE	1,280	0.005	6.71	0.777	3.34
SUBTOTALS						68.90

TOTAL FACILITY VOC EMISSIONS

347.31  
 =====



PS Form 3811, Jan. 1979

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

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

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Mr. J. W. Mathey  
 1100 N. Ellis Road  
 Jacksonville, FL 32205

3. ARTICLE DESCRIPTION:  

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	7682427	

 (Always obtain signature of addressee or agent)

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

4. DATE OF DELIVERY  
 10/12/82

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

POSTMARK: JACKSONVILLE, FL 1982 OCT 13

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

P16 7682427

RECEIPT FOR CERTIFIED MAIL

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

SENT TO  
 Mr. J. W. Mathey  
 STREET AND NO.  
 1100 N. Ellis Rd.  
 P.O., STATE AND ZIP CODE  
 Jacksonville, FL 32205

POSTAGE		\$
CERTIFIED FEE		¢
SPECIAL DELIVERY		¢
RESTRICTED DELIVERY		¢
SHOW TO WHOM AND DATE DELIVERED		¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢
TOTAL POSTAGE AND FEES		\$

CONSULT POSTMASTER FOR FEES

OPTIONAL SERVICES

RETURN RECEIPT SERVICE

POSTMARK OR DATE  
 10/8/82

PS Form 3800, Apr. 1976

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



BOB GRAHAM  
GOVERNOR

Victoria J. Tschinkel  
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

October 8, 1982

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. J. W. Mathey  
Plant Manager  
Metal Container Corporation  
1100 N. Ellis Road  
Jacksonville, Florida 32205

Dear Mr. Mathey:

AC 16-57752  
Enclosed is Permit Numbers AC 16-57753, dated October 5, 1982  
to Metal Container Corporation  
issued pursuant to Section 403, Florida Statutes.

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

Sincerely,

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

CHF/pa

Enclosure

cc: Charles M. Nolan, Pat Nolan & Associates  
Johnny Cole, FDER, Northeast District  
Steve Pace, Jacksonville Bio-Environmental Services  
John V. Stier, Anheuser-Busch Companies

Final Determination

Metal Container Corporation  
Anheuser-Busch Companies, Inc.  
Overvarnish Units Nos. 3 & 4  
Jacksonville, Florida

Construction Permit  
Application Numbers:

AC 16-57752  
AC 16-57753

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

Final Determination for Metal Container Corporation  
Overvarnish Units No. 3 and No. 4  
Anheuser-Busch Companies, Inc.

The construction permit applications from Metal Container Corporation for the construction of overvarnish units No. 3 and No. 4 at its existing facility have been reviewed by the Bureau of Air Quality Management. The technical evaluation and preliminary determination was completed on August 4, 1982. Notice of the Department's Intent to Issue was published in the Florida Times-Union on August 18, 1982. Copies of the technical evaluation and preliminary determination were available for public inspection at Jacksonville's Bio-Environmental Services (BES), DER's St. John's River Subdistrict (now DER's Northeast District), and DER's Bureau of Air Quality Management.

One comment was received concerning these applications. John V. Stier, senior environmental engineer with Anheuser-Busch Companies, Inc., requested some changes and modifications of "Specific Conditions" (see Attachment 3). The following are the Bureau's comments, by item, to the request:

General Comments:

1. See Attachment 3.

Bureau's comments: The formula used to determine emission credits, which were below the RACT required limits, was also used to establish the maximum allowable limit of 403.5 TPY VOC. Further, the maximum allowable limit is also at the maximum level allowed before PSD review is required. However, the restriction on the maximum VOC content that a coating can contain, less water and as delivered, will only have a limited affect on the total facility VOC emissions accounting. Therefore, the important facts are the maximum facility annual VOC emissions limit, 403.5 TPY, and the quality of the emissions accounting by material balance on a monthly basis.

In conclusion, Specific Conditions Nos. 1 and 2 will be deleted and No. 6 will be revised.

2. See Attachment 3.

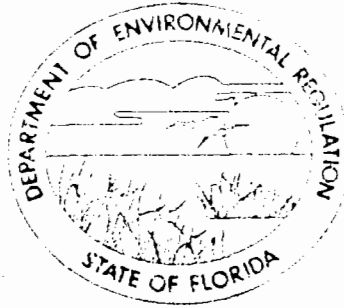
Bureau's comments: This request is acceptable. Specific Condition No. 5 will be deleted and No. 6 will be revised.

No other comments were received. It is recommended that the construction permit be issued as drafted, incorporating the revised "Specific Conditions", as found on the following page,

and the Attachment No. 3 (J. V. Stier's letter dated August 20, 1982).

### Revised Specific Conditions

1. The hours of operation shall not exceed 24 hours per day, 7 days per week, 52 weeks per year, or 8,760 hours per year.
2. The amounts and formulas of each coating and solvent shall be recorded on, at least, a monthly basis. The formula should include pounds of VOC per gallon of coating, less water, and should be based on a certified analysis of each coating given by the supplier. These records and certifications shall be made available for Department inspection upon request.
3. Before startup of the unit, operation permits for all coating lines at the facility shall be amended to limit total VOC emissions from the entire facility to a maximum limit of and not to exceed 403.5 tons per year.
4. Compliance with the standards of Specific Condition No. 3 shall be verified annually in the form of a compliance report submitted to the Jacksonville Bio-Environmental Services (JBES) office. This report shall include test results, manufacturer's certifications and coating usage records.
5. Prior to 90 days before the expiration of this permit, a complete application for an operating permit shall be submitted to the JBES office. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration of this permit or receipt of an operating permit.



STATE OF FLORIDA  
DEPARTMENT OF  
ENVIRONMENTAL REGULATION

CONSTRUCTION  
PERMIT

NO. AC 16-57752

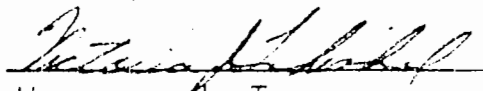
METAL CONTAINER CORPORATION  
ANHEUSER-BUSCH COMPANIES, INC.  
1100 NORTH ELLIS ROAD  
JACKSONVILLE, FLORIDA 32205

DATE OF ISSUANCE:

October 5, 1982

DATE OF EXPIRATION

FEBRUARY 28, 1983

  
VICTORIA J. TSCHINKEL  
SECRETARY

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

APPLICANT: Metal Container Corporation  
1100 Ellis Road  
Jacksonville, Florida 32205

PERMIT/CERTIFICATION  
NO. AC 16-57752

COUNTY: Duval

PROJECT: Installation of  
Overvarnish Unit No. 3  
on Coating Line No. 3

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

Installation of an overvarnish unit on existing coating line No. 3  
using water-based coating formula.

Attachment:

1. Application to construct Air Pollution Sources, DER Form  
17-1.122(16).
2. Addendum to application, dated July 6, 1982, from John V. Stier of  
Anheuser-Busch Co.
3. John V. Stier's letter dated August 20, 1982.



PERMIT NO.: AC 16-57752  
APPLICANT: Metal Container Corporation

**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 Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court 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 indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.

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

4. As provided in subsection 403.087(6), 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.

5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.

6. 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 Section 403.111, F.S.

7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

8. 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, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.

9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.

10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.

11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.

12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation 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.

13. This permit also constitutes:

- Determination of Best Available Control Technology (BACT)
- Determination of Prevention of Significant Deterioration (PSD)
- Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 16-57752  
APPLICANT: Metal Container Corporation

SPECIFIC CONDITIONS:

1. The hours of operation shall not exceed 24 hours per day, 7 days per week, 52 weeks per year, or 8,760 hours per year.
2. The amounts and formulas of each coating and solvent shall be recorded on, at least, a monthly basis. The formula should include pounds of VOC per gallon of coating, less water, and should be based on a certified analysis of each coating given by the supplier. These records and certifications shall be made available for Department inspection upon request.
3. Before startup of the unit, operation permits for all coating lines at the facility shall be amended to limit total VOC emissions from the entire facility to a maximum limit of and not to exceed 403.5 tons per year.
4. Compliance with the standards of Specific Condition No. 3 shall be verified annually in the form of a compliance report submitted to the Jacksonville Bio-Environmental Services (JBES) office. This report shall include test results, manufacturer's certifications and coating usage records.
5. Prior to 90 days before the expiration of this permit, a complete application for an operating permit shall be submitted to the JBES office. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration of this permit or receipt of an operating permit.

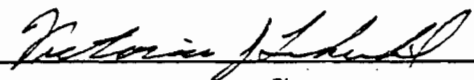
PERMIT NO.: AC 16-57752  
APPLICANT: Metal Container Corporation

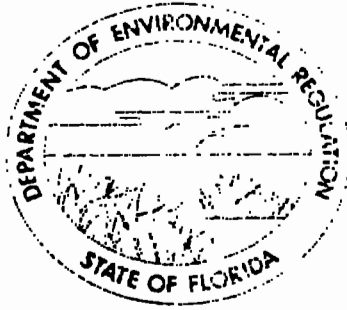
Expiration Date: February 28, 1983

Issued this 5 day of October, 1982.

                     Pages Attached.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

  
Signature



STATE OF FLORIDA  
DEPARTMENT OF  
ENVIRONMENTAL REGULATION

CONSTRUCTION  
PERMIT

NO. AC 16-57753

METAL CONTAINER CORPORATION  
ANHEUSER-BUSCH COMPANIES, INC.  
1100 NORTH ELLIS ROAD  
JACKSONVILLE, FLORIDA 32205

DATE OF ISSUANCE

October 5, 1982

DATE OF EXPIRATION

FEBRUARY 23, 1983

VICTORIA J. TSCHINKEL

SECRETARY

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICANT: Metal Container Corporation  
1100 Ellis Road  
Jacksonville, Florida 32205

PERMIT/CERTIFICATION  
NO. AC 16-57753

COUNTY: Duval

PROJECT: Installation  
of Overvarnish Unit  
No. 4 on Coating Line  
No. 4

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

Installation of an overvarnish unit on existing coating line No. 4  
using water-based coating formula.

Attachment:

1. Application to construct Air Pollution Sources, DER Form  
17-1.122(16).
2. Addendum to application, dated July 6, 1982, from John V. Stier of  
Anheuser-Busch Co.
3. John V. Stier's letter dated August 20, 1982.

PERMIT NO.: AC 16-57753  
APPLICANT: Metal Container Corporation

**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 Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court 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 indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.
3. 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 non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. 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.
4. As provided in subsection 403.087(6), 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.
5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.
6. 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 Section 403.111, F.S.
7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
8. 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, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.
9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.
10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.
11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.
12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation 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.
13. This permit also constitutes:
  - Determination of Best Available Control Technology (BACT)
  - Determination of Prevention of Significant Deterioration (PSD)
  - Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 16-57753

APPLICANT: Metal Container Corporation

SPECIFIC CONDITIONS:

1. The hours of operation shall not exceed 24 hours per day, 7 days per week, 52 weeks per year, or 8,760 hours per year.
2. The amounts and formulas of each coating and solvent shall be recorded on, at least, a monthly basis. The formula should include pounds of VOC per gallon of coating, less water, and should be based on a certified analysis of each coating given by the supplier. These records and certifications shall be made available for Department inspection upon request.
3. Before startup of the unit, operation permits for all coating lines at the facility shall be amended to limit total VOC emissions from the entire facility to a maximum limit of and not to exceed 403.5 tons per year.
4. Compliance with the standards of Specific Condition No. 3 shall be verified annually in the form of a compliance report submitted to the Jacksonville Bio-Environmental Services (JBES) office. This report shall include test results, manufacturer's certifications and coating usage records.
5. Prior to 90 days before the expiration of this permit, a complete application for an operating permit shall be submitted to the JBES office. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration of this permit or receipt of an operating permit.

PERMIT NO.: AC 16-57753  
APPLICANT: Metal Container Corporation

Expiration Date: February 28, 1983

Issued this 5 day of October, 1982

                     Pages Attached.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

  
Signature



State of Florida  
 DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

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

**RECEIVED**  
 OCT 4 1982  
 Office of the Secretary

TO: Victoria J. Tschinkel  
 FROM: Clair Fancy *Clair Fancy*  
 DATE: October 4, 1982  
 SUBJ: Approval and Signature of Air Construction Permits

Attached please find two Air Construction Permits for which the applicant is Metal Container Corporation. The proposed construction is the installation of overvarnish units on existing coating lines No. 3 and No. 4.

Day 90, after which the permits would be issued by default, is November 1, 1982.

The Bureau recommends your approval and signature.

CF/pa

Attachment



**Metal Container  
Corporation**

ONE OF THE ANHEUSER-BUSCH COMPANIES

August 24, 1982

Mr. C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality Management  
State of Florida  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8241

DER  
AUG 30 1982  
CAQM

Dear Mr. Fancy:

In accordance with your letter of August 5, 1982, Metal Container Corporation caused to have published in the Florida Times-Union the attached notice.

The affidavit required by your office is enclosed. If you have any questions, please feel free to call me at (904) 786-8806.

Sincerely,

METAL CONTAINER CORPORATION

Robert J. Lasky  
Project Engineer

RJL/rjp

Enclosures

cc: Messrs. John Stier  
Tom Vogl  
Tim Houghton  
Mike Koscianski



# FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }  
COUNTY OF DUVAL }

Before the undersigned authority personally appeared \_\_\_\_\_

George A. Dan who on oath says that he is

Retail Advertising Supervisor of The Florida Times-Union, and

Jacksonville Journal, daily newspapers published at Jacksonville in Duval County,

Florida; that the attached copy of advertisement, being a \_\_\_\_\_

### Legal Notice

in the matter of Notice of proposed agency action

in the \_\_\_\_\_ Court,

was published in The Florida Times Union

in the issues of August 18, 1982

**NOTICE OF PROPOSED AGENCY ACTION**

The Department of Environmental Regulation gives notice of its intent to issue a permit to the Metal Container Corporation for the construction of Overvornish Units No. 3 and No. 4 at their facility in Jacksonville, Duval County, Florida. A determination of Best Available Control Technology (BACT) was not required.

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

The Application, Technical Evaluation and Departmental Intent are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

- Dept. of Env. Regulation  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, FL 32301
- Dept. of Env. Regulation  
St. Johns River Subdistrict  
3426 Bills Road  
Jacksonville, FL 32207
- Jacksonville Bio-  
Environmental Services  
Department of Health,  
Welfare, and Bio-  
Environmental Services  
515 West 6th Street  
Jacksonville, Florida 32206

Comments on this action shall be submitted in writing to Bill Thomas of the Tallahassee office within thirty (30) days of this notice.

Affiant further says that the said The Florida Times-Union and Jacksonville Journal are each newspapers published at Jacksonville, in said Duval County, Florida, and that the said newspapers have each heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, and Jacksonville Journal each day except Sundays, and each has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Sworn to and subscribed before me

this 18th day of August, 1982

Haoru J. Dan  
Notary Public,  
State of Florida at Large

George A. Dan  
Notary Public, State of Florida

My Commission Expires \_\_\_\_\_ My Commission Expires July 9, 1986

Bonded Thru Troy Fein - Insurance, Inc.



ANHEUSER-BUSCH COMPANIES

Bruce M.  
Rec'd 9/1/82 PM

August 20, 1982

Mr. Bill Thomas  
Bureau of Air Quality Management  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301

Dear Bill:

Upon review of the draft permit conditions for overvarnish units #3 and #4 (AC 16-57752 and AC 16-57753) the following changes are suggested:

1. Since the issuance of permits is contingent upon amendment of all operating permits for coating lines that will limit total plant VOC emissions to a maximum allowable level of 403.5 tons per year, it seems unnecessary and over restrictive to also limit the VOC content of each individual coating. The calculations submitted to the DER were based upon the actual coatings used during the years 1981 and 1982, and may be subject to slight changes in the future. ~~If necessary, the RACT levels would seem to be a more appropriate limit for specific coating materials.~~ The plant realizes that the true indication of compliance will be the overall annual emission level of 403.5 tons. The emissions will be tracked very closely to assure this number will not be exceeded.
2. A certified manufacturer's analysis of the coatings should be sufficient in lieu of EPA Method 24 testing. Our past experience with Method 24 indicates that it is a costly, complex and time consuming procedure and is often checked for accuracy against the manufacturer's data sheets.

In conclusion, the specific conditions should be amended to read:

1. The hours of operation shall not exceed 24 hours per day, 7 days per week, 52 weeks per year, or 8,760 hours per year.
2. The amounts and formulas of each coating and solvent shall be recorded on a monthly basis. The formula should include pounds of VOC per gallon of coating less water, and should be based on a certified analysis of each coating given by the supplier. These records and certifications shall be made available for Department inspection upon request.

Save as referenced documents!

315  
48  
300  
400

no - credit was given for reduction below RACT levels. in MSD applic. so total must be below RACT. Inter change at RACT levels may be ok provided total is as relied on for credit given.

(REVISED)  
 METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
 ANNUAL VOC EMISSIONS HISTORY

Year	Actual VOC Emissions (tons)	Increase/Decrease (tons)
1977	341.3	Base
1978	356.1	+14.8
1979	349.4	-6.7
1980	366.3	+16.9
1981	315.5	-50.8
	5-year net	-25.8
1982	--	Approved Increase +45.1 (Overvarnish Lines 1 & 2)
Proposed Modification	--	+38.6 (Overvarnish Lines 3 & 4)
		<u>-42.2</u> (T.O. on 1 basecoat/inside spray line)
	Proposed Decrease	-3.6
	5 Year Total Increase	<u>+15.7</u>

$\frac{TPY\ VOC}{10^3\ conc}$   
 353.3 TPY AVER.  
 340.3  
 301.5  
 285.2  
 308.1  
 259.0  
 308.8 TPY/10<sup>3</sup> conc AVER.  
 - WB coatings

60.6  
 @ 72.4%  
 83.7

METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
ACTUAL COATING USAGES (GALLONS)

<u>PRODUCT USED</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
White Basecoat	<i>why so high?</i> 147,335	138,230	114,308	129,940	143,468
Clear Basecoat	0	385	19,653	16,625	19,745
Inside Spray	197,407	205,320	195,288	218,058	232,874
Bottom Varnish	2,530	2,090	1,815	1,760	1,870
Necker Lubricant	30,090 est	35,430 est	36,750 est	35,670 est	36,540 est
Methyl Chloroform	14,905 est	14,905	15,070	14,905	15,455
Methyl Ethyl Ketone	12,595 est	12,595	11,825	11,440	7,425
Flasolv 15	2,475 est	2,475	2,145	2,365	1,595
Butyl Cellosolve	0	0	0	165	990
Overvarnish	0	0	0	0	0
Cans Produced (Billions)	1.003	1.181	1.225	1.189	1.218 <i>x 10<sup>9</sup></i>

*Gal/10<sup>3</sup> cans*

*1.1495 x 10<sup>9</sup> can*

*106.3*

(REVISED)  
 METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
ACTUAL VOC EMISSIONS (TONS)

<u>PRODUCT USED</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
White Basecoat	41.3	38.8	32.0	36.4	87.4
Clear Basecoat	0.0	0.1	6.7	5.6	10.9
<u>Inside Spray</u>	<u>142.1</u>	<u>147.8</u>	<u>140.6</u>	<u>157.0</u>	<u>135.0</u>
Bottom Varnish	1.3	1.1	0.9	0.9	1.0
Necker Lubricant	66.2	77.9	80.8	78.5	0.0
Methyl Chloroform	55.9	55.9	56.5	55.9	58.0
Methyl Ethyl Ketone	28.3	28.3	26.5	25.7	16.7
Flasolv 15	6.2	6.2	5.4	5.9	4.0
Butyl Cellosolve	0.0	0.0	0.0	0.4	2.5
Overvarnish	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
TOTALS	<u>341.3</u> <i>1.043 x 10<sup>9</sup></i>	<u>356.1</u> <i>1.161 x 10<sup>9</sup></i>	349.4	366.3	315.5

*fugitive emissions included*

*cleaning*

*Flasolv 15*

METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
 CONTEMPORANEOUS INCREASE/DECREASE CALCULATIONS

General Assumptions

1. Annual coating usage data presented in Table I was acquired from past purchasing records where possible. Two exceptions are noted.
  - a) Necker lubricant actual annual usage is estimated using an application rate of 0.03 gals per 1000 cans.
  - b) Clean-up solvent usage for 1977 is estimated to be equal to the 1978 values.
2. VOC emissions from solvent and water based coatings are based upon the following material constituents:

Material	VOC Content (lbs/gal less water)		Water Content (% by volume)
	Solvent Based	Water Based	
2.8 #/gal } White Basecoat	3.87	2.09	41.7
Clear Basecoat	4.65	2.59	57.3
4.2 - Inside Spray	6.0	3.74	69.2
4.2 - Bottom Varnish	-	2.1	51.0
2.8 - Overvarnish	-	2.1	51.0

3. Solvent based coatings emissions were controlled with thermal oxidizers (T.O.) for the years 1977, 1978, 1979, and 1980. For basecoating operations, 90% of the emissions reached the thermal oxidizers, 10% was fugitive. For inside spray operations, 80% of the emissions reached the thermal oxidizers, 20% was fugitive. (Based on best engineering judgement) ← verify?
4. Average removal efficiencies for the thermal oxidizers are based upon stack emission tests in 1978 and 1980 as follows:

Year	Percentage Removal Per Thermal Oxidizer				Average
	1	2	3	4	
1977	Use 1978 Data				95
1978	91.2	95.8	94.5	92.5	95
1979	Use 1980 Data				95
1980	98.4	95.3	95.6	90.2	95

5. Two thirds by weight of the clean-up solvents will be emitted as fugitive VOC, while one third will be retained in rags, etc. and sent to a solvent reclaimer.

← verify  
 1/3 factor



1977 Actual Emissions

White Basecoat

SB

Uncontrolled	$147,335 \text{ gals} \times \frac{3.87 \text{ lbs VOC}}{\text{gal coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 285.1 \text{ tons VOC}$
Fugitive	$285.1 \text{ tons VOC} \times 0.10 = 28.5 \text{ tons VOC}$
T.O. Exhausts	$285.1 \text{ tons VOC} \times 0.90 \times 0.05 = 12.8 \text{ tons VOC}$

Inside Spray

SB

Uncontrolled	$197,407 \text{ gals} \times \frac{6.0 \text{ lbs VOC}}{\text{gal coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 592.2 \text{ tons VOC}$
Fugitive	$592.2 \text{ tons VOC} \times 0.20 = 118.4 \text{ tons VOC}$
T.O. Exhausts	$592.2 \text{ tons VOC} \times 0.80 \times 0.05 = 23.7 \text{ tons VOC}$

Bottom Varnish

Uncontrolled = Fugitive

WB

$$\left[ 2530 \text{ gals} - (2530 \text{ gals} \times .510 \text{ H}_2\text{O}) \right] \times \frac{2.1 \text{ lbs VOC}}{\text{gals coating} - \text{H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 1.3 \text{ tons VOC}$$

Necker Lubricant

Uncontrolled = Fugitive

$$\frac{0.03 \text{ gals}}{1000 \text{ cans}} \times 1.003 \times 10^9 \text{ cans} = 30,090 \text{ gals}$$

$$30,090 \text{ gals} \times .80 \text{ hexane} \times \frac{5.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 66.2 \text{ tons VOC}$$

Methyl Chloroform

Uncontrolled = Fugitive

$$14,905 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 55.9 \text{ tons VOC}$$

Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$12,595 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 28.3 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$2,475 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 6.2 \text{ tons VOC}$$

Annual Totals

Fugitive	304.8 tons VOC
T.O. Exhausts	<u>36.5</u> tons VOC
TOTAL	341.3 tons VOC

1978 Actual Emissions

White Basecoat

SB

Uncontrolled	$138,230 \text{ gals} \times \frac{3.87 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 267.5 \text{ tons VOC}$
Fugitive	$267.5 \text{ tons VOC} \times 0.10 = 26.8 \text{ tons VOC}$
T.O. Exhausts	$267.5 \text{ tons VOC} \times 0.90 \times 0.05 = 12.0 \text{ tons VOC}$

Clear Basecoat

SB

Uncontrolled	$385 \text{ gals} \times \frac{4.65 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 0.9 \text{ tons VOC}$
Fugitive	$0.9 \text{ tons VOC} \times 0.10 = 0.1 \text{ tons VOC}$
T.O. Exhausts	$0.9 \text{ tons VOC} \times 0.90 \times 0.05 = \text{Negligible VOC}$

Inside Spray

SB

Uncontrolled	$205,320 \text{ gals} \times \frac{6.0 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 616.0 \text{ tons VOC}$
Fugitive	$616.0 \text{ tons VOC} \times 0.20 = 123.2 \text{ tons VOC}$
T.O. Exhausts	$616.0 \text{ tons VOC} \times 0.80 \times 0.05 = 24.6 \text{ tons VOC}$

Bottom Varnish

Uncontrolled = Fugitive

WB

$$\left[ 2090 \text{ gals} - (2090 \text{ gals} \times 0.51 \text{ H}_2\text{O}) \right] \times \frac{2.1 \text{ lbs VOC}}{\text{Gal Coating less H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 1.1 \text{ tons VOC}$$

Necker Lubricant

Uncontrolled = Fugitive

$$\frac{0.03 \text{ gals}}{1000 \text{ cans}} \times 1.181 \times 10^9 \text{ cans} = 35,430 \text{ gals}$$

$$35,430 \text{ gals} \times .80 \text{ Hexane} \times \frac{5.5 \text{ lbs}}{\text{Gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 77.9 \text{ tons VOC}$$

Methyl Chloroform

Uncontrolled = Fugitive

$$14,905 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 55.9 \text{ tons VOC}$$

Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$12,595 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 28.3 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$2,475 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 6.2 \text{ tons VOC}$$

Annual Totals

Fugitive	319.5
T.O. Exhausts	<u>36.6</u>
Total	356.1

## 1979 Actual Emissions

### White Basecoat

$$\text{Uncontrolled} \quad 114,308 \text{ gals} \times \frac{3.87 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 221.2 \text{ tons VOC}$$

$$\text{Fugitive} \quad 221.2 \text{ tons VOC} \times 0.10 = 22.1 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 221.2 \text{ tons VOC} \times 0.90 \times 0.05 = 9.9 \text{ tons VOC}$$

### Clear Basecoat

$$\text{Uncontrolled} \quad 19,653 \text{ gals} \times \frac{4.65 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 45.7 \text{ tons VOC}$$

$$\text{Fugitive} \quad 45.7 \text{ tons VOC} \times 0.10 = 4.6 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 45.7 \text{ tons VOC} \times 0.90 \times 0.05 = 2.1 \text{ tons VOC}$$

### Inside Spray

$$\text{Uncontrolled} \quad 195,288 \text{ gals} \times \frac{6.0 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 585.9 \text{ tons VOC}$$

$$\text{Fugitive} \quad 585.9 \text{ tons VOC} \times 0.20 = 117.2 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 585.9 \text{ tons VOC} \times 0.80 \times 0.05 = 23.4 \text{ tons VOC}$$

### Bottom Varnish

Uncontrolled = Fugitive

$$\left\{ 1815 \text{ gals} - (1815 \text{ gals} \times 0.51 \text{ H}_2\text{O}) \right\} \times \frac{2.1 \text{ lbs VOC}}{\text{Gal Coating Less H}_2\text{O}} \times$$

$$\frac{\text{Ton}}{2000 \text{ lbs}} = 0.9 \text{ tons VOC}$$

### Necker Lubricant

Uncontrolled = Fugitive

$$\frac{0.03 \text{ gals}}{1000 \text{ cans}} \times 1.225 \times 10^9 \text{ cans} = 36,750 \text{ gals}$$

$$36,750 \text{ gals} \times .80 \text{ Hexane} \times \frac{5.5 \text{ lbs}}{\text{Gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 80.8 \text{ tons VOC}$$

Methyl Chloroform

Uncontrolled = Fugitive

$$15,070 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 56.5 \text{ tons VOC}$$

Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$11,825 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 26.5 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$2145 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 5.4 \text{ tons VOC}$$

Annual Totals

Fugitive	314.0
T.O. Exhausts	<u>35.4</u>
Total	349.4

1980 Actual Emissions

White Basecoat

SB  
Uncontrolled 129,940 gals  $\times \frac{3.87 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 251.4 \text{ tons VOC}$

Fugitive 251.4 tons VOC  $\times 0.10 = 25.1 \text{ tons VOC}$

T.O. Exhausts 251.4 tons VOC  $\times 0.90 \times 0.05 = 11.3 \text{ tons VOC}$

Clear Basecoat

SB  
Uncontrolled 16,625 gals  $\times \frac{4.65 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 38.7 \text{ tons VOC}$

Fugitive 38.7 tons VOC  $\times 0.10 = 3.9 \text{ tons VOC}$

T.O. Exhausts 38.7 tons VOC  $\times 0.90 \times 0.05 = 1.7 \text{ tons VOC}$

Inside Spray

SB  
Uncontrolled 218,058 gals  $\times \frac{6.0 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 654.2 \text{ tons VOC}$

Fugitive 654.2 tons VOC  $\times 0.20 = 130.8 \text{ tons VOC}$

T.O. Exhausts 654.2 tons VOC  $\times 0.80 \times 0.05 = 26.2 \text{ tons VOC}$

Bottom Varnish

Uncontrolled = Fugitive

WB  
$$\left[ 1760 \text{ gals} - (1760 \text{ gals} \times 0.51 \text{ H}_2\text{O}) \right] \times \frac{2.1 \text{ lbs VOC}}{\text{Gal Coating less H}_2\text{O}} \times$$

$$\frac{\text{Ton}}{2000 \text{ lbs}} = 0.9 \text{ tons VOC}$$

Necker Lubricant

Uncontrolled = Fugitive

$$\frac{0.03 \text{ gals}}{1000 \text{ cans}} \times 1.189 \times 10^9 \text{ cans} = 35,670 \text{ gals}$$

$$35,670 \text{ gals} \times .80 \text{ Hexane} \times \frac{5.5 \text{ lbs}}{\text{Gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 78.5 \text{ tons VOC}$$

Methyl Chloroform

Uncontrolled = Fugitive

$$14,905 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 55.9 \text{ tons VOC}$$

Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$11,440 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 25.7 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$2365 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 5.9 \text{ tons VOC}$$

Flasolv EB

Uncontrolled = Fugitive

$$165 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 0.4 \text{ tons VOC}$$

Annual Totals

Fugitive	327.1
T.O. Exhausts	<u>39.2</u>
Total	366.3



1981 Actual Emissions (Switch to Water Based)

White Basecoat

$$\left\{ 143,468 \text{ gals} - (143,468 \times .417 \text{ H}_2\text{O}) \right\} \times \frac{2.09 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} =$$

*83,642 x 0.71 = 29.69 TPY difference*

87.4 tons VOC

Clear Basecoat

$$\left\{ 19,745 \text{ gals} - (19,745 \times .573 \text{ H}_2\text{O}) \right\} \times \frac{2.59 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} =$$

*8,431 x 0.21 = .96 TPY difference*

10.9 tons VOC

Inside Spray

$$\left\{ 232,874 \text{ gals} - (232,874 \times .69 \text{ H}_2\text{O}) \right\} \times \frac{3.74 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} =$$

*71,725 x 0.46 = 16.50 TPY diff*

~~135.0~~ tons VOC  
134.1

Bottom Varnish

$$\left\{ 1870 \text{ gals} - (1870 \times .51 \text{ H}_2\text{O}) \right\} \times \frac{2.1 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} =$$

*916.3 x 2.1 = .96 TPY diff*

1.0 tons VOC

Methyl Chloroform

Uncontrolled = Fugitive

$$15,455 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 58.0 \text{ tons VOC}$$

Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$7425 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 16.7 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$1595 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 4.0 \text{ tons VOC}$$

Total decrease from RACT =  
39.7  
16.5  
1.0  
48.0 TPY credit  
48.0 TPY

Flasolv EB

Uncontrolled = Fugitive

$$990 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 2.5 \text{ tons VOC}$$

Annual Total

315.5 tons VOC

81.2 (cleanup)

PROPOSED MODIFICATION  
One Line Controlled with Thermal Oxidizer

*81 mag = 35,750 (can line)  
= 58,807 gal/yr  
= 3,000 gal/yr diff (quarters)*

All White Basecoat (Worst Case)

Uncontrolled Maximum  $\frac{800 \text{ cans}}{\text{Min}} \times \frac{0.140 \text{ gals}}{1000 \text{ cans}} \times \frac{60 \text{ min}}{\text{Hr}} = \frac{6.72 \text{ gals}}{\text{Hr}}$

$$\left\{ \frac{6.72 \text{ gals}}{\text{Hr}} - (6.72 \times 0.417 \text{ H}_2\text{O}) \right\} \times \frac{2.09 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} = \frac{8.2 \text{ lbs VOC}}{\text{Hr}}$$

$$\frac{8.2 \text{ lbs VOC}}{\text{Hr}} \times \frac{8760 \text{ Hrs}}{\text{Yr}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 35.9 \text{ tons VOC}$$

Fugitive  $35.9 \text{ tons VOC} \times .10 = 3.6 \text{ tons VOC}$

T.O. Exhaust (60% Removal)  $35.9 \text{ tons VOC} \times .90 \times .40 = 12.9 \text{ tons VOC}$

Inside Spray

Uncontrolled Maximum  $\frac{800 \text{ cans}}{\text{Min}} \times \frac{0.196 \text{ gals}}{1000 \text{ cans}} \times \frac{60 \text{ min}}{\text{Hr}} = \frac{9.41 \text{ gals}}{\text{Hr}}$

$$\left\{ \frac{9.41 \text{ gals}}{\text{Hr}} - (9.41 \times 0.69 \text{ H}_2\text{O}) \right\} \times \frac{3.74 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} = \frac{10.9 \text{ lbs VOC}}{\text{Hr}}$$

$$\frac{10.9 \text{ lbs VOC}}{\text{Hr}} \times \frac{8760 \text{ Hrs}}{\text{Yr}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 47.7 \text{ tons VOC}$$

Fugitive  $47.7 \text{ tons VOC} \times .20 = 9.5 \text{ tons VOC}$

T.O. Exhaust (60% Removal)  $47.7 \text{ tons VOC} \times .80 \times .40 = 15.3 \text{ tons VOC}$

Summary

Uncontrolled Emissions = 35.9 tons + 47.7 tons = 83.6 tons VOC

Proposed Modification = 16.5 tons + 24.8 tons = 41.3 tons VOC

Net Reduction = 42.3 tons VOC

*81 mag/line = 68,215 gal/yr  
= 82,432 gal/yr  
= 24,215 diff.*

	315.5	TPY	Base (1981)
83.7	+ 45.1		Oververmish lines 1 & 2
	+ 38.6		" " 3 & 4
90.4	- <del>42.3</del> 21.0		T.O. on one Basecoat/Int spray line
	- 48.1		credit under RACT (from '81 base)

363.6 actual <sup>RACT</sup> allowance based on 1981

	315.5	+ 40	TPY	denominis	= 355.5
	+ 83.7				
	- <del>90.4</del> 69.5				
	<u>308.8</u>				<u>329.7</u>

Dept till  
LACT  
offsets  
(over denimis)

Wash cap. (one line)  $\frac{800 \text{ cans}}{\text{min}} \times 60 \times 8760 = .42048 \times 10^9 \text{ cans/yr}$

- W. cans/81 =  $1.218 \times 10^9$   
 $\div 4 = 3.045 \times 10^8 \text{ cans/line}$

- Total trans/yr voc Basecoat (one line) = 35.9 TPY (max)

" " " " " (one line (actual based on 1981))  
 $= 35.9 \times \frac{3.045 \times 10^8}{.42048 \times 10^9} = 26.0 \text{ TPY}$   
 $26 \times .9 = 23.4 \text{ TPY}$

Int. Spray =  $47.7 \text{ TPY} \times \frac{3.045 \times 10^8}{.42048 \times 10^9} = 34.54$

$34.54 \times .80 = 27.6 \text{ TPY}$

Total =  $27.6 + 26.0 = 53.6 \text{ TPY}$

60% T.O. removal =  $(53.6 \times .40) = 21.4 \text{ TPY}$  affects T.O.

both  
Basecoat and  
Int. Spray  
affects

315  
48  
40

437.5  
- 67.0  
- 117.0  

---

437.5  
50.0  

---

487.5  
- 31 T.O.  

---

456

- give full prod.

$$\begin{array}{r} 315.5 + 48.1 = 363.6 \\ \underline{60.6} \\ 376.1 \text{ actual} \end{array} \quad \begin{array}{r} 376.1 \\ \underline{12.5} \\ 403.6 \text{ TPY} \end{array}$$

allows 37.5 TPY before  
LAER

$$341.3 + 40 = 381.3$$

$$\begin{array}{r} 315.5 \\ \underline{83.7} \\ 399.2 \end{array}$$

Maximum production / line =  $\frac{800 \text{ cans}}{\text{minute}}$   
 = 1,152,000 cans/day  
 per line = 4,204,800 cans/yr  
 x 4 lines = 1,681,920,000 cans/yr  
 last year @ 72.4% cap.

'81 emissions = 315.5 TPY  
 MAX ALL RACT for '81 =  $\frac{315.5}{.724} = 435.8$  TPY  
 435.8 + 40 TPY (downing) = 475.8 TPY before LAER

48.1 TPY RACT credit  $\div .724 = 66.4$  TPY credit

TOTAL RACT allowable for '81 = 435.8 + 66.4 = 502.2 TPY

42.1  
 83.7 TPY increase for overvornish units

<del>502.2</del>	315.5
<del>418.5</del>	83.7
	<u>399.2</u> after N added

502.2	315.5	315.5
- 399.2	48.1	<u>60.0</u>
<u>103.0</u> TPY	<u>363.6</u>	375.0
+ 40	60.0	

143 TPY  
 before LAER

420

DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control



December 16, 1981

Mr. Tim Powell  
Bureau of Air Quality Management  
Central Air Permitting Section  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Re: Metal Container Corporation  
Clear Overvarnish Modification Request

Dear Mr. Powell:

The Bio-Environmental Services Division staff has received the proposed modification at Metal Container Corporation's Jacksonville facility and recommends approval of such modification.

This agency also concurs with the request to apply clear basecoat before or after the printing ink on lines 3 and 4. Our office will initiate revision of permit A016-44658 (line 3) and permit A016-44659 (line 4) in this regard as soon as possible.

If we can be of further assistance please advise.

Very truly yours,

Robert S. Pace, P.E.  
Pollution Control Engineer

RSP/JEW/vj

cc: John Stier - A.B.  
cc: Bob Lasky - A.B.





the additional premium or March 31, 1981.

**§ 2602.4 [Amended]**

3. Section 2602.4 is amended by deleting "section 4022(a)" wherever it appears and substituting "sections 4022(a) or 4022A(a)."

4. Section 2602.5 is revised to read as follows:

**§ 2602.5 Premium rate.**

(a) *Single employer plans.* Plans other than multi-employer plans shall pay the following premiums for basic benefits guaranteed under section 4022(a) of the Act:

(1) For plan years beginning on or after January 1, 1978, two dollars sixty cents for each individual who is a participant in such plan on the last day of the preceding plan year;

(2) For plan years beginning on or after September 2, 1976 and ending on or before December 30, 1978, one dollar for each individual who is a participant in such plan on the last day of the preceding plan year; or

(3) For plan years beginning before September 2, 1976, one dollar for each individual who is a participant in such plan at any time during the plan year.

(b) *Multiemployer plans.* Multiemployer plans shall pay premiums for basic benefits guaranteed under section 4022(a) or 4022A(a) as follows:

(1) For plan years beginning after September 26, 1980, multiemployer plans shall pay premiums at the rate set forth in the following table for each individual who is a participant in such plan on the last day of the preceding plan year.

	Rate
For plan years beginning:	
After Sept. 26, 1980 and before Sept. 27, 1984	\$1.40
After Sept. 26, 1984 and before Sept. 27, 1986	1.80
After Sept. 26, 1986 and before Sept. 27, 1988	2.20
After Sept. 26, 1988	2.60

(2) For the plan year in which September 26, 1980 falls ("the enactment year"), multiemployer plans shall pay a premium for each individual who is a participant in such plan on the last day of the preceding plan year at the rate set forth in the following table:

	Rate
For plan years beginning in:	
September 1979	5.50
October 1979	54
November 1979	58
December 1979	62
January 1980	67
February 1980	71
March 1980	75
April 1980	79
May 1980	83
June 1980	88

	Rate
July 1980	92
August 1980	96
September 1980 (on or before Sept. 26)	1.00

The rates in the above table equal (after rounding) the sum of—

(i) Fifty cents multiplied by a fraction, the numerator of which is the number of calendar months in the enactment year ending before September 26, 1980, and the denominator of which is twelve, and

(ii) One dollar, multiplied by a fraction equal to one minus the fraction determined under paragraph (b)(2)(i) of this section.

(3) For plan years before the enactment year, multiemployer plans shall pay premiums as follows:

(i) For plan years beginning on or after September 2, 1976, fifty cents for each individual who is a participant in such plan on the last day of the preceding plan year; or

(ii) For plan years beginning before September 2, 1976, fifty cents for each individual who is a participant in such plan at any time during the plan year.

(c) For plans not previously covered under section 4021 of the Act, the plan shall pay the applicable premium under paragraphs (a) or (b) of this section for each individual who is a participant in such plan on the plan's effective date.

**§ 2602.6 [Amended]**

5. Section 2602.6 is amended by deleting "(Rev. August 1975)."

6. Section 2602.12 is revised to read as follows:

**§ 2602.12 Mailing address.**

Plan administrators shall mail the Form PBGC-1 and all payments for premiums, interest and penalties to: Pension Benefit Guaranty Corporation, P.O. Box 2454, Washington, D.C. 20013.

(Secs. 4002(b)(3) and 4008(a), Pub. L. 93-406, 88 Stat. 1004, as amended by Secs. 403(l) and 105 (respectively), Pub. L. 96-384, 94 Stat. 1208 (29 U.S.C. 1302(b)(3) and 1308(a))

Issued at Washington, D.C. on this 3rd day of December 1980.

Ray Marshall,  
*Chairman, Board of Directors, Pension Benefit Guaranty Corporation.*

Issued on the date set forth above, pursuant to a resolution of the Board of Directors approving this regulation authorizing its Chairman to issue same.

Mitchell Strickler,  
*Acting Secretary, Pension Benefit Guaranty Corporation.*

[FR Doc. 80-17879 Filed 12-5-80; 8:45 am]  
BILLING CODE 7708-01-M

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 51**

[AD-FRL-1694.3, Docket No. A-80-55]

**Compliance With VOC Emission Limitations for Can Coating Operations**

**AGENCY:** Environmental Protection Agency.

**ACTION:** Notice of policy memorandum.

**SUMMARY:** Reproduced below is a copy of a memorandum in which the Assistant Administrator for Air, Noise and Radiation describes an acceptable compliance program for can coating operations. This compliance program will allow the use of a daily weighted average in conjunction with a plantwide emission limitation.

**FOR FURTHER INFORMATION CONTACT:** Leo Stander, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards (MD-15), Research Triangle Park, N.C. 27711, (919/541-5516).

**SUPPLEMENTARY INFORMATION:** The memorandum reproduced below, which the Assistant Administrator for Air, Noise and Radiation sent to the ten EPA Regional Administrators, describes a program for determining compliance with appropriate emission limitations in State Implementation Plans. This memorandum notifies State and local agencies that in EPA's view, in general, their regulations may be interpreted as allowing a daily weighted average for approving permits and compliance plans without further regulatory changes or SIP revisions. EPA is encouraging this approach. A suggested format is attached to the memorandum.

David G. Hawkins,  
*Assistant Administrator for Air, Noise and Radiation.*  
United States Environmental Protection Agency,  
Office of Air, Noise, and Radiation,  
Washington, D.C., November 20, 1980.  
Subject: Compliance with VOC Emission Limitations for Can Coating Operations.  
From: David G. Hawkins, Assistant Administrator for Air, Noise, and Radiation (ANR-443).  
Memo to: Regional Administrator, Regions I-X.

The Agency has been requested by the Can Manufacturers Institute to consider the utilization of the compliance program described below for determining compliance with appropriate emission limitations in State Implementation Plans. The Agency has previously considered such an approach and in a memorandum dated November 21, 1978, from Richard C. Rhoads, Director, Control

Programs Development Division to Director, Air and Hazardous Materials Division, Regions I-X entitled "RACT Options for Can Coating Operations," the Agency stated that a SIP submittal with such provisions would be approvable. This memorandum expands Mr. Rhoads' memorandum to cover options which can be utilized by States in determining compliance with can coating VOC emission limitations.

Mr. Rhoads' memorandum stated that a State's regulation which provides for a daily weighted average in conjunction with a plantwide emission limitation would be approvable as part of a SIP. This is because of the severe practical problems faced by can manufacturing plants where a number of lines apply as many as 50 different coatings, depending on the end uses of the cans. In this industry, line specific emission limitations may cause can coaters to be in violation when a high solvent coating is applied.

Regulatory language in State Implementation Plans defining the allowable emission limits for can coating operations differs in detail from State to State and among areas in individual States. The Agency believes that for the most part, the States and relevant local agencies may utilize a daily weighted average to determine whether a can manufacturing operation is in compliance

with the State's emission limitations. EPA is issuing this interpretative statement to notify State and local agencies that in EPA's view, in general, their regulations may be interpreted as allowing daily weighted averages for approving permits and compliance plans without further regulatory changes or the need for a SIP revision. EPA encourages such an interpretation.

Compliance can be determined for any 24-hour period based on total actual emissions calculated from daily units of production records (e.g., number of each type of can, sheet, or end), application rates of each coating (e.g., gallons/units of production), solvent and solids content of each coating, and control efficiency. This would then be compared to the total allowable emissions for that production mix assuming each coating complied with applicable emission limitations. The attached suggested format allows use of a standardized equation to express the weight of VOC per gallon of coatings, less water, in terms of weight of VOC per gallon of solids to determine

\*This compliance method may be applicable to multipoint situations where the plants are under common ownership or control and are located in the same geographic area. EPA will consider approval of such multipoint applications of this method.

compliance. The pounds of solvent per gallon of coating should be based on a certified analysis of the VOC content of each coating given to the user by the supplier. This analysis should be verifiable by laboratory analysis. For purposes of emission limitation compliance, VOC content of coatings is the responsibility of the user. The percent capture and control efficiency must be established by using approved test methods on the worst case solvent or for all cases of use and held constant until such time as a new test is conducted to demonstrate a different efficiency.

It is essential that companies keep detailed records in a format that will allow simple and accurate verification and that the information be available as necessary for compliance certification and possible enforcement action. Further, standard test methods to verify the solvent content of each coating should be in accordance with those prescribed in the State's regulations.

States are urged to utilize enforcement techniques which encourage the development and use of low solvent coatings technology in the can manufacturing industry. In the long run, use of such technology is preferable to incineration from the point of view of reliability and maintenance of controls, as well as for purposes of energy conservation. Attachment.

Suggested Format for Determining Compliance for Can Coating Operations<sup>1</sup>

	Pounds VOC per gallon coating less water <sup>2</sup>	Percent solids	Percent solvent	Percent water	Pounds VOC per gallon solids	Application rate (gallon per units produced)	Units produced	Gallon coating applied (f x g)	Gallon solids applied (b x h - 100)	Control <sup>3</sup> efficiency	Pounds of VOC (e x i x j / (h - j))
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
<b>Actual Emissions</b>											
1. Sheet coating.....	5.42	26.4	73.6		20.52	22	5	110	29.0	0.81	113.1
2. Sheet coating.....	1.09	50.0	8.7	41.3	1.28	10	24	240	120.0		153.6
3. Sheet coating.....	5.08	31.2	68.8		16.23	10	24	240	74.9	91	231.0
4. Side seam.....	8.34	13.9	86.1		45.59	1.5	18	27	3.8		173.2
5. Inside spray.....	3.91	16.0	18.1	85.9	8.33	8	24	192	30.7		255.7
6. End compound.....	4.20	42.9	57.1		9.80	1.5	24	36	15.4		150.9
Actual total emissions.....											1,077.5
<b>Allowable Emissions Using Complying Coating<sup>2</sup></b>											
1. Sheet coating.....	2.8				4.52				29.0		131.1
2. Sheet coating.....	2.8				4.52				120.0		542.4
3. Sheet coating.....	2.8				4.52				74.9		336.5
4. Side seam.....	5.5				21.76				3.8		82.7
5. Inside spray.....	4.2				9.78				30.7		300.2
6. End compound.....	3.7				7.44				15.4		114.6
Allowable total emissions.....											1,509.5

<sup>1</sup> Concept based on the following principal for comparing actual and allowable emissions: Pounds VOC emitted = pounds VOC per gallon of solids x gallons of solids applied per unit. (Same gallons of solids applied for actual and allowable.)

<sup>2</sup> Control efficiency varies with emission devices used. The percent capture and control efficiency must be established by using approved test methods on the worst case solvent or for all cases of use and held constant until such time as a new test is conducted to demonstrate a different efficiency.

<sup>3</sup> Complies with State VOC emission limitations.

NOTE—Data in columns a, b, c, d, f, g, and i (under actual emissions) obtained from plant records including thinning solvent.

D = Density of solvent for complying coating (average density is 7.36 lbs./gallon).

$$e = \frac{(a) \times C}{(b)} \quad C = 100 \text{ pct or } e = \frac{D \times (a)}{[D - (a)]}$$

Telephone Record

Talked with John Stier Date 7/30/82

Time \_\_\_\_\_ of \_\_\_\_\_

Phone Number 314-577-4170 Called \_\_\_\_\_ Party Called \_\_\_\_\_

Reason: ① What will emission cap be?

② Limit coating voc content below RACT?

③ Are figures for overwash units (60.6 TPY) representative?

Action/Reply: \_\_\_\_\_

483.6 - emissions cap

315.5  
60.6  

---

376.1 - actual emissions

27.5 - available VOC left

435.8 TPY -  
83.7  

---

519.5 TPY - full prod. cap. emissions

July 6, 1982

DER

JUL 7 1982

BAQM

Mr. Tim Powell  
Florida Department of Environmental Regulation  
Room 601  
2600 Blair Stone Road  
Tallahassee, FL 32301

Re: Metal Container Corporation

Dear Mr. Powell:

ESE wishes to provide test methodology for determining V.O.C. compliance status for Metal Container Corporation's two-piece can plant in Jacksonville, Florida.

Four thermal oxidizers will be utilized for emission control upon completion of the addition of overvarnish processes to each of the production lines. All V.O.C. emissions from the plant, with the exception of the actual overvarnish application process, will pass through an ambient temperature baghouse followed by a thermal oxidizer. The emission limitation for this plant will be specified in terms of an annual emission ceiling. Compliance will be demonstrated by the addition of thermal oxidizer emissions and the V.O.C. content of the overvarnish coating. To predict that future emissions will not exceed current rates, it is necessary to demonstrate the efficiency of the thermal oxidizers.

ESE proposes to perform testing at the thermal oxidizer inlets and outlets using a sampling train that consist of the following elements in series:

1. Heated stainless steel probe,
2. Two distilled water impingers in ice bath,
3. One dry impinger trap in ice bath,
4. Glass fiber filter, and
5. Flame ionization detector (F.I.D.)

ENVIRONMENTAL SCIENCE AND ENGINEERING, INC.

Mr. Tim Powell  
Page Two  
July 6, 1982

Total organic carbon analyses will be performed on the impinger and filter samples. This result will be added to the F.I.D. results reported as methane.

This sampling approach was made after a review of the process and testing alternatives. It is felt that the use of Method 25 on eight sources (inlets and outlets) would be very expensive and require a great number of sample containers. The proposed method is superior economically and adequate in accuracy as it provides a means of removing and quantifying total V.O.C. condensibles and leaving F.I.D. analysis for the light hydrocarbons that should respond very closely to methane calibration. Further conservatism in the emission data is obtained when one assumes that the more complex compounds (those tending to give a depressed response to an F.I.D. calibrated on methane) are more likely found at the T.O. inlet rather than the outlet. Possible analyzer inaccuracies would therefore tend to lower efficiency calculations.

*← isn't this the other way around*

Please contact me if you have any questions or if more discussion is required.

Sincerley,

*Stephen L. Neck*

Stephen L. Neck, P.E.  
Group Leader  
Source Engineering

SLN/ds

cc: Mr. John Stier  
Anheuser Busch Companies, Inc.  
One Busch Place  
St. Louis, MO 63118

Mr. Bob Lasky  
Metal Container Corporation  
1100 N. Ellis Road  
Jacksonville, Florida 32205

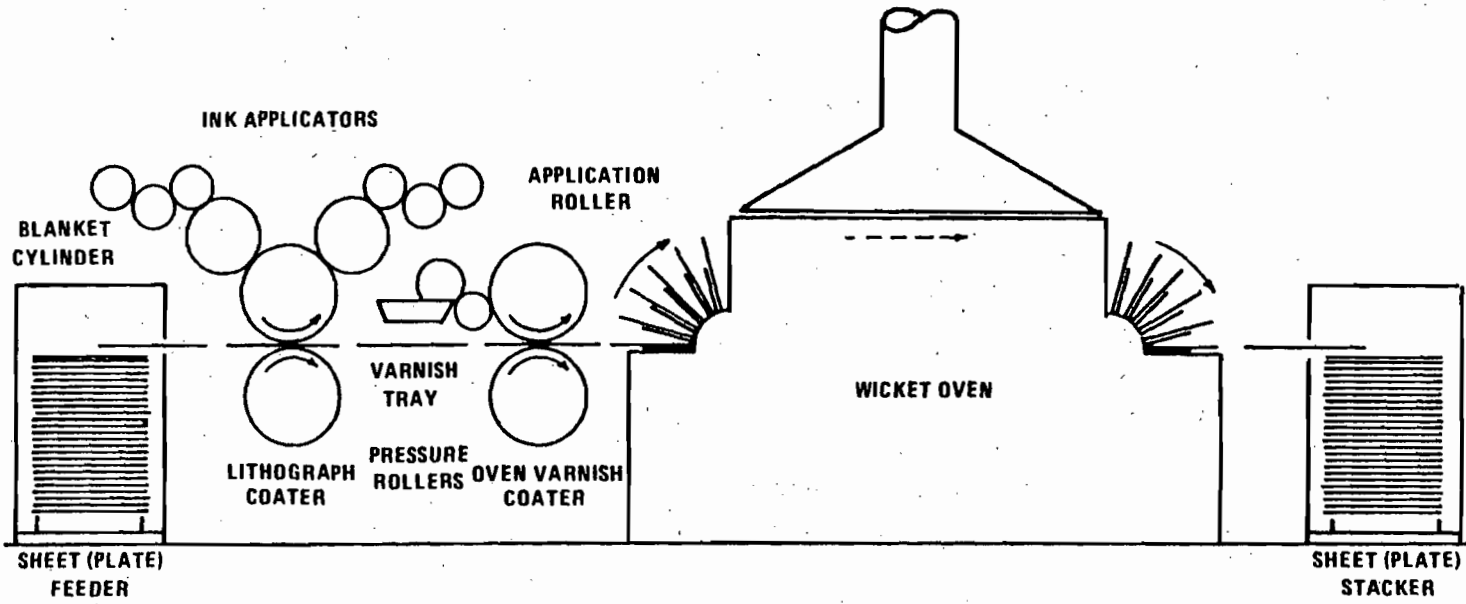


Figure 4.2.2.2. Three piece can sheet printing operation.<sup>7</sup>

Call someone @ EPA about Test Method.

Telephone Record

Talked with Bill Polpore Date 7/19/82

Time \_\_\_\_\_ of RTP

Phone Number (919) 541-5516 Called \_\_\_\_\_ Party Called \_\_\_\_\_

Reason: VOC Method 25

out - call back 7/19 -

Action/Reply: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone Record

Talked with Bob Lasky Date 7/8/82

Time \_\_\_\_\_ of M.C.C (Metal Container Corp.)

Phone Number (904) 786-8806 Called \_\_\_\_\_ Party Called X

Reason: overwarnish units 3 & 4 permit application.

Called back to ask at 4:30 PM (7/8/82)

Action/Reply: \_\_\_\_\_

every month they (MCC) crank up TDS to ensure that they still operate

① Trial run > before they're sure they want ~~to~~ to apply for TD?

②

②

He said:

① Water condensing in tubes fouls up test method.

② only one water's line will be directed TO unit.



Telephone Record

Talked with Jerry Wansley Date 7/8/82  
Time \_\_\_\_\_ of JAN BES  
Phone Number (904) 633-3318 Called \_\_\_\_\_ Party Called \_\_\_\_\_  
Reason: MCC application

Action/Reply: MCC told them about test problems at plant up north (ask Lasky about)

MCC variance Gainesville - variance from

PS Form 3811, Jan. 1979  
RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

④ SENDER: Complete items 1, 2, and 3.  
Add your address in the "RETURN TO" space on reverse.

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

2. ARTICLE ADDRESSED TO:  
 Robert J. Lasky  
 1100 N. Ellis Rd.  
 Jacksonville, FL 32205

3. ARTICLE DESCRIPTION:  

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	7682411	

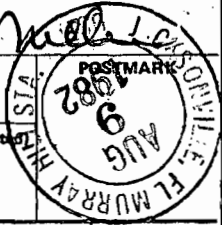
 (Always obtain signature of addressee or agent)

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

4. DATE OF DELIVERY  
 8/9/82

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: \_\_\_\_\_ CLERK'S INITIALS \_\_\_\_\_



☆GPO : 1979-300-459

P16 7682411  
 RECEIPT FOR CERTIFIED MAIL

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

SENT TO		Robert J. Lasky
STREET AND NO.		1100 N. Ellis Rd.
P.O., STATE AND ZIP CODE		Jacksonville, FL 32205
POSTAGE		\$ _____
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	¢ _____
	SPECIAL DELIVERY	¢ _____
	RESTRICTED DELIVERY	¢ _____
	OPTIONAL SERVICES	
	RETURN RECEIPT SERVICE	
	SHOW TO WHOM AND DATE DELIVERED	¢ _____
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢ _____
	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢ _____
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢ _____
TOTAL POSTAGE AND FEES		\$ _____
POSTMARK OR DATE		8/6/82

PS Form 3800, Apr. 1976

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

August 5, 1982

CERTIFIED MAIL - RETURN RECEIPT REQUESTED


Mr. Robert J. Lasky  
Metal Container Corporation  
1100 N. Ellis Road  
Jacksonville, Florida 32205

Dear Mr. Lasky:

Pursuant to Section 403.815, Florida Statutes, and Florida Administrative Code Rule 17-1.62, you are required to publish (at your own expense) the attached notice. This notice should be published, one time only, in the legal ad section of the Florida Times-Union as soon as possible and no later than August 22, 1982.

The Department, in accordance with Rule 17-1.62, is required to have proof that the public notice was given. Therefore, please have the newspaper prepare an affidavit of publication to submit to the Department.

Sincerely,

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

CHF:ras

Attachment

NOTICE OF PROPOSED AGENCY ACTION

The Department of Environmental Regulation gives notice of its intent to issue a permit to the Metal Container Corporation for the construction of Overvarnish Units #3 and #4 at their facility in Jacksonville, Duval County, Florida. A determination of Best Available Control Technology (BACT) was not required.

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

The Application, Technical Evaluation and Departmental Intent are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

Dept. of Env. Regulation  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, FL 32301

Dept. of Env. Regulation  
St. Johns River Sub-  
district  
3426 Bills Road  
Jacksonville, FL 32207

Jacksonville Bio-Environmental Services  
Department of Health, Welfare, and  
Bio-Environmental Services  
515 West 6th Street  
Jacksonville, Florida 32206

Comments on this action shall be submitted in writing to Bill Thomas of the Tallahassee office within thirty (30) days of this notice.

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

MEMORANDUM

TO: Robert J. Lasky, Metal Container Corporation  
John V. Stier, Anheuser-Busch Companies  
Charles M. Nolan, Pat Nolan & Associates  
Steve Pace, Jacksonville BES  
Johnny Cole, FDER-SJRS

FROM: *Bill Thomas*  
C. H. Fancy, Bureau of Air Quality Management

DATE: August 4, 1982

SUBJECT: Preliminary Determination - Metal Container Corporation  
Application to Construct Overvarnish Units #3 and #4  
(AC 16-57752 and AC 16-57753)

Attached are copies of the applications, Technical Evaluation and Preliminary Determination, and proposed permits to construct the subject overvarnish units at the applicant's facility in Jacksonville.

Please submit any comments which you may have concerning this action, in writing, to Bill Thomas of the Bureau of Air Quality Management.

CF:TP:ras

NOTICE OF PROPOSED AGENCY ACTION

The Department of Environmental Regulation gives notice of its intent to issue a permit to the Metal Container Corporation for the construction of Overvarnish Units #3 and #4 at their facility in Jacksonville, Duval County, Florida. A determination of Best Available Control Technology (BACT) was not required.

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

The Application, Technical Evaluation and Departmental Intent are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

Dept. of Env. Regulation  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, FL 32301

Dept. of Env. Regulation  
St. Johns River Sub-  
district  
3426 Bills Road  
Jacksonville, FL 32207

Jacksonville Bio-Environmental Services  
Department of Health, Welfare, and  
Bio-Environmental Services  
515 West 6th Street  
Jacksonville, Florida 32206

Comments on this action shall be submitted in writing to Bill Thomas of the Tallahassee office within thirty (30) days of this notice.

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

28-5.15 Requests for Formal and Informal Proceedings

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

Technical Evaluation  
and  
Preliminary Determination

Metal Container Corporation  
Duval County

Overvarnish Units #3 and #4

Application Numbers:

AC 16-57752

AC 16-57753

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

August 4, 1982



I. Project Description

A. Applicant

Metal Container Corporation  
1100 North Ellis Road  
Jacksonville, Florida 32205

B. Project and Location

The applicant proposes to add overvarnish coating units to existing can coating lines No. 3 and No. 4. The facility is located at 1100 North Ellis Road in Jacksonville. The UTM Coordinates are 428.440 km East and 3356.377 km North.

C. Process Description and Controls

The can coating lines at the Metal Container Corporation plant are used in the manufacturing of aluminum beer cans for Anheuser-Busch. The additional overvarnish units are being added to alleviate abrasion problems encountered during shipping of the project. The additional units will rollcoat the water-based varnish, which will contain 2.1 pounds of Volatile Organic Compounds (VOC) per gallon of coating applied, minus water content. After the cans are coated, they pass through a natural gas fired drier. The applicant originally intended to control the resulting VOC emissions by incineration, however after review of

the project, it was determined that the proposed water-based solvent technology would be sufficient under the existing air pollution regulations of Chapter 17-2, Florida Administrative Code (FAC). The argument for this determination is outlined below.

## II. Rule Applicability

The proposed project, resulting in an increase of VOC emissions in an area designated nonattainment for ozone, is potentially subject to Section 17-2.510, FAC, New Source Review (NSR) for Nonattainment Areas. VOC are precursors in the formation of ozone, and are therefore limited under the rule. The Preconstruction Review Requirements of this section call for application of Lowest Achievable Emission Rate (LAER) technology for any major construction or major modification. Major emitting facilities for VOC which undergo modifications that would increase VOC emissions by a "significant" amount would be subject to this control technology.

In 1981 the plant switched to water-based coating technology within the limits of the Reasonably Available Control Technology (RACT) regulations for can coating operations, as defined in Section 17-2.650(1)(f)1., FAC. Previously, the plant used solvent-based coatings, controlling VOC by thermal oxidizers. In February, 1982, the Department issued permits allowing the addition of water-based overvarnish units to lines No. 1 and No.2 under the

provisions of Section 17-2.510<sup>FAC</sup>. The current applications propose the addition of identical overvarnish units to the remaining coating lines No. 3 and No. 4. VOC emissions from all four overvarnish operations are credited as contemporaneous emission increases as defined in the New Source Review Section.

Taking into account the recent modification at the plant, as well as the intent of the rules for such a case, the Department has determined that the baseline date for tallying contemporaneous emissions increases (or decreases) shall be 1981, when the switch to water-based coatings was made. Subsequent review of the 1981 emissions calculations revealed that the <sup>VOC</sup> water content of the solvents in use are actually below the RACT standards. This would amount to a credit of 48 tons per year over the 1981 actual emissions. Therefore, the absolute RACT baseline is as follows:

315.5 TPY	-	1981 Actual Emissions
48.0 TPY	-	Emissions Credits (Under RACT Standard)
<u>363.5 TPY</u>	-	Total VOC Baseline for Plant

Any net VOC emissions increase over this figure would be credited toward a "significant net emissions increase" as given in 17-2.510(2)(e)2<sup>FAC</sup>. When this significant net increase would equal or exceed 40 tons per year (see Table 500-2, Chapter 17-2<sup>FAC</sup>), the New Source Review requirements of 17-2.510(4)<sup>FAC</sup> would apply. This project will not result in an increase over this level.

However, operational limits and coating inventory/reporting procedures must be implemented to ensure adherence to the regulations.

III. Summary of Emissions and Air Quality Analysis

A. Emission Limitations

VOC pollutants from overvarnish Units No. 3 and No. 4 will be limited such that overvarnish coatings applied will not exceed the RACT standard.

Operating permits for all four lines shall be changed to limit VOC content below the RACT standard, representative of formulations on which the Department relied in calculation of an emissions credit under the RACT standard. These limits are necessary to ensure nonapplicability of LAER requirements and will be as follows:

<u>Coating</u>	<u>VOC Content</u> <u>(lbs/gal less water)</u>
White Basecoat	2.09
Clear Basecoat	2.59
Inside Spray	3.74
Bottom Varnish	2.1
Overvarnish	2.1

Operating permits for all four lines shall be amended to limit total VOC emissions from the plant to the maximum level

allowed before LAER would have to be applied. This level would be the allowable baseline of 363.5 tons per year, plus the allowable significant increase of 40 tons per year, or 403.5 tons per year.

In addition, the applicant will be required to monitor coating inventories and formulations and to report to the Department before increases of production or formulation changes would result in emissions exceeding the allowable level.

#### B. Air Quality Analysis

The current project will result in increases of pollutant emissions, however not to the extent which would significantly impact the air quality of the area.

#### IV. Conclusions

The emission limitations proposed are based on the applicant's previous production level, as well as the RACT standards and the New Source Review Requirements for Nonattainment Areas. Issuance of permits for the additional Overvarnish units is contingent upon amendment of all operating permits for coating lines that will limit total plant VOC emissions to a maximum allowable limit of 403.5 tons per year. The applicant must notify the Department and apply for a LAER permit if this limit is to be exceeded.

The General and Specific Conditions for the current construction permits are given in the proposed permits attached.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICANT: Metal Container Corporation  
1100 Ellis Road  
Jacksonville, Florida 32205

PERMIT/CERTIFICATION  
NO. AC 16-57752

COUNTY: Duval

PROJECT: Installation  
of Overvarnish Unit  
No. 3 on Coating Line  
No. 3

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

Installation of an overvarnish unit on existing coating line No. 3  
using water-based coating formula.

Attachment:

1. Application to construct Air Pollution Sources, DER Form  
17-1.122(16).
2. Addendum to application, dated July 6, 1982, from John V. Stier of  
Anheuser-Busch Co.

PERMIT NO.: AC 16-57752  
APPLICANT: Metal Container Corporation

**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 Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court 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 indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.

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

4. As provided in subsection 403.087(6), 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.

5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.

6. 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 Section 403.111, F.S.

7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

8. 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, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.

9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.

10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.

11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.

12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation 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.

13. This permit also constitutes:

- Determination of Best Available Control Technology (BACT)
- Determination of Prevention of Significant Deterioration (PSD)
- Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 16-57752  
APPLICANT: Metal Container Corporation

SPECIFIC CONDITIONS:

1. The Volatile Organic Compound (VOC) content of the coating as delivered to the coating applicator of Overvarnish Unit No. 3 shall not exceed 2.1 pounds per gallon of coating less water.
2. The maximum allowable rate of VOC emissions for overvarnish Unit No. 3 shall be 4.4 pounds per hour.
3. The hours of operation shall not exceed 24 hours per day, 7 days per week, 52 weeks per year or 8760 hours per year.
4. The amounts and formulas of each coating and solvent shall be recorded on, at least, a monthly basis. The formula should include pounds of VOC per gallon of coating, less water, and should be based on a certified analysis of each coating given by the supplier. These records and certifications shall be made available for Department inspection upon request.
5. Testing for VOC content of each coating used shall be conducted according to EPA Method 24, as referenced in Section 17-2.700, F.A.C.
6. Before startup of the unit, operation permits for all coating lines at the facility shall be amended to limit total VOC emissions from the entire facility to 403.5 tons per year. The permits shall also be amended to limit all coatings in use to the following standards, not to be exceeded:

<u>Coating</u>	<u>Pounds of VOC per gallon of coating, less water</u>
White Basecoat	2.09
Clear Basecoat	2.59
Inside Spray	3.74
Bottom Varnish	2.10
Overvarnish	2.10

7. Compliance with the emission limitations and the coating formula standards shall be by submittal of test results, as performed per Specific Condition No. 5. Compliance with the standards of Specific Condition No. 7 shall be verified annually in the form of a compliance report submitted to the Jacksonville Bio-Environmental



PERMIT NO.: AC 16-57752  
APPLICANT: Metal Container Corporation

Services (JBES) office. This report shall include test results, manufacturer's certifications and coating usage records.

8. Prior to 90 days before the expiration of this permit, a complete application for an operating permit shall be submitted to the JBES office. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration of this permits or receipt of an operating permit.

Expiration Date: February 28, 1983

Issued this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

\_\_\_\_\_ Pages Attached.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

\_\_\_\_\_  
Signature

PAGE \_\_\_\_\_ OF \_\_\_\_\_.

PERMIT NO.: AC 16-57752  
APPLICANT: Metal Container Corporation

SPECIFIC CONDITIONS:

1. The Volatile Organic Compound (VOC) content of the coating as delivered to the coating applicator of Overvarnish Unit No. 3 shall not exceed 2.1 pounds per gallon of coating less water.
2. The maximum allowable rate of VOC emissions for overvarnish Unit No. 3 shall be 4.4 pounds per hour.
3. The hours of operation shall not exceed 24 hours per day, 7 days per week, 52 weeks per year or 8760 hours per year.
4. The amounts and formulas of each coating and solvent shall be recorded on, at least, a monthly basis. The formula should include pounds of VOC per gallon of coating, less water, and should be based on a certified analysis of each coating given by the supplier. These records and certifications shall be made available for Department inspection upon request.
5. Testing for VOC content of each coating used shall be conducted according to EPA Method 24, as referenced in Section 17-2.700, F.A.C.
6. Before startup of the unit, operation permits for all coating lines at the facility shall be amended to limit total VOC emissions from the entire facility to 403.5 tons per year. The permits shall also be amended to limit all coatings in use to the following standards, not to be exceeded:

<u>Coating</u>	<u>Pounds of VOC</u> <u>per gallon of coating, less water</u>
White Basecoat	2.09
Clear Basecoat	2.59
Inside Spray	3.74
Bottom Varnish	2.10
Overvarnish	2.10

7. Compliance with the emission limitations and the coating formula standards shall be by submittal of test results, as performed per Specific Condition No. 5. Compliance with the standards of Specific Condition No. 7 shall be verified annually in the form of a compliance report submitted to the Jacksonville Bio-Environmental

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICANT: Metal Container Corporation  
1100 Ellis Road  
Jacksonville, Florida 32205

PERMIT/CERTIFICATION  
NO. AC 16-55753

COUNTY: Duval

PROJECT: Installation  
of Overvarnish Unit  
No. 4 on Coating Line  
No. 4

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

Installation of an overvarnish unit on existing coating line No. 4  
using water-based coating formula.

Attachment:

1. Application to construct Air Pollution Sources, DER Form  
17-1.122(16).
2. Addendum to application, dated July 6, 1982, from John V. Stier of  
Anheuser-Busch Co.

PERMIT NO.: AC 16-57753  
APPLICANT: Metal Container Corporation

**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 Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court 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 indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.
3. 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 non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue; and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. 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.
4. As provided in subsection 403.087(6), 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.
5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.
6. 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 Section 403.111, F.S.
7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
8. 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, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.
9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.
10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.
11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.
12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation 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.
13. This permit also constitutes:
  - Determination of Best Available Control Technology (BACT)
  - Determination of Prevention of Significant Deterioration (PSD)
  - Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 16-57753  
APPLICANT: Metal Container Corporation

SPECIFIC CONDITIONS:

1. The Volatile Organic Compound (VOC) content of the coating as delivered to the coating applicator of Overvarnish Unit No. 4 shall not exceed 2.1 pounds per gallon of coating less water.
2. The maximum allowable rate of VOC emissions for overvarnish Unit No. 4 shall be 4.4 pounds per hour.
3. The hours of operation shall not exceed 24 hours per day, 7 days per week, 52 weeks per year or 8760 hours per year.
4. The amounts and formulas of each coating and solvent shall be recorded on, at least, a monthly basis. The formula should include pounds of VOC per gallon of coating, less water, and should be based on a certified analysis of each coating given by the supplier. These records and certifications shall be made available for Department inspection upon request.
5. Testing for VOC content of each coating used shall be conducted according to EPA Method 24, as referenced in Section 17-2.700, F.A.C.
6. Before startup of the unit, operation permits for all coating lines at the facility shall be amended to limit total VOC emissions from the entire facility to 403.5 tons per year. The permits shall also be amended to limit all coatings in use to the following standards, not to be exceeded:

<u>Coating</u>	<u>Pounds of VOC</u> <u>per gallon of coating, less water</u>
White Basecoat	2.09
Clear Basecoat	2.59
Inside Spray	3.74
Bottom Varnish	2.10
Overvarnish	2.10

7. Compliance with the emission limitations and the coating formula standards shall be by submittal of test results, as performed per Specific Condition No. 5. Compliance with the standards of Specific Condition No. 7 shall be verified annually in the form of a compliance report submitted to the Jacksonville Bio-Environmental

PERMIT NO.: AC 16-57753  
APPLICANT: Metal Container Corporation

Services (JBES) office. This report shall include test results, manufacturer's certifications and coating usage records.

8. Prior to 90 days before the expiration of this permit, a complete application for an operating permit shall be submitted to the JBES office. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration of this permits or receipt of an operating permit.

Expiration Date: February 28, 1983

Issued this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

\_\_\_\_\_ Pages Attached.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

\_\_\_\_\_  
Signature

PAGE \_\_\_\_\_ OF \_\_\_\_\_.

DEPARTMENT OF HEALTH, WELFARE  
& BIO-ENVIRONMENTAL SERVICES  
Bio-Environmental Services Division  
Air and Water Pollution Control



DER

JUL 22 1982

BAQM

July 16, 1982

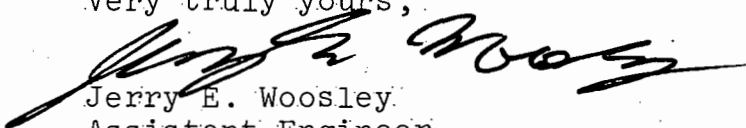
Mr. Tim Powell  
Central Air Permitting Section  
Dept. of Environmental Regulation  
2600 Blairstone Road  
Tallahassee, Florida 32301

Dear Mr. Powell:

Enclosed is the information which you requested on Metal Container Corporation. Hopefully, this information will be helpful in your permit application review.

If I can be of further assistance, please advise.

Very truly yours,

  
Jerry E. Woosley  
Assistant Engineer

JEW/vj

Enclosure



*Metal Containment  
Ellis Rd.*

*April 1980*

II. SUMMARY AND DISCUSSION OF RESULTS

Results of the testing are summarized in Table 1. Support data are located in the Appendix.

All inlet and outlet testing were performed simultaneously.

All units are achieving greater than 90% removal of hydrocarbons reported as methane.

All pertinent support data and copies of the strip charts have been included in the report appendices.



TABLE 1

## EMISSION SUMMARY

SOURCE	TIME	DATE	MEAN ANALYZER ppm	EFFICIENCY %	VOLUMETRIC FLOW ACFM	SCFMD	% H <sub>2</sub>
Unit 1 Inlet	1011-1211	4/25/80	1587	98.4	15545	7478	3.2
Unit 1 Outlet	1011-1211	4/25/80	25 (.47%/yr)				4.0
Unit 2 Inlet	1044-1244	4/28/80	823	95.3	20813	9856	2.7
Unit 2 Inlet	1044-1244	4/28/80	39 (.97%/yr)				3.3
Unit 3 Inlet	1243-1443	4/25/80	1000	95.6	16118	8873	2.5
Unit 3 Outlet	1243-1443	4/25/80	44 (.99%/yr)				3.1
Unit 4 Inlet	1258-1458	4/28/80	448	90.2	20813	10162	2.2
Unit 4 Outlet	1258-1458	4/28/80	44 (1.13%/yr)				2.6

### III. PROCESS DESCRIPTION AND OPERATION

Each of the four thermal oxidizing units at the Metal Container Corporation plant serves a complete can production line. Gaseous emissions from can cleansing and coating operations are collected with a blower and a duct-work system. The gas stream is directed through the thermal oxidizer where the temperature is raised to approximately 1200<sup>o</sup>F. A blower on the discharge side directs the gases to a heat recovery system and atmospheric discharge.

Production line No. 1 (including the thermal oxidizer) produces 16 oz. cans. Production rate is 800 units per minute and process weights are as follows:

1442	lb/hr. Aluminum
88.9	lb/hr. Coating materials
1530.4	lb/hr. Total

This includes 30.0 lb/hr. volatile materials.

Each of the other three production lines produces 12 oz. cans at a rate of 800 units per minute with the following process weights:

1244.2	lb/hr. Aluminum
74.63	lb/hr. Coating materials
1318.8	lb/hr. Total

This includes 31.3 lb/hr. volatile materials.

Total fuel consumption for the plant at capacity operation is 385 gallons of propane per hour with approximately 240 gallons per hour used in the four thermal oxidizers. This quantity is evenly divided among the units yielding 60 gal/hr/unit. At 90,000 BTU per gallon of propane, each thermal oxidizer has a heat input of 5,400,000 BTUH.

All units were operating at capacity except for sporadic interruptions which are normally encountered.

#### IV. SAMPLING POINT LOCATION

The sampling points for all units were as follows:

INLET; Header section, immediately following inlet duct and immediately prior to combustion chamber of oxidizer unit.

OUTLET; Ductwork on discharge of oxidizer unit prior to atmospheric damper.

## V. FIELD AND ANALYTICAL PROCEDURES

The gaseous hydrocarbon sampling and analytical systems employed for this test program consisted of:

1. A stainless steel probe.
2. Teflon sampling line.
3. Vacuum pump.
4. Two Model 8401 Bendix Hydrocarbon Analyzers.

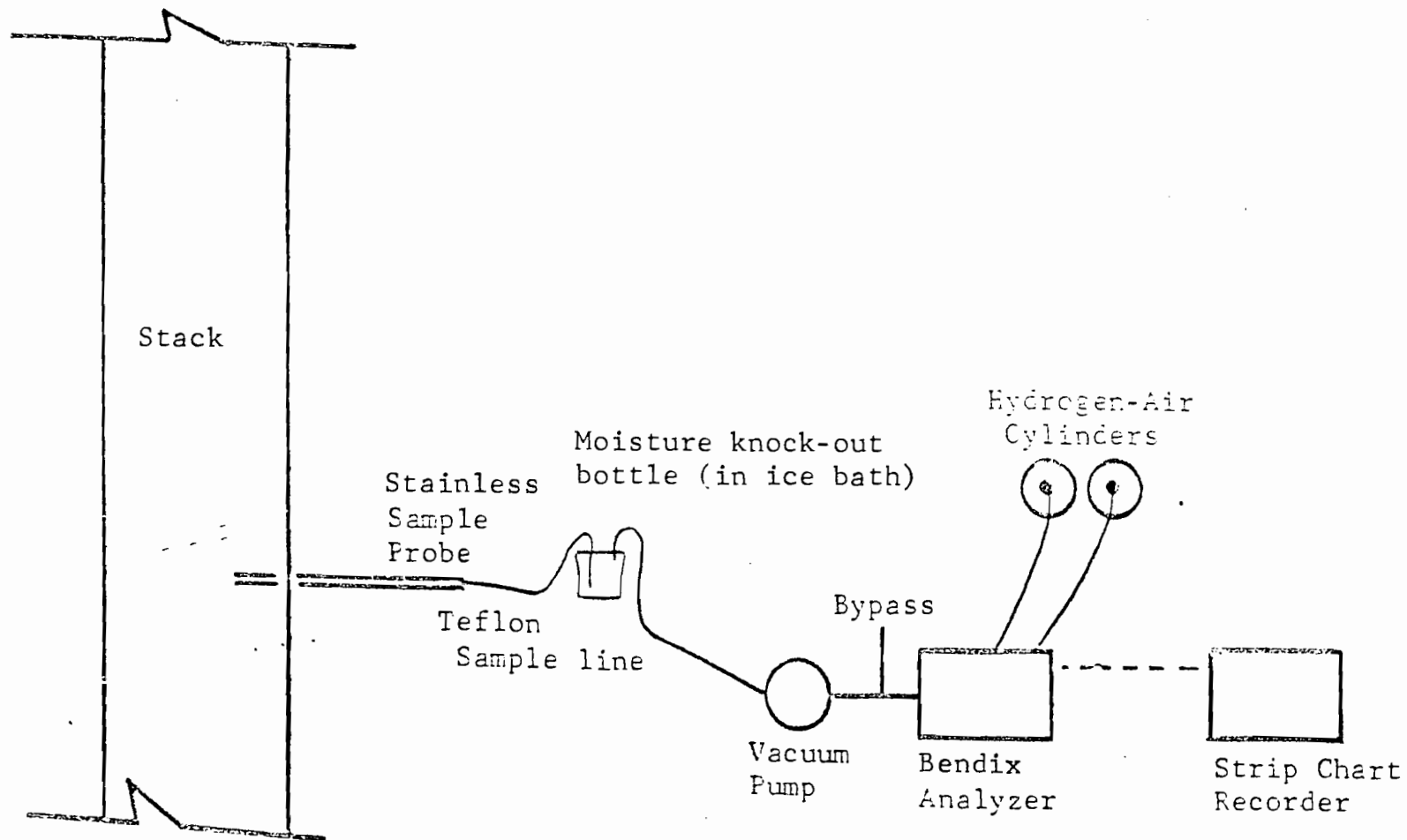
Figure 1 illustrates the system employed for the testing. About two (2) liters per minute of stack gas is delivered to the instrument which was regulated to accept a flow of 0.1 liters per minute to the flame ionization detector, the rest of the sample being bypassed to the atmosphere. The analyzer response is recorded on a strip chart recorder on a continuous basis and the readings quantified by means of a multipoint methane calibration curve. (See Appendix)

The F.I. D. is fired on a mixture of hydrogen and pure air.

Velocity traverses were taken at each outlet location. Moisture runs using E. P. A. Method were conducted at each inlet and outlet.

FIGURE 1

SAMPLING SYSTEM SCHEMATIC



∞

3426 BILLS ROAD  
JACKSONVILLE, FLORIDA 32207  
Telephone: 904/396-6959



*Paul  
Woosley*

HOB GRAHAM  
GOVERNOR  
VICTORIA TSCHINKEL  
SECRETARY

G. DOUG DUTTON  
SUBDISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER SUBDISTRICT

October 29, 1981

Mr. Robert J. Lasky, Project Engineer  
Metal Container Corporation  
1100 N. Ellis Road  
Jacksonville, Florida 32205



Dear Mr. Lasky:

Duval County - AP  
Metal Container Corp.  
Can Coating Line #3

Enclosed is Permit Number A016-44658 , dated October 29, 1981 , to operate the subject pollution source, issued pursuant to Section 403.061(14), Florida Statutes.

Should you object to this permit, including any and all of the conditions contained therein, you may file an appropriate petition for administrative hearing. This petition must be filed within fourteen (14) days of the receipt of this letter. Further, the petition must conform to the requirements of Section 28-5.201, Florida Administrative Code (see reverse side). The petition must be filed with the Office of General Counsel, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301.

If no petition is filed within the prescribed time, you will be deemed to have accepted this permit and waived your right to request an administrative hearing on this matter.

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

Sincerely,

A handwritten signature in black ink that reads "Frank Watkins, Jr.".

Frank Watkins, Jr., P.E.  
Subdistrict Engineer

FW:vk

cc: Mr. Charles M. Nolan, P.E.  
Jacksonville BES

original typed on 100% recycled paper



STATE OF FLORIDA  
**DEPARTMENT OF ENVIRONMENTAL REGULATION**  
ST. JOHNS RIVER SUBDISTRICT

APPLICANT: Metal Container Corporation  
1100 North Ellis Road  
Jacksonville, Florida 32205

PERMIT/CERTIFICATION  
NO. A016-44658

COUNTY: Duval

PROJECT: Can Coating Line  
#3

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

Two piece aluminum can (12oz) coating line #3 including white or clear basecoat, inside spray, bottom varnish, and necker lubricant applicators. Four (4) drying and curing ovens are located in the line rated at a maximum heat input of 11.9 MBTU/hr.

Located at 1100 North Ellis Road, Jacksonville, Florida 32205.  
UTM E - 7428.440 N - 3356.377.

In accordance with application received June 22, 1981 and additional information received on August 14, 1981 and September 28, 1981.



A016-44658

Metal Container Corporation

## CONDITIONS:

Supporting documents are retained in the office file to which they were submitted and attached as stated in the leading paragraph and General Condition No. 2. They are as follows:

- (A) Plot Plans & Diagrams
- (B) Emission Calculations

2. The permitted maximum allowable emission rate for each pollutant is as follows:

<u>Pollutant</u>	<u>Emission Rate</u>	<u>(lbs./hr.)</u>	<u>(T/yr.)</u>	<u>Opacity</u>
VOC (Process)	29.9*		131	NA
VOC (Non-Process)			25	

\*Includes Necker Lubricant.

- 3. Testing of emissions must be accomplished at 90% - 100% of the maximum permitted rate.
- 4. The City of Jacksonville Bio-Environmental Services Division (BESD) shall be notified 14 days prior to testing and copies of the test report shall be submitted to BESD within 15 days after completion of testing.
- 5. The following pollutants shall be tested at intervals indicated from the date of September 1, 1981.

<u>Pollutant</u>	<u>Frequency</u>
VOC ( $\frac{\text{lbs. of VOC}}{\text{Gallon Coating Minus Water}}$ )*	12 Months

\*Includes basecoat (white & clear), inside spray, and bottom varnish.

- 6. Submit an annual operation report to BESD for this source on the form supplied by the Department for each calendar year on or before March 1.
- 7. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.
- 8. Basecoat, inside spray, and bottom varnish coatings are limited to 2.8, 4.2 and 4.2 lbs. of VOC/(gallon of coating minus water).
- 9. The VOC content of the referenced materials (5 above) shall be determined in triplicate for each sample by the methods given in Appendix "A" of "Control of Volatile Organic Emissions from Existing Stationary Sources" - Vol. II, EPA 450/2-77-008.

PERMIT NO.: A016-44658  
APPLICANT: Metal Container Corporation

SPECIFIC CONDITIONS:

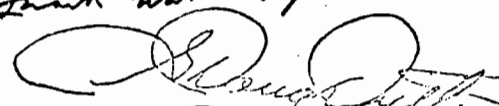
10. Operation hours shall be limited to 8760/yr.

Expiration Date: September 30, 1986 Issued this 29th day of October 1981

CITY OF JACKSONVILLE  
BIO-ENVIRONMENTAL SERVICES DIVISION

  
Donald C. Bayly, Assistant Chief

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

*Frank Williams Jr.*  
for   
G. Doug Dutton, Subdistrict Manager

3428 BILLS ROAD  
JACKSONVILLE, FLORIDA 32207  
Telephone: 904/396-6959



*Face  
Worsley*

BOB GRAHAM  
GOVERNOR  
VICTORIA TSCHINKEL  
SECRETARY

G. DOUG DUTTON  
SUBDISTRICT MANAGER

STATE OF FLORIDA  
**DEPARTMENT OF ENVIRONMENTAL REGULATION**

ST. JOHNS RIVER SUBDISTRICT

October 29, 1981

Mr. Robert J. Lasky, Project Engineer  
Metal Container Corporation  
1100 N. Ellis Road  
Jacksonville, Florida 32205



Dear Mr. Lasky:

Duval County - AP  
Metal Container Corp.  
Can Coating Line #4

Enclosed is Permit Number A016-44659, dated October 29, 1981, to operate the subject pollution source, issued pursuant to Section 403.061(14), Florida Statutes.

Should you object to this permit, including any and all of the conditions contained therein, you may file an appropriate petition for administrative hearing. This petition must be filed within fourteen (14) days of the receipt of this letter. Further, the petition must conform to the requirements of Section 28-5.201, Florida Administrative Code (see reverse side). The petition must be filed with the Office of General Counsel, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301.

If no petition is filed within the prescribed time, you will be deemed to have accepted this permit and waived your right to request an administrative hearing on this matter.

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

Sincerely,

Frank Watkins, Jr., P.E.  
Subdistrict Engineer

FW:vk

cc: Mr. Charles M. Nolan, P.E.  
Jacksonville BES

original typed on 100% recycled paper

26 BILLS ROAD  
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM  
GOVERNOR

JACOB D. VARN  
SECRETARY

G. DOUG DUTTON  
SUBDISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER SUBDISTRICT

APPLICANT: Metal Container Corporation  
1100 North Ellis Road  
Jacksonville, Florida 32205

PERMIT/CERTIFICATION  
NO. A016-44659

COUNTY: Duval

PROJECT: Can Coating Line  
#4

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

Two piece aluminum can (12 oz) coating line #4 including white or clear basecoat, inside spray, bottom varnish, and necker lubricant applicators. Four (4) drying and curing ovens are located in the line rated at a maximum heat input of 11.9 MBTU/hr.

Located at 1100 North Ellis Road, Jacksonville, Florida 32205.

UTM. E - 7428.440 N - 3356.377.

In accordance with application received June 22, 1981 and additional information received on August 14, 1981 and September 28, 1981.

PERMIT NO.: A016-44659

APPLICANT: Metal Container Corporation

## SPECIFIC CONDITIONS:

1. Supporting documents are retained in the office file to which they were submitted and not attached as stated in the leading paragraph and General Condition No. 2. They are as follows:

- (A) Plot Plans & Diagrams
- (B) Emission Calculations

2. The permitted maximum allowable emission rate for each pollutant is as follows:

<u>Pollutant</u>	<u>Emission Rate (lbs./hr.)</u>	<u>(T/yr.)</u>	<u>Opacity</u>
VOC (Process)	29.9*	131	NA
VOC (Non-Process)		25	

\*Includes Necker Lubricant

3. Testing of emissions must be accomplished at 90% - 100% of the maximum permitted rate.

4. The City of Jacksonville Bio-Environmental Services Division (BESD) shall be notified 14 days prior to testing and copies of the test report shall be submitted to BESD within 15 days after completion of testing.

5. The following pollutants shall be tested at intervals indicated from the date of September 1, 1981.

<u>Pollutant</u>	<u>Frequency</u>
VOC $\frac{\text{lbs. of VOC}}{\text{(Gallon of Coating Minus Water)}}$	* 12 Months

\*Includes basecoat (white & clear), inside spray, and bottom varnish.

6. Submit an annual operation report to BESD for this source on the form supplied by the Department for each calendar year on or before March 1.

7. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.

8. Basecoat, inside spray, and bottom varnish coating are limited to 2.8, 4.2, and 4.2 lbs. of VOC/(gallon of coating minus water).

9. The VOC content of the referenced materials (5 above) shall be determined in triplicate for each sample by the methods given in Appendix "A" of "Control of Volatile Organic Emissions from Existing Stationary Sources" - Vol. II, EPA 450/2-77-008.

PERMIT NO.: A016-44659

APPLICANT: Metal Container Corporation

SPECIFIC CONDITIONS:

10. Operation hours shall be limited to 8760/yr.


Expiration Date: September 30, 1986

Issued this 29th day of October 19 81

CITY OF JACKSONVILLE  
BIO-ENVIRONMENTAL SERVICES DIVISION

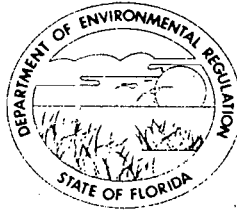
STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

  
Donald C. Bayly, Assistant Chief

*Frank Webster*  
for   
G. Doug Dutton, Subdistrict Manager

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

July 9, 1982

J. W. Mathey  
Plant Manager  
Metal Container Corporation  
1100 N. Ellis Road  
Jacksonville, Florida 32205

Dear Mr. Mathey:

This is to acknowledge receipt and transaction of your "Application to Construct an Air Pollution Source" fee check.

The permit processing numbers assigned are as follows:

AC 16-57752 - Overvarnish Unit No. 3

AC 16-57753 - Overvarnish Unit No. 4

If we may be of further assistance, please feel free to call met at (904) 488-1344.

Sincerely,

Patty Adams  
Bureau of Air Quality  
Management

PA:ras

Attachment

Best Available Copy



metal container corporation

4-27  
810

B019759  
CHECK DATE  
7/1/82

CHECK NUMBER  
019759

PAY THIS AMOUNT

\$\*\*\*\*\*40.00

STATE OF FLORIDA  
DEPT. OF ENVIRONMENTAL REGULATORS

Manufacturers Bank & Trust Company  
OF SAINT LOUIS

METAL CONTAINER CORPORATION

AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

[REDACTED]

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

Nº 33619

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Metal Container Corporation Date July 2, 1982

Address 1100 N. Collins Road Jacksonville FL Dollars \$ 40.00

Applicant Name & Address Same as above 33205

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

Revenue Code 0101 Application Number AC 16-57752  
AC 16-57753

By Patricia G. Adams





ANHEUSER-BUSCH COMPANIES

DER

JUL 8 1982

BAQM

July 6, 1982

Mr. Tim Powell  
Bureau of Air Quality Management  
State of Florida  
Department of Environmental Regulation  
2600 Blair Stone Road  
Twin Towers Office Building  
Tallahassee, Florida 32301

Dear Tim:

Please find attached the calculation sheets to accompany the application to construct overvarnish units on lines 3 and 4 at the Metal Container Corporation Facility in Jacksonville, Florida. The slight numerical changes in the revised emission tables are due to significant figure alterations only. As discussed at our meeting on July 2, 1982, these calculations and test information to be submitted by ESE in Gainesville are the last items of information needed to make the application complete.

If you have any questions concerning the emission calculations, please contact me directly at 314-577-4170.

Sincerely,

John V. Stier  
Senior Environmental  
Engineer

JVS/bkb

Att.

METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
ANNUAL VOC EMISSIONS HISTORY

<u>Year</u>	<u>Actual VOC Emissions (tons)</u>	<u>Increase/Decrease (tons)</u>
1977	337.3	Base
1978	351.4	+14.1
1979	344.6	-6.8
1980	361.5	+16.9
1981	314.8	<u>-46.7</u>
		5-year net -22.5
1982	--	Approved Increase +45.1 (Overvarnish Lines 1 & 2)
Proposed Modification	--	+38.6 (Overvarnish Lines 3 & 4)
		<u>-63.5</u> (T.O. on 1 basecoat/inside spray line)
		Proposed Decrease -24.9
		Total Decrease <u><u>-2.3</u></u>

METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
ACTUAL COATING USAGES (GALLONS)

<u>PRODUCT USED</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
White Basecoat	147,335	138,230	114,308	129,940	143,468
Clear Basecoat	0	385	19,653	16,625	19,745
Inside Spray	197,407	205,320	195,288	218,058	232,874
Bottom Varnish	2,530	2,090	1,815	1,760	1,870
Necker Lubricant	30,090 est	35,430 est	36,750 est	35,670 est	36,540 est
Methyl Chloroform	14,905 est	14,905	15,070	14,905	15,455
Methyl Ethyl Ketone	12,595 est	12,595	11,825	11,440	7,425
Flasolv 15	2,475 est	2,475	2,145	2,365	1,595
Butyl Cellosolve	0	0	0	165	990
Overvarnish	0	0	0	0	0
Cans Produced (Billions)	1.003	1.181	1.225	1.189	1.218

METAL CONTAINER CORPORATION  
JACKSONVILLE, FLORIDA  
ACTUAL VOC EMISSIONS (TONS)

<u>PRODUCT USED</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
White Basecoat	41.3	38.8	32.0	36.4	87.4
Clear Basecoat	0.0	0.1	6.7	5.6	10.9
Inside Spray	142.1	147.8	140.6	157.0	134.3
Bottom Varnish	1.3	1.1	0.9	0.9	1.0
Necker Lubricant	62.2	73.2	76.0	73.7	0.0
Methyl Chloroform	55.9	55.9	56.5	55.9	58.0
Methyl Ethyl Ketone	28.3	28.3	26.5	25.7	16.7
Flasolv 15	6.2	6.2	5.4	5.9	4.0
Butyl Cellosolve	0.0	0.0	0.0	0.4	2.5
Overvarnish	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
TOTALS	337.3	351.4	344.6	361.5	314.8

AC 16-57752



DER

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

JUL 2 1982

APPLICATION TO OPERATE/CONSTRUCT  
AIR POLLUTION SOURCES

BAQM

SOURCE TYPE: Aluminum Can Coating  New<sup>1</sup>  Existing<sup>1</sup>

APPLICATION TYPE:  Construction  Operation  Modification

COMPANY NAME: Metal Container Corporation COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Overvarnish Unit No. 3

SOURCE LOCATION: Street 1100 N. Ellis Road City Jacksonville

UTM: East 428.440 KM North 3356.377 KM

Latitude 30 ° 20 ' 15 " N Longitude 81 ° 44 ' 42 " W

APPLICANT NAME AND TITLE: Robert J. Lasky, Project Engineer

APPLICANT ADDRESS: 1100 N. Ellis Road, Jacksonville, Florida 32205

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of Metal Container Corporation

I certify that the statements made in this application for a Overvarnish Unit No. 3

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: J. W. Mathey

J. W. Mathey, Plant Manager  
Name and Title (Please Type)

Date: 7-1-82 Telephone No. 904-786-8806

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

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed: Charles M. Nolan

Charles M. Nolan  
Name (Please Type)

Pat Nolan & Associates

8282 Western Way Circle, Suite 111  
Jacksonville, Florida 32216  
Company Name (Please Type)  
Mailing Address (Please Type)

(Affix Seal)

Florida Registration No. 19889 Date: 7-1-82 Telephone No. 731-4288

<sup>1</sup>See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

**SECTION II: GENERAL PROJECT INFORMATION**

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

The application is for the addition of a roll coat unit to the existing dry offset lithography unit. The overvarnish applied will be a water-based material in full compliance of the Florida regulations and the proposed federal New Source Performance Standards. A net decrease in total emissions from the facility will result.

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

Start of Construction As soon as possible Completion of Construction One Month

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 (water-based coating)

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

SC16-2084	Issued 1/15/74	Expired 4/28/75
A016-2598	Issued 9/10/76	Expired 3/31/81
A016-44658	Issued 10/29/81	Expires 9/30/86

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code?  Yes  No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr \_\_\_\_\_ ; if seasonal, describe: \_\_\_\_\_

G. If this is a new source or major modification, answer the following questions. (Yes or No) \*See Below

1. Is this source in a non-attainment area for a particular pollutant? \_\_\_\_\_
  - a. If yes, has "offset" been applied? \_\_\_\_\_
  - b. If yes, has "Lowest Achievable Emission Rate" been applied? \_\_\_\_\_
  - c. If yes, list non-attainment pollutants.  
\_\_\_\_\_
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. \_\_\_\_\_
3. Does the State "Prevention of Significant Deterioration" (PSD) requirements apply to this source? If yes, see Sections VI and VII. \_\_\_\_\_
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? \_\_\_\_\_
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? \_\_\_\_\_

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

\*See attachment showing net decrease in annual emissions from the facility.

**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		
Overvarnish	VOC		37 Max	
Aluminum Cans	---	---	1450 Max	

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

- Total Process Input Rate (lbs/hr): 1487 Max
- Product Weight (lbs/hr): 1463 Max

**C. Airborne Contaminants Emitted:**

Name of Contaminant	Emission <sup>1</sup>		Allowed Emission <sup>2</sup> Rate per Ch. 17-2, F.A.C.	Allowable <sup>3</sup> Emission lbs/hr	Potential Emission <sup>4</sup>		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
VOC	4.4	19.3	17-2.16 (6) (a)	4.4	4.4	19.3	

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles <sup>5</sup> Size Collected (in microns)	Basis for Efficiency (Sec. V, It <sup>5</sup> )
N/A (water-based material)				

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

<sup>2</sup>Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. - 0.1 pounds per million BTU heat input)

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

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

<sup>5</sup>If Applicable

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
No additional fuel consumption			

\*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: \_\_\_\_\_ Percent Ash: \_\_\_\_\_

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

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

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

F. If applicable, indicate the percent of fuel used for space heating. Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

No additional liquid or solid wastes are expected from the modification.

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

Stack Height: 70 ft. Stack Diameter: 3.0 ft.

Gas Flow Rate: est. 10,000 ACFM Gas Exit Temperature: 280 °F.

Water Vapor Content: 2.4 % Velocity: est 24 FPS

SECTION IV: INCINERATOR INFORMATION N/A

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

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

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

Approximate Number of Hours of Operation per day \_\_\_\_\_ days/week \_\_\_\_\_

Manufacturer \_\_\_\_\_

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



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

Stack Height: \_\_\_\_\_ ft. Stack Diameter \_\_\_\_\_ Stack Temp. \_\_\_\_\_

Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM\* Velocity \_\_\_\_\_ FPS

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

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

Brief description of operating characteristics of control devices: \_\_\_\_\_

---



---



---

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

---



---



---

### SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

- 9. An application fee of \$20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.
- 10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

**SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY**

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?  
 Yes  No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)  Yes  No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration

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

- 1. Control Device/System:
- 2. Operating Principles:
- 3. Efficiency:\*
- 4. Capital Costs:
- 5. Useful Life:
- 6. Operating Costs:
- 7. Energy:
- 8. Maintenance Cost:
- 9. Emissions:

Contaminant	Rate or Concentration

\*Explain method of determining D 3 above.

AC 16-57753



STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
APPLICATION TO OPERATE/CONSTRUCT  
AIR POLLUTION SOURCES

DER  
JUL 2 1982  
BAQM

SOURCE TYPE: Aluminum Can Coating  New<sup>1</sup>  Existing<sup>1</sup>  
APPLICATION TYPE:  Construction  Operation  Modification  
COMPANY NAME: Metal Container Corporation COUNTY: Duval

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

SOURCE LOCATION: Street 1100 N. Ellis Road City Jacksonville  
UTM: East 428.440 KM North 3356.377 KM  
Latitude 30 ° 20 ' 15 " N Longitude 81 ° 44 ' 42 " W

APPLICANT NAME AND TITLE: Robert J. Lasky, Project Engineer  
APPLICANT ADDRESS: 1100 N. Ellis Road, Jacksonville, Florida 32205

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of Metal Container Corporation  
I certify that the statements made in this application for a Overvarnish Unit No. 4 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: J. W. Mathey  
J. W. Mathey, Plant Manager  
Name and Title (Please Type)  
Date: 7-1-82 Telephone No. 904-786-8806

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

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed: Charles M. Nolan  
Charles M. Nolan  
Name (Please Type)

(Affix Seal)

Pat Nolan & Associates  
Company Name (Please Type)  
8282 Western Way Circle, Suite 111  
Jacksonville, Florida 32216  
Mailing Address (Please Type)

Florida Registration No. 19889 Date: 7-1-82 Telephone No. 731-4288

<sup>1</sup>See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

**SECTION II: GENERAL PROJECT INFORMATION**

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

The application is for the addition of a roll coat unit to the existing dry offset lithography unit. The overvarnish applied will be a water-based material in full compliance of the Florida regulations and the proposed federal New Source Performance Standards. A net decrease in total emissions from the facility will result.

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

Start of Construction As soon as possible Completion of Construction One Month

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 (water-based coating)

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

SC16-2084 Issued 1/15/74 Expired 4/28/75

A016-2598 Issued 9/10/76 Expired 3/31/81

A016-44659 Issued 10/29/81 Expires 9/30/86

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? Yes  No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr \_\_\_\_\_ ; if seasonal, describe: \_\_\_\_\_

G. If this is a new source or major modification, answer the following questions. (Yes or No) \*See Below

1. Is this source in a non-attainment area for a particular pollutant? \_\_\_\_\_

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

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

c. If yes, list non-attainment pollutants.

Ozone

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. \_\_\_\_\_

3. Does the State "Prevention of Significant Deterioration" (PSD) requirements apply to this source? If yes, see Sections VI and VII. \_\_\_\_\_

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? \_\_\_\_\_

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? \_\_\_\_\_

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

\*See attachment showing net decrease in annual emissions from the facility.

**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		
Overvarnish	VOC		37 Max	
Aluminum Cans	---	---	1450 Max	

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

- Total Process Input Rate (lbs/hr): 1487 Max
- Product Weight (lbs/hr): 1463 Max

**C. Airborne Contaminants Emitted:**

Name of Contaminant	Emission <sup>1</sup>		Allowed Emission <sup>2</sup> Rate per Ch. 17-2, F.A.C.	Allowable <sup>3</sup> Emission lbs/hr	Potential Emission <sup>4</sup>		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
VOC	4.4	19.3	17-2.16 (6) (a)	4.4	4.4	19.3	

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles <sup>5</sup> Size Collected (in microns)	Basis for Efficiency (Sec. V, It <sup>5</sup> )
N/A (water-based material)				

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

<sup>2</sup>Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. - 0.1 pounds per million BTU heat input)

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

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

<sup>5</sup>If Applicable

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
No additional fuel consumption			

\*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: \_\_\_\_\_ Percent Ash: \_\_\_\_\_

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

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

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

F. If applicable, indicate the percent of fuel used for space heating. Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

No additional liquid or solid wastes are expected from the modification.

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

Stack Height: 70 ft. Stack Diameter: 3.0 ft.

Gas Flow Rate: est. 10,000 ACFM Gas Exit Temperature: 280 °F.

Water Vapor Content: 2.4 % Velocity: est 24 FPS

SECTION IV: INCINERATOR INFORMATION N/A

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

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

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

Approximate Number of Hours of Operation per day \_\_\_\_\_ days/week \_\_\_\_\_

Manufacturer \_\_\_\_\_

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

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

Stack Height: \_\_\_\_\_ ft. Stack Diameter \_\_\_\_\_ Stack Temp. \_\_\_\_\_

Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM\* Velocity \_\_\_\_\_ FPS

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

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

Brief description of operating characteristics of control devices: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

- 9. An application fee of \$20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.
- 10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

**SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY**

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?  
 Yes  No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)  Yes  No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration

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

- |                           |                      |
|---------------------------|----------------------|
| 1. Control Device/System: | 4. Capital Costs:    |
| 2. Operating Principles:  | 6. Operating Costs:  |
| 3. Efficiency:*           | 8. Maintenance Cost: |
| 5. Useful Life:           |                      |
| 7. Energy:                |                      |
| 9. Emissions:             |                      |

Contaminant	Rate or Concentration

\*Explain method of determining D 3 above.



METAL CONTAINER CORPORATION  
JULY, 1982  
VOC EMISSION CALCULATIONS

NOTE: All emissions (allowable, maximum, actual and potential) are equivalent in this situation.

Overvarnish Lines No. 3 and 4 (12 oz can lines)

Hourly Emissions (per line)

$$\frac{800 \text{ cans}}{\text{Min}} \times \frac{.0895 \text{ gals coating}}{1000 \text{ cans}} \times \frac{60 \text{ Min}}{\text{Hr}} = 4.3 \text{ gals coating/hr}$$

$$\frac{4.30 \text{ gals}}{\text{Hr}} - \left\{ \frac{4.30 \text{ gal}}{\text{Hr}} \times .51 \text{ H}_2\text{O} \right\} \times \frac{2.1 \text{ lb VOC}}{\text{gal coating less H}_2\text{O}} = 4.4 \text{ lb VOC per hr}$$

Annual Emissions (per line)

$$\frac{4.4 \text{ lbs VOC}}{\text{Hr}} \times \frac{8760 \text{ Hrs}}{\text{Yr}} \times \frac{\text{Ton}}{2000 \text{ lb}} = 19.3 \text{ tons VOC per year}$$

Total Annual Emissions (Lines 3 and 4)

$$19.3 + 19.3 = \underline{\underline{38.6 \text{ tons VOC per year}}}$$

SECTION III. B. 1.  
TOTAL PROCESS INPUT DERIVATION

Overvarnish Lines No. 3 and 4 (12 oz can lines)

Aluminum (per line)

$$\frac{30.2 \text{ lbs AL}}{1000 \text{ cans}} \times \frac{800 \text{ cans}}{\text{Min}} \times \frac{60 \text{ Min}}{\text{Hr}} = \frac{1450 \text{ lbs AL}}{\text{Hr}}$$

Overvarnish (per line)

$$\frac{0.0895 \text{ gals coating}}{1000 \text{ cans}} \times \frac{800 \text{ cans}}{\text{Min}} \times \frac{60 \text{ Min}}{\text{Hr}} \times \frac{8.65 \text{ lbs}}{\text{Gal}} = \frac{37 \text{ lbs coating}}{\text{Hr}}$$

Total (per line)

$$\frac{1450 \text{ lbs AL}}{\text{Hr}} + \frac{37 \text{ lbs coating}}{\text{Hr}} = \underline{\underline{1487 \text{ lbs per hour}}}$$

SECTION III. B. 2.  
PRODUCT WEIGHT DERIVATION

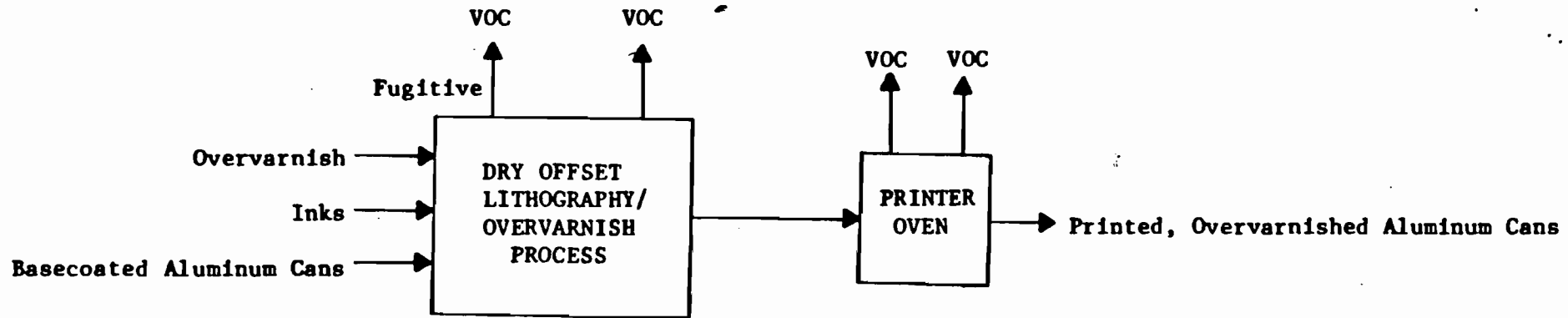
Overvarnish Lines No. 3 and 4 (12 oz can lines)

Overvarnished Product

$$\frac{30.2 \text{ lbs AL}}{1000 \text{ cans}} + \frac{.287 \text{ lbs dried coating}}{1000 \text{ cans}} \times \frac{800 \text{ cans}}{\text{Min}} \times \frac{60 \text{ Min}}{\text{Hr}} = \underline{\underline{1463 \text{ lbs per hour}}}$$

METAL CONTAINER CORPORATION - NOVEMBER, 1981

FLOW DIAGRAM OF PROPOSED MODIFICATION  
Each of 2 Lines



NOTE: It is assumed that 75% of the VOC from the overvarnish operation is emitted at the coater and the remaining 25% at the oven. (EPA-450/3-80-036a, Beverage Can Surface Coating Industry - Background Information for Proposed Standards, page 3-14)

METAL CONTAINER CORPORATION  
NSPS APPLICABILITY  
OCTOBER, 1981

The modification proposed in these applications is affected by the November 26, 1980 proposed rulemaking for the Beverage Can Surface Coating Industry. Since a final rule has not been published at this time, the proposed numerical emission limit of 0.46 kg VOC/litre of solids for overvarnish operations will be addressed.

The overvarnish material proposed in this application is compared to the numerical limitation by the following calculations:

$$\frac{2.1 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{.49 \text{ gal coating less H}_2\text{O}}{\text{gal coating}} \times \frac{\text{gal coating}}{.32 \text{ gal solids}} \times \frac{\text{kg VOC}}{2.2 \text{ lbs VOC}} \times$$
$$\frac{.264 \text{ gal coating}}{\text{litre coating}} = .38 \text{ kg VOC/litre solids}$$

As shown, the proposed material (PPG CC3180D) will comply with the proposed NSPS.



PPG INDUSTRIES, INC./760 PITTSBURGH DR./P. O. DRAWER A/DELAWARE, OHIO 43015/AREA 614/363-9610

Coatings and Resins Division

October 6, 1981

Mr. T. Vogel  
Metal Container Corporation  
666 Mason Ridge Center Drive  
Creve Cour, MO 63141

Dear Tom,

Attached are the VOC calculations for CE3180D and CC3345, varnish,  
plus CE3293-2, white, as we discussed on the phone.

If you need any other information, please call.

Yours truly,

A handwritten signature in cursive script, appearing to read 'W. V. Warnick', written in dark ink.

W. V. Warnick  
Technical Manager  
Container Coatings

nm

cc: J. D. Buescher

A faint, rectangular stamp or mark is visible on the right side of the page, partially overlapping the signature area. It appears to be a box with some illegible text or a signature inside.

CC3180D and CC3345 CLEAR VARNISHES

KNOWN = Weight/Gallon = 8.65#  
 Weight percent Solids = 37%  
 Volatile percent by Weight = 81% water and 19% organic  
 VOC = 2.1 pounds/gallon coating less water

Basis of Calculation: 0.0895 gallons of overvarnish/1000 cans

$$1. \frac{0.0895 \text{ gallons of varnish}}{1000 \text{ cans}} \times \frac{8.65 \text{ pounds}}{\text{gallon}} = 0.77 \text{ pounds of varnish/1000 cans}$$

$$2. \text{ Solids} = 37 \text{ percent by weight, so the volatile} = 100 - 37 = 63\% \text{ by weight}$$

Water is 81% of volatile -  
 so  $0.81 \times 63\% = 51\%$  of the total varnish weight is water and for  
 1000 cans

$$0.51 \text{ percent water} \times \frac{0.77 \text{ pounds varnish}}{1000 \text{ cans}} = 0.39 \text{ pounds water/1000 cans}$$

$$\frac{0.39 \text{ pounds water}}{1000 \text{ cans}} \div \frac{8.53 \text{ pounds}}{\text{gallon water}} = 0.046 \text{ gallons water/1000 cans}$$

$$3. \begin{array}{l} 0.0895 \text{ gallons varnish/1000 cans} \\ 0.046 \text{ gallons water/1000 cans} \\ \hline 0.044 \text{ gallons of coating less water/1000 cans} \end{array}$$

$$4. \frac{0.044 \text{ gallons coating less water}}{1000 \text{ cans}} \times \frac{2.1 \text{ pounds VOC}}{\text{gallon coating less water}} =$$

0.091 pounds VOC/1000 cans

# PPG Container Coatings

BEST AVAILABLE COPY



INDUSTRIES

# Product Data Sheet

PPG INDUSTRIES INC., COATINGS AND RESINS DIVISION, 760 PITTSBURGH DR., DELAWARE, OHIO 43015 (614) 363-9610

Date: April 7, 1980 PPG Code: CC3180D  
 Submitted to: Metal Container Product: Water Reducible Size Coating  
 Location: St. Louis, MO Submitted by: J. P. Knudtson  
 Attention of: Mr. N. J. Fitzgerald Location: Delaware, OH

Sample request: \_\_\_\_\_

Suggested Use: \_\_\_\_\_ Interior \_\_\_\_\_ Process \_\_\_\_\_  Pasteurization  
 Exterior \_\_\_\_\_  Non-Process \_\_\_\_\_ Non-Pasteurization

### PRODUCT DESCRIPTION (AS SHIPPED)

Viscosity: 45 ± 5 Sec. # 4 Ford Cup @ 77°F. Weight/Gallon: 8.65 ± 0.20 lbs.  
 Total Solids 37.0 ± 2.00% by weight Method 4 min at 375°F (3.2 ± 2.00% by volume)  
 Cured Film Color clear Gloss high Contains Internal Lubricant yes  
 Storage Life 3 months at 77°F. Freeze Protection Required yes  
3 months at 100°F. Resin Type acrylic/melamine  
 Flash Point 120 °F (Pensky-Martins) pH 8.6 ± .4

### SUGGESTED APPLICATION DATA

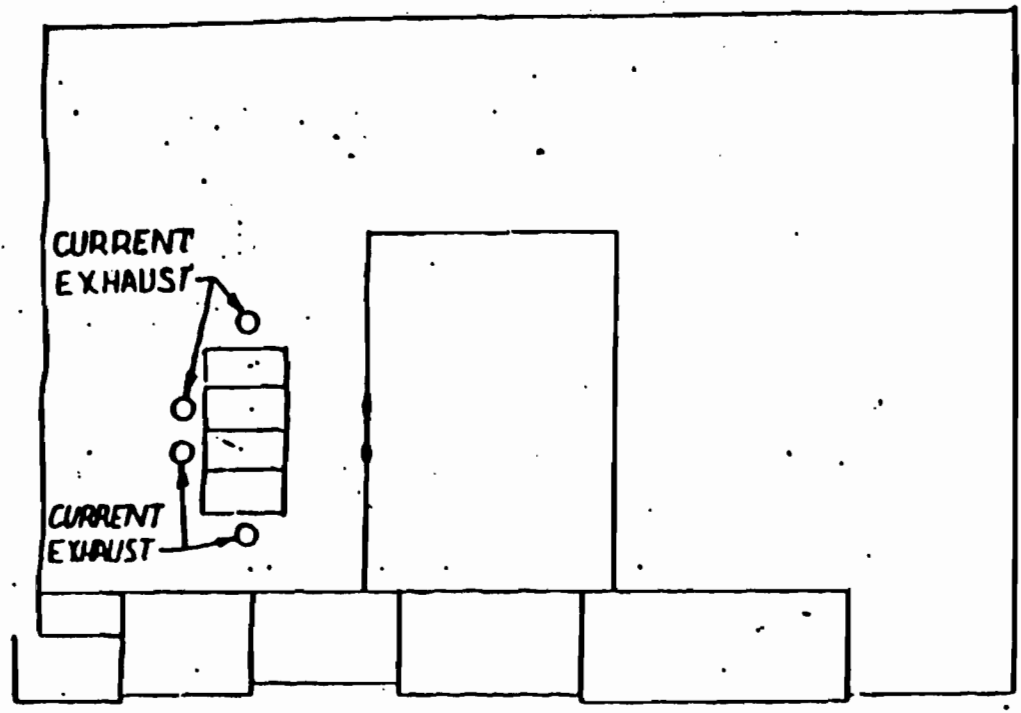
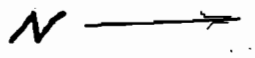
Method rollcoat Substrate 2 piece aluminum cans  
 Thinner water and/or butyl cellosolve Clean Up Solvent: water and/or butyl cellosolve  
 Application Visc. 45 ± 5 Sec. # 4 Ford Cup @ 77°F. Film Weight 3.5-4.5 mgs./ sq in  
 Agitation Required Before Use: yes 15 min on drum roller or equivalent  
 Recommended Bake: 90 sec at 400 °F metal temperature plus I/S bake  
 Alternate Bake: \_\_\_\_\_ at \_\_\_\_\_ °F metal temperature

#### Additional Information:

VOC = 2.1 #/gal  
 250 gms/liter

NOTE. STATEMENTS AND METHODS DESCRIBED HEREIN ARE BASED UPON THE BEST INFORMATION AND PRACTICES KNOWN TO PPG INDUSTRIES, INC. HOWEVER, PROCEDURES FOR APPLICATIONS MENTIONED ARE SUGGESTIONS ONLY AND ARE NOT TO BE CONSTRUED AS REPRESENTATION OR WARRANTIES AS TO PERFORMANCE OR RESULTS. NOR DOES PPG INDUSTRIES, INC. WARRANT FREEDOM FROM PATENT INFRINGEMENT IN THE USE OF ANY FORMULA OR PROCESS SET FORTH HEREIN WHEN SUGGESTED USE INCLUDES PROCESS AND/OR PASTEURIZATION. PPG DOES NOT CLAIM ACCEPTABLE PERFORMANCE AT ALL POSSIBLE TIMES AND TEMPERATURES. THE USER MUST TEST PERFORMANCE FOR ACCEPTABILITY USING HIS CONDITIONS.

BEST AVAILABLE COPY



1100 N. ELLIS ROAD

12 SEPT 73

TOLERANCE AND SURFACE FINISH TO BE LAID OUT NOTES			
OPERATION	PLACES WHERE USED		
	D	SD	DD
MACHINING	0.1	0.01	0.005
WELDING	0.1	0.01	0.005
DRILLING	0.1	0.01	0.005
ANGULAR DIM	0.1	0.01	0.005



DATE	REVISION
12 SEPT 73 <td>INITIALS AND CHANGE NO.</td>	INITIALS AND CHANGE NO.
REFERENCE	
TITLE	
METAL CONTAINER CORP.	
JACKSONVILLE CAN PLANT	
PLOT PLAN & ROOF LAYOUT	

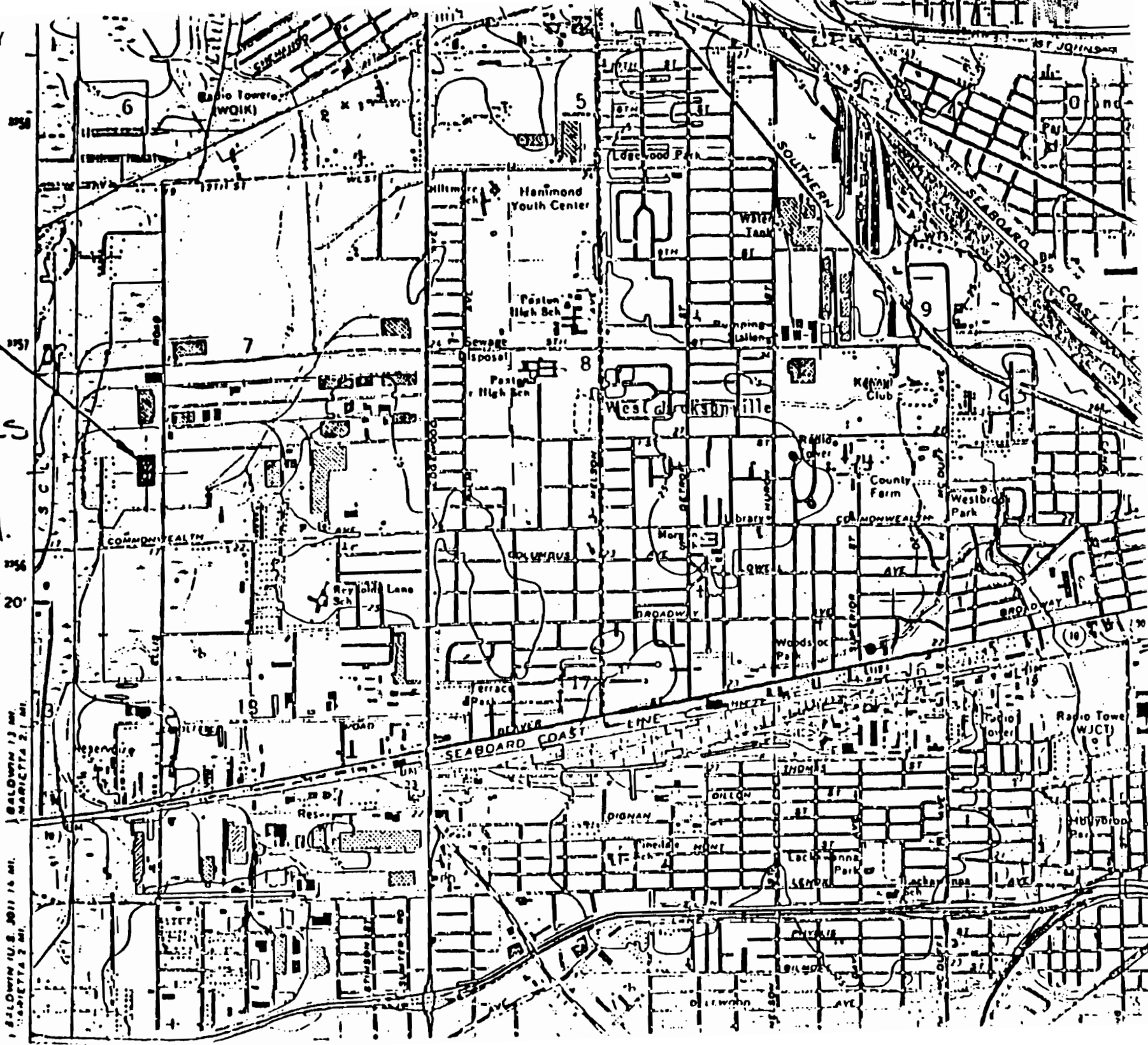


1100 North  
Ellis Rd

COORDINATES

428440 E.

3356377 N.



1 SLOWIN U.S. 2011 16 MI.  
 BALDWIN 13 MI.  
 MARIETTA 2 MI.

**ESE ENVIRONMENTAL SCIENCE AND ENGINEERING, INC.**

July 6, 1982

DER

JUL 7 1982

BAQM

Mr. Tim Powell  
Florida Department of Environmental Regulation  
Room 601  
2600 Blair Stone Road  
Tallahassee, FL 32301

Re: Metal Container Corporation

Dear Mr. Powell:

ESE wishes to provide test methodology for determining V.O.C. compliance status for Metal Container Corporation's two-piece can plant in Jacksonville, Florida.

Four thermal oxidizers will be utilized for emission control upon completion of the addition of overvarnish processes to each of the production lines. All V.O.C. emissions from the plant, with the exception of the actual overvarnish application process, will pass through an ambient temperature baghouse followed by a thermal oxidizer. The emission limitation for this plant will be specified in terms of an annual emission ceiling. Compliance will be demonstrated by the addition of thermal oxidizer emissions and the V.O.C. content of the overvarnish coating. To predict that future emissions will not exceed current rates, it is necessary to demonstrate the efficiency of the thermal oxidizers.

ESE proposes to perform testing at the thermal oxidizer inlets and outlets using a sampling train that consist of the following elements in series:

1. Heated stainless steel probe,
2. Two distilled water impingers in ice bath,
3. One dry impinger trap in ice bath,
4. Glass fiber filter, and
5. Flame ionization detector (F.I.D.)

?

ENVIRONMENTAL SCIENCE AND ENGINEERING, INC.

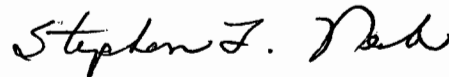
Mr. Tim Powell  
Page Two  
July 6, 1982

Total organic carbon analyses will be performed on the impinger and filter samples. This result will be added to the F.I.D. results reported as methane.

This sampling approach was made after a review of the process and testing alternatives. It is felt that the use of Method 25 on eight sources (inlets and outlets) would be very expensive and require a great number of sample containers. The proposed method is superior economically and adequate in accuracy as it provides a means of removing and quantifying total V.O.C. condensibles and leaving F.I.D. analysis for the light hydrocarbons that should respond very closely to methane calibration. Further conservatism in the emission data is obtained when one assumes that the more complex compounds (those tending to give a depressed response to an F.I.D. calibrated on methane) are more likely found at the T.O. inlet rather than the outlet. Possible analyzer inaccuracies would therefore tend to lower efficiency calculations.

Please contact me if you have any questions or if more discussion is required.

Sincerley,



Stephen L. Neck, P.E.  
Group Leader  
Source Engineering

SLN/ds

cc: Mr. John Stier  
Anheuser Busch Companies, Inc.  
One Busch Place  
St. Louis, MO 63118

Mr. Bob Lasky  
Metal Container Corporation  
1100 N. Ellis Road  
Jacksonville, Florida 32205

AC 16-57752



DER

JUL 2 1982

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
APPLICATION TO OPERATE/CONSTRUCT  
AIR POLLUTION SOURCES

BAQM

SOURCE TYPE: Aluminum Can Coating  New<sup>1</sup>  Existing<sup>1</sup>  
APPLICATION TYPE:  Construction  Operation  Modification  
COMPANY NAME: Metal Container Corporation COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Overvarnish Unit No. 3

SOURCE LOCATION: Street 1100 N. Ellis Road City Jacksonville  
UTM: East 428.440 KM North 3356.377 KM  
Latitude 30 ° 20 ' 15 " N Longitude 81 ° 44 ' 42 " W

APPLICANT NAME AND TITLE: Robert J. Lasky, Project Engineer  
APPLICANT ADDRESS: 1100 N. Ellis Road, Jacksonville, Florida 32205

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of Metal Container Corporation

I certify that the statements made in this application for a Overvarnish Unit No. 3 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: J. W. Mathey  
J. W. Mathey, Plant Manager  
Name and Title (Please Type)  
Date: 7-1-82 Telephone No. 904-786-8806

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

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed: Charles M. Nolan  
Charles M. Nolan  
Name (Please Type)  
Pat Nolan & Associates  
Company Name (Please Type)  
8282 Western Way Circle, Suite 111  
Jacksonville, Florida 32216  
Mailing Address (Please Type)  
Date: 7-1-82 Telephone No. 731-4288



Florida Registration No. 19889

<sup>1</sup>See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

**SECTION II: GENERAL PROJECT INFORMATION**

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.  
The application is for the addition of a roll coat unit to the existing dry  
offset lithography unit. The overvarnish applied will be a water-based  
material in full compliance of the Florida regulations and the proposed federal  
New Source Performance Standards. A net decrease in total emissions from the  
facility will result.

B. Schedule of project covered in this application (Construction Permit Application Only)  
 Start of Construction As soon as possible Completion of Construction One Month

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 (water-based coating)

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

<u>SC16-2084</u>	<u>Issued 1/15/74</u>	<u>Expired 4/28/75</u>
<u>A016-2598</u>	<u>Issued 9/10/76</u>	<u>Expired 3/31/81</u>
<u>A016-44658</u>	<u>Issued 10/29/81</u>	<u>Expires 9/30/86</u>

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? Yes  No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr \_\_\_\_\_ ;  
 if seasonal, describe: \_\_\_\_\_

- G. If this is a new source or major modification, answer the following questions. (Yes or No) \*See Below
1. Is this source in a non-attainment area for a particular pollutant? \_\_\_\_\_
    - a. If yes, has "offset" been applied? \_\_\_\_\_
    - b. If yes, has "Lowest Achievable Emission Rate" been applied? \_\_\_\_\_
    - c. If yes, list non-attainment pollutants.  
 \_\_\_\_\_
  2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. \_\_\_\_\_
  3. Does the State "Prevention of Significant Deterioration" (PSD) requirements apply to this source? If yes, see Sections VI and VII. \_\_\_\_\_
  4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? \_\_\_\_\_
  5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? \_\_\_\_\_

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

\*See attachment showing net decrease in annual emissions from the facility.

**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		
Overvarnish	VOC		37 Max	
Aluminum Cans	---	---	1450 Max	

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

- Total Process Input Rate (lbs/hr): 1487 Max
- Product Weight (lbs/hr): 1463 Max

**C. Airborne Contaminants Emitted:**

Name of Contaminant	Emission <sup>1</sup>		Allowed Emission <sup>2</sup> Rate per Ch. 17-2, F.A.C.	Allowable <sup>3</sup> Emission lbs/hr	Potential Emission <sup>4</sup>		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
VOC	4.4	19.3	17-2.16 (6) (a)	4.4	4.4	19.3	

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles <sup>5</sup> Size Collected (in microns)	Basis for Efficiency (Sec. V, It <sup>5</sup> )
N/A (water-based material)				

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

<sup>2</sup>Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. - 0.1 pounds per million BTU heat input)

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

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

<sup>5</sup>If Applicable

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
No additional fuel consumption			

\*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: \_\_\_\_\_ Percent Ash: \_\_\_\_\_

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

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

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

F. If applicable, indicate the percent of fuel used for space heating. Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

No additional liquid or solid wastes are expected from the modification.

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

Stack Height: 70 ft. Stack Diameter: 3.0 ft.

Gas Flow Rate: est. 10,000 ACFM Gas Exit Temperature: 280 °F.

Water Vapor Content: 2.4 % Velocity: est 24 FPS

SECTION IV: INCINERATOR INFORMATION N/A

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

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

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

Approximate Number of Hours of Operation per day \_\_\_\_\_ days/week \_\_\_\_\_

Manufacturer \_\_\_\_\_

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

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

Stack Height: \_\_\_\_\_ ft. Stack Diameter \_\_\_\_\_ Stack Temp. \_\_\_\_\_

Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM\* Velocity \_\_\_\_\_ FPS

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

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

Brief description of operating characteristics of control devices: \_\_\_\_\_

---



---



---

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

---



---



---

### SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.



- 9. An application fee of \$20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.
- 10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

**SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY**

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?  
 Yes  No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)  Yes  No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration

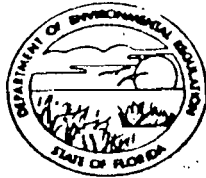
D. Describe the existing control and treatment technology (if any).

- |                           |                      |
|---------------------------|----------------------|
| 1. Control Device/System: | 4. Capital Costs:    |
| 2. Operating Principles:  | 6. Operating Costs:  |
| 3. Efficiency: *          | 8. Maintenance Cost: |
| 5. Useful Life:           |                      |
| 7. Energy:                |                      |
| 9. Emissions:             |                      |

Contaminant	Rate or Concentration

\*Explain method of determining D 3 above.

AC 16-57753



DER

JUL 2 1982

BAQM

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
APPLICATION TO OPERATE/CONSTRUCT  
AIR POLLUTION SOURCES

SOURCE TYPE: Aluminum Can Coating  New<sup>1</sup>  Existing<sup>1</sup>

APPLICATION TYPE:  Construction  Operation  Modification

COMPANY NAME: Metal Container Corporation COUNTY: Duval

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

SOURCE LOCATION: Street 1100 N. Ellis Road City Jacksonville

UTM: East 428.440 KM North 3356.377 KM

Latitude 30 ° 20 ' 15 "N Longitude 81 ° 44 ' 42 "W

APPLICANT NAME AND TITLE: Robert J. Lasky, Project Engineer

APPLICANT ADDRESS: 1100 N. Ellis Road, Jacksonville, Florida 32205

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of Metal Container Corporation

I certify that the statements made in this application for a Overvarnish Unit No. 4

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

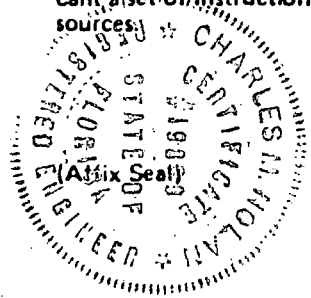
Signed: J. W. Mathey  
J. W. Mathey, Plant Manager  
Name and Title (Please Type)  
Date: 7-1-82 Telephone No. 904-786-8806

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

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed: Charles M. Nolan  
Charles M. Nolan  
Name (Please Type)  
Pat Nolan & Associates  
Company Name (Please Type)  
8282 Western Way Circle, Suite 111  
Jacksonville, Florida 32216  
Mailing Address (Please Type)

Florida Registration No. 19889 Date: 7-1-82 Telephone No. 731-4288



<sup>1</sup>See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.  
The application is for the addition of a roll coat unit to the existing dry offset lithography unit. The overvarnish applied will be a water-based material in full compliance of the Florida regulations and the proposed federal New Source Performance Standards. A net decrease in total emissions from the facility will result.

B. Schedule of project covered in this application (Construction Permit Application Only)  
 Start of Construction As soon as possible Completion of Construction One Month

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 (water-based coating)

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

SC16-2084	Issued 1/15/74	Expired 4/28/75
A016-2598	Issued 9/10/76	Expired 3/31/81
A016-44659	Issued 10/29/81	Expires 9/30/86

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? Yes  No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr \_\_\_\_\_ ; if seasonal, describe: \_\_\_\_\_

- G. If this is a new source or major modification, answer the following questions. (Yes or No) \*See Below
1. Is this source in a non-attainment area for a particular pollutant? \_\_\_\_\_
    - a. If yes, has "offset" been applied? \_\_\_\_\_
    - b. If yes, has "Lowest Achievable Emission Rate" been applied? \_\_\_\_\_
    - c. If yes, list non-attainment pollutants.  
Ozone
  2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. \_\_\_\_\_
  3. Does the State "Prevention of Significant Deterioration" (PSD) requirements apply to this source? If yes, see Sections VI and VII. \_\_\_\_\_
  4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? \_\_\_\_\_
  5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? \_\_\_\_\_

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

\*See attachment showing net decrease in annual emissions from the facility.

**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		
Overvarnish	VOC		37 Max	
Aluminum Cans	---	---	1450 Max	

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

- Total Process Input Rate (lbs/hr): 1487 Max
- Product Weight (lbs/hr): 1463 Max

**C. Airborne Contaminants Emitted:**

Name of Contaminant	Emission <sup>1</sup>		Allowed Emission <sup>2</sup> Rate per Ch. 17-2, F.A.C.	Allowable <sup>3</sup> Emission lbs/hr	Potential Emission <sup>4</sup>		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
VOC	4.4	19.3	17-2.16 (6) (a)	4.4	4.4	19.3	

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles <sup>5</sup> Size Collected (in microns)	Basis for Efficiency (Sec. V, It <sup>5</sup> )
N/A (water-based material)				

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

<sup>2</sup>Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 0.1 pounds per million BTU heat input)

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

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

<sup>5</sup>If Applicable

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
No additional fuel consumption			

\*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: \_\_\_\_\_ Percent Ash: \_\_\_\_\_

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

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

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

F. If applicable, indicate the percent of fuel used for space heating. Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

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

No additional liquid or solid wastes are expected from the modification.

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

Stack Height: 70 ft. Stack Diameter: 3.0 ft.

Gas Flow Rate: est. 10,000 ACFM Gas Exit Temperature: 280 °F.

Water Vapor Content: 2.4 % Velocity: est 24 FPS

SECTION IV: INCINERATOR INFORMATION N/A

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

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

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

Approximate Number of Hours of Operation per day \_\_\_\_\_ days/week \_\_\_\_\_

Manufacturer \_\_\_\_\_

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

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

Stack Height: \_\_\_\_\_ ft. Stack Diameter \_\_\_\_\_ Stack Temp. \_\_\_\_\_

Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM\* Velocity \_\_\_\_\_ FPS

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

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

Brief description of operating characteristics of control devices: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**SECTION V: SUPPLEMENTAL REQUIREMENTS**

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

- 9. An application fee of \$20; unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.
- 10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

**SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY**

- A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?  
 Yes  No

Contaminant	Rate or Concentration

- B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)  Yes  No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration

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

- |                           |                      |
|---------------------------|----------------------|
| 1. Control Device/System: | 4. Capital Costs:    |
| 2. Operating Principles:  | 6. Operating Costs:  |
| 3. Efficiency:*           | 8. Maintenance Cost: |
| 5. Useful Life:           |                      |
| 7. Energy:                |                      |
| 9. Emissions:             |                      |

Contaminant	Rate or Concentration

\*Explain method of determining D 3 above.

METAL CONTAINER CORPORATION  
JULY, 1982  
VOC EMISSION CALCULATIONS

NOTE: All emissions (allowable, maximum, actual and potential) are equivalent in this situation.

Overvarnish Lines No. 3 and 4 (12 oz can lines)

Hourly Emissions (per line)

$$\frac{800 \text{ cans}}{\text{Min}} \times \frac{.0895 \text{ gals coating}}{1000 \text{ cans}} \times \frac{60 \text{ Min}}{\text{Hr}} = 4.3 \text{ gals coating/hr}$$

$$\frac{4.30 \text{ gals}}{\text{Hr}} - \left\{ \frac{4.30 \text{ gal}}{\text{Hr}} \times .51 \text{ H}_2\text{O} \right\} \times \frac{2.1 \text{ lb VOC}}{\text{gal coating less H}_2\text{O}} = 4.4 \text{ lb VOC per hr}$$

Annual Emissions (per line)

$$\frac{4.4 \text{ lbs VOC}}{\text{Hr}} \times \frac{8760 \text{ Hrs}}{\text{Yr}} \times \frac{\text{Ton}}{2000 \text{ lb}} = 19.3 \text{ tons VOC per year}$$

Total Annual Emissions (Lines 3 and 4)

$$19.3 + 19.3 = \underline{\underline{38.6 \text{ tons VOC per year}}}$$



SECTION III. B. 1.  
TOTAL PROCESS INPUT DERIVATION

Overvarnish Lines No. 3 and 4 (12 oz can lines)

Aluminum (per line)

$$\frac{30.2 \text{ lbs AL}}{1000 \text{ cans}} \times \frac{800 \text{ cans}}{\text{Min}} \times \frac{60 \text{ Min}}{\text{Hr}} = \frac{1450 \text{ lbs AL}}{\text{Hr}}$$

Overvarnish (per line)

$$\frac{0.0895 \text{ gals coating}}{1000 \text{ cans}} \times \frac{800 \text{ cans}}{\text{Min}} \times \frac{60 \text{ Min}}{\text{Hr}} \times \frac{8.65 \text{ lbs}}{\text{Gal}} = \frac{37 \text{ lbs coating}}{\text{Hr}}$$

Total (per line)

$$\frac{1450 \text{ lbs AL}}{\text{Hr}} + \frac{37 \text{ lbs coating}}{\text{Hr}} = \underline{\underline{1487 \text{ lbs per hour}}}$$

SECTION III. B. 2.  
PRODUCT WEIGHT DERIVATION

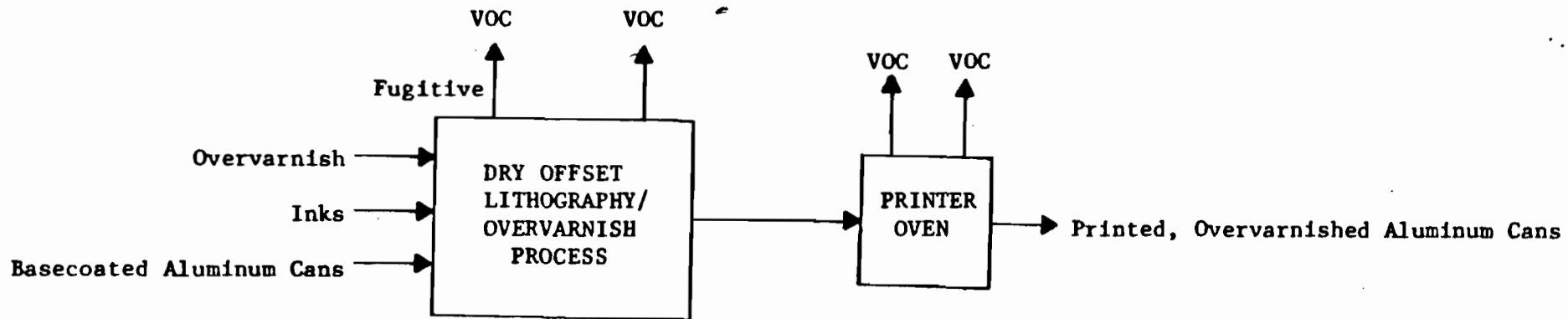
Overvarnish Lines No. 3 and 4 (12 oz can lines)

Overvarnished Product

$$\frac{30.2 \text{ lbs AL}}{1000 \text{ cans}} + \frac{.287 \text{ lbs dried coating}}{1000 \text{ cans}} \times \frac{800 \text{ cans}}{\text{Min}} \times \frac{60 \text{ Min}}{\text{Hr}} = \underline{\underline{1463 \text{ lbs per hour}}}$$

METAL CONTAINER CORPORATION - NOVEMBER, 1981

FLOW DIAGRAM OF PROPOSED MODIFICATION  
Each of 2 Lines



NOTE: It is assumed that 75% of the VOC from the overvarnish operation is emitted at the coater and the remaining 25% at the oven. (EPA-450/3-80-036a, Beverage Can Surface Coating Industry - Background Information for Proposed Standards, page 3-14)

METAL CONTAINER CORPORATION  
NSPS APPLICABILITY  
OCTOBER, 1981

The modification proposed in these applications is affected by the November 26, 1980 proposed rulemaking for the Beverage Can Surface Coating Industry. Since a final rule has not been published at this time, the proposed numerical emission limit of 0.46 kg VOC/litre of solids for overvarnish operations will be addressed.

The overvarnish material proposed in this application is compared to the numerical limitation by the following calculations:

$$\frac{2.1 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{.49 \text{ gal coating less H}_2\text{O}}{\text{gal coating}} \times \frac{\text{gal coating}}{.32 \text{ gal solids}} \times \frac{\text{kg VOC}}{2.2 \text{ lbs VOC}} \times$$
$$\frac{.264 \text{ gal coating}}{\text{litre coating}} = .38 \text{ kg VOC/litre solids}$$

As shown, the proposed material (PPG CC3180D) will comply with the proposed NSPS.



INDUSTRIES

PPG INDUSTRIES, INC./760 PITTSBURGH DR./P. O. DRAWER A/DELAWARE, OHIO 43015/AREA 614/363-9610

Coatings and Resins Division

October 6, 1981

Mr. T. Vogel  
Metal Container Corporation  
666 Mason Ridge Center Drive  
Creve Cour, MO 63141

Dear Tom,

Attached are the VOC calculations for CE3180D and CC3345, varnish,  
plus CE3293-2, white, as we discussed on the phone.

If you need any other information, please call.

Yours truly,

A handwritten signature in black ink, appearing to read 'W. V. Warnick', written in a cursive style.

W. V. Warnick  
Technical Manager  
Container Coatings

nm

cc: J. D. Buescher

A faint, rectangular stamp or mark, possibly a date stamp, located in the lower right quadrant of the page. The text within the stamp is illegible.

CC3180D and CC3345 CLEAR VARNISHES

KNOWN = Weight/Gallon = 8.65#  
 Weight percent Solids = 37%  
 Volatile percent by Weight = 81% water and 19% organic  
 VOC = 2.1 pounds/gallon coating less water

Basis of Calculation: 0.0895 gallons of overvarnish/1000 cans

$$1. \frac{0.0895 \text{ gallons of varnish}}{1000 \text{ cans}} \times \frac{8.65 \text{ pounds}}{\text{gallon}} = 0.77 \text{ pounds of varnish/1000 cans}$$

$$2. \text{ Solids} = 37 \text{ percent by weight, so the volatile} = \begin{array}{r} 100 \\ -37 \\ \hline 63\% \text{ by weight} \end{array}$$

Water is 81% of volatile -  
 so  $0.81 \times 63\% = 51\%$  of the total varnish weight is water and for  
 1000 cans

$$0.51 \text{ percent water} \times \frac{0.77 \text{ pounds varnish}}{1000 \text{ cans}} = 0.39 \text{ pounds water/1000 cans}$$

$$\frac{0.39 \text{ pounds water}}{1000 \text{ cans}} \div \frac{8.53 \text{ pounds}}{\text{gallon water}} = 0.046 \text{ gallons water/1000 cans}$$

$$3. \begin{array}{l} 0.0895 \text{ gallons varnish/1000 cans} \\ \frac{0.046}{0.044} \text{ gallons water/1000 cans} \\ 0.044 \text{ gallons of coating less water/1000 cans} \end{array}$$

$$4. \frac{0.044 \text{ gallons coating less water}}{1000 \text{ cans}} \times \frac{2.1 \text{ pounds VOC}}{\text{gallon coating less water}} =$$

0.091 pounds VOC/1000 cans

# PPG Container Coatings

BEST AVAILABLE COPY

# Product Data Sheet



PPG INDUSTRIES INC., COATINGS AND RESINS DIVISION, 760 PITTSBURGH DR., DELAWARE, OHIO 43015 (614) 363-9610

Date: April 7, 1980 PPG Code: CC3180D  
Submitted to: Metal Container Product: Water Reducible Size Coating  
Location: St. Louis, MO Submitted by: J. P. Knudtson  
Attention of: Mr. N. J. Fitzgerald Location: Delaware, OH  
Sample request: \_\_\_\_\_  
Suggested Use: \_\_\_\_\_ Interior \_\_\_\_\_ Process \_\_\_\_\_  Pasteurization  
 Exterior \_\_\_\_\_  Non-Process \_\_\_\_\_ Non-Pasteurization

## PRODUCT DESCRIPTION (AS SHIPPED)

Viscosity: 45 ± 5 Sec. # 4 Ford Cup @ 77°F. Weight/Gallon: 8.65 ± 0.20 lbs.  
Total Solids 37.0 ± 2.00% by weight Method 4 min at 375°F (32 ± 2.00% by volume)  
Cured Film Color clear Gloss high Contains Internal Lubricant YES  
Storage Life 3 months at 77°F. Freeze Protection Required yes  
3 months at 100°F. Resin Type acrylic/melamine  
Flash Point 120 °F (Pensky-Martins) pH 8.6 ± .4

## SUGGESTED APPLICATION DATA

Method rollcoat Substrate 2 piece aluminum cans  
Thinner water and/or butyl cellosolve Clean Up Solvent: water and/or butyl cellosolve  
Application Visc. 45 ± 5 Sec. # 4 Ford Cup @ 77°F. Film Weight 3.5-4.5 mgs./ sq in  
Agitation Required Before Use: yes 15 min on drum roller or equivalent  
Recommended Bake: 90 sec at 400 °F metal temperature plus I/S bake  
Alternate Bake: \_\_\_\_\_ at \_\_\_\_\_ °F metal temperature

### Additional Information:

VOC = 2.1 #/gal  
250 gms/liter

NOTE: STATEMENTS AND METHODS DESCRIBED HEREIN ARE BASED UPON THE BEST INFORMATION AND PRACTICES KNOWN TO PPG INDUSTRIES, INC. HOWEVER, PROCEDURES FOR APPLICATIONS MENTIONED ARE SUGGESTIONS ONLY AND ARE NOT TO BE CONSTRUED AS REPRESENTATION OR WARRANTIES AS TO PERFORMANCE OR RESULTS. NOR DOES PPG INDUSTRIES, INC. WARRANT FREEDOM FROM PATENT INFRINGEMENT IN THE USE OF ANY FORMULA OR PROCESS SET FORTH HEREIN. WHEN SUGGESTED USE INCLUDES PROCESS AND/OR PASTEURIZATION, PPG DOES NOT CLAIM ACCEPTABLE PERFORMANCE AT ALL POSSIBLE TIMES AND TEMPERATURES. THE USER MUST TEST PERFORMANCE FOR ACCEPTABILITY USING HIS CONDITIONS.

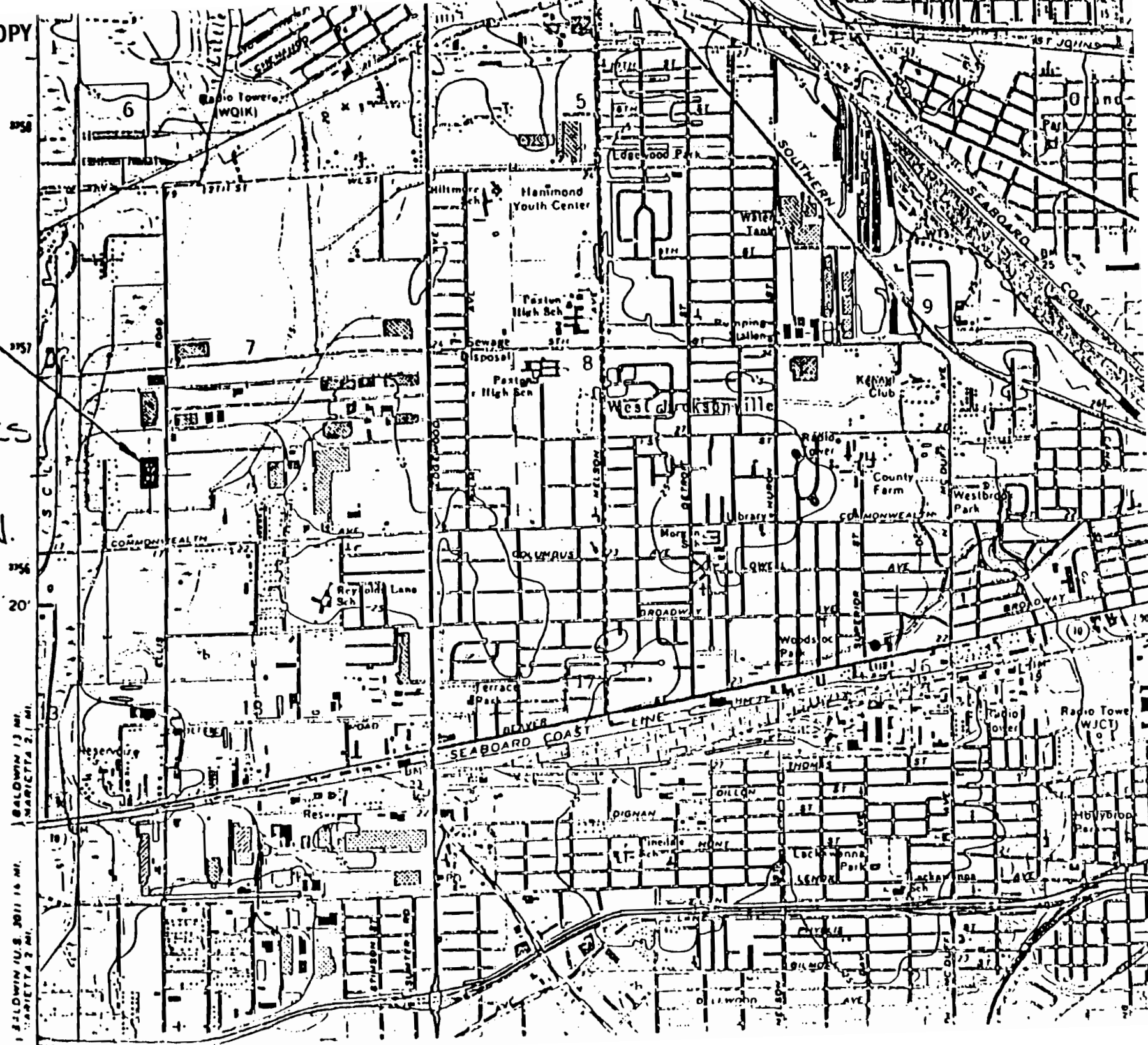


1100 North  
Ellis Rd

COORDINATES

428440 E.

3356377 N.



1:50,000 U.S. 3011 1:6 MI.  
 1:50,000 U.S. 3011 1:6 MI.  
 1:50,000 U.S. 3011 1:6 MI.  
 1:50,000 U.S. 3011 1:6 MI.



METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
ANNUAL VOC EMISSIONS HISTORY

<u>Year</u>	<u>Actual VOC Emissions (tons)</u>	<u>Increase/Decrease (tons)</u>
1977	337.3	Base
1978	351.4	+14.1
1979	344.6	-6.8
1980	361.5	+16.9
1981	314.8	<u>-46.7</u>
		5-year net -22.5
1982	--	Approved Increase +45.1 (Overvarnish Lines 1 & 2)
Proposed Modification	--	+38.6 (Overvarnish Lines 3 & 4)
		<u>-63.5</u> (T.O. on 1 basecoat/inside spray line)
		Proposed Decrease -24.9
		Total Decrease <u>-2.3</u>

METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
ACTUAL COATING USAGES (GALLONS)

<u>PRODUCT USED</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
White Basecoat	147,335	138,230	114,308	129,940	143,468
Clear Basecoat	0	385	19,653	16,625	19,745
Inside Spray	197,407	205,320	195,288	218,058	232,874
Bottom Varnish	2,530	2,090	1,815	1,760	1,870
Necker Lubricant	30,090 est	35,430 est	36,750 est	35,670 est	36,540 est
Methyl Chloroform	14,905 est	14,905	15,070	14,905	15,455
Methyl Ethyl Ketone	12,595 est	12,595	11,825	11,440	7,425
Flasolv 15	2,475 est	2,475	2,145	2,365	1,595
Butyl Cellosolve	0	0	0	165	990
Overvarnish	0	0	0	0	0
Cans Produced (Billions)	1.003	1.181	1.225	1.189	1.218

METAL CONTAINER CORPORATION  
JACKSONVILLE, FLORIDA  
ACTUAL VOC EMISSIONS (TONS)

<u>PRODUCT USED</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
White Basecoat	41.3	38.8	32.0	36.4	87.4
Clear Basecoat	0.0	0.1	6.7	5.6	10.9
Inside Spray	142.1	147.8	140.6	157.0	134.3
Bottom Varnish	1.3	1.1	0.9	0.9	1.0
Necker Lubricant	62.2	73.2	76.0	73.7	0.0
Methyl Chloroform	55.9	55.9	56.5	55.9	58.0
Methyl Ethyl Ketone	28.3	28.3	26.5	25.7	16.7
Flasolv 15	6.2	6.2	5.4	5.9	4.0
Butyl Cellosolve	0.0	0.0	0.0	0.4	2.5
Overvarnish	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
TOTALS	337.3	351.4	344.6	361.5	314.8

(REVISED)  
 METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
ANNUAL VOC EMISSIONS HISTORY

<u>Year</u>	<u>Actual VOC Emissions (tons)</u>	<u>Increase/Decrease (tons)</u>
1977	341.3	Base
1978	356.1	+14.8
1979	349.4	-6.7
1980	366.3	+16.9
1981	315.5	<u>-50.8</u>
		5-year net -25.8
1982	--	Approved Increase +45.1 (Overvarnish Lines 1 & 2)
Proposed Modification	--	+38.6 (Overvarnish Lines 3 & 4)
		<u>-42.2</u> (T.O. on 1 basecoat/inside spray line)
		Proposed Decrease -3.6
		5 Year Total Increase <u>+15.7</u>

METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
ACTUAL COATING USAGES (GALLONS)

<u>PRODUCT USED</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
White Basecoat	147,335	138,230	114,308	129,940	143,468
Clear Basecoat	0	385	19,653	16,625	19,745
Inside Spray	197,407	205,320	195,288	218,058	232,874
Bottom Varnish	2,530	2,090	1,815	1,760	1,870
Necker Lubricant	30,090 est	35,430 est	36,750 est	35,670 est	36,540 est
Methyl Chloroform	14,905 est	14,905	15,070	14,905	15,455
Methyl Ethyl Ketone	12,595 est	12,595	11,825	11,440	7,425
Flasolv 15	2,475 est	2,475	2,145	2,365	1,595
Butyl Cellosolve	0	0	0	165	990
Overvarnish	0	0	0	0	0
Cans Produced (Billions)	1.003	1.181	1.225	1.189	1.218

(REVISED)  
METAL CONTAINER CORPORATION  
JACKSONVILLE, FLORIDA  
ACTUAL VOC EMISSIONS (TONS)

<u>PRODUCT USED</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
White Basecoat	41.3	38.8	32.0	36.4	87.4
Clear Basecoat	0.0	0.1	6.7	5.6	10.9
Inside Spray	142.1	147.8	140.6	157.0	135.0
Bottom Varnish	1.3	1.1	0.9	0.9	1.0
Necker Lubricant	66.2	77.9	80.8	78.5	0.0
Methyl Chloroform	55.9	55.9	56.5	55.9	58.0
Methyl Ethyl Ketone	28.3	28.3	26.5	25.7	16.7
Flasolv 15	6.2	6.2	5.4	5.9	4.0
Butyl Cellosolve	0.0	0.0	0.0	0.4	2.5
Overvarnish	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
TOTALS	341.3	356.1	349.4	366.3	315.5

METAL CONTAINER CORPORATION  
 JACKSONVILLE, FLORIDA  
 CONTEMPORANEOUS INCREASE/DECREASE CALCULATIONS

General Assumptions

1. Annual coating usage data presented in Table I was acquired from past purchasing records where possible. Two exceptions are noted.
  - a) Necker lubricant actual annual usage is estimated using an application rate of 0.03 gals per 1000 cans.
  - b) Clean-up solvent usage for 1977 is estimated to be equal to the 1978 values.
2. VOC emissions from solvent and water based coatings are based upon the following material constituents:

<u>Material</u>	<u>VOC Content</u> <u>(lbs/gal less water)</u>		<u>Water Content</u> <u>(% by volume)</u>
	<u>Solvent Based</u>	<u>Water Based</u>	
White Basecoat	3.87	2.09	41.7
Clear Basecoat	4.65	2.59	57.3
Inside Spray	6.0	3.74	69.2
Bottom Varnish	-	2.1	51.0
Overvarnish	-	2.1	51.0

3. Solvent based coatings emissions were controlled with thermal oxidizers (T.O.) for the years 1977, 1978, 1979, and 1980. For basecoating operations, 90% of the emissions reached the thermal oxidizers, 10% was fugitive. For inside spray operations, 80% of the emissions reached the thermal oxidizers, 20% was fugitive. (Based on best engineering judgement)
4. Average removal efficiencies for the thermal oxidizers are based upon stack emission tests in 1978 and 1980 as follows:

<u>Year</u>	<u>Percentage Removal Per</u> <u>Thermal Oxidizer</u>				<u>Average</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	
1977	Use 1978 Data				95
1978	91.2	95.8	94.5	92.5	95
1979	Use 1980 Data				95
1980	98.4	95.3	95.6	90.2	95

5. Two thirds by weight of the clean-up solvents will be emitted as fugitive VOC, while one third will be retained in rags, etc. and sent to a solvent reclaimer.

## 1977 Actual Emissions

### White Basecoat

$$\text{Uncontrolled} \quad 147,335 \text{ gals} \times \frac{3.87 \text{ lbs VOC}}{\text{gal coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 285.1 \text{ tons VOC}$$

$$\text{Fugitive} \quad 285.1 \text{ tons VOC} \times 0.10 = 28.5 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 285.1 \text{ tons VOC} \times 0.90 \times 0.05 = 12.8 \text{ tons VOC}$$

### Inside Spray

$$\text{Uncontrolled} \quad 197,407 \text{ gals} \times \frac{6.0 \text{ lbs VOC}}{\text{gal coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 592.2 \text{ tons VOC}$$

$$\text{Fugitive} \quad 592.2 \text{ tons VOC} \times 0.20 = 118.4 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 592.2 \text{ tons VOC} \times 0.80 \times 0.05 = 23.7 \text{ tons VOC}$$

### Bottom Varnish

Uncontrolled = Fugitive

$$\left[ 2530 \text{ gals} - (2530 \text{ gals} \times .510 \text{ H}_2\text{O}) \right] \times \frac{2.1 \text{ lbs VOC}}{\text{gals coating} - \text{H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 1.3 \text{ tons VOC}$$

### Necker Lubricant

Uncontrolled = Fugitive

$$\frac{0.03 \text{ gals}}{1000 \text{ cans}} \times 1.003 \times 10^9 \text{ cans} = 30,090 \text{ gals}$$

$$30,090 \text{ gals} \times .80 \text{ hexane} \times \frac{5.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 66.2 \text{ tons VOC}$$

### Methyl Chloroform

Uncontrolled = Fugitive

$$14,905 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 55.9 \text{ tons VOC}$$



Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$12,595 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 28.3 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$2,475 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 6.2 \text{ tons VOC}$$

Annual Totals

Fugitive	304.8 tons VOC
T.O. Exhausts	<u>36.5</u> tons VOC
TOTAL	341.3 tons VOC

## 1978 Actual Emissions

### White Basecoat

$$\text{Uncontrolled} \quad 138,230 \text{ gals} \times \frac{3.87 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 267.5 \text{ tons VOC}$$

$$\text{Fugitive} \quad 267.5 \text{ tons VOC} \times 0.10 = 26.8 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 267.5 \text{ tons VOC} \times 0.90 \times 0.05 = 12.0 \text{ tons VOC}$$

### Clear Basecoat

$$\text{Uncontrolled} \quad 385 \text{ gals} \times \frac{4.65 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 0.9 \text{ tons VOC}$$

$$\text{Fugitive} \quad 0.9 \text{ tons VOC} \times 0.10 = 0.1 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 0.9 \text{ tons VOC} \times 0.90 \times 0.05 = \text{Negligible VOC}$$

### Inside Spray

$$\text{Uncontrolled} \quad 205,320 \text{ gals} \times \frac{6.0 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 616.0 \text{ tons VOC}$$

$$\text{Fugitive} \quad 616.0 \text{ tons VOC} \times 0.20 = 123.2 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 616.0 \text{ tons VOC} \times 0.80 \times 0.05 = 24.6 \text{ tons VOC}$$

### Bottom Varnish

Uncontrolled = Fugitive

$$\left[ 2090 \text{ gals} - (2090 \text{ gals} \times 0.51 \text{ H}_2\text{O}) \right] \times \frac{2.1 \text{ lbs VOC}}{\text{Gal Coating less H}_2\text{O}} \times$$

$$\frac{\text{Ton}}{2000 \text{ lbs}} = 1.1 \text{ tons VOC}$$

### Necker Lubricant

Uncontrolled = Fugitive

$$\frac{0.03 \text{ gals}}{1000 \text{ cans}} \times 1.181 \times 10^9 \text{ cans} = 35,430 \text{ gals}$$

$$35,430 \text{ gals} \times .80 \text{ Hexane} \times \frac{5.5 \text{ lbs}}{\text{Gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 77.9 \text{ tons VOC}$$

Methyl Chloroform

Uncontrolled = Fugitive

$$14,905 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 55.9 \text{ tons VOC}$$

Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$12,595 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 28.3 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$2,475 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 6.2 \text{ tons VOC}$$

Annual Totals

Fugitive	319.5
T.O. Exhausts	<u>36.6</u>
Total	356.1

## 1979 Actual Emissions

### White Basecoat

$$\text{Uncontrolled} \quad 114,308 \text{ gals} \times \frac{3.87 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 221.2 \text{ tons VOC}$$

$$\text{Fugitive} \quad 221.2 \text{ tons VOC} \times 0.10 = 22.1 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 221.2 \text{ tons VOC} \times 0.90 \times 0.05 = 9.9 \text{ tons VOC}$$

### Clear Basecoat

$$\text{Uncontrolled} \quad 19,653 \text{ gals} \times \frac{4.65 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 45.7 \text{ tons VOC}$$

$$\text{Fugitive} \quad 45.7 \text{ tons VOC} \times 0.10 = 4.6 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 45.7 \text{ tons VOC} \times 0.90 \times 0.05 = 2.1 \text{ tons VOC}$$

### Inside Spray

$$\text{Uncontrolled} \quad 195,288 \text{ gals} \times \frac{6.0 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 585.9 \text{ tons VOC}$$

$$\text{Fugitive} \quad 585.9 \text{ tons VOC} \times 0.20 = 117.2 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 585.9 \text{ tons VOC} \times 0.80 \times 0.05 = 23.4 \text{ tons VOC}$$

### Bottom Varnish

Uncontrolled = Fugitive

$$\left\{ 1815 \text{ gals} - (1815 \text{ gals} \times 0.51 \text{ H}_2\text{O}) \right\} \times \frac{2.1 \text{ lbs VOC}}{\text{Gal Coating less H}_2\text{O}} \times$$

$$\frac{\text{Ton}}{2000 \text{ lbs}} = 0.9 \text{ tons VOC}$$

### Necker Lubricant

Uncontrolled = Fugitive

$$\frac{0.03 \text{ gals}}{1000 \text{ cans}} \times 1.225 \times 10^9 \text{ cans} = 36,750 \text{ gals}$$

$$36,750 \text{ gals} \times .80 \text{ Hexane} \times \frac{5.5 \text{ lbs}}{\text{Gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 80.8 \text{ tons VOC}$$

Methyl Chloroform

Uncontrolled = Fugitive

$$15,070 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 56.5 \text{ tons VOC}$$

Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$11,825 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 26.5 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$2145 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 5.4 \text{ tons VOC}$$

Annual Totals

Fugitive 314.0

T.O. Exhausts 35.4

Total 349.4

## 1980 Actual Emissions

### White Basecoat

$$\text{Uncontrolled} \quad 129,940 \text{ gals} \times \frac{3.87 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 251.4 \text{ tons VOC}$$

$$\text{Fugitive} \quad 251.4 \text{ tons VOC} \times 0.10 = 25.1 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 251.4 \text{ tons VOC} \times 0.90 \times 0.05 = 11.3 \text{ tons VOC}$$

### Clear Basecoat

$$\text{Uncontrolled} \quad 16,625 \text{ gals} \times \frac{4.65 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 38.7 \text{ tons VOC}$$

$$\text{Fugitive} \quad 38.7 \text{ tons VOC} \times 0.10 = 3.9 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 38.7 \text{ tons VOC} \times 0.90 \times 0.05 = 1.7 \text{ tons VOC}$$

### Inside Spray

$$\text{Uncontrolled} \quad 218,058 \text{ gals} \times \frac{6.0 \text{ lbs VOC}}{\text{Gal Coating}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 654.2 \text{ tons VOC}$$

$$\text{Fugitive} \quad 654.2 \text{ tons VOC} \times 0.20 = 130.8 \text{ tons VOC}$$

$$\text{T.O. Exhausts} \quad 654.2 \text{ tons VOC} \times 0.80 \times 0.05 = 26.2 \text{ tons VOC}$$

### Bottom Varnish

Uncontrolled = Fugitive

$$\left[ 1760 \text{ gals} - (1760 \text{ gals} \times 0.51 \text{ H}_2\text{O}) \right] \times \frac{2.1 \text{ lbs VOC}}{\text{Gal Coating less H}_2\text{O}} \times$$

$$\frac{\text{Ton}}{2000 \text{ lbs}} = 0.9 \text{ tons VOC}$$

### Necker Lubricant

Uncontrolled = Fugitive

$$\frac{0.03 \text{ gals}}{1000 \text{ cans}} \times 1.189 \times 10^9 \text{ cans} = 35,670 \text{ gals}$$

$$35,670 \text{ gals} \times .80 \text{ Hexane} \times \frac{5.5 \text{ lbs}}{\text{Gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 78.5 \text{ tons VOC}$$

Methyl Chloroform

Uncontrolled = Fugitive

$$14,905 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 55.9 \text{ tons VOC}$$

Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$11,440 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 25.7 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$2365 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 5.9 \text{ tons VOC}$$

Flasolv EB

Uncontrolled = Fugitive

$$165 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 0.4 \text{ tons VOC}$$

Annual Totals

Fugitive	327.1
T.O. Exhausts	<u>39.2</u>
Total	366.3

1981 Actual Emissions (Switch to Water Based)

White Basecoat

$$\left\{ 143,468 \text{ gals} - (143,468 \times .417 \text{ H}_2\text{O}) \right\} \times \frac{2.09 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 87.4 \text{ tons VOC}$$

Clear Basecoat

$$\left\{ 19,745 \text{ gals} - (19,745 \times .573 \text{ H}_2\text{O}) \right\} \times \frac{2.59 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 10.9 \text{ tons VOC}$$

Inside Spray

$$\left\{ 232,874 \text{ gals} - (232,874 \times .69 \text{ H}_2\text{O}) \right\} \times \frac{3.74 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 135.0 \text{ tons VOC}$$

Bottom Varnish

$$\left\{ 1870 \text{ gals} - (1870 \times .51 \text{ H}_2\text{O}) \right\} \times \frac{2.1 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = 1.0 \text{ tons VOC}$$

Methyl Chloroform

Uncontrolled = Fugitive

$$15,455 \text{ gals} \times \frac{11.2 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 58.0 \text{ tons VOC}$$

Methyl Ethyl Ketone

Uncontrolled = Fugitive

$$7425 \text{ gals} \times \frac{6.7 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 16.7 \text{ tons VOC}$$

Flasolv 15

Uncontrolled = Fugitive

$$1595 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 4.0 \text{ tons VOC}$$



Flasolv EB

Uncontrolled = Fugitive

$$990 \text{ gals} \times \frac{7.5 \text{ lbs}}{\text{gal}} \times \frac{\text{Ton}}{2000 \text{ lbs}} \times .67 = 2.5 \text{ tons VOC}$$

Annual Total

315.5 tons VOC

PROPOSED MODIFICATION  
One Line Controlled with Thermal Oxidizer

All White Basecoat (Worst Case)

$$\begin{aligned} \text{Uncontrolled Maximum} & \quad \frac{800 \text{ cans}}{\text{Min}} \times \frac{0.140 \text{ gals}}{1000 \text{ cans}} \times \frac{60 \text{ min}}{\text{Hr}} = \frac{6.72 \text{ gals}}{\text{Hr}} \\ & \quad \left\{ \frac{6.72 \text{ gals}}{\text{Hr}} - (6.72 \times 0.417 \text{ H}_2\text{O}) \right\} \times \frac{2.09 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} = \\ & \quad \quad \quad \frac{8.2 \text{ lbs VOC}}{\text{Hr}} \\ & \quad \frac{8.2 \text{ lbs VOC}}{\text{Hr}} \times \frac{8760 \text{ Hrs}}{\text{Yr}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = \text{35.9 tons VOC} \end{aligned}$$

Fugitive  $35.9 \text{ tons VOC} \times .10 = 3.6 \text{ tons VOC}$

T.O. Exhaust (60% Removal)  $35.9 \text{ tons VOC} \times .90 \times .40 = 12.9 \text{ tons VOC}$

Inside Spray

$$\begin{aligned} \text{Uncontrolled Maximum} & \quad \frac{800 \text{ cans}}{\text{Min}} \times \frac{0.196 \text{ gals}}{1000 \text{ cans}} \times \frac{60 \text{ min}}{\text{Hr}} = \frac{9.41 \text{ gals}}{\text{Hr}} \\ & \quad \left\{ \frac{9.41 \text{ gals}}{\text{Hr}} - (9.41 \times 0.69 \text{ H}_2\text{O}) \right\} \times \frac{3.74 \text{ lbs VOC}}{\text{gal coating less H}_2\text{O}} = \\ & \quad \quad \quad \frac{10.9 \text{ lbs VOC}}{\text{Hr}} \\ & \quad \frac{10.9 \text{ lbs VOC}}{\text{Hr}} \times \frac{8760 \text{ Hrs}}{\text{Yr}} \times \frac{\text{Ton}}{2000 \text{ lbs}} = \text{47.7 tons VOC} \end{aligned}$$

Fugitive  $47.7 \text{ tons VOC} \times .20 = 9.5 \text{ tons VOC}$

T.O. Exhaust (60% Removal)  $47.7 \text{ tons VOC} \times .80 \times .40 = 15.3 \text{ tons VOC}$

*Bottom varnish ?*

Summary

Uncontrolled Emissions = 35.9 tons + 47.7 tons = 83.6 tons VOC

Proposed Modification = 16.6 tons + 24.8 tons = 41.4 tons VOC

Net Reduction = 42.2 tons VOC