

# Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

March 21, 1991

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

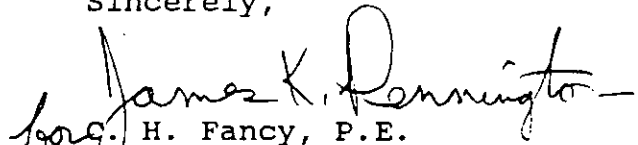
Mr. Joseph Waters, Plant Manager  
Metal Container Corporation  
5909 N.W. 18th Drive  
Gainesville, Florida 32606

Dear Mr. Waters:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to construct/modify the Gainesville Lid Center facility.

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

Sincerely,

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

CHF/TH/plm

Attachments

c: Andrew Kutyna, NE Dist.  
Shannon K. Baruch, NE Dist.  
John H. Schamburgh, P.E.  
J. Harper, EPA  
C. Shaver, NPS  
D. Pusch, A-BC

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of  
Application for Permit by:

Metal Container Corporation  
5909 N.W. 18th Drive  
Gainesville, Florida 32606

DER File No. AC 01-185835  
PSD-FL-153

---

INTENT TO ISSUE

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

The applicant, Metal Container Corporation, applied on August 31, 1990, to the Department of Environmental Regulation for a permit to construct/modify the Gainesville Lid Center facility.

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

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

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

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

The Petition shall contain the following information:

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

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

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

*for James K. Pennington*  
C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

Copies furnished to:

Andrew Kutyna, NE Dist.  
Shannon K. Baruch, NE Dist.  
John H. Schamburgh, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 3-21-91.

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

*Kimi Daber*  
Clerk

3-21-91  
Date

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

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Metal Container Corporation, 5909 N.W. 18th Drive, Gainesville, Alachua County, Florida 32606, to construct/modify the Gainesville Lid Center facility. A determination of Best Available Control Technology (BACT) was required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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

The Petition shall contain the following information:

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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the

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

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

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

Department of Environmental Regulation  
Northeast District  
7825 Baymeadows Way, Suite 200B  
Jacksonville, Florida 32256-7577

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the Department's final determination. Further, a public hearing may be requested by any person. Such requests must be submitted within 30 days of this notice.

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

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

3. Article Addressed to:  
 Mr. Joseph Waters  
 Plant Manager  
 Metal Container Corp.  
 5909 N.W. 18th Drive  
 Gainesville, FL 32606

4. Article Number:  
 P 407 802 153

Type of Service:  
 Registered  Insured  
 Certified  COD  
 Express Mail  Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED

5. Signature - Addressee

6. Signature - Agent  
 *Joe Knight*

7. Date of Delivery  
 3-25-91

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

PS Form 3811, Apr. 1989 U.S.G.P.O. 1989-238-815 DOMESTIC RETURN RECEIPT

P 407 802 153

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL

(See Reverse)

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

Sent to	Mr. Joseph Waters, Metal
Street and No.	Continer Corp. 5909 N.W. 18th Dr.
P.O., State and ZIP Code	Gainesville, FL 32606
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
	Mailed: 3-21-91
	Permit: AC 01-185835
	PSD-FL-153

PS Form 3800, June 1985

Technical Evaluation  
and  
Preliminary Determination

Metal Container Corporation  
Gainesville, Alachua County, Florida

Permit No. AC 01-185835  
PSD-FL-153

Lid Modules 1 through 4

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

March 21, 1991



## SYNOPSIS OF APPLICATION

### I.1 Applicant Name and Address

Metal Container Corporation  
5909 N. W. 18th Drive  
Gainesville, Florida 32606

### I. 2 Reviewing and Process Schedule

Date of Receipt of Application: August 31, 1990

30 days of Completeness Review: Department's letter dated September 28, 1990.

Response to Incompleteness Letter: Company's letter dated October 5, 1990; and additional information received on November 6, 1990, December 24, 1990, and January 15, 1991.

Application Completeness Day: December 24, 1990.

## II. FACILITY INFORMATION

### II.1 Facility Location

Metal Container Corporation is located at 5909 N.W. 18th Drive in Gainesville, Alachua County, Florida. The UTM coordinates are Zone 17, 369.38 km East and 3287.23 km North.

### II.2 Standard Industrial Classification Code (SIC)

This facility is classified as follows:

Major Group No. 34 - Fabricated Metal Products, Except Machinery and Transportation Equipment

Group No. 341 - Metal Can and Shipping Containers

Industry No. 3411 - Metal Cans

### II.3 Facility Category

Metal Container Corporation (MCC) is classified as a major emitting facility for volatile organic compounds (VOC). Existing permitted emissions of VOC are 323 TPY. The proposed project will increase VOC emissions by 61 TPY. Total permitted volatile organic emissions for this facility after the modernization shall not be allowed to exceed 384 TPY.

### III. PROJECT DESCRIPTION

Metal Container Corporation proposed to modernize its Gainesville Lid Center. This modernization will increase the facility's annual shell press production capacity to 11.445 billion lids from the existing 6.528 billion lids.

The modernization project will consist of:

1) The removal of all existing shell presses and conversion presses with the exception of:

- a) the shell press, two conversion presses, and two liners currently permitted as Module 4,
- b) the shell press, three conversion presses, and three liners permitted as Module 6,
- c) the six additional existing liners.

2) The addition of the following new equipment:

- a) two shell presses,
- b) seven conversion presses,
- c) three liners, and
- d) a shell press scrap cyclone, and
- e) supporting equipment (e.g., balancers and baggers).

Table I (page 7) lists the equipment at each module after the modification.

Table II (page 8) lists the equipment.

#### III.1 Background Information

- Year 1983 - Original permits to operate were received for Modules Nos. 1, 2, and 3.

- Year 1985 - Operating permit issued for Module No. 4.

- Year 1986 - Operating permits for all four modules were renewed in November. Permitted annual VOC emissions for the whole facility are 239.2.

- Year 1988 - Operating permit AO 01-144728, issued this year, included Module No. 5. Permitted annual VOC emissions for the whole facility are 235.6 tons per year.

- Year 1989 - Construction permit AC 01-159034 was issued for Module No. 6. This permit allowed an additional 87.4 tons of VOC per year, bringing the facility-wide total to 323 tons VOC per year. This construction permit was revised in March 1990 to incorporate the 13th conversion press, with no change in permitted emissions.

• Year 1990 - Application for the construction permit for the modernization project submitted on August 31, 1990.

• Year 1991 - Permit AC 01-185835 and PSD-FL-153 will be issued. Permitted annual VOC emissions for the whole facility shall not exceed 384 tons per year.

#### IV. PROCESS DESCRIPTION

Major steps in this process are as follows:

Aluminum stock is stamped into lid "shells" by the shell presses. The rims of these shells are curled in the presses, and end sealant is applied in the curl by the liners. The lids are "finished" by the conversion presses which emboss the lids, score the openings, and fabricate and attach the tabs.

#### V. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Rules 17-2 and 17-4.

Metal Container Corporation (MCC) is located in an area (Alachua County) currently designated attainment for all criteria pollutants, F.A.C. Rule 17-2.

MCC is a major emitting facility for volatile organic compounds (VOC) as defined in F.A.C. Rule 17-2.100(112). Permitted emissions of VOC for the entire facility after the proposed project, shall not exceed 384 TPY.

The proposed project, a modification to the lid manufacturing process, will be reviewed under F.A.C. Rule 17-2.500, Prevention of a Significant Deterioration (PSD), which requires the use of Best Available Control Technology (BACT) and an air quality analysis. The proposed project, increasing the facility's emissions by 241 VOC TPY, is considered under PSD regulations, a major modification to a major facility.

The proposed facility shall comply with F.A.C. Rule 17-2.620, General Pollutant Emission Limiting Standards; F.A.C. Rule 17-2.630, BACT; and F.A.C. Rule 17-2.700, Stationary Point Source Emission Test Procedures.

#### VI. SOURCE IMPACT ANALYSIS

##### VI.1 Emission Limitations

The operation of this facility will produce emissions of volatile organic compounds (VOC). These emissions occur from the use of end sealant compound, tab lube and clean-up solvents.

The chemical products used in this process are listed in the material safety data sheets (MSDS) as containing heptane, hexane, and petroleum hydrocarbons.

The permitted emissions for the entire facility shall not exceed 87.6 lbs VOC/hour and 384 tons VOC/year

Table III (page 9) summarizes the proposed VOC emissions at the facility by shell press production (module).

## VI.2. Air Quality Analysis

The proposed project is subject to an air quality analysis for ozone since the projected increase in VOC emissions is greater than 100 TPY. However, there are no currently available air dispersion models for use in modeling VOC point sources in relation to ozone concentrations. For this reason and also since the proposed project is located in an ozone attainment area, it will be regulated through the BACT requirements and PSD review for it will be based primarily on the BACT determination.

The proposed project has also been evaluated in accordance with procedures contained in the Department's Air Toxics Permitting Strategy (Draft). The maximum hourly emissions of potential air toxics were modeled to determine the predicted off-property maximum ambient concentrations for comparison to the no-threat levels contained in the air toxics permitting strategy. The pollutants evaluated were n-hexane, n-heptane, cyclohexane, cyclohexylmethane, toluene, benzene and stoddard solvent. Since n-hexane was the principal VOC air toxic of interest, modeling was performed directly for n-hexane emissions. The maximum predicted concentrations for the other pollutants were based on the ratio of their projected emissions to those of n-hexane. Total facility-wide emissions of n-hexane are projected to be 26.8 lbs/hr and 104.2 tons per year. The emissions are released through 13 vents, stacks and exhausts located on the roof. The total emissions of each pollutant are distributed among the 13 emission points in proportion to the exhaust flowrate. Because the proposed project will result in an increase of n-hexane emissions, the applicant will improve the dispersion characteristics by raising stack heights and where possible by changing exhaust orientations from horizontal to vertical.

The EPA and Department-approved Industrial Source Complex Short-Term (ISCST) model was run with one year of meteorological data (Tallahassee surface and Waycross, GA upper air, 1986). Direction specific downwash parameters were used because the stacks were less than the good engineering practice (GEP) stack height. Since only one year of data was used, the highest predicted concentrations were compared with the no-threat levels. A receptor grid with 50-meter spacing between receptor points was used. The modeling results are given in the table below and show that maximum predicted off-property concentrations for each pollutant are below the applicable no-threat levels.

Pollutant	Maximum Predicted Concentration (ug/m3)			No-Threat Levels (ug/m3)		
	8-hr	24-hr	Annual	8-hr	24-hr	Annual
n-hexane	796	355	--	1,800	430	--
n-heptane	707	315	--	32,000	15,238	--
cyclohexane	143	64	--	1,000	238	--
cyclohexylmethane	59	27	--	32,000	7,619	--
toluene	--	--	11*	--	--	2,000
benzene	--	--	0.05*	--	--	0.123
stoddard solvent	53	24	--	5,250	1,250	--

\*Annual concentrations were not modeled. Annual concentrations are conservatively assumed to equal the modeled 24 hour impact.

#### V. CONCLUSION

Based on the information provided by Metal Container Corporation, the Department has reasonable assurance that the construction of the proposed source, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard or PSD increment, or violate any other technical provision of Chapter 17-2 of the Florida Administrative Code.

*Barry D. Dickson*  
 # 36024  
 3-21-91

Table I  
 METAL CONTAINER CORPORATION - GAINESVILLE LID CENTER  
 MODERNIZATION PROJECT

Equipment Identification by Module

Module	Permit Application Designation (a)	Shell Press	<u>Equipment (b)</u> End Liners	Conversion Presses
4 (c)	Machine 4 (c)	SP-4	EL-4 EL-5	CP-6 CP-7
5 (d)	Machine 3 (d)	SP-3	EL-1 EL-2 EL-3 EL-6	CP-8 CP-9 CP-10
6	Machine 2	SP-2	EL-11 EL-12 EL-13 EL-14	CP-4 CP-5
7	Machine 1	SP-1	EL-7 EL-8 EL-9 EL-10	CP-1 CP-2 CP-3
Off-Line Conversion Presses	-	-	-	CP-11 CP-12

(a) As designated in the August 15, 1990 permit application

(b) As identified in Table II.A-1 of the August 15, 1990 permit application

(c) Currently identified/permitted as Module 4 by Florida DER

(d) Currently identified/permitted as Module 6 by Florida DER

Table II  
 GAINESVILLE LID CENTER MODERNIZATION -  
 EQUIPMENT LIST

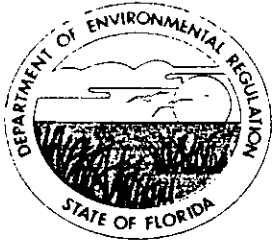
Identification	Manufacturer
<b>Shell Press</b>	
SP-1	Minster/Redicon End Level II
SP-2	"
SP-3	"
SP-4	Minster/Redicon DAS-100-72
<b>Conversion Press</b>	
CP-1	Minster/Stolle
CP-2	"
CP-3	"
CP-4	"
CP-5	"
CP-6	Bruderer/Stolle
CP-7	"
CP-8	Minster/Stolle
CP-9	"
CP-10	"
CP-11	"
CP-12	"
<b>End Liner</b>	
EL-1	Preferred
EL-2	"
EL-3	"
EL-4	"
EL-5	"
EL-6	"
EL-7	"
EL-8	"
EL-9	"
EL-10	"
EL-11	"
EL-12	"
EL-13	"
EL-14	"

Table III  
PROPOSED SUMMARY OF EMISSIONS

VOC Emissions (by shell press production)

Source	lbs/hr	tons/yr
Machine 1 (Module 7)		
end sealant	24.5	95.4
tab lube	13.1	50.9
Amsco 1487	5.7	22.2
Amsco 1241	<u>0.5</u>	<u>2.1</u>
Total	<u>43.9</u>	<u>170.6</u>
Machine 2 (Module 6)		
end sealant	24.5	95.4
tab lube	13.1	50.9
Amsco 1487	5.7	22.2
Amsco 1241	<u>0.5</u>	<u>2.1</u>
Total	<u>43.9</u>	<u>170.6</u>
Machine 3 (Module 5)		
end sealant	21.8	84.8
tab lube	11.6	45.3
Amsco 1487	5.1	19.8
Amsco 1241	<u>0.5</u>	<u>1.8</u>
Total	<u>39.0</u>	<u>151.7</u>
Machine 4 (Module 4)		
end sealant	10.2	39.6
tab lube	5.4	21.1
Amsco 1487	2.4	9.2
Amsco 1241	<u>0.2</u>	<u>0.9</u>
Total	<u>18.2</u>	<u>70.8</u>
Entire Facility		
end sealant	81.1	315.2
tab lube	43.3	168.3
Amsco 1487	18.9	73.4
Amsco 1241	<u>1.8</u>	<u>6.9</u>
Total	<u>145.0</u>	<u>563.8</u>





# Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

**PERMITTEE:**  
Metal Container Corp.  
5909 NW 18th Drive  
Gainesville, Florida 32606

Permit Number: AC 01-185835  
Expiration Date: January 30, 1993  
County: Alachua  
Latitude/Longitude: 29°42'5"  
82°20'53"  
Project: Lid Modules 1 thru 4

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

For the construction/modification of the Lid Center (Modules 1 through 4) at Metal Container Corp. facility in Gainesville, Alachua, County, Florida. The UTM coordinates are Zone 17, 369.38 km and 3287.23 N.

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

Attachments are listed below:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16), received on August 31, 1990.
2. Department's letter dated September 28, 1990.
3. Metal Container Corporation's letters dated October 5, November 6, and December 24, 1990; and January 15, 1991.

PERMITTEE:  
Metal Container Corporation

Permit Number: AC 01-185835  
Expiration Date: January 30, 1993

**GENERAL CONDITIONS:**

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

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

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

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

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

PERMITTEE:  
Metal Container Corporation

Permit Number: AC 01-185835  
Expiration Date: January 30, 1993

**GENERAL CONDITIONS:**

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

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

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

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

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

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

PERMITTEE:  
Metal Container Corporation

Permit Number: AC 01-185835  
Expiration Date: January 30, 1993

**GENERAL CONDITIONS:**

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

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

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

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

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

13. This permit also constitutes:

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

14. The permittee shall comply with the following:

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

PERMITTEE:  
Metal Container Corporation

Permit Number: AC 01-185835  
Expiration Date: January 30, 1993

**GENERAL CONDITIONS:**

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

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

**SPECIFIC CONDITIONS:**

Emission Limits

1. The maximum VOC content of the coatings and solvents used in this operation shall not exceed the following limits:

3.2 lbs VOC  
gal end sealant  
(excluding water)

6.0 lbs VOC  
gal tab lube

Clean up Solvent: 6.32 lbs VOC and 4.35 lbs VOC  
gal mineral spirits gal hexane

PERMITTEE:  
Metal Container Corporation

Permit Number: AC 01-185835  
Expiration Date: January 30, 1993

**SPECIFIC CONDITIONS:**

2. The acceptable ambient concentrations (AAC) levels for the following pollutants shall not be exceeded:

Pollutant	No-Threat Levels (ug/m3)		
	8-hr	24-hr	Annual
n-hexane	1,800	430	--
n-heptane	32,000	15,238	--
cyclohexane	1,000	238	--
cyclohexylmethane	32,000	7,619	--
toluene	--	--	2,000
benzene	--	--	0.123
stoddard solvent	5,250	1,250	--

3. The total permitted VOC emissions from coatings and organic solvents for the entire facility shall not exceed 87.6 lbs per hour and 384 tons per year.

Operating Requirements

4. This facility is allowed to operate continuously (8760 hours per year).

5. The permitted materials and utilization rates are as stated in the application. These rates include but are not limited to:

- A maximum annual production of 11.445 billion lids.
- A maximum usage rate (all coatings and solvents) of 0.0248 gallons/1000 lids.
- A maximum input rate of 9510 lbs/hr aluminum shell and tab stock.

6. Any other operating parameter established during compliance testing and/or inspection that will confirm the proper operation of this facility shall be included in the operating permit.

7. The applicant shall install a thermal oxidizer capable of meeting the following specifications:

- A minimum of 65% capture efficiency.
- A minimum of 95% destruction efficiency.

PERMITTEE:  
Metal Container Corporation

Permit Number: AC 01-185835  
Expiration Date: January 30, 1993

**SPECIFIC CONDITIONS:**

Compliance Determination

8. Compliance with the VOC emission limits (as specified in the BACT determination) for this facility shall be determined by EPA Method 25 (destruction efficiency), Method 25A (capture efficiency), and EPA Method 24 or 24A (VOC content). The aforementioned Methods are contained in 40 CFR 60, Appendix A (July 1, 1989) and adopted by reference in Section 17-2.700, F.A.C. Compliance with the VOC standards can also be determined by EPA approved protocol(s) as described in the EPA Memorandum dated April 16, 1990, entitled "Guidelines for Developing a State Protocol for the Measurement of Capture Efficiency" (copy attached). The permittee shall notify the Department days in advance of the Method and/or protocol selected.

9. The permittee or the coating manufacturer shall determine the VOC content of each coating using EPA Method 24 or 24A contained in 40 CFR 60, Appendix A, and adopted by reference in F.A.C. Rule 17-2.700. The enclosed Appendix B (EPA 450/3-84-019), if properly completed for each affected coating, may be submitted in lieu of the Method 24 or 24A tests. New coatings or the same coating supplied by a different manufacturer shall be tested for VOC content using EPA Method 24 and 24A or the above mentioned Appendix B prior initial use in production. Each coating shall be tested after it is diluted with the maximum amount of solvent used by the permittee for production. The use of a different coating (not included in the application) requires prior written notification. Notification shall be provided to the Northeast District office and shall include EPA Method 24 or Appendix B test results. Testing procedures shall be consistent with the requirements of F.A.C. Rule 17-2.700.

10. Compliance with the acceptable ambient concentrations shall be demonstrated based on calculations certified by a Professional Engineer registered in Florida using actual operating conditions. Determination of the ambient concentration for chemical organic compounds shall be determined by Department approved dispersion modeling calculations. Ambient monitoring may be used in addition to modeling. These calculations shall be available upon request by the Department.

11. The permittee shall maintain a record of the clean up solvents used and the waste solvents hauled off site on a quarterly basis. A composite sample of the VOC content in the waste solvents shall be established once per quarter using Method 24 or 24A.

PERMITTEE:  
Metal Container Corporation

Permit Number: AC 01-185835  
Expiration Date: January 30, 1993

**SPECIFIC CONDITIONS:**

12. The permittee shall maintain accurate recordkeeping of all paints and solvents in operation at the facility for at least a two year period.

13. The permittee shall notify the Northeast District office in writing at least 30 days prior to any testing. The period prior to testing shall not exceed 180 days after construction is completed. Compliance test results shall be submitted to the Northeast office no later than 45 days after the final test run.

14. When the Department, after investigation, has good reason (such as odor complaints, increased visible emissions, etc.), to believe that any applicable emission standard contained in Chapter 17-2, F.A.C., or in this permit is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of the tests to the Department.

Rule Requirements

15. This facility shall comply with all applicable provisions of Chapter 403, Florida Statutes, and Chapters 17-2 and 17-4, Florida Administrative Code.

16. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state or local permitting requirements and regulations (F.A.C. Rule 17-2.210(1)).

17. According to F.A.C. Rule 17-2.620(1)(a), no person shall store, pump, handle, process, load, unload, or use in any process or installation volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Currently, there are no control strategies associated with this operation other than crew efficiency to minimize pollutant emissions. The following procedures shall be utilized to minimize pollutant emissions, but shall not be limited to:

- o maintain tightly fitting covers, lids, etc., on all containers of VOC when they are not being handled, tapped, etc.;
- o where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, bath, etc., of VOC so that it can be covered when not use;



PERMITTEE:  
Metal Container Corporation

Permit Number: AC 01-185835  
Expiration Date: January 30, 1993

**SPECIFIC CONDITIONS:**

- o all fittings, valve lines etc., shall be properly maintained; and,
- o all VOC spills shall be attended to immediately and the waste properly disposed of, recycled, etc.

18. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor pursuant to F.A.C. Rule 17-2.620(2).

19. Pursuant to F.A.C. Rule 17-2.210(2), Air Operating Permits, the permittee shall be required to submit annual reports on the actual operation and emissions of the facility. Material balance reports are required and shall be sent to the Northeast District office to assess emissions and maintain VOC emissions inventory. The quantity of lids processed per module shall be included in the report. This report shall also include but not be limited to VOC limits (lbs/hr, lbs/day, lbs/month, tons/yr), measured destruction & capture efficiency, manufacturer's certification, coating usage records, hours of operation, and test results.

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

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

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1991

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

---

Carol M. Browner, Secretary

Best Available Control Technology (BACT) Determination  
Metal Container Corporation  
Alachua County

The applicant intends to modernize their aluminum lid manufacturing facility in Gainesville, Florida. The modernization will result in an increase in the facility's annual production, from an existing 6.528 billion lids to 11.445 billion lids. This increase in production will result in an annual potential increase of 241 tons of volatile organic compound emissions above the currently permitted 323 tons. Potential VOC emissions will be minimized through the use of low-solvent, high solids compounds.

In accordance with Rule 17-2.500(2)(f)(3) of the Florida Administrative Code (F.A.C.) a BACT review for volatile organic compounds is required since the potential emissions increase exceeds the significant emission rate of 40 tons per year.

BACT Determination Requested by the Applicant:

The BACT determination requested by the applicant is based on the use of high solid/low VOC end sealant. The VOC contents for the end sealant and other compounds proposed for use at the facility is given below:

Compound	VOC Content (weight fraction)
End Sealant	0.4048
Tab Lube	0.945
Solvents	1.0

Date Receipt of a BACT Application:

December 24, 1990

Review Group Members:

This determination was based upon comments received from the applicant and the Permitting and Standards Section.

BACT Determination Procedure:

In accordance with Florida Administrative Code Chapter 17-2, Air Pollution, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case-by-case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

BACT Analysis:

A review of the BACT/LAER Clearinghouse indicates that BACT for lid manufacturing (total of two determinations) has been based on limiting the VOC content of the end sealant compound.

The first determination, made January 10, 1986, showed that BACT for a modified source was the use of an end sealant compound with a VOC content of 4.2 pounds/gallon minus water. The second, issued January 21, 1988, determined that BACT for a new source was the use of an end sealant compound with a VOC content of 3.7 pounds/gallon. These determinations are less stringent than that proposed by the applicant as being BACT for this modernization project (VOC content equals 3.2 pounds/gallon).

In accordance with the "top-down" BACT procedure the applicant has evaluated two control technologies which would further reduce VOC emissions. The two technologies are:

1. the use of non-VOC (water-base) end sealant compound,
2. collection and destruction of VOC emissions through the use of thermal incineration.

Both of these technologies were assessed assuming application to the new modules to be added as part of the modernization. The two existing modules which remain will continue to operate using the existing high solid/low-solvent compound as they are currently permitted.

Water-Based End Sealant:

The applicant has indicated that there are both operational and technical difficulties associated with the use of water-based end sealant compound.

According to the applicant, water-base end sealant compound requires a longer curing time. In order to reduce the curing time, drying ovens must be added to drive off the water. In addition, the applicant's experience with water-base end sealant has shown significantly lower production efficiency than with low solvent/high solids sealant due to equipment downtime from tooling build-up and high spoilage rates.

In order to meet committed production quotas from this facility, additional equipment would be required if water-base sealant was used. A liner, dryer, balancer, conversion press, counter/bagger, and conveying equipment would be the minimum additional equipment required, as well as a new additional water-base compound bulk storage and delivery system.

The applicant has indicated that the total levelized annual cost (operating plus amortized capital cost) to install and operate the additional equipment needed to utilize water-base end sealant compound would be approximately \$1.34 million. When this cost is taken into consideration with the annual VOC reductions that would be realized by using water-base end sealant compound (191 tons per year) the cost per ton of controlling VOC's would be \$7,016.

This cost (\$7,016/ton) is not representative of costs that have been previously justified as BACT and is judged to be cost prohibitive for this facility.

Thermal Incineration:

Incineration is a commonly used method to control the emissions of VOC's from various processes that utilize VOC containing compounds. Emission reductions are achieved through this method by capturing and ducting the VOC's which are "flashed-off" during the manufacturing process to an incinerator.

The applicant has stated that the lid manufacturing process does not easily lend itself to the capture of VOC due to the nature of the compounds used and the speed at which the ends pass through the lines. The largest reductions could be achieved by ducting the

scrap cyclones (VOC from tab lube) and the end liners and balancers (VOC from end sealant) to the incineration unit. The applicnat has estimated that 65% of the VOC from these materials can be captured and ducted to a thermal oxidizer with a 90% destruction efficiency.

Given the 65% capture and 90% destruction of VOC's from the tab lube and end sealing processes, it is estimated that VOC reduction would be approximately 171 tons per year. When this VOC reduction is taken into consideration with the total levelized annual cost (operating plus amortized capital cost) to install and operate a thermal oxidizer of \$774,700, the cost to control VOC emissions would be \$4,530 per ton. This cost is more representative of what has been judged to be BACT for VOC control.

Environmental Impact Analysis:

In addition to the bulk VOC control that could be achieved by using either water-base end sealant or thermal oxidation, such control would also reduce the amount of potential toxic emissions. The type and quantity of air toxics that are expected from the use of the proposed end sealant are given as follows:

<u>Air Toxic</u>	<u>Emissions(tons/year)</u>
n-hexane	101.24
n-heptane	23.44
cyclohexane	16.3
cyclohexylmethane	7.8
	<hr/>
Total-	148.7

The use of water-base end sealant would result in 100% control of these toxic compounds since the sealant would not contain any VOC. If thermal oxidation was employed, these toxic compounds would be reduced by 58.4 percent.

A review of the maximum impacts expected from these air toxics indicates that the use of the proposed end sealant without additional control could result in a 24-hour impact which approaches the Florida Air Toxic Working Group's No-Threat Level for n-hexane. As this is the case, the additional control that would be achieved by using either water-base end sealant or thermal oxidation provides added justification for such a requirement as BACT.

The air toxics n-hexane, cyclohexane, and cyclohexylmethane result in maximum impacts which are well below the no-threat levels as proposed.

BACT Determination by DER:

Discussion:

The information presented by the applicant and the studies conducted by the Department suggests that the use of high solid/low VOC end sealant alone does not represent BACT for the proposed modernization of the facility. The use of low VOC end sealant alone does nothing to control VOC emissions resulting from the tab lube which is also part of the manufacturing process. Although the use of water-base end sealant would provide the greatest VOC control, the resulting cost to control VOC (\$7,016/ton) is judged to be prohibitively expensive.

The use of thermal oxidation, however, appears more reasonable as a BACT requirement. The applicant indicated that the cost per ton of controlling VOC in this manner would be approximately \$4,530. This cost (\$4,530/ton) is consistent with cost per ton levels that have been justified for other recent BACT determinations for pollutants that contribute to ozone formation (VOC and nitrogen oxides). In addition, such control would ensure that the air toxics associated with the end sealant are controlled by more than 58 percent.

It should be noted that the applicant's cost estimate to control VOC using thermal oxidation could be overstated. The applicant based its cost estimate on calculating annualized cost using a 12 percent interest rate. This exceeds the 10 percent interest that is suggested for cost per ton calculations as expressed in the EPA's OAQPS Control Cost Manual. In addition, recent evaluations of thermal oxidation for VOC control indicates that control efficiencies of 95% rather than the 90% proposed by the applicant are achievable.

Using the 10 percent interest rate suggested by EPA and the 95% control efficiency, the cost per ton of reducing VOC's is estimated to be \$3,992/ton. This cost provides further justification for requiring this level of control based on recent BACT determinations. Based on this estimate, the cost of providing control using thermal oxidation would increase the cost of manufacturing lids with the new modules by 10.4 cents per thousand. This added manufacturing cost is judged to be insignificant and further substantiates the use of thermal oxidation as BACT for the facility.

In addition to the localized benefits that could be obtained from VOC control at the facility, providing such control would have a significant impact on the amount of total VOC being emitted from stationary sources in Florida. The recent emissions inventory indicates that given the total VOC emissions resulting from the

modernization project, Metal Container Corporation in Gainesville would be ranked as the sixth highest VOC emitter in Florida and the largest VOC emitter in the Northeast District. As this is the case, any justifiable measures which would lower VOC emissions at this facility are worthy of consideration.

Conclusion:

Based on the discussion presented in this analysis, BACT for the Metal Container Corporation is represented by controlling the solvent content of the end sealant and using thermal oxidation with the following specifications:

End Sealant	3.2 pounds VOC per gallon
Thermal Oxidizer*	65% capture efficiency 95% destruction efficiency

\*thermal oxidizer to control VOC capture from the both the end sealant and tab lube process.

Details of the Analysis may be Obtained by Contacting:

Barry Andrews, P.E., BACT Coordinator  
Department of Environmental Regulation  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Recommended By:

Approved By:

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

\_\_\_\_\_  
Carol M. Browner, Secretary  
Dept. of Environmental Regulation

\_\_\_\_\_  
Date 1991

\_\_\_\_\_  
Date 1991