

F. G. C. G. G.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

DEP File No. AC 48-214902
Orange County

Mr. Douglas L. Terrill, Plant Manager
Foamex, L.P.
1351 Gemini Boulevard
Orlando, Florida 32821

Enclosed is permit No. AC 48-214902. This "after-the-fact" air construction permit for an existing flexible polyurethane foam manufacturing facility located in Orlando, Orange County, Florida, also authorizes modifications to the exhaust/dispersion system. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 14 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on 2/3/95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Charlatta Hayes 2/3/95
Clerk Date

Copies furnished to:
Charles Collins, CD
Dennis Nester, OCEPD
Joe Tessitore, P.E.

Ronald File
William Hanks

} 2-3-95 & T

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Douglas L. Terrill
 Foamex, L.P.
 1351 Gemini Blvd
 Orlando, FL 32821

4a. Article Number
 Z 751 860 024

4b. Service Type

Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 2/6

5. Signature (Addressee)

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

6. Signature (Agent)
 M. Barber

PS Form 3811, December 1991 U.S. GPO: 1992-323-402 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service

Mr. Douglas L. Terrill
 Terrill, Plant Manager
 Foamex, L.P.
 13

Z 751 860 024



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to Douglas Terrill	
Street and No. Foamex	
City, State and ZIP Code Orlando, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$

PS Form 3800, March 1993

Postmark or Date
 2-3-95
 AC 48-214902

Final Determination

Foamex, L.P.
Orlando, Florida
Orange County

Flexible Polyurethane Foam Manufacturing Facility
Permit No. AC 48-214902

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

February 3, 1995

FINAL DETERMINATION

A Technical Evaluation and Preliminary Determination (TE&PD) for an "after-the-fact" construction permit for Foamex, L.P.'s existing flexible polyurethane foam manufacturing facility located in Orlando, Orange County, Florida, was distributed on August 26, 1994. A Revised TE&PD that included modifications to the exhaust/dispersion system at this facility was distributed on November 17, 1994. The November 17 determination replaced the August 26 determination. The Notice of Intent to Issue was published in the Orlando Sentinel on December 20, 1994.

The applicant's engineer submitted comments dated January 26, 1995, on the proposed permit. These comments noted an error in the operation time of the Slabstock Process and requested a revision of the date that the modifications would be completed and the dates that the progress report would be submitted. These requests are acceptable to the Department and Specific Conditions Nos. 1, 3 and 6 of the proposed permit are revised.

The final action of the Department will be to issue the permit as proposed in the Revised TE&PD, except for the changes noted above.



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

PERMITTEE:
Foamex, L.P.
1351 Gemini Blvd.
Orlando, FL 32821

Permit Number: AC48-214902
Expiration Date: May 15, 1996
County: Orange
Latitude/Longitude: 28°24'15"N
81°23'40"W
Project: Flexible Polyurethane
Foam Manufacturing
Plant

This after-the-fact permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-212 and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto and specifically described as follows:

Modification to the exhaust/dispersion system at an existing flexible polyurethane foam manufacturing facility located at 1351 Gemini Blvd., Orlando, Orange County, Florida 32821. The six operations at this facility are an 18.1 TPH slabstock polyurethane foam production unit, an 18.1 TPH foam fabrication operation, a 3.1 TPH rebond polyurethane foam production unit, 11 above ground storage tanks, a 4.2 MMBtu/hr natural gas fired boiler, and a total 1.85 MMBtu/hr natural gas fired environmental space heating system.

The modified facility will have: a foam line stack that is 125 ft. high and 2.8 ft. in diameter and handling 30,000 acfm of air; a long bun storage room stack that is 125 ft. high and 2.8 ft. in diameter and handling 30,000 acfm of air; seventeen 50,000 acfm exhaust fans venting through 3.6 ft. diameter stacks with an elevation of 53 feet; and, two 15,000 acfm exhaust fans venting through 2 ft. diameter stacks with an elevation of 53 feet. The methylene chloride storage tank (No. 10) will be equipped with a pressure/vacuum relief valve.

The 4.2 MMBtu/hr natural gas fired boiler and 13 indirect natural gas fired heaters (1.85 MMBtu/hr total heat input) at this facility are exempt from air permitting pursuant to Rule 62-210.300(3), F.A.C.

The UTM coordinates of this facility are Zone 17, 461.0 km E and 3142.9 km N.

PERMITTEE:
Foamex, L.P.

Permit Number: AC48-214902
Expiration Date: May 15, 1996

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

Attachments are listed below:

1. Application received July 1, 1994.
2. Harding Lawson Associates letter dated August 3, 1994.
3. Harding Lawson Associates letter dated September 30, 1994.
4. Harding Lawson Associates memo dated January 26, 1995.

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, F.S. 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), F.S., 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

PERMITTEE:
Foamex, L.P.

Permit Number: AC48-214902
Expiration Date: May 15, 1996

GENERAL CONDITIONS:

the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

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.

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.

PERMITTEE:
Foamex, L.P.

Permit Number: AC48-214902
Expiration Date: May 15, 1996

GENERAL CONDITIONS:

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 F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. 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 F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

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

PERMITTEE:
Foamex, L.P.

Permit Number: AC48-214902
Expiration Date: May 15, 1996

GENERAL CONDITIONS:

this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

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

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

SPECIFIC CONDITIONS:

1. The enhanced exhaust systems shall be completed by February 15, 1996. The systems shall include: two 2.8 ft. diameter by 125 ft. high stacks, each handling 30,000 acfm of air; seventeen roof exhaust fans with 3.6 ft. diameter 53 ft. high stacks, each handling 50,000 acfm of air; and, two roof exhaust fans with 2 ft. diameter by 53 ft. high stacks, each handling 15,000 acfm of air. The two 125 ft. high stacks shall be equipped with stack sampling facilities meeting the specifications listed in Rule 62-297.345, F.A.C. Tank No. 10 shall be equipped with a pressure/vacuum relief valve.

2. The chemicals used at this facility shall not exceed the following quantities during any 12 month period: 513,090 lbs/yr (256.6 TPY) methylene chloride; 1,000,000 lbs/yr (500 TPY) polymer; 15,000,000 lbs/yr (7,500 TPY) polyol; and, 10,000,000 lbs/yr (5,000 TPY) toluene diisocyanate. Cleanup solvent losses shall not exceed: 2 gallons/month isopropyl alcohol; 5,770 lbs/yr 1,1,1-trichloroethane with silicone lubricant; and, 1,000 lbs/yr mineral spirits.

PERMITTEE:
Foamex, L.P.

Permit Number: AC48-214902
Expiration Date: May 15, 1996

SPECIFIC CONDITIONS:

Compliance with this condition shall be determined by records of purchases, inventory changes, and receipts for chemicals disposed of off site. The permittee shall maintain a log showing the amount of chemicals used each month to document compliance with these limitations.

3. Maximum operation times for each operation at this facility are:

<u>Operation</u>	<u>hrs/day</u>	<u>days/week</u>	<u>weeks/year</u>	<u>hrs/year</u>
Slabstock Process	3	5	52	780
Rebond Process	24	6	52	7488
Foam Fabrication Operations	16	6	52	4992
Tank Storage	24	7	52	8760
Steam Boiler	24	7	52	8760
Environmental Heating				400

The permittee shall maintain a log to show compliance with this condition. The log shall be kept for a minimum of 5 years and made available for Department inspection upon request.

4. For inventory purposes, the estimated emissions from this facility (based on the emissions factors listed in the application, the limitations on operation time, and chemical usage) are:

AVERAGE EMISSIONS FROM FACILITY OPERATIONS:

<u>Chemicals</u>	<u>lbs/hr</u>	<u>Emissions TPY</u>
methylene chloride	1519.11	261.03
1,1,1-trichloroethane	2.5	1.86
toluene diisocyanate	0.3746	0.157

PERMITTEE:
Foamex, L.P.

Permit Number: AC48-214902
Expiration Date: May 15, 1996

SPECIFIC CONDITIONS:

MAXIMUM POTENTIAL EMISSIONS FROM INDIVIDUAL OPERATIONS ARE ESTIMATED TO BE:

	<u>Operation/chemical</u>	<u>Emissions</u>	
		<u>lbs/hr</u>	<u>TPY</u>
I.	Slabstock Polyurethane Foam Production/ toluene diisocyanate	0.37	0.14
II.	Foam Line Stack/ methylene chloride	955.8	153.93
III.	Long Bun Storage Room Stack/ methylene chloride	557.55	89.79
IV.	Foam Fabric Operations/ methylene chloride	5.1	14.41
	1,1,1-trichloroethane	2.5	1.86
V.	Rebond Polyurethane Foam Production/ toluene diisocyanate	0.0046	0.017
VI.	Tank Storage (Tank No. 10)/ methylene chloride	0.66	2.92
VII.	Steam Boiler	Trace amounts of the normal products of combustion (less than 1 lb/hr of all pollutants)	
VIII.	Environmental Heating	Trace amounts of the normal products of combustion (less than 1 lb/hr of all pollutants)	

5. To confirm the emission factors used in the application, the permittee shall measure the emissions from both slabstock process stacks for methylene chloride by EPA Method 18, as described in 40 CFR 60, Appendix A. If the measured emission factors are significantly different from the ones used in the application, the applicant shall remodel the emissions from the facility using the emission factors established by the stack test to confirm that the Acceptable Ambient Concentration for methylene chloride is not exceeded. Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then sources may be tested at less than capacity (i.e. less than 90% of the maximum operating rate

PERMITTEE:
Foamex, L.P.

Permit Number: AC48-214902
Expiration Date: May 15, 1996

SPECIFIC CONDITIONS:

allowed by this permit); in this case, subsequent source operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. The stack test and modeling results shall be submitted to the Department with the application for permit to operate required by Specific Condition No. 8. (Rule 62-4.070, F.A.C.)

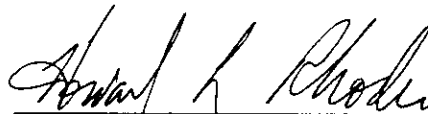
6. Progress reports on the replacement of the process and/or the installation of air pollution control equipment to meet MACT requirements shall be submitted to the Orange County Environmental Protection Department and the Department's Central District and Bureau of Air Regulation on or before the dates noted below.

First Progress Report	Due by June 30, 1995
Second Progress Report	Due by January 31, 1995
Third Progress Report	Due by June 30, 1996

7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. (Rule 62-4.090, F.A.C.)

8. An application for an operation permit shall be submitted to the Department's Central District office at least 90 days prior to the expiration date of this construction permit. 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. (Rules 62-4.055 and 62-4.220, F.A.C.)

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director
Division of Air Resources
Management

ATTACHMENT 3

Harding Lawson Associates



September 30, 1994

26005.F21.816

Mr. C.H. Fancy, P.E.
Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED
OCT 3 1994

Bureau of
Air Regulation

Response to Proposed
Permit Conditions
Foamex L.P.
DEP File No. AC48-214902

Dear Mr. Fancy:

We are in receipt of the Technical Evaluation and Preliminary Determination and the proposed Construction Permit conditions issued by your office on August 22, 1994 for the Foamex L.P. (Foamex) flexible polyurethane foam manufacturing facility located in Orlando. This letter presents a summary of the comments by Foamex and Harding Lawson Associates/Cross Tessitore & Associates (HLA/CTA) and requested changes to the proposed Specific Conditions #2, 3 and 4 issued by FDEP. The comments presented in this letter have been discussed previously by phone with Mr. Willard Hanks of your staff. Mr. Hanks requested that the comments be submitted in writing.

Attachments 2 and 3 provide pages from the permit application Volume 1 and Volume 2, respectively, that have been revised to reflect the changes requested in each comment. As discussed in the following comments and as stated in these attachments, the requested changes in Specific Conditions 2, 3 and 4 do not result in any substantial increase in the calculated maximum ground level concentrations for methylene chloride, toluene diisocyanate, or 1,1,1-trichloroethane. The maximum ground level concentrations remain below the FDEP Acceptable Ambient Air Concentrations (AAAC) for these compounds.

Should you have any questions or comments regarding this information, please do not hesitate to contact Ms. Kay Rykowski or Mr. Joe Tessitore at (407) 851-1484.

Yours very truly,

HARDING LAWSON ASSOCIATES

Patricia Kay Rykowski

Patricia Kay Rykowski
Project Engineer

PKR/pkr

foamex12.doc/

cc: Mr. Arthur Pereira, Foamex L.P.
Mr. Doug Terrill, Foamex L.P.

Joseph L. Tessitore
Joseph L. Tessitore, P.E.
Managing Principal

Engineering and
Environmental Services

4763 South Conway Road Orlando, FL 32812 407/851-1484 Fax 407/855-0369

A Subsidiary of Harding Associates • Offices Nationwide

September 26, 1994
 26005.F21.816
 Mr. C.H. Fancy, P.E.
 FDEP
 Page 2

COMMENT 1

Foamex requests a change in the limits on the annual quantities of chemicals used at the facility stated in Specific Condition 2. Increases in the annual usage rates of polymer, polyol and toluene diisocyanate are requested to allow for production of high density foam grades that do not require the use of a blowing agent. Polymer and polyol do not contain Volatile Organic Compounds (VOC) or Hazardous Air Pollutants (HAP), and the usage rates of these materials do not affect any emission calculations included in the application. Attachment 1 provides Material Safety Data Sheets (MSDS) for these chemicals.

Since toluene diisocyanate (TDI) is also required for the production of such high density foam grades, an increase in the annual TDI usage rate is also requested. Both emission rates and air quality impact levels of TDI were calculated in the permit application, thus HLA/CTA revised the analyses to account for the requested increase in the annual TDI usage rate. A summary of the revised analyses are provided below.

	As Stated in Permit Application	Revised As Per Requested Change to Specific Condition 2
Annual TDI Usage Rate	2325 TPY	5000 TPY
Maximum TDI Emission Rate	0.129 TPY 0.3746 lb/hr	0.157 TPY 0.3746 lb/hr
Maximum TDI Ground Level Concentration	0.15 $\mu\text{g}/\text{m}^3$ (8 hr) 0.02 $\mu\text{g}/\text{m}^3$ (24 hr)	0.15 $\mu\text{g}/\text{m}^3$ (8 hr) 0.02 $\mu\text{g}/\text{m}^3$ (24 hr)
FDEP AAAC - TDI	0.36 $\mu\text{g}/\text{m}^3$ (8 hr) 0.0864 $\mu\text{g}/\text{m}^3$ (24 hr)	

As a result of the requested change in annual TDI usage, the total annual TDI emissions increased from 0.129 tpy to 0.31 tpy. However, the maximum 8-hr and 24-hr TDI groundlevel concentrations did not change as a result of this emissions increase and thus remain well below the FDEP Acceptable Ambient Air Concentrations (AAAC).

An increase in the annual usage rate of mineral spirits to 1000 lbs/hr is also requested. Mineral spirits is included as one of the cleanup solvents used at the facility and this usage rate does not impact any emission calculations included in the application.

September 26, 1994
26005.F21.816
Mr. C.H. Fancy, P.E.
FDEP
Page 3

The requested change in Specific Condition 2 is provided below.

From:

2. The chemicals used at this facility shall not exceed the following quantities during any 12 month period: 513,090 lbs/yr (256.6 TPY) methylene chloride; 270,000 lbs/yr (135 TPY) polymer; 8,800,000 lbs/yr (4,400 TPY) polyol; and, 4,650,000 lbs/yr (2,325 TPY) toluene diisocyanate. Cleanup solvent losses shall not exceed: 2 gallons/month isopropyl alcohol; 5,770 lbs/yr 1,1,1-trichloroethane with silicone lubricant; and, 97.5 lbs/yr mineral spirits.

Compliance with this condition shall be determined by records of purchases, inventory changes, and receipts for chemicals disposed of off site. The permittee shall maintain a log showing the amount of chemicals used each month to document compliance with these limitations.

To:

2. The chemicals used at this facility shall not exceed the following quantities during any 12 month period: 513,090 lbs/yr (256.6 TPY) methylene chloride; 1,000,000 lbs/yr (500 TPY) polymer; 15,000,000 lbs/yr (7,500 TPY) polyol; and, 10,000,000 lbs/yr (5,000 TPY) toluene diisocyanate. Cleanup solvent losses shall not exceed: 2 gallons/month isopropyl alcohol; 5,770 lbs/yr 1,1,1-trichloroethane with silicone lubricant; and, 1000 lbs/yr mineral spirits.

Compliance with this condition shall be determined by records of purchases, inventory changes, and receipts for chemicals disposed of off site. The permittee shall maintain a log showing the amount of chemicals used each month to document compliance with these limitations.

September 26, 1994
 26005.F21.816
 Mr. C.H. Fancy, P.E.
 FDEP
 Page 4

COMMENT 2

Foamex requests a change in the maximum operating times stated in Specific Condition 3 for the Slabstock Process, Rebond Process and Foam Fabrication operations at the facility. The weekly Slabstock Process operation is requested to be increased from 4 days/wk to 5 days/wk, the daily Foam Fabrication operation is requested to be increased from 12 hrs/day to 16 hrs/day, and the daily Rebond process operation is requested to be increased from 12 hrs/day to 24 hrs/day. These changes are requested to provide for greater flexibility in production scheduling, and to allow for production of the high density foam grades as discussed under Comment 1 above. The requested increases in operating times for each operation result in an increase in the annual emission rate of TDI; this emission increase was considered along with the increase in annual TDI usage discussed under Comment 1 above. The requested increases in the operating time for the Foam Fabrication and Rebond process operations result in an increase in the maximum 24-hr average emission rates for the facility exhaust fans (Source Numbers 3 through 21) used in the dispersion modeling analysis for calculation of maximum 24-hr ground level concentrations of methylene chloride, TDI and 1,1,1-Trichloroethane. HLA/CTA revised this analysis to account for the increased emission rates, and the results are summarized below.

	As Stated in Permit Application	Revised As Per Requested Change to Specific Condition 3
Methylene Chloride 24 hr Maximum Emission Rate Exhaust Fans 3-19	0.64949 lb/hr	0.67078 lb/hr
TDI 24 hr Maximum Emission Rate Rebond Exhaust Fans 20-21	0.00115 lb/hr	0.0023 lb/hr
1,1,1-Trichloroethane 24 hr Maximum Emission Rate Exhaust Fans 3-19	0.07353 lb/hr	0.098 lb/hr
Maximum 24 hr Ground Level Concentrations:		
Methylene Chloride	84.9 $\mu\text{g}/\text{m}^3$	85.3 $\mu\text{g}/\text{m}^3$
TDI	0.02 $\mu\text{g}/\text{m}^3$	0.02 $\mu\text{g}/\text{m}^3$
1,1,1-Trichloroethane	2.3 $\mu\text{g}/\text{m}^3$	3.1 $\mu\text{g}/\text{m}^3$
FDEP AAAC - Methylene Chloride	417.6 $\mu\text{g}/\text{m}^3$ (24 hr)	
FDEP AAAC - TDI	0.0864 $\mu\text{g}/\text{m}^3$ (24 hr)	
FDEP AAAC - 1,1,1-Trichloroethane	9168 $\mu\text{g}/\text{m}^3$ (24 hr)	

These results show that the maximum 24 hr ground level concentrations for each compound remain well below the FDEP AAAC.

September 26, 1994
 26005.F21.816
 Mr. C.H. Fancy, P.E.
 FDEP
 Page 5

The requested change in Specific Condition 2 is provided below.

From:

3. Maximum operation times for each operation at this facility are:

Operation	hrs/day	days/week	weeks/year	hrs/year
Slabstock Process	3	4	52	624
Rebond Process	12	6	52	3744
Foam Fabrication Operations	12	6	52	3744
Tank Storage	24	7	52	8760
Steam Boiler	24	7	52	8760
Environmental				400

The permittee shall maintain a log to show compliance with this condition. The log shall be kept for a minimum of 5 years and made available for Department inspection upon request.

To:

3. Maximum operation times for each operation at this facility are:

Operation	hrs/day	days/week	weeks/year	hrs/year
Slabstock Process	3	5	52	780
Rebond Process	24	6	52	7488
Foam Fabrication Operations	16	6	52	4992
Tank Storage	24	7	52	8760
Steam Boiler	24	7	52	8760
Environmental				400

The permittee shall maintain a log to show compliance with this condition. The log shall be kept for a minimum of 5 years and made available for Department inspection upon request.

September 26, 1994
 26005.F21.816
 Mr. C.H. Fancy, P.E.
 FDEP
 Page 6

COMMENT 3

As a result of the issues addressed in Comments 1 and 2, Foamex requests a modification of the estimated emissions stated in Specific Condition 4. The requested changes in Specific Condition 4 are provided below.

From:

4. For inventory purposes, the estimated emissions from this facility (based on the emissions factors listed in the application, the limitations on operation time, and chemical usage) are:

AVERAGE EMISSIONS FROM SIX OPERATIONS:

	lbs/hr	TPY
methylene chloride	1519.11	261.03
1,1,1-trichloroethane	2.5	1.86
toluene diisocyanate	0.3746	0.129

MAXIMUM POTENTIAL EMISSIONS FROM INDIVIDUAL OPERATIONS ARE ESTIMATED TO BE:

Operation/chemical	Emissions	
	lbs/hr	TPY
I. Slabstock Polyurethane Foam Production		
a) toluene diisocyanate	0.37	0.12
b) Foam Line Stack		
methylene chloride	955.8	153.93
c) Long Bun Storage Room Stack		
methylene chloride	577.55	89.79
II. Foam Fabric Operations		
methylene chloride	5.1	14.41
1,1,1-trichloroethane	2.5	1.86
III. Rebond Polyurethane Foam Production		
toluene diisocyanate	0.0046	0.009
IV. Tank Storage (Tank No. 10)		
methylene chloride	0.66	2.92
V. Steam Boiler	Trace amounts of the normal products of combustion (less than 1 lb/hr of all pollutants)	
VI. Environmental Heating	Trace amounts of the normal products of combustion (less than 1 lb/hr of all pollutants)	

September 26, 1994
 26005.F21.816
 Mr. C.H. Fancy, P.E.
 FDEP
 Page 7

To:

4. For inventory purposes, the estimated emissions from this facility (based on the emissions factors listed in the application, the limitations on operation time, and chemical usage) are:

AVERAGE EMISSIONS FROM SIX OPERATIONS:

	lbs/hr	TPY
methylene chloride	1519.11	261.03
1,1,1-trichloroethane	2.5	1.86
toluene diisocyanate	0.3746	0.157

MAXIMUM POTENTIAL EMISSIONS FROM INDIVIDUAL OPERATIONS ARE ESTIMATED TO BE:

Operation/chemical	Emissions	
	lbs/hr	TPY
I. Slabstock Polyurethane Foam Production		
a) toluene diisocyanate	0.37	0.14
b) Foam Line Stack methylene chloride	955.8	153.93
c) Long Bun Storage Room Stack methylene chloride	577.55	89.79
II. Foam Fabric Operations		
methylene chloride	5.1	14.41
1,1,1-trichloroethane	2.5	1.86
III. Rebond Polyurethane Foam Production		
toluene diisocyanate	0.0046	0.017
IV. Tank Storage (Tank No. 10)		
methylene chloride	0.66	2.92
V. Steam Boiler	Trace amounts of the normal products of combustion (less than 1 lb/hr of all pollutants)	
VI. Environmental Heating	Trace amounts of the normal products of combustion (less than 1 lb/hr of all pollutants)	

ATTACHMENT 4

OFFICE MEMORANDUM

To: Willard Hanks
FDEP - Tallahassee

From: Kay Rykowski

Date: January 26, 1995

Subject: Foamex, L.P.
Draft Permit to Construct

Project Number: 26005.F21.816

Post-It Fax Note 7671	Date: 1/26/95	# of pages: 2
To WILLARD HANKS	From KAY RYKOWSKI	
Co/Dept: BUREAU OF AIR REGULATION	Co: HLA/CTA	
Phone # (904) 488-1344	Phone # (407) 851-1484	
Fax # (904) 922-6979	Fax # (407) 855-0369	

This memo is to present to you in writing the items we discussed during previous phone conversations regarding draft permit number AC48-214902 for Foamex, L.P.

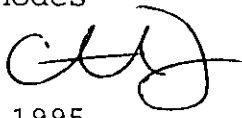
1. The value stated in Specific Condition 3 as the maximum operating time for the Slabstock Process is given as 7188 hrs/yr, but should be 7488 hrs/yr. (See attached).
2. Specific Condition 1 should be revised to state that the enhanced exhaust systems shall be completed 12 months after the permit issue date.
3. Specific Condition 6 should be revised to reflect the following dates:

First Progress Report	Due by June 30, 1995
Second Progress Report	Due by January 31, 1996
Third Progress Report	Due by June 30 1996



Florida Department of
Environmental Protection

Memorandum

To: Howard L. Rhodes
From: Clair Fancy 
Date: February 3, 1995
Subject: Approval of Construction Permit
AC 48-214902
Foamex, L.P.

Attached for your approval and signature is an "after-the-fact" air construction permit for an existing flexible polyurethane foam manufacturing facility located in Orlando, Orange County, Florida. The permit also authorizes modifications to the exhaust/dispersion system. The modifications will lower the ambient air impact of the methylene chloride and other pollutant emissions to below the Acceptable Ambient Concentration.

I recommend your approval and signature.

CF/WH/t

Attachment

2-2-95

Clair,
FTL, review, edit,
initial / signature.
Hubs,
Bum