

Check Sheet

Company Name: Sun Graphic Inc.
Permit Number: App AC 06-184651
PSD Number: _____
Permit Engineer: _____

Application:

- | | |
|--|--------------------------|
| <input checked="" type="checkbox"/> Initial Application | Cross References: |
| <input checked="" type="checkbox"/> Incompleteness Letters | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> Responses | <input type="checkbox"/> |
| <input type="checkbox"/> Waiver of Department Action | <input type="checkbox"/> |
| <input type="checkbox"/> Department Response | |
| <input type="checkbox"/> Other | |

Intent: *& Revised*

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

Final

Determination:

- Final Determination
- Signed Permit
- BACT or LAER Determination
- Other

Post Permit Correspondence:

- Extensions/Amendments/Modifications
- Other

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:
*Donna Nichol, Pres.
 Sun Graphic Inc.
 1830 NW 21st St.
 Pompano Beach, FL
 33060*

4. Article Number
P 407 852 931

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
X *[Signature]*

6. Signature - Agent
X

7. Date of Delivery
3-7-91

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 407 852 931

RECEIPT FOR CERTIFIED MAIL

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

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

Sent to *Donna Nichol*

Street and No. *Sun Graphic*

City, State and ZIP Code *Pompano Beach, FL*

Postage \$

Certified Fee

Special Delivery Fee

Restricted Delivery Fee

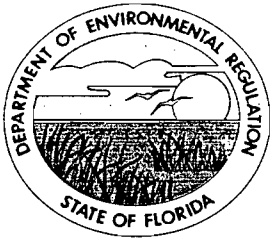
Return Receipt showing to whom and Date Delivered

Return Receipt showing to whom, Date, and Address of Delivery

TOTAL Postage and Fees \$

Postmark or Date *3-13-91*
AC 06-184651

PS Form 3800, June 1985



Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. Norm Nichol, President
Sun Graphic, Inc.
1820 Northwest 21st Street
Pompano Beach, Florida 33060

March 12, 1991

Enclosed is construction permit AC 06-184651 to construct an air stripper tower system for contaminated groundwater at your lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Barry D. Anderson

for

C. H. Fancy, P.E.
Chief

Bureau of Air Regulation

Copy furnished to:

Isidore Goldman, SE District
Al Linero, Broward Co.
Greg Worley, USEPA
Robert Baker, P.E.
Don Elhenbeck, BWC

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of buisness on 3-13-91.

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

Keri Doker
Clerk

3-13-91
Date

Final Determination

Sun Graphic, Inc.
Pompano Beach, Florida
Broward County

Air Stripper Tower System
for Contaminated Groundwater

Permit No. AC 06-184651

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

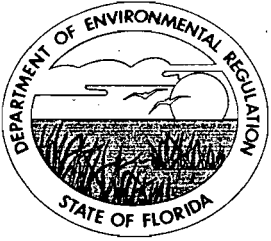
February 8, 1991

Final Determination

The Technical Evaluation and Preliminary Determination for the permit to construct an air stripper tower system for contaminated groundwater at Sun Graphic, Inc.'s lithographic blanket manufacturing plant located at 1820 Northwest 21st Street, Pompano Beach, Broward County, Florida, was distributed on October 26, 1990. An Amendment to the October 26, 1990, Technical Evaluation and Preliminary Determination was distributed on December 21, 1990. The Notice of Intent to Issue was published in the Fort Lauderdale News/Sun-Sentinel on January 4, 1991. Copies of the evaluation were available for public inspection at the Broward County Environmental Quality Control Board (EQCB) office in Fort Lauderdale and the Department offices in West Palm Beach and Tallahassee.

Broward County EQCB's air toxic program submitted calculations showing that the proposed air stripper should be at least 27 feet high to keep the toluene concentration below the acceptable ambient air concentration. The Department notes that the proposed height of the air stripper is 28.3 feet.

Because of delays in the issuance of this permit, the Department is extending its expiration date. The final action of the Department will be to issue construction permit AC 06-184651 as proposed in the Amendment to the October 26, 1990, Technical Evaluation and Preliminary Determination, except for the change noted above.



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:
Sun Graphic, Inc.
1820 NW 21st Street
Pompano Beach, Florida 33060

Permit Number: AC 06-184651
Expiration Date: July 1, 1991
County: Broward
Latitude/Longitude: 26°15'26"N
80°08'49"W
Project: Air Stripper Tower
System

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

For the construction of a 99+% efficient contaminated ground water air stripper system consisting of a shallow well, collection tank, tower feed pump (50 GPM flow), 28.3 ft. (min) high air stripper tower (1.5 ft. diameter packed column containing 22 ft. of packing), mist eliminator, air blower (1,060 ACFM), and a biocide feeder. The air stripper system will be located at the permittee's existing lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida.

The UTM coordinates of this site are Zone 17, 585.2 km E and 2904.3 km N.

The source 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. DER letter dated August 23, 1990.
2. Baker Enviro. Eng. letter dated September 18, 1990.
3. Baker Enviro. Eng. letter dated November 7, 1990.
4. Broward County EQCB memo dated January 23, 1991.

PERMITTEE:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: July 1, 1991

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:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: July 1, 1991

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:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: July 1, 1991

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 proscribed 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. 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 this permit, and

PERMITTEE:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: July 1, 1991

GENERAL CONDITIONS:

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.

14. 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 contaminated water flow to the air stripper column shall not exceed 50 GPM. The permittee shall check the flow rate to the column (stripper) at least once during each normal business day that the system is in operation.

2. The concentration of toluene in the contaminated ground water shall not exceed 370,000 ug/l. During start-up, the influent and effluent from the air stripper shall be sampled for the BTEX compounds every 12 hours for 3 days by Methods 5030/8020 or other methods with the approval of the Department. Following start-up, the influent and effluent from the air stripper shall be monitored monthly for BTEX compounds.

3. Based on the procedures described in the Department's October 20, 1987, memorandum titled Final Air Stripper Review Procedure, or other methods with prior approval of the Department, the emissions from the air stripper system shall not exceed:

PERMITTEE:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: July 1, 1991

SPECIFIC CONDITIONS:

Pollutant	Maximum lbs/hr	Emissions TPY (Avg)*
Toluene	9.26	0.04
Benzene	0.007	0.0004
Ethyl Benzene	0.0242	0.0008
Xylene	0.0320	0.0004
MEK	0.0014	0.00004

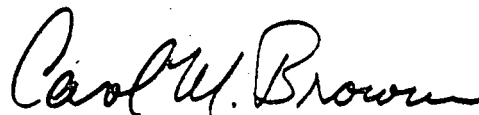
* Excludes initial 3 month operation.

The Department may require analysis of the ground water for any suspected compound it has good reason to believe is being emitted in excess of the quantities listed in the application.

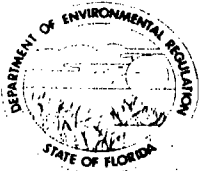
4. The air stripper system may operate continuously, 8760 hrs/yr.
5. The air stripper column system shall not discharge air pollutants in quantities that cause or contribute to objectionable odors.
6. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
7. An application for an operation permit must be submitted to the Southeast 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. Rule 17-4.220).

Issued this 8th day
of March, 1991

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Carol M. Browner, Secretary



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

Interoffice Memorandum

TO: Carol M. Browner
FROM: Clair Fancy *CF*
DATE: February 25, 1991
SUBJ: Approval of Construction Permit AC 06-184651
Sun Graphic, Inc.

Attached for your approval and signature is a permit prepared by the Bureau of Air Regulation for the above mentioned company to construct an air stripper tower system for contaminated groundwater at Sun Graphic, Inc.'s lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida.

The only comments submitted were from Broward County EQCB.

Day 90, after which this permit will be issued by default, is March 28, 1991.

I recommend your approval and signature.

CF/WH/plm

Attachments

*PATSO2 update
3/8/91
BOM*



6821 S.W. Archer Road
Gainesville, FL 32608
TEL (904) 371-9451
FAX (904) 378-1500

RECEIVED

September 5, 1991
B-2253

SEP 10 1991
Division of Air
Resources Management

Ms. Daniela Banu
Broward County Office of
Natural Resource Protection
621 South Andrews Avenue
Fort Lauderdale, Florida 33301

RE: Sun Graphic, Inc.
Construction Permit # AC 06-18465
Certificate of Completion of Construction of the Air Stripper

Dear Ms. Banu:

Based on successful installation and operational tests of the air
stripper, I am requesting that a 5 year operating permit be issued.

Attached is the following:

- Two (2) copies of the FDER Certificate of Completion
of Construction for the Air Stripper.
- A check for \$30.00 (filing fee).

Please let me know if you need further information or have any questions
concerning this application.

Sincerely,

BAKER ENVIRONMENTAL ENGINEERING, INC.

Robert A. Baker, P.E.

xc: Willard Hanks - FDER (Tallahassee)
Bill Baker - Sun Graphic, Inc.
Stephanie Brooks - FDER (SW)
Norm Nichol - Rycoline, Inc.



6821 S.W. Archer Road
Gainesville, FL 32608
TEL (904) 371-9451
FAX (904) 378-1500

September 5, 1991
B-2253

Ms. Stephanie Brooks
Florida Department of Environmental
Regulation
Southwest District
1900 South Congress Avenue
West Palm Beach, Florida 33406

RE: Sun Graphic, Inc.
Construction Permit # AC 06-184651
Certificate of Completion of Construction for the Air Stripper

Dear Ms. Brooks:

Based on successful installation and operational tests of the air
stripper, I am requesting that a 5 year operating permit be issued.

Attached are the following:

- Three (3) copies of the FDER Certificate of
Completion of Construction for the
Air Stripper.
- A check for \$750.00 (filing fee) based on Sun Graphic, Inc.
being a minor source per the SRS permit.

Please let me know if you need further information or have any questions
concerning this application.

Sincerely,

BAKER ENVIRONMENTAL ENGINEERING, INC.

A handwritten signature in black ink that reads "Robert A. Baker". The signature is written in a cursive, flowing style.

Robert A. Baker, P.E.

xc: Daniela Banu - BCONRP
Willard Hanks - FDER (Tallahassee)
Bill Baker - Sun Graphic, Inc.
Norm Nichol - Rycoline, Inc.

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. Norm Nichol, President Sun Graphic, Inc. 1820 Northwest 21st Street Pompano Beach, FL 33060	4. Article Number P 407 852 675
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED .	
5. Signature - Addressee X <i>Jo Anne Smollen</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery 5-3-91	

PS Form 3811, Apr. 1989

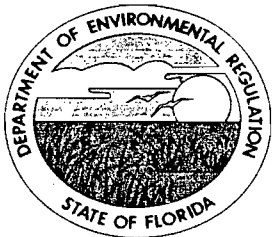
*U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

P 407 852 675
RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

PS Form 3800, June 1985
 *U.S.G.P.O. 1989-234-555

Sent to Mr. Norm Nichol, Sun Graphic	
Street and No. 1820 Northwest 21st Street	
P.O., State and ZIP Code Pompano Beach, FL 33060	
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: 4-30-91 Permit: AC 06-184651	



Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

April 23, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Norm Nichol, President
Sun Graphic, Inc.
1820 Northwest 21st Street
Pompano Beach, Florida 33060

Dear Mr. Nichol:

RE: AC 06-184651, Air Stripper Tower System

The Department is in receipt of Baker Environmental Engineering, Inc.'s March 18, 1991 letter, requesting the referenced construction permit be extended to allow additional time for the application for permit to operate to be submitted. This request is acceptable to the Department thereby the expiration date of construction permit No. AC 06-184651 is extended from July 1, 1991, to October 1, 1991. A copy of this letter must be filed with the referenced construction permit and shall become a part of that permit.

Sincerely,

Carol M. Browner
Secretary

CMB/kt

attachment

cc: I. Goldman, SE District
A. Linero, Broward County
R. Baker, P.E.



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

Interoffice Memorandum

TO: Carol Browner, Secretary

FROM: Clair Fancy, Chief *CHF*
Bureau of Air Regulation

DATE: April 23, 1991

SUBJ: Amendment of Construction Permit No. AC 06-184651
Sun Graphic, Inc.

RECEIVED

APR 24 1991

Office of the Secretary

Attached for your approval and signature is a letter that will extend the expiration date of a permit to construct a stripper tower system for Sun Graphic, Inc. of Pompano Beach, Broward County, Florida. The extension was requested to allow time to submit the application for permit to operate.

This request is not controversial and I recommend your approval and signature.

CHF/WH/t

attachment



6821 S.W. Archer Road
Gainesville, FL 32608
TEL (904) 371-9451
FAX (904) 378-1500

March 18, 1991
B-2254

RECEIVED
MAR 20 1991
DER - BAQM

Mr. Clair H. Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Sun Graphic, Inc. Air Permit for an Air Stripper Tower System for
Contaminated Groundwater, Permit No. AC 06-184651.

Dear Mr. Fancy

Sun Graphic, Inc has received the above referenced permit, which was mailed from your office on March 13, 1991. Per Specific Condition 7, Sun Graphic is required to submit an application for an operation permit to the Southeast District at least 90 days before the expiration of the construction permit. Since the construction permit expires July 1, 1991, the operation permit application would have to be submitted by April 2nd to meet the 90-day deadline. Construction of the air stripper system will not be completed until June 1991. As a result, Sun requests a 90-day extension (until October 1, 1991) of the permit for the air stripper tower per Specific Condition 6 of the referenced permit.

Thank you for your help in this matter. Please call me if you have any questions or need additional information.

Sincerely,

BAKER ENVIRONMENTAL ENGINEERING, INC.

Robert A Baker, P.E.

RAB: phm

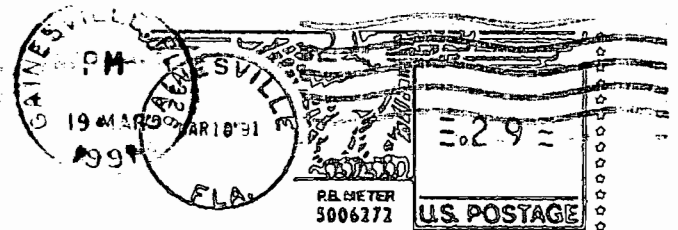
xc: Dan Smolen, Sun Graphic
Isidore Goldman, SE District
Al Linero, Broward County

W. Namba

12207



6821 S.W. Archer Road
Gainesville, FL 32608



Mr. Clair H. Fancy
Bureau of Air Regulation
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400



Office of Natural Resource Protection

Air Quality
621 S. Andrews Avenue
Ft. Lauderdale, FL 33301
(305) 765-4437

RECEIVED
JAN 28 1991
DER-BAQM

MEMORANDUM

TO: Willard Hanks
Bureau of Air Regulation, DER

FROM: Daniel Dossman *DD*
Office of Natural Resource Protection, Air Section

DATE: January 23, 1991

REFERENCE: **Sun Graphic Inc,**
1820 NW 21 Street
Pompano Beach, Fl. 33060
DER File No AC 06-184651/Air Stripper

COMMENTS:

We received the letter dated November 7, 1990 in which the applicant requested a modification to the preliminary permit determination for the air stripper permit (AC 06-184651).

The Air Toxics Evaluation was conducted and revealed that the emissions are not in accordance with the FDER Acceptable Ambient Air Standards. Toluene emissions are modeling high.

An increase of the stack height by two feet is recommended.

Please find attached the comparative calculations.

BROWARD COUNTY EQCB AIR SECTION AIR TOXICS PROGRAM

12/13/90 AIR STRIPPER

PROJECT: SUN GRAPHIC. INC

EMISSION CALCULATIONS	TLV FAC		FLOW RATE	50 Gal/min	STACK H(f)	27	RESULTS M.A.C>AAC
			A.S. Eff	0.999 %	AAC mg/m ³	M.A.C mg/m ³	
BENZENE	3	100	276 ppb	0.0069 lb/h	0.0071	0.0013	FALSE
TOLUENE	375	50	370000 ppb	9.1982 lb/h	1.7850	1.7328	FALSE
XYLENE	435	100	1280 ppb	0.0318 lb/h	1.0353	0.0060	FALSE
ETHYLBENZENE	435	100	966 ppb	0.0240 lb/h	1.0353	0.0045	FALSE
MEK	590	100	56 ppb	0.0014 lb/h	1.4042	0.0003	FALSE

NOTE:
Calculations revealed compliance when stack height is increased by two feet

BROWARD COUNTY EQCB AIR SECTION AIR TOXICS PROGRAM

12/13/90 AIR STRIPPER

PROJECT: SUN GRAPHIC. INC

EMISSION CALCULATIONS	TLV FAC		FLOW RATE	50 Gal/min	STACK H(f)	25	RESULTS M.A.C>AAC
			A.S. Eff	0.999 %	AAC mg/m ³	M.A.C mg/m ³	
BENZENE	3	100	276 ppb	0.0069 lb/h	0.0071	0.0015	FALSE
TOLUENE	375	50	370000 ppb	9.1982 lb/h	1.7850	2.0627	TRUE
XYLENE	435	100	1280 ppb	0.0318 lb/h	1.0353	0.0071	FALSE
ETHYLBENZENE	435	100	966 ppb	0.0240 lb/h	1.0353	0.0054	FALSE
MEK	590	100	56 ppb	0.0014 lb/h	1.4042	0.0003	FALSE

NOTE:

Air stripper emissions are NOT in accordance with the FDER Acceptable Ambient Air standards
Toluene emissions are modeling high

RECOMMENDATION:

Increase stack height by two feet

BROWARD COUNTY O.N.R.P.
621 S. ANDREWS AVENUE
FORT LAUDERDALE
FLORIDA 33301

Phone # (305) 765-4436

Fax # (305) 765-4109

To:

WILLARD HANKS
Bureau of Air Management

From:

Daniel Dorman
ONRP
Broward County

Date:

1/23/91

Project No.:

If you cannot read any portion of this transmission, please contact O.N.R.P. as soon as possible.

Number of pages including cover sheet 4

MEMORANDUM

TO: Willard Hanks
Bureau of Air Regulation, DER

FROM: Daniel Dossman *DD.*
Office of Natural Resource Protection, Air Section

DATE: January 23, 1991

REFERENCE: Sun Graphic Inc,
1820 NW 21 Street
Pompano Beach, Fl. 33060
DER File No AC 06-184651/air stripper

COMMENTS:

We received the letter dated November 7, 1990 in which the applicant requested a modification to the preliminary permit determination for the air stripper permit (AC 06-184651).

The Air Toxics Evaluation was conducted and revealed that the emissions are not in accordance with the FDER Acceptable Ambient Air Standards. Toluene emissions are modeling high. Increases stack height by two feet is recommended.

Please find attached.

BROWARD COUNTY EQCB AIR SECTION AIR TOXICS PROGRAM

12/13/90 AIR STRIPPER

PROJECT: SUN GRAPHIC. INC

EMISSION CALCULATIONS	TLV FAC		FLOW RATE	50 Gal/min	STACK H(ft)	27	RESULTS M.A.C>AAC
			A.S. Eff	0.999 %	AAC mg/m ³	M.A.C mg/m ³	
BENZENE	3	100	276 ppb	0.0069 lb/h	0.0071	0.0013	FALSE
TOLUENE	375	50	370000 ppb	9.1982 lb/h	1.7850	1.7328	FALSE
XYLENE	455	100	1280 ppb	0.0318 lb/h	1.0353	0.0060	FALSE
ETHYLBENZENE	435	100	966 ppb	0.0240 lb/h	1.0353	0.0045	FALSE
MEK	590	100	56 ppb	0.0014 lb/h	1.4042	0.0003	FALSE

NOTE:
Calculations revealed compliance when stack height is increased by 2 feet

BROWARD COUNTY EQCB AIR SECTION AIR TOXICS PROGRAM

12/13/90 AIR STRIPPER

PROJECT: SUN GRAPHIC. INC

EMISSION CALCULATIONS	FLOW RATE		50 Gal/m ³ n	STACK H(f)	25	RESULTS	
	TLV	FAC	A.S. Eff	0.999 %	AAC mg/m ³		M.A.C mg/m ³
BENZENE	3	100	276 ppb	0.0069 lb/h	0.0071	0.0015	FALSE
TOLUENE	375	50	370000 ppb	9.1982 lb/h	1.7850	2.0627	TRUE
XYLENE	435	100	1280 ppb	0.0318 lb/h	1.0353	0.0071	FALSE
ETHYLBENZENE	435	100	966 ppb	0.0240 lb/h	1.0353	0.0054	FALSE
MEK	590	100	56 ppb	0.0014 lb/h	1.4042	0.0003	FALSE

NOTE:

Air stripper emissions are NOT in accordance with the FDER Acceptable Ambient Air standards
Toluene emissions are modeling high

RECOMMENDATION:

Increase stack height two feet

Dim Graphics Air Strips

$$\text{ht.} = 28.3 \text{ ft} = 8.63 \text{ m}$$

$$\text{dia.} = 1.5 \text{ ft} = 0.46 \text{ m}$$

$$\text{flow} = 1,060 \text{ FT}^3/\text{MIN}$$

$$\text{Temp} = \text{amb}$$

$$\text{Emission} = 9.26 \text{ lbs/hr toluene}$$

$$A = \frac{\pi D^2}{4} = \frac{\pi (1.5)^2}{4} = 1.77 \text{ FT}^2$$

$$\text{Velocity} = \frac{1,060 \text{ FT}^3}{\text{MIN } 1.77 \text{ FT}^2} \times \frac{\text{MIN}}{60 \text{ SEC}} = 10 \text{ FPS}$$

$$= 3.05 \text{ m/s}$$

$$\text{Emission} = \frac{9.26 \text{ lbs}}{\text{hr}} \times \frac{454 \text{ grams}}{\text{lb}} \times \frac{\text{hr}}{3600 \text{ SEC}} = 1.17 \text{ g/s toluene}$$

$$\text{Max 1 hr impact } 996.4 \text{ ug/m}^3 @ 122 \text{ m}$$

$$\text{max 8 hr} = (996.4)(0.7) = 697.5 \text{ ug/m}^3$$

$$\text{max annual} = (996.4)(0.2) = 199.3 \text{ ug/m}^3$$

$$\text{Annual No threat level} = 2,000$$

$$\text{TLV} = 375 \text{ mg/m}^3$$

$$\text{AAC}_{40 \text{ hr/wk}} = \frac{40}{40} \frac{1}{100} 375 \times 10^3 = 3,750 \text{ ug/m}^3$$

$$\text{AAC}_{\text{Cont.}} = \frac{40}{168} \frac{1}{100} 375 \times 10^3 = 892 \text{ ug/m}^3$$

*** SCREEN-1.1 MODEL RUN ***
*** DRAFT VERSION XXXXX ***

sun graphics air stripper

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = POINT
EMISSION RATE (G/S) = 1.170
STACK HEIGHT (M) = 8.63
STK INSIDE DIAM (M) = .46
STK EXIT VELOCITY (M/S) = 3.05
STK GAS EXIT TEMP (K) = 293.00
AMBIENT AIR TEMP (K) = 293.00
RECEPTOR HEIGHT (M) = .00
IOPT (1=URB,2=RUR) = 2
BUILDING HEIGHT (M) = .00
MIN HORIZ BLDG DIM (M) = .00
MAX HORIZ BLDG DIM (M) = .00

BUOY. FLUX = .00 M**4/S**3; MOM. FLUX = .49 M**4/S**2.

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	0	.0	.0	.0	.0	.0	.0	
100.	925.2	3	1.0	1.0	320.0	12.8	12.5	7.5	NO
200.	908.2	4	1.0	1.0	320.0	12.8	15.6	8.6	NO
300.	889.4	5	1.0	1.0	5000.0	12.6	16.9	8.8	NO
400.	812.0	6	1.0	1.0	5000.0	12.3	14.7	7.1	NO
500.	855.3	6	1.0	1.0	5000.0	12.3	18.0	8.5	NO
600.	813.2	6	1.0	1.0	5000.0	12.3	21.3	9.8	NO
700.	741.6	6	1.0	1.0	5000.0	12.3	24.5	11.0	NO
800.	664.9	6	1.0	1.0	5000.0	12.3	27.7	12.0	NO
900.	595.3	6	1.0	1.0	5000.0	12.3	30.8	13.0	NO
1000.	534.1	6	1.0	1.0	5000.0	12.3	33.9	14.0	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

122.	996.4	3	1.0	1.0	320.0	12.8	15.1	9.1	NO
------	-------	---	-----	-----	-------	------	------	-----	----

DWASH= MEANS NO CALC MADE (CONC = 0.0)
 DWASH=NO MEANS NO BUILDING DOWNWASH USED
 DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
 DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
 DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

 *** SUMMARY OF SCREEN MODEL RESULTS ***




State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

Interoffice Memorandum

TO: Scott Benyon

FROM: Patricia E. Comer 

DATE: January 17, 1991

RE: OGC FILE NO. 90-1690
SUN GRAPHIC, INC. v. & DER
Permit Application No. AP 06-184651

On November 21, 1990, petitioner was granted an extension of time until January 10, 1991, in which to file a petition for administrative proceedings concerning the above-captioned case. No petition or further request for extension was filed within the allotted extension of time.

If you have not taken any action since the petition was filed, the original agency action is now final. Please advise me of your disposition of this matter so that we may update and close our file.

Please call if there are any questions. Thank you for your assistance.

PEC/ld

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JAN 22 1991

Dept. of Environmental Reg.
West Palm Beach

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

DISTRICT ROUTING SLIP

TO: Clair Fancy DATE: 1/23/91

CC
TO:

	PENSACOLA	Northwest District	
	PANAMA CITY	Northwest District Branch Office	
	TALLAHASSEE	Northwest District Branch Office	
	TAMPA	Southwest District	
	ORLANDO	Central Florida District	
	MELBOURNE	Central Florida District Branch Office	
	JACKSONVILLE	Northwest District	
	GAINESVILLE	Northwest District Branch Office	
	FORT MYERS	South Florida District	
	PUNTA GORDA	South Florida District Branch Office	
	MARATHON	South Florida District Branch Office	
	WEST PALM BEACH	Southeast Florida District	
	PORT ST. LUCIE	Southeast Florida District Branch Office	

Reply Optional Reply Required Info Only
Date Due: _____ Date Due: _____

COMMENTS:

Looks like your permit action.

J. Goldman

FROM:

TEL:

STATE OF FLORIDA
COUNTY OF BROWARD/PALM BEACH/DADE
BEFORE THE UNDERSIGNED AUTHORITY PERSONALLY
APPEARED BRADY HATTON WHO ON
OATH SAYS THAT HE/SHE IS A DULY AUTHORIZED
REPRESENTATIVE OF THE CLASSIFIED DEPARTMENT OF
THE FORT LAUDERDALE NEWS/SUN-SENTINEL, DAILY
NEWSPAPERS PUBLISHED IN BROWARD/PALM BEACH/DADE
COUNTY, FLORIDA THAT THE ATTACHED COPY OF
ADVERTISEMENT, BEING A

RECEIVED

JAN 14 1991

DER-BAQM

NOTICE

IN THE MATTER OF

AC 06-184651

IN THE CIRCUIT COURT, WAS PUBLISHED IN SAID
NEWSPAPER IN THE ISSUES OF
C-1/4-1X

CS4902

AFFIANT FURTHER SAYS THAT THE SAID FORT
LAUDERDALE NEWS/SUN-SENTINEL ARE NEWSPAPERS
PUBLISHED IN SAID BROWARD/PALM BEACH/DADE
COUNTY, FLORIDA, AND THAT THE SAID NEWSPAPERS
HAVE HERETOFORE BEEN CONTINUOUSLY PUBLISHED IN
SAID BROWARD/PALM BEACH/DADE COUNTY, FLORIDA,
EACH DAY, AND HAVE BEEN ENTERED AS SECOND
CLASS MATTER AT THE POST OFFICE IN FORT
LAUDERDALE, IN SAID BROWARD COUNTY, FLORIDA,
FOR A PERIOD OF ONE YEAR NEXT PRECEDING THE
FIRST PUBLICATION OF THE ATTACHED COPY OF
ADVERTISEMENT; AND AFFIANT FURTHER SAYS THAT
HE/SHE HAS NEITHER PAID NOR PROMISED ANY PERSON,
FIRM OR CORPORATION ANY DISCOUNT, REBATE,
COMMISSION OR REFUND FOR THE PURPOSE OF
SECURING THIS ADVERTISEMENT FOR PUBLICATION
IN SAID NEWSPAPERS.

AUTHORIZED REPRESENTATIVE

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 04 DAY OF JANUARY
A.D. 1990

Laura L. Bezahl
NOTARY PUBLIC

Notary Public, State of Florida
My Commission Expires July 10, 1993

cc: J. Finkle
G. E. ... BCORP
S. ...

The Department of Environmental Regulation hereby gives notice of its intent to issue an order construction permit (AC 06-184651) to Sun Graphic Inc., 1820 N.W. 21st St., Pompano Beach, Florida 33060. The permit authorizes the installation of an air stripper tower system to treat contaminated groundwater at their lithographic plates manufacturing plant located at 1820 N.W. 21st St., Pompano Beach, Broward Co. Florida. The system will emit up to 0.26 lb/hr and 0.04 TPD toluene (along with smaller quantities of benzene, ethyl benzene, xylene, MEX and other organic pollutants from the contaminated groundwater. Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) determinations were not required. These emissions will not cause a violation of any ambient air quality standard or Prevention of Significant Deterioration (PSD) increment. The Department is issuing this notice 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, F.S. 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 32309-2400, within 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 (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 the 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 applications are 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 32309-2400 Department of Environmental Regulation Southeast District 1900 S. Congress Avenue, Suite A West Palm Beach, Florida 33406 Broward County Environmental Quality Control Board 521 South Andrews Avenue Fort Lauderdale, Florida 33310 Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination, January 4, 1991.

RECEIVED

JAN 18 1991

Dept. of Environmental Reg.
West Palm Beach

FORT LAUDERDALE NEWS/SUN-SENTINEL
 PUBLISHED DAILY
 FORT LAUDERDALE, BROWARD COUNTY, FLORIDA
 BOCA RATON, PALM BEACH COUNTY, FLORIDA
 MIAMI, DADE COUNTY, FLORIDA

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 an air pollution construction permit (AC 06-184651) to Sun Graphic Inc., 1820 N.W. 21st St., Pompano Beach, Florida 33060. The permit authorizes the installation of an air stripper tower system to treat contaminated groundwater at their lithographic blanket manufacturing plant located at 1820 N.W. 21st St., Pompano Beach, Broward Co., Florida. The system will emit up to 9.26 lbs/hr and 0.04 TPY toluene along with smaller quantities of benzene, ethyl benzene, xylene, MED and other organic pollutants from the contaminated groundwater. Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) determinations were not required. These emissions will not cause a violation of any ambient air quality standard or Prevention of Significant Deterioration (PSD) increment. 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, F.S. 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 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 (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 the 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 formu-

STATE OF FLORIDA
 COUNTY OF BROWARD/PALM BEACH/DADE
 BEFORE THE UNDERSIGNED AUTHORITY PERSONALLY APPEARED *D. Johnson* WHO ON OATH SAYS THAT HE/SHE IS A DULY AUTHORIZED REPRESENTATIVE OF THE CLASSIFIED DEPARTMENT OF THE FORT LAUDERDALE NEWS/SUN-SENTINEL, DAILY NEWSPAPERS PUBLISHED IN BROWARD/PALM BEACH/DADE COUNTY, FLORIDA THAT THE ATTACHED COPY OF ADVERTISEMENT, BEING A

RECEIVED

JAN 14 1991

DER-BAQM

NOTICE

IN THE MATTER OF

AC 06-184651

IN THE CIRCUIT COURT, WAS PUBLISHED IN SAID NEWSPAPER IN THE ISSUES OF
 C, 1/4, 1X

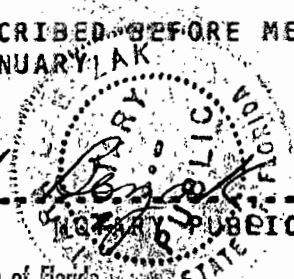
CS4902

AFFIANT FURTHER SAYS THAT THE SAID FORT LAUDERDALE NEWS/SUN-SENTINEL ARE NEWSPAPERS PUBLISHED IN SAID BROWARD/PALM BEACH/DADE COUNTY, FLORIDA, AND THAT THE SAID NEWSPAPERS HAVE HERETOFORE BEEN CONTINUOUSLY PUBLISHED IN SAID BROWARD/PALM BEACH/DADE COUNTY, FLORIDA, EACH DAY, AND HAVE BEEN ENTERED AS SECOND CLASS MATTER AT THE POST OFFICE IN FORT LAUDERDALE, IN SAID BROWARD COUNTY, FLORIDA, FOR A PERIOD OF ONE YEAR NEXT PRECEDING THE FIRST PUBLICATION OF THE ATTACHED COPY OF ADVERTISEMENT; AND AFFIANT FURTHER SAYS THAT HE/SHE HAS NEITHER PAID NOR PROMISED ANY PERSON, FIRM OR CORPORATION ANY DISCOUNT, REBATE, COMMISSION OR REFUND FOR THE PURPOSE OF SECURING THIS ADVERTISEMENT FOR PUBLICATION IN SAID NEWSPAPERS.

.....
 AUTHORIZED REPRESENTATIVE

SWORN TO AND SUBSCRIBED BEFORE ME
 THIS 04 DAY OF JANUARY, 1990
 A.D. 1990

Nara L. ...
 (SEAL)



Notary Public, State of Florida

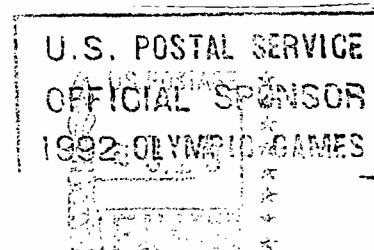
My Commission Expires July 20, 1993

Bonded Thru Troy Foin - Insurance Inc.

cc: A. Hanks
 A. Zinner, BCNRP
 J. Goldmann, SED

SUN GRAPHIC INC.

1820 Northwest 21st Street • Pompano Beach, Florida 33069



Mr. Willard Hanks
Air Engineer
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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JAN 14 1991
DER-BACK



late 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 applications are 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
Southeast District
1900 S. Congress Avenue, Suite A

West Palm Beach,
Florida 33406

Broward County Environmental Quality Control Board

621 South Andrews Avenue
Fort Lauderdale, Florida 33310

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.
January 4, 1991

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. Norm Nichol, Pres. Sun Graphic, Inc. 1820 NW 21st St. Pompano Beach, FL 33060	4. Article Number P 256 395 059 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
5. Signature - Addressee X	Always obtain signature of addressee or agent and DATE DELIVERED.
6. Signature - Agent X <i>Caslyn Blanton</i>	8. Addressee's Address (ONLY if requested and fee paid) 8
7. Date of Delivery 12-26-90	

PS Form 3811, Apr. 1989

* U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

P 256 395 059

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, June 1985

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

Sent to <i>Mr. Norm Nichol</i>	
Street and No. <i>Sun Graphic</i>	
P.O., State and ZIP Code <i>1820 NW 21st St.</i>	
Postage <i>Pompano Bch, FL</i>	
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 <i>AC 06-184651</i> <i>12-21-90</i>	



Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

December 18, 1990

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Norm Nichol, President
Sun Graphic, Inc.
1820 Northwest 21st Street
Pompano Beach, Florida 33060

Dear Mr. Nichol:

Attached is one copy of an amendment to the Technical Evaluation and Preliminary Determination and proposed permit to construct an air stripper tower system for contaminated groundwater at your existing lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida.

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,

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

CHF/WH/plm

Attachments

c: Isidore Goldman, SE District
Al Linero, Broward Co.
Greg Worley, USEPA
Robert Baker, P.E.
Don Elhenbeck, BWC

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Applications for Permits by:

Sun Graphic, Inc.
1820 N.W. 21st Street
Pompano Beach, Florida 33060

DER File No. AC 06-184651

INTENT TO ISSUE

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

The applicant, Sun Graphic, Inc., applied on August 3, 1990, to the Department of Environmental Regulation for a permit to construct an air stripper tower system to treat contaminated groundwater at the existing lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida.

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

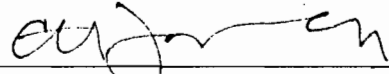
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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



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

Copies furnished to:

Isidore Goldman, SE District
Al Linero, Broward Co.
Greg Worley, USEPA
Robert Baker, P.E.
Don Elhenbeck, BWC

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 12-21-90.

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

Kenn Baker
Clerk

12-21-90
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 an air pollution construction permit (AC 06-184651) to Sun Graphic Inc., 1820 N.W. 21st St., Pompano Beach, Florida 33060. The permit authorizes the installation of an air stripper tower system to treat contaminated groundwater at their lithographic blanket manufacturing plant located at 1820 N.W. 21st St., Pompano Beach, Broward Co., Florida. The system will emit up to 9.26 lbs/hr and 0.04 TPY toluene along with smaller quantities of benzene, ethyl benzene, xylene, MEK and other organic pollutants from the contaminated groundwater. Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) determinations were not required. These emissions will not cause a violation of any ambient air quality standard or Prevention of Significant Deterioration (PSD) increment. 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 applications 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 applications are 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
Southeast District
1900 S. Congress Avenue, Suite A
West Palm Beach, Florida 33406

Broward County Environmental Quality
Control Board
621 South Andrews Avenue
Fort Lauderdale, Florida 33310

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

Amendment to the October 26, 1990
Technical Evaluation
and
Preliminary Determination

Sun Graphic, Inc.
Pompano Beach, Florida
Broward County

Air Stripper Tower System
for Contaminated Groundwater

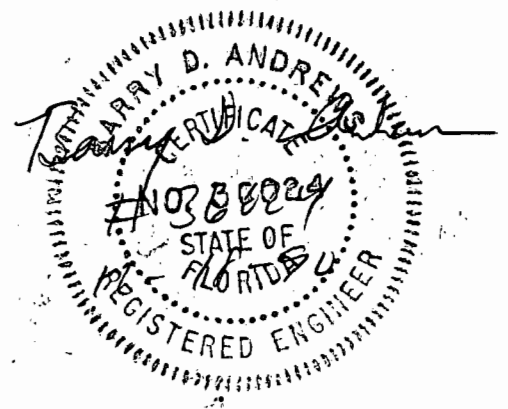
Permit No. AC 06-184651

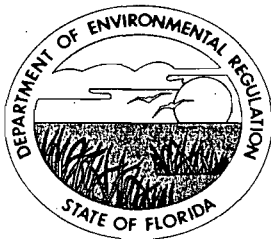
Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

December 18, 1990

Amendment

The Technical Evaluation and Preliminary Determination for the permit to construct an air stripper tower system to treat contaminated ground water at Sun Graphic, Inc.'s lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida, was distributed on October 26, 1990. The Department told the applicant not to publish the Public Notice until the design changes that were confirmed in Baker Environmental Engineering, Inc.'s November 7, 1990, letter were evaluated. The design changes were operating the air stripper system at a higher flow of water containing higher concentrations of pollutants. Although annual emissions are unchanged, the maximum hourly emissions are higher. The maximum concentration caused by these emissions in the ambient air, knowing the emissions and stack parameters, can be estimated using EPA's Screening Model. From the TLV values for the specific pollutants, an acceptable ambient air concentration for each pollutant can be determined. These calculations were done on the proposed project and the results show the impact from this source will be below the acceptable ambient air standards. The attached amended Public Notice and proposed permit addresses the changes requested. To provide reasonable assurance that the air stripper system will comply with the air regulations, the Department did retain limits on the maximum flow of contaminated water, maximum concentration of pollutant in the water, and the emissions in Specific Conditions Nos. 1, 2, and 3. The applicant must publish the attached Public Notice to resume the permitting process.





Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachimann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:

Sun Graphic, Inc.
1820 NW 21st Street
Pompano Beach, Florida 33060

Permit Number: AC 06-184651
Expiration Date: March 1, 1991
County: Broward
Latitude/Longitude: 26°15'26"N
80°08'49"W

Project: Air Stripper Tower
System

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

For the construction of a 99+% efficient contaminated ground water air stripper system consisting of a shallow well, collection tank, tower feed pump (50 GPM flow), 28.3 ft. (min) high air stripper tower (1.5 ft. diameter packed column containing 22 ft. of packing), mist eliminator, air blower (1,060 ACFM), and a biocide feeder. The air stripper system will be located at the permittee's existing lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida.

The UTM coordinates of this site are Zone 17, 585.2 km E and 2904.3 km N.

The source 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. DER letter dated August 23, 1990.
2. Baker Enviro. Eng. letter dated September 18, 1990.
3. Baker Enviro. Eng. letter dated November 7, 1990.

PERMITTEE:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

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:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

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:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

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 proscribed 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. 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 this permit, and

PERMITTEE:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

GENERAL CONDITIONS:

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.

14. 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 contaminated water flow to the air stripper column shall not exceed 50 GPM. The permittee shall check the flow rate to the column (stripper) at least once during each normal business day that the system is in operation.

2. The concentration of toluene in the contaminated ground water shall not exceed 370,000 ug/l. During start-up, the influent and effluent from the air stripper shall be sampled for the BTEX compounds every 12 hours for 3 days by Methods 5030/8020 or other methods with the approval of the Department. Following start-up, the influent and effluent from the air stripper shall be monitored monthly for BTEX compounds.

3. Based on the procedures described in the Department's October 20, 1987, memorandum titled Final Air Stripper Review Procedure, or other methods with prior approval of the Department, the emissions from the air stripper system shall not exceed:

PERMITTEE:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

SPECIFIC CONDITIONS:

Pollutant	Maximum lbs/hr	Emissions TPY (Avg)*
Toluene	9.26	0.04
Benzene	0.007	0.0004
Ethyl Benzene	0.0242	0.0008
Xylene	0.0320	0.0004
MEK	0.0014	0.00004

* Excludes initial 3 month operation.

The Department may require analysis of the ground water for any suspected compound it has good reason to believe is being emitted in excess of the quantities listed in the application.

4. The air stripper system may operate continuously, 8760 hrs/yr.

5. The air stripper column system shall not discharge air pollutants in quantities that cause or contribute to objectionable odors.

6. 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 (F.A.C. Rule 17-4.090).

7. An application for an operation permit must be submitted to the Southeast 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. Rule 17-4.220).

Issued this _____ day
of _____, 1990

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E., Director
Division of Air Resources
Management



6821 S.W. Archer Road
Gainesville, FL 32608
TEL (904) 371-9451
FAX (904) 378-1500

November 7, 1990
B-2254

RECEIVED
NOV 8 1990
DER-BAQM

Mr. Willard Hanks
Bureau of Air Regulation
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: DER File No. AC 06-1B4651
In the Matter of an Application for Permit
Sun Graphic, Inc.
1820 N.W. 21st Street
Pompano Beach, FL 33060

Dear Mr. Hanks:

Per our telephone conversation November 5, this letter addresses the request from Sun Graphic, Inc. to modify the preliminary permit determination for the air stripper permit.

The specific points that Sun Graphic Inc. requests be changed are as follows:

- 1. Page 5 of 6; Specific Condition 1 states that "the contaminated water flow to the air stripper column shall not exceed 18 gpm."

Eighteen (18) gpm is the projected flow rate to obtain required drawdown and capture of the groundwater plume. Flow rates may need to be adjusted (up or down) to capture the groundwater plume and comply with the requirements of Broward County Environmental Quality Control Board (BCEQCB). Thus, the flow rate could exceed, or be less than, 18 gpm.

- 2. Page 5 of 6; Specific Condition 2 states that "the concentration of toluene in the contaminated groundwater shall not exceed 170,000 ug/l."

The highest concentration measured at the site is 170,000 ug/l toluene. However, initial concentrations may be slightly lower or higher. As the enclosed data show, even if the concentrations of each parameter are doubled, the resulting air emissions are well below the no threat levels.

Mr. Willard Hanks
November 7, 1990
Page Two

3. Page 6 of 6; Specific Condition 3. The maximum lbs/hr emissions need to be adjusted based on potentially higher flow rates and influent concentrations. The proposed maximum lbs/hr emissions are shown in Table 1. The proposed emissions, which are below the no threat levels are based on a flow rate of 50 gpm and the following influent concentrations:

Toluene	370,000 ug/l
Benzene	276 ug/l
Ethylbenzene	966 ug/l
Xylenes	1,280 ug/l
MEK	56 ug/l

The enclosed data show that if the influent concentrations are doubled from the concentrations used in our July 24, 1990 submittal, and the flow is increased from 18 gpm to 50 gpm, the emissions are still below the no threat levels for all the compounds of concern. This example is a worst-case scenario. We believe that the conditions submitted in the July 24, 1990 application will be a more accurate scenario. However, to ensure that Sun Graphic, Inc. will be operating within the permit limits, we request that the Specific Conditions in the preliminary permit determination be modified as shown in Table 1. This will provide Sun Graphic, Inc. the necessary flexibility to operate the air stripper system.

Sun Graphic, Inc. also requests that the enclosed changes be made without resubmitting the permit so that the air stripper system can be installed as soon as possible to comply with BCEQCB.

Please call me if you have questions or need additional information. Thank you for your help in this matter.

Sincerely,

BAKER ENVIRONMENTAL ENGINEERING, INC.

Patricia Markey for

Robert A. Baker, P.E.

RAB/jda

Enclosure

xc: Norm Nichol
Dan Smolen
Mary Smallwood
Patricia Markey

Table 1. Requested Changes to Specific Conditions

- Specific Condition 1. The flow to the air stripper column shall not cause the air stripper emissions to exceed the limits given in Specific Condition 3. The permittee shall check the flow rate to the column (stripper) at least once during each normal business day that the system is in operation.
- Specific Condition 2. The concentration of toluene in the groundwater shall not cause the emissions from the air stripper to exceed the limits given in Specific Condition 3. During start-up, the influent and effluent from the air stripper shall be sampled for the BTEX compounds every 12 hours for 3 days by Methods 5030/8020 or other methods with the approval of the Department. Following start-up, the influent and effluent from the air stripper shall be monitored monthly for BTEX compounds.
- Specific Condition 3. Based on the procedures described in the Department's October 20, 1987, memorandum titled Final Air Stripper Review Procedure, or other methods with prior approval of the Department, the emissions from the air stripper system shall not exceed:

<u>Pollutant</u>	<u>Maximum (lbs/hr)</u>	<u>Emissions TPY (Avg)</u>
Toluene	9.26	0.04
Benzene	0.007	0.0004
Ethyl Benzene	0.0242	0.0008
Xylene	0.0320	0.0004
MEK	0.0014	0.00004

NOTE: THESE CALCULATIONS ARE BASED UPON:

- 1) INCREASING THE HIGHEST CONCENTRATION FOUND IN GROUNDWATER SAMPLES BY 200%
- 2) INCREASING THE MASS FLOW RATE THROUGH THE SYSTEM BY A FACTOR OF 277 %
- 3) CUMULATIVE EFFECT OF ITEMS 1 AND 2 IS A 550 % INCREASE IN THE TOTAL EMISSIONS PER HOUR

INPUTS:

50 GPM
 1060 ACFM
 UG/L
 TOLUENE 370000
 BENZENE 276
 ETHYLBE 966
 XYLENES 1280
 MEK 56
 REMOVAL 100 %

OUTPUTS:

1892.5 LITERS/MIN
 30.0 M3/MIN
 LB/HR
 9.2640
 0.0069
 0.0242
 0.0320
 0.0014
 23326.0
 17.4
 60.9
 80.7
 3.5

SCREEN MODEL = 107.8 UG/M³ FOR 1 LB/HR OF POLLUTANT EMISSION RATE

MODEL CONVERSION FACTORS: 8-HOUR = 0.7
 24-HOUR = 0.4
 ANNUAL = 0.1

EXAMPLE CALCULATION 107.8 ug/m³ x 9.26 lb/hr x 0.1 = 99.86 ug/m³

CAT	NO THREAT LEVELS ug/m ³			MODEL RESULTS ug/m ³			
	8-HOUR	24-HOUR	ANNUAL	8-HOUR	24-HOUR	ANNUAL	
	TOLUENE	B	7500	1786	2000	699.1	399.5
BENZENE	A	30	71	0.12	0.5215	0.2980	0.0745 *
ETHYLBENZENE	A	4350	1036	0	1.8251	1.0429	0.2607
XYLENES	A	4350	1036	300	2.4184	1.3819	0.3455
MEK	A	5900	1405	80	0.1058	0.1058	0.1058

* BENZENE IS THE WORST CASE, IT REMAINS AT 60% OF THE NO-THREAT LEVEL.



6821 S.W. Archer Road
Gainesville, FL 32608
TEL (904) 371-9451
FAX (904) 378-1500

RECEIVED

November 5, 1990
B-2254

NOV 7 1990

DER-BAQM

Office of the General Counsel
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: DER File No. AC 06-1B4651
In the Matter of an Application for Permit
Sun Graphic, Inc.
1820 N.W. 21st Street
Pompano Beach, FL 33060

Dear Reader:

Sun Graphic, Inc. requests a 45 to 60-day extension to the 14 days required to petition for an administrative proceeding (hearing) filed pursuant to the provisions of Section 120.57, Florida Statutes, Sun Graphic, Inc..

Sun Graphic, Inc. applied on July 24, 1990 to the Department of Environmental Regulation (DER) for a permit to temporarily operate an air stripper for a groundwater remediation project at Sun's Pompano Beach facility. On October 26, 1990, the DER mailed its "Intent to Issue" to applicant, Sun Graphic, Inc. The DER's notice included a draft permit to be issued which applicant believes contains terms and conditions substantially affecting applicant's interests. Applicant, therefore, submits this petition to extend the time to file for an administrative hearing.

Applicant intends to negotiate with the DER for a final permit which applicant deems acceptable without going to an administrative hearing. Therefore, Sun Graphic requests an extension to file for an administrative hearing until January 1, 1991.

The name, address, and telephone number of Applicant-Petitioner are stated in the heading. The DER's Permit File No. is AC 06-184651 and the county in which the project is proposed in Broward County.

Applicant-Petitioner received notice of the DER's proposed action through mail delivery of its Intent to Issue posted October 26, 1990.

Applicant-Petitioner believes that its substantial interests are affected by the DER's proposed action. Certain terms and conditions of the draft permit may impose practical restraints on Applicant-Petitioner's ability to operate the groundwater remediation system without violating the law. Unless relief is granted in the form of modifications to the permit, which are described below, Applicant-Petitioner could be in violation of requirements imposed by Broward County Environmental Quality Control Board (BCEQCB) to

treat groundwater. The specific points of contention are described as follows:

1. Page 5 of 6; Specific Condition 1 states that "the contaminated water flow to the air stripper column shall not exceed 18 gpm."

Eighteen (18) gpm is the projected flow rate to obtain required drawdown and capture of the groundwater plume. Flow rates may need to be adjusted (up or down) to capture the groundwater plume and comply with the requirements of BCEQCB. Thus, the flow rate could exceed, or be less than, 18 gpm.
2. Page 5 of 6; Specific Condition 2 states that "the concentration of toluene in the contaminated groundwater shall not exceed 170,000 ug/l".

170,000 ug/l is the projected worst case scenario. However, initial concentrations may be below or slightly above this concentration.
3. Page 6 of 6; Specific Condition 3. The maximum lbs/hr emissions need to be adjusted based on potentially higher flow rates and/or influent concentrations.

Sun Graphic, Inc. is submitting information to Mr. Willard Hanks of DER requesting the above changes to Specific Conditions 1,2 and 3 of the preliminary determination. This information shows that all emissions are below the no threat levels even at higher flow rates or higher influent concentrations.

Applicant-Petitioner respectfully requests a 45 to 60-day extension to the 14-day deadline for filing for an administrative hearing to resolve the contested points.

Sincerely,

BAKER ENVIRONMENTAL ENGINEERING, INC.



Robert A. Baker, P.E.

RAB/jda

xc: Willard Hanks
Norm Nichol
Dan Smolen
Mary Smallwood
Patricia Markey

● **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: Norm Nichol, Pres. Sun Graphic, Inc. 1820 NW 21st St. Pompano Beach, FL 33060	4. Article Number P 280 742 397
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee X Teresa D. Flint	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery 10-29-90	

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

P 280 742 397

RECEIPT FOR CERTIFIED MAIL

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

PS Form 3800, June 1985
 * U.S.G.P.O. 1989-234-555

Sent to	Norm Nichol
Street and No.	Sun Graphic
P.O., State and ZIP Code	1820 NW 21st St
Postage	Pompano Beach FL
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	10-26-90
	AC06-184651



Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

October 26, 1990

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Norm Nichol, President
Sun Graphic, Inc.
1820 Northwest 21st Street
Pompano Beach, Florida 33060

Dear Mr. Nichol:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to construct an air stripper tower system for contaminated groundwater at your existing lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida.

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,

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

CHF/WH/plm

Attachments

c: Isidore Goldman, SE District
Gary Carlson, Broward Co.
Mark Armentrout, USEPA
Robert Baker, P.E.
Don Elhenbeck, BWC

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Applications for Permits by:

Sun Graphic, Inc.
1820 N.W. 21st Street
Pompano Beach, Florida 33060

DER File No. AC 06-184651

INTENT TO ISSUE

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

The applicant, Sun Graphic, Inc., applied on August 3, 1990, to the Department of Environmental Regulation for a permit to construct an air stripper tower system to treat contaminated groundwater at the existing lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida.

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

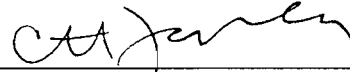
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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



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

Copies furnished to:

Isidore Goldman, SE District
Gary Carlson, Broward Co.
Mark Armentrout, USEPA
Robert Baker, P.E.
Don Elhenbeck, BWC

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 10-26-90.

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

Keri Baker
Clerk

10-26-90
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 an air pollution construction permit (AC 06-184651) to Sun Graphic Inc., 1820 N.W. 21st St., Pompano Beach, Florida 33060. The permit authorizes the installation of an air stripper tower system to treat contaminated groundwater at their lithographic blanket manufacturing plant located at 1820 N.W. 21st St., Pompano Beach, Broward Co., Florida. The system will emit 0.04 TPY toluene and smaller quantities of benzene, ethyl benzene, xylene, MEK and other organic pollutants from the contaminated groundwater. Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) determinations were not required. These emissions will not cause a violation of any ambient air quality standard or Prevention of Significant Deterioration (PSD) increment. 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 applications 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 applications are 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
Southeast District
1900 S. Congress Avenue, Suite A
West Palm Beach, Florida 33406

Broward County Environmental Quality
Control Board
621 South Andrews Avenue
Fort Lauderdale, Florida 33310

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

Technical Evaluation
and
Preliminary Determination

Sun Graphic, Inc.
Pompano Beach, Florida
Broward County

Air Stripper Tower System
for Contaminated Groundwater

Permit No. AC 06-184651

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

October 26, 1990

I. General Information

A. Applicant

Sun Graphic, Inc.
1820 Northwest 21st Street
Pompano Beach, Florida 33060

B. Request

On August 3, 1990, Sun Graphic, Inc. submitted an application for permit to construct an air stripper tower system to treat contaminated ground water caused by leaking underground solvent (toluene) storage tanks at their existing lithographic blanket manufacturing plant (SIC 3069) located at 1820 Northwest 21st Street, Pompano Beach, Broward County, Florida. The UTM coordinates of this plant are Zone 17, 585.2 km E and 2904.3 km N. The application was considered complete on September 18, 1990, when additional information on the project (Baker Environmental Engineering, Inc. September 14, 1990, letter) was received by the Department.

C. Process

Contaminated water is pumped from the collection tank for the shallow wells at an 18 GPM rate to a 28.3 foot high air stripper (packed column). Air is blown into the bottom of the column at a 1,060 ACFM rate, flows up the column countercurrent to the contaminated water flow, and through a mist eliminator at the top of the column to the atmosphere. An estimated 99+% of the organic solvents in the contaminated water evaporate into the air stream and are discharged to the ambient air with the air. The treated water is discharged to the municipal sewer systems.

D. Emissions

Using the procedure outlined in the Department's October 20, 1987, memorandum, the applicant estimated the emissions and ambient air impact of the air stripper tower system. The emissions are shown in the following table:

Pollutant	PPB in Groundwater	Max. Emissions lbs/hr	Average Emissions TPY
Benzene	138	0.0012	0.0004
Ethyl Benzene	483	0.0044	0.0008
Toluene	170,000	1.532	0.04
Xylene	640	0.0058	0.0004
MEK	28	0.0003	0.00004

II. Rule Applicability

The proposed project, construction of a groundwater air stripper tower system, is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (F.A.C.).

The plant is in an area designated nonattainment for ozone (F.A.C. Rule 17-2.410) and attainment for the other criteria pollutants (F.A.C. Rule 17-2.420).

The facility is a major source of volatile organic compounds (VOC). The proposed project is not subject to the preconstruction review requirements of F.A.C. Rule 17-2.510, New Source Review for Nonattainment Areas, because the proposed project will not result in a significant net emissions increase of VOC (F.A.C Chapter 17-2, Table 500-2).

The project is subject to F.A.C. Rule 17-2.520 which pertains to sources not subject to prevention of significant deterioration or nonattainment review. There is no applicable reasonably available control technology standard for this operation. The source shall comply with F.A.C. Rule 17-2.620(1) and (2), General Pollutant Emission Limiting Standards. The allowable VOC emissions will be set at the rates estimated by the applicant. Higher emissions could subject the project to additional regulations.

III. Technical Evaluation

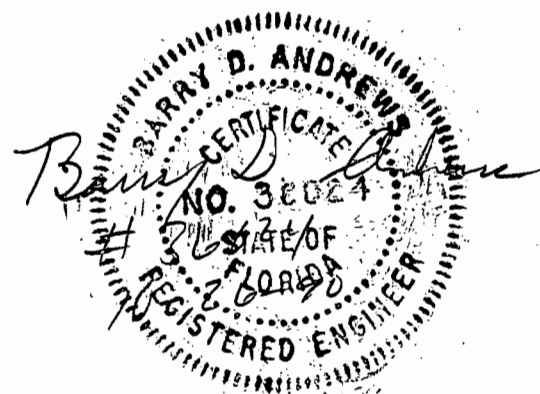
Based on the Department's October 20, 1987, memorandum on air stripper operations, air stripper towers typically remove 95-99% of the VOC from the contaminated water. From an analysis of the contaminated water and its volumetric flow through the tower, the BTEX emissions were estimated for the proposed source. The maximum concentration of these pollutants in the ambient air, knowing the emissions and stack parameters, can be estimated using EPA's Screening Model. From the TLV values for the specific pollutants, an acceptable ambient air concentration for each pollutant can be determined. These calculations were done for the proposed project and the results show the impact from this source will be well below the acceptable ambient air standards.

IV. Ambient Air Impact

Based on the modeled impact of the estimated emissions of the BTEX compounds from the proposed source, the operation of the air stripper tower system will not create a health hazard or cause/contribute to an ambient air quality violation.

V. Conclusion

Based on the information provided by Sun Graphic, Inc., the Department has reasonable assurance that the proposed construction/installation of air stripper tower system, 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, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.





Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE: Sun Graphic, Inc.
1820 NW 21st Street
Pompano Beach, Florida 33060

Permit Number: AC 06-184651
Expiration Date: March 1, 1991
County: Broward
Latitude/Longitude: 26°15'26"N
80°08'49"W

Project: Air Stripper Tower
System

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

For the construction of a 99+% efficient contaminated ground water air stripper system consisting of a shallow well, collection tank, tower feed pump (18 GPM flow), 28.3 ft. (min) high air stripper tower (1.5 ft. diameter packed column containing 22 ft. of packing), mist eliminator, air blower (1,060 ACFM), and a biocide feeder. The air stripper system will be located at the permittee's existing lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida.

The UTM coordinates of this site are Zone 17, 585.2 km E and 2904.3 km N.

The source 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. DER letter dated August 23, 1990.
2. Baker Enviro. Eng. letter dated September 18, 1990.

PERMITTEE:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

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:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

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:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

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 proscribed 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. 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 this permit, and

PERMITTEE:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

GENERAL CONDITIONS:

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.

14. 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 contaminated water flow to the air stripper column shall not exceed 18 GPM. The permittee shall check the flow rate to the column (stripper) at least once during each normal business day that the system is in operation.

2. The concentration of toluene in the contaminated ground water shall not exceed 170,000 ug/l. During start-up, the influent and effluent from the air stripper shall be sampled for the BTEX compounds every 12 hours for 3 days by Methods 5030/8020 or other methods with the approval of the Department. Following start-up, the influent and effluent from the air stripper shall be monitored monthly for BTEX compounds.

3. Based on the procedures described in the Department's October 20, 1987, memorandum titled Final Air Stripper Review Procedure, or other methods with prior approval of the Department, the emissions from the air stripper system shall not exceed:

PERMITTEE:
Sun Graphic, Inc.

Permit Number: AC 06-184651
Expiration Date: March 1, 1991

SPECIFIC CONDITIONS:

Pollutant	Maximum Emissions	
	lbs/hr	TPY (Avg)*
Toluene	1.532	0.04
Benzene	0.0012	0.0004
Ethyl Benzene	0.004	0.0008
Xylene	0.0058	0.0004
MEK	0.0003	0.00004

* Excludes initial 3 month operation.

The Department may require analysis of the ground water for any suspected compound it has good reason to believe is being emitted in excess of the quantities listed in the application.

4. The air stripper system may operate continuously, 8760 hrs/yr.
5. The air stripper column system shall not discharge air pollutants in quantities that cause or contribute to objectionable odors.
6. 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 (F.A.C. Rule 17-4.090).
7. An application for an operation permit must be submitted to the Southeast 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. Rule 17-4.220).

Issued this _____ day
of _____, 1990

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E., Director
Division of Air Resources
Management

SUN GRAPHIC INC.

PRINTING PRESS BLANKET MFG.

1820 Northwest 21st Street • Pompano Beach, Florida 33069

Phone (305) 974-0217 - 974-0218



October 8, 1990

RECEIVED

OCT 9 1990

DER-BAQM

Mr. Willard Hanks
Bureau of Air Quality
State of Florida
Department of Environmental Regulation

FAX 904/487-4938

Dear Mr. Hanks:

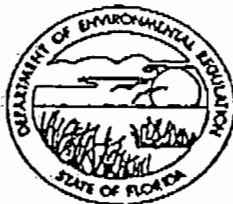
Attached is our Application to Construct Air Pollution Sources,
per Robert A. Baker, P.E., Baker Environmental Engineering, Inc.

SUN GRAPHIC, INC.

Norman J. Nichol
Norman J. Nichol
President

cc: R. A. Baker

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



APPLICATION TO ~~CREATE~~/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Stripper [] New¹ [] Existing¹

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

COMPANY NAME: Sun Graphic, Inc. COUNTY: Broward

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

SOURCE LOCATION: Street 1820 N.W. 21st Street City Pompano Beach

UTM: East (17) 585.200 km North 2904.300 km

Latitude 26 ° 15 ' 26 "N Longitude 80 ° 08 ' 49 "W

APPLICANT NAME AND TITLE: Norm Nichol, President

APPLICANT ADDRESS: same as above

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Sun Graphic, Inc.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution contro 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. also understand that a permit, if granted by the department, will be non-transferabl and I will promptly notify the department upon sale or legal transfer of the permitte establishment.

*Attach letter of authorization

Signed: [Signature]

Norm Nichol, President
Name and Title (Please Type)

Date: 10/8/90 Telephone No. 305/974-0217

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 hav been ~~examined~~/examined by me and found to be in conformity with modern engineerin principles applicable to the treatment and disposal of pollutants characterized in th permit application. There is reasonable assurance, in my professional judgmen, tha

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



6821 S.W. Archer Road
Gainesville, FL 32608
TEL (904) 371-9451
FAX (904) 378-1500

September 14, 1990
B-2254

RECEIVED

SEP 17 1990

DER - BAQM

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

RE: File No. AC 06-184651, Groundwater Air Stripper

Dear Mr. Fancy:

This letter responds to your request for additional information in your letter dated August 23, 1990, to Mr. Norm Nichol of Sun Graphic, Inc.

Question 1. How much MEK is in the contaminated groundwater?

Response: MEK was detected in two of thirteen wells at low concentrations [28 micrograms per liter (ug/l) and 15 ug/l]. MEK has not been detected in either well above the detection limit in subsequent samples (see Table 1).

Question 2. Has the leaking underground storage tank handled other solvents besides toluene? If so, what is their concentration in the groundwater?

Response: The leaking underground storage tank did not handle other solvents besides toluene. Small traces of benzene, xylene, and ethylbenzene, impurities in toluene have been detected in the groundwater. In the most recent sampling, benzene was detected in one well at 8 ug/l. Ethylbenzene and xylene were detected at 5 and 7 ug/l, respectively, in only one well (see Table 1).

Question 3. How were the maximum and average concentrations of the BTEX compounds in the contaminated groundwater determined?

Response: In the enclosed revised application, maximum concentrations of the BTEX's were determined using the worst case results to represent a worst-case scenario (see Table 1). It is expected that after 3 to 6 months, after the initial slug of contaminants has passed, that the average case will be occurring. The concentrations in the influent to the air stripper will also be diluted by combining groundwater from the most contaminated areas with groundwater from less contaminated areas at the site.

Letter to Mr. Clair H. Fancy
September 14, 1990
Page 2

Question 4. How will Sun Graphic, Inc. monitor the groundwater being treated in the air stripper?

Response: During start-up, the influent and effluent from the air stripper will be sampled for the BTEX compounds every 12 hours for 72 hours. Following start-up, the influent and effluent from the air stripper will be monitored monthly for BTEX compounds.

I am submitting revised copies of the original applications to clarify the worst case BTEX concentrations as indicated in Table 1, the inclusion of MEK data, corrections to some typographical errors and changes in some of the text that reflect the new calculations.

The air stripper is an essential part of a remedial action schedule that is subject to state and county enforcements actions if the stripper is not operational by late October. Therefore, speedy action on this application is requested.

I hope the above has addressed your concerns. Please contact me if you have any questions or need additional information.

Sincerely,

BAKER ENVIRONMENTAL ENGINEERING, INC.



Robert A. Baker

RAB:jda

BEE-90.4[WP]RAB9-14

xc: Dan Smolen
Norm Nichol
Daniela Bann - BCEQCB
Dr. H. Schneider - BCQCB
Williard Hanks - FDER



TABLE 1

SUN GRAPHICS GROUNDWATER ORGANICS DATA

Monitor Well (MW #)-Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl Benzene (ug/l)	Xylene (ug/l)	MEK (ug/l)	COD (mg/l)	Total Phenols (mg/l)
MW-1: 5/4/87	< 1	6.8	< 1	< 1	NA*	NA	NA
7/20/87	< 1	< 1	< 1	4.9	NA	NA	NA
5/1/88	3.1	< 1	< 1	1.8	NA	40	NA
7/27/88	< 1	< 1	1.7	21	< 50	NA	0.003
8/18/88	8	< 1	5	7	NA	NA	NA
MW-2: 2/9/87	NA	NA	NA	NA	NA	147	0.67
3/11/87	138	960	483	189	NA	NA	NA
5/4/87	13.2	1,718	48.3	112.5	NA	NA	NA
7/20/87	5.5	6,700	26.1	125	NA	NA	NA
5/1/88	63	150,000	150	600	28	260	6.00
5/1/88 (Dupl.)	65	170,000	140	640	25	250	4.80
7/27/88**	< 1	< 1	< 1	3	< 50	NA	1.16
8/18/88	< 20	82,000	< 20	137	NA	NA	NA
MW-3: 5/4/87	2.74	44.8	5.1	17.5	NA	NA	NA
7/20/87	12.0	6,700	29.9	98.4	NA	NA	NA
5/1/88	10.0	29,000	38	130	10	100	0.64
7/27/88**	8	< 1	11	131	< 50	NA	0.083
8/18/88	< 20	16,000	< 20	< 20	NA	NA	NA
MW-4: 3/11/87	NA	NA	NA	NA	< 25	NA	NA
5/4/87	< 1	16.7	< 1	< 1	< 25	NA	NA
7/20/87	< 1	42.1	< 1	< 1	NA	NA	NA
5/1/88	< 1	< 1	< 1	< 1	< 10	64	0.01
8/11/88	< 1	< 1	< 1	< 1	NA	NA	NA
MW-5: 5/1/88	< 1	< 1	< 1	< 1	< 10	70	0.01
8/11/88	< 1	< 1	< 1	< 1	NA	NA	NA
MW-6: 5/1/88	< 1	< 1	< 1	< 1	< 10	62	0.01
8/18/88	< 1	3.9	< 1	< 1	NA	NA	NA
MW-7: 5/1/88	< 1	5	21	18	15	150	0.01
7/27/88	< 1	< 1	< 1	< 1	< 50	NA	0.004
8/18/88	< 20	1,200	< 20	< 20	NA	NA	NA
MW-8: 5/1/88	< 1	< 1	< 1	< 1	< 10	70	0.01
8/19/88	< 1	3	< 1	< 1	NA	NA	NA
MW-9: 5/1/88	< 1	< 1	< 1	< 1	< 10	35	0.01
8/19/88	< 1	< 1	< 1	< 1	NA	NA	NA

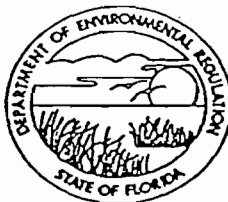
TABLE 1.2-1 (CONTINUED)

Monitor Well (MW #)-Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl Benzene (ug/l)	Xylene (ug/l)	MEK (ug/l)	COD (mg/l)	Total Phenols (mg/l)
MW-10: 5/1/88	< 1	250	< 1	< 1	< 10	54	0.02
5/1/88 (Dupl.)	< 1	130	< 1	< 1	< 10	28	0.02
6/7/88	< 1	< 1	< 1	< 1	< 10	72	<.01
7/27/88	< 1	< 1	< 1	< 1	< 50	NA	0.003
8/18/88	< 20	< 20	< 20	< 20	NA	NA	NA
MW-11: 6/7/88	5.8	8	6	77	< 10	200	<.01
7/27/88	< 1	< 1	< 1	7	< 50	NA	0.034
MW-12: 6/7/88	< 1	< 1	< 1	< 1	< 10	180	<.01
7/27/88	< 1	< 1	< 1	< 1	< 50	NA	0.007
MW-13D: 6/7/88	13	1.5	< 1	28	< 10	60	<.01
6/7/88 (Dupl.)	12	1.1	< 1	26	< 10	53	<.01
8/18/88	< 1	< 1	< 1	< 1	NA	NA	NA

* NA - Not Analyzed

** 7/27/88 - Review of the mass spectra from the BTX analyses for MW-2 and MW-3 indicate these data are incorrect.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



APPLICATION TO ~~OPERATE~~/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Stripper [] New¹ [] Existing¹

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

COMPANY NAME: Sun Graphic, Inc. COUNTY: Broward

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

SOURCE LOCATION: Street 1820 N.W. 21st Street City Pompano Beach

UTM: East (17) 585.200 km North 2904.300 km

Latitude 26 ° 15 ' 26 "N Longitude 80 ° 08 ' 49 "W

APPLICANT NAME AND TITLE: Norm Nichol, President

APPLICANT ADDRESS: same as above

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Sun Graphic, Inc.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: _____

Norm Nichol, President
Name and Title (Please Type)

Date: _____ Telephone No. 305/974-0217

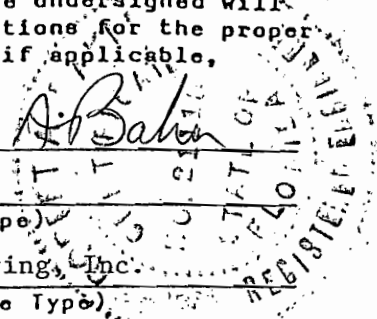
B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

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

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

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

Signed Robert A. Baker
Robert A. Baker
Name (Please Type)
Baker Environmental Engineering, Inc.
Company Name (Please Type)
6821 S.W. Archer Road, Gainesville, FL 32608
Mailing Address (Please Type)



Florida Registration No. 21118 Date: 9/14/90 Telephone No. 904/371-9451

SECTION II: GENERAL PROJECT INFORMATION

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

Installation of an air stripping system for recovery and decontamination of groundwater. The system will have a pumping rate of approximately 18 gpm and will be removing toluene.

B. Schedule of project covered in this application (Construction Permit Application Only)
Start of Construction September 1990 Completion of Construction October 1990

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.)
\$20,000(+) for air stripper

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.
None

E. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wka/yr 52; if power plant, hrs/yr _____; if seasonal, describe: _____

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

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

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

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

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

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

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? NO

a. If yes, for what pollutants? _____

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

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

- 1. Broward County is a non-attainment area for oxidants (ozone). The modification will contribute less than 4 tons per year of VOC's, therefore offsets and LAER are not applicable.
- 2. BACT is not applicable to the source since it is in a non-attainment area.

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		
Groundwater	VOC	0.02 %	1.5	See Figure 1

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

1. Total Process Input Rate (lbs/hr): N/A
2. Product Weight (lbs/hr): N/A

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

Name of Contaminant	Emission ¹ *		Allowed Emission Rate per Rule 17-2	Allowable Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Toluene	0.009	0.039	N/A	N/A	0.009	0.039	
Benzene	0.00009	0.00039	N/A	N/A	0.00009	0.00039	
Ethyl Benzene	0.00018	0.00079	N/A	N/A	0.00018	0.00079	
Xylene	0.00009	0.00039	N/A	N/A	0.00009	0.00039	
MEK	0.000009	0.000039	N/A	N/A	0.000009	0.000039	

¹See Section V, Item 2. *Emissions based on expected maximums after the first 3 months of puming.

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

³Calculated from operating rate and applicable standard.

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

D. Control Devices: (See Section V, Item 4) None

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

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating. N/A

Annual Average _____ Maximum _____

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

The recovered and decontaminated groundwater will be discharged to the sewer.

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

Stack Height: _____ ft. Stack Diameter: _____ ft.
 Gas Flow Rate: _____ ACFM _____ DSCFH Gas Exit Temperature: _____ °F.
 Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Not Applicable

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

Description of Waste _____

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

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

Manufacturer _____

Date Constructed _____ Model No. _____

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

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

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

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

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

Brief description of operating characteristics of control devices: _____

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

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

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

- 9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
- 10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

Yes No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration

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

- | | |
|---------------------------|--------------------------|
| 1. Control Device/System: | 2. Operating Principles: |
| 3. Efficiency:* | 4. Capital Costs: |

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

- a. Height: ft.
- b. Diameter: ft.
- c. Flow Rate: ACFM
- d. Temperature: °F.
- e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

- j. Applicability to manufacturing processes;
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Costs:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

- 1. Control Device:
- 2. Efficiency:¹
- 3. Capital Cost:
- 4. Useful Life:
- 5. Operating Cost:
- 6. Energy:²
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:
- a. (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

Not Applicable

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂+ _____ Wind spd/dir

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

Other data recorded _____

Attach all data or statistical summaries to this application.

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

2. Instrumentation, Field and Laboratory

- a. Was instrumentation EPA referenced or its equivalent? Yes No
- b. Was instrumentation calibrated in accordance with Department procedures?
 Yes No Unknown

B. Meteorological Data Used for Air Quality Modeling

- 1. _____ Year(s) of data from _____ / _____ / _____ to _____ / _____ / _____
month day year month day year
- 2. Surface data obtained from (location) _____
- 3. Upper air (mixing height) data obtained from (location) _____
- 4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

- 1. _____ Modified? If yes, attach description.
- 2. _____ Modified? If yes, attach description.
- 3. _____ Modified? If yes, attach description.
- 4. _____ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

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

E. Emission Data Used in Modeling

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

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

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

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

SITE LOCATION

and

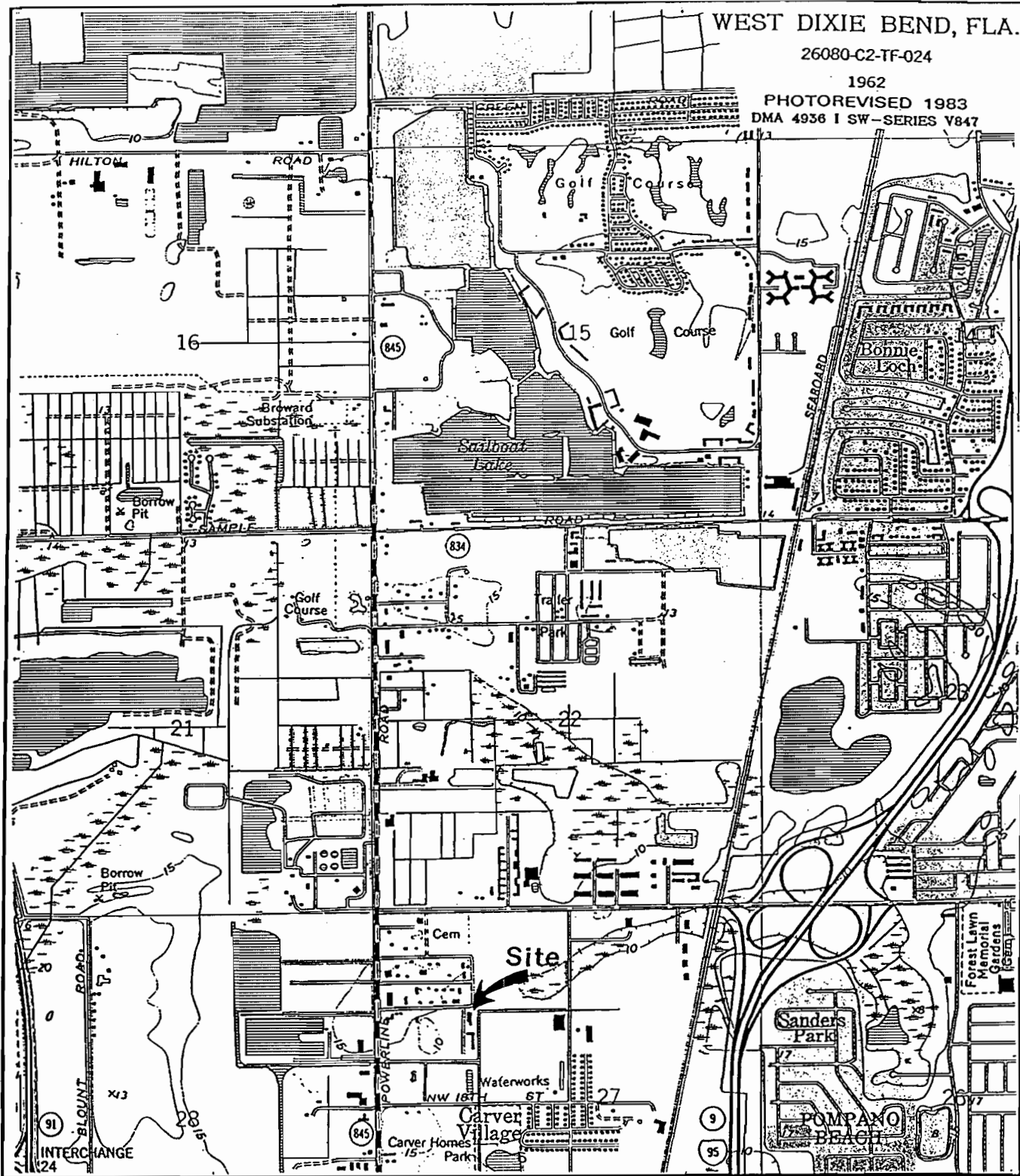
PLOT PLAN

WEST DIXIE BEND, FLA.

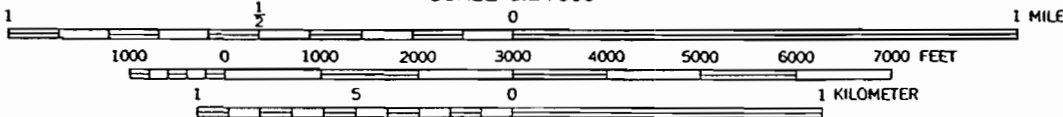
26080-C2-TF-024

1962

PHOTOREVISED 1983
DMA 4936 I SW-SERIES V847



SCALE 1:24 000



CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

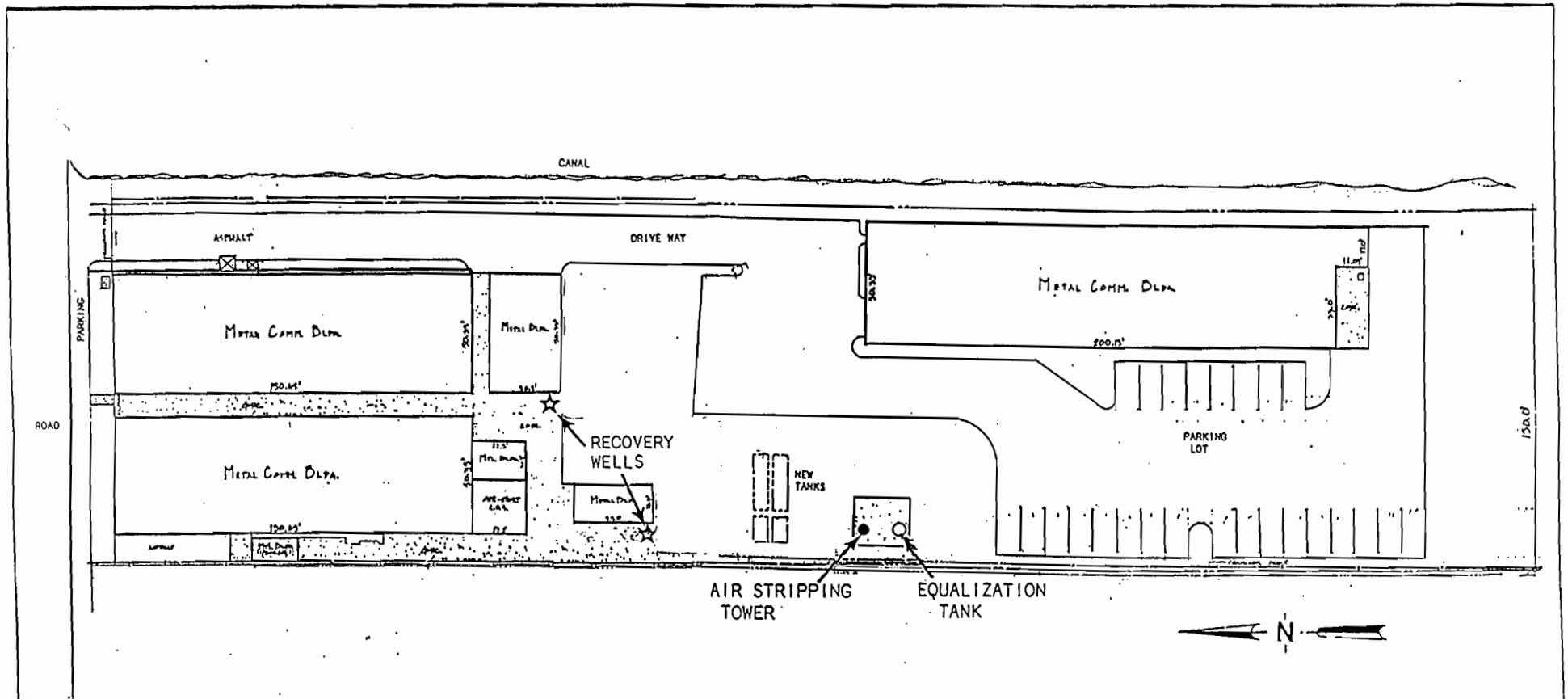


QUADRANGLE LOCATION

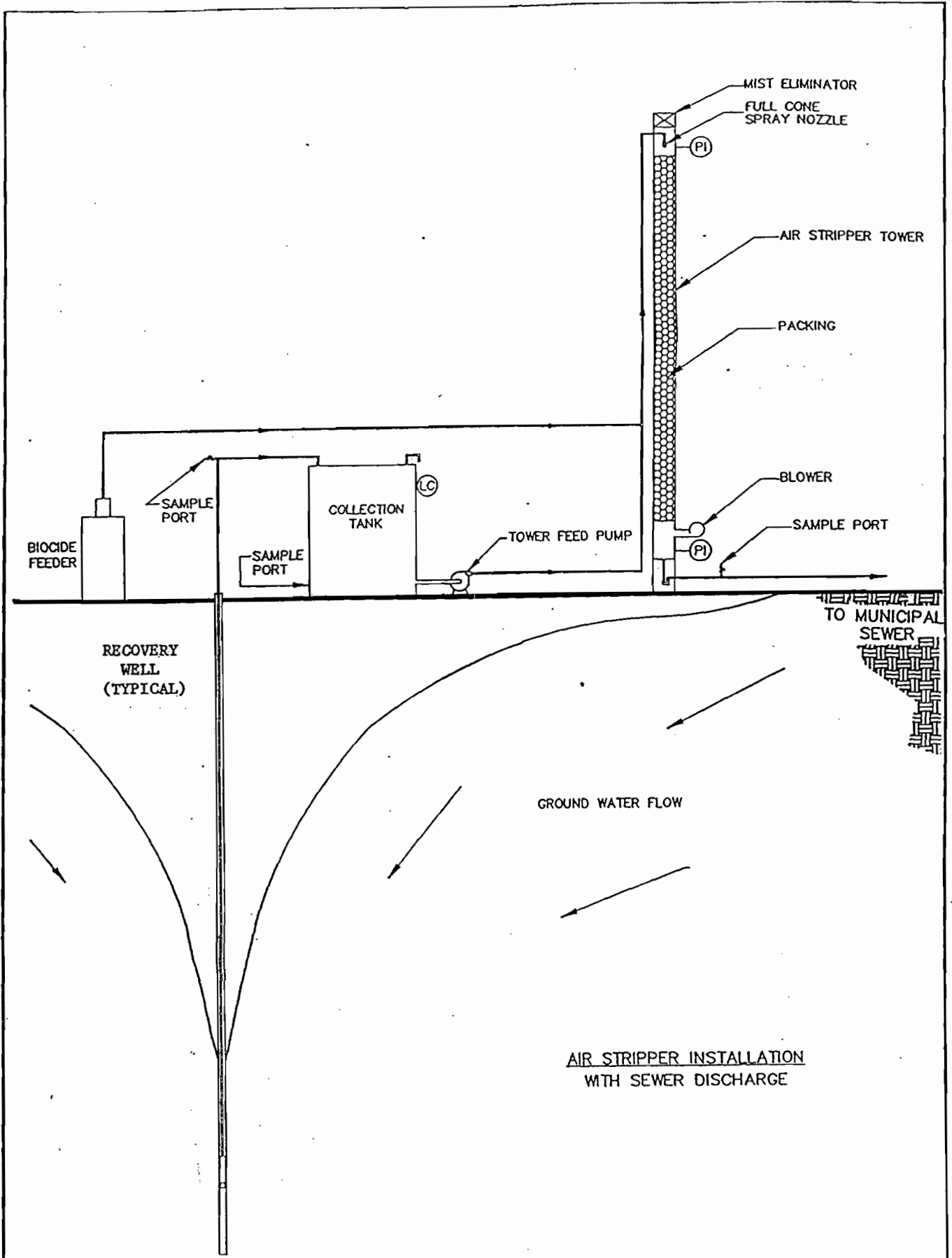
SITE LOCATION MAP

UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

BAKER
ENVIRONMENTAL ENGINEERING, INC.



REMEDATION EQUIPMENT LOCATION



PROCESS DESCRIPTION

PROCESS DESCRIPTION

Overview

Sun Graphic, Inc. (SGI) plans to operate a groundwater remediation system (air stripper) to recover a past release of toluene from underground storage tanks. The groundwater contamination has the following characteristics:

<u>Parameter</u>	<u>Maximum Concentration</u> (ug/l)	<u>Average Concentration</u> (ug/l)
Toluene	170,000	<1,000
Benzene	138	<10
Ethyl Benzene	438	<20
Xylene	640	<10
MEK	28	<1

The air stripper will have the following characteristics:

Pumping Rate	18 GPM
Air Flow	1,060 ACFM
Airstripper Height	28.3 feet
Packing Height	22 feet
Diameter	1.5 feet
Operating Hours	8,760 hrs/year
Removal Efficiency	>99%

The air stripper is anticipated to be in operation over the next 5 years.

Air Emissions

The air emissions, assuming 100% stripping, are as follows:

<u>Parameter</u>	<u>Maximum</u>		<u>Average</u>	
	<u>(lb/hr)</u>	<u>(TPY)</u>	<u>(lb/hr)</u>	<u>(TPY)</u>
Toluene	1.532	6.710	0.009	0.0390
Benzene	0.0012	0.005	0.00009	0.00039
Ethyl Benzene	0.0044	0.019	0.00018	0.00079
Xylene	0.0058	0.025	0.00009	0.00039
MEK	0.0003	0.001	0.000009	0.000039

It is expected that after 3 to 6 months the average case will be occurring due to the fact that, by this time, the initial slug of contaminants will have passed.

AIR TOXIC MODELING RESULTS

Air Toxics

In order to evaluate any toxic effect of specific compound, a Screen Drift Model was executed using a 1 lb/hr emission rate and the air stripper's characteristics. The maximum 1-hour concentration calculated by the model was 107.8 ug/m³. This result was then scaled for each contaminant and converted to an 8-hour, 24-hour, and annual concentration using the following EPA model conversion factor:

$$8\text{-hour} = 0.7 \times 1\text{-hour}$$

$$24\text{-hour} = 0.4 \times 1\text{-hour}$$

$$\text{Annual} = 0.1 \times 1\text{-hour}$$

Table 2 summarizes these results. All four compounds were found to be within the calculated no threat levels.

TABLE 1

SUN GRAPHICS GROUNDWATER ORGANICS DATA

Monitor Well (MW #)-Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl Benzene (ug/l)	Xylene (ug/l)	MEK (ug/l)	COD (mg/l)	Total Phenols (mg/l)
MW-1: 5/4/87	< 1	6.8	< 1	< 1	NA*	NA	NA
7/20/87	< 1	< 1	< 1	4.9	NA	NA	NA
5/1/88	3.1	< 1	< 1	1.8	NA	40	NA
7/27/88	< 1	< 1	1.7	21	< 50	NA	0.003
8/18/88	8	< 1	5	7	NA	NA	NA
MW-2: 2/9/87	NA	NA	NA	NA	NA	147	0.67
3/11/87	138	960	483	189	NA	NA	NA
5/4/87	13.2	1,718	48.3	112.5	NA	NA	NA
7/20/87	5.5	6,700	26.1	125	NA	NA	NA
5/1/88	63	150,000	150	600	28	260	6.00
5/1/88 (Dupl.)	65	170,000	140	640	25	250	4.80
7/27/88**	< 1	< 1	< 1	3	< 50	NA	1.16
8/18/88	< 20	82,000	< 20	137	NA	NA	NA
MW-3: 5/4/87	2.74	44.8	5.1	17.5	NA	NA	NA
7/20/87	12.0	6,700	29.9	98.4	NA	NA	NA
5/1/88	10.0	29,000	38	130	10	100	0.64
7/27/88**	8	< 1	11	131	< 50	NA	0.083
8/18/88	< 20	16,000	< 20	< 20	NA	NA	NA
MW-4: 3/11/87	NA	NA	NA	NA	< 25	NA	NA
5/4/87	< 1	16.7	< 1	< 1	< 25	NA	NA
7/20/87	< 1	42.1	< 1	< 1	NA	NA	NA
5/1/88	< 1	< 1	< 1	< 1	< 10	64	0.01
8/11/88	< 1	< 1	< 1	< 1	NA	NA	NA
MW-5: 5/1/88	< 1	< 1	< 1	< 1	< 10	70	0.01
8/11/88	< 1	< 1	< 1	< 1	NA	NA	NA
MW-6: 5/1/88	< 1	< 1	< 1	< 1	< 10	62	0.01
8/18/88	< 1	3.9	< 1	< 1	NA	NA	NA
MW-7: 5/1/88	< 1	5	21	18	15	150	0.01
7/27/88	< 1	< 1	< 1	< 1	< 50	NA	0.004
8/18/88	< 20	1,200	< 20	< 20	NA	NA	NA
MW-8: 5/1/88	< 1	< 1	< 1	< 1	< 10	70	0.01
8/19/88	< 1	3	< 1	< 1	NA	NA	NA
MW-9: 5/1/88	< 1	< 1	< 1	< 1	< 10	35	0.01
8/19/88	< 1	< 1	< 1	< 1	NA	NA	NA

TABLE 1.2-1 (CONTINUED)

Monitor Well (MW #)-Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl Benzene (ug/l)	Xylene (ug/l)	MEK (ug/l)	COD (mg/l)	Total Phenols (mg/l)
MW-10: 5/1/88	< 1	250	< 1	< 1	< 10	54	0.02
5/1/88 (Dupl.)	< 1	130	< 1	< 1	< 10	28	0.02
6/7/88	< 1	< 1	< 1	< 1	< 10	72	<.01
7/27/88	< 1	< 1	< 1	< 1	< 50	NA	0.003
8/18/88	< 20	< 20	< 20	< 20	NA	NA	NA
MW-11: 6/7/88	5.8	8	6	77	< 10	200	<.01
7/27/88	< 1	< 1	< 1	7	< 50	NA	0.034
MW-12: 6/7/88	< 1	< 1	< 1	< 1	< 10	180	<.01
7/27/88	< 1	< 1	< 1	< 1	< 50	NA	0.007
MW-13D: 6/7/88	13	1.5	< 1	28	< 10	60	<.01
6/7/88 (Dupl.)	12	1.1	< 1	26	< 10	53	<.01
8/18/88	< 1	< 1	< 1	< 1	NA	NA	NA

* NA - Not Analyzed

** 7/27/88 - Review of the mass spectra from the BTX analyses for MW-2 and MW-3 indicate these data are incorrect.

Table 2. Air Toxic Emissions, Sun Graphic, Inc. - Air Stripper

	CAT	No Threat Levels (ug/m ³)			Model Results (ug/m ³)*		
		8-hour	24-hour	Annual	8-hour	24-hour	Annual
Toluene	B	7,500	1,786	2000	115.6	66.07	16.52
Benzene	A	30	7.1	0.12	0.09	0.05	.013
Ethyl Benzene	A	4,350	1,036	--	0.332	0.189	0.047
Xylene	A	4,350	1,036	300	0.032	0.018	0.005
MEK	A	5,900	1,405	80	0.023	0.013	0.003

Notes:

*Based on:

Toluene (lb/hr)	1.5323
Benzene (lb/hr)	0.0012
Ethyl Benzene (lb/hr)	0.0044
Xylene (lb/hr)	0.0058
MEK (lb/hr)	0.0003

Model conversion factors:

8-hour = 0.7
24-hour = 0.4
Annual = 0.1

(Note: Model results were maximum of 107.8 ug/m³ for 1 lb/hr).

Example:

$$\text{Toluene annual level} = 107.8 \text{ ug/m}^3 \times 1.53 \text{ lb/hr} \times .1 = 16.52 \text{ ug/m}^3$$

SUN GRAPHIC AIR STRIPPER DATA

9/11/90

INPUTS:

18 GPM
1060 ACFM

OUTPUTS:

681.3 LITERS/MIN
30.0 M3/MIN

	UG/L	MW	LB/HR	MG/M3
TOLUENE	170000	92.14	1.5323	3858.2
ETHYLBEN.	483	116.25	0.0044	11.0
BENZENE	138	84.16	0.0012	3.1
XYLENES	640	106.17	0.0058	14.5
MEK	28	72.11	0.0003	0.6

REMOVAL 100 %

	INPUT	X FACTOR	OUTPUT
EMISSION RATE	1 LB/HR	0.125997	0.125997 G/S
STACK HEIGHT	28.3 FT	0.3048	8.62584 M
STACK DIA	18 IN	0.0254	0.4572 M
STACK FLOW	1060 ACFM	0.000472	0.50032 CUBIC M/S
VELOCITY	***** 600 FPM	0.00508	3.0471663 M/S
STACK TEMP	70 oF (5/9(oF-32))+273.15		294 oK
AMB TEMP	70 oF (5/9(oF-32))+273.15		294 oK
RECEPTOR HEIGHT	0 FT	0.3048	0 M
BLD. HT	10 FT	0.3048	3.048 M
BLD WIDTH	10 FT	0.3048	3.048 M
BLD DEPTH	10 FT	0.3048	3.048 M
CONC***	0.0000157 LBS/CF	1.6E+10	251572.32 UG/M3

09-10-90
02:10:41

* SCREEN-1.1 MODEL RUN ***
* VERSION DATED 88300 ***

Graphic Air Stripper

AMPLE TERRAIN INPUTS:

SOURCE TYPE = POINT
EMISSION RATE (G/S) = .1260
STACK HEIGHT (M) = 8.63
STK INSIDE DIAM (M) = .46
STK EXIT VELOCITY (M/S) = 3.05
STK GAS EXIT TEMP (K) = 294.00
AMBIENT AIR TEMP (K) = 294.00
RECEPTOR HEIGHT (M) = .00
IOPT (1=URB,2=RUR) = 2
BUILDING HEIGHT (M) = 3.05
MIN HORIZ BLDG DIM (M) = 3.05
MAX HORIZ BLDG DIM (M) = 3.05

OY. FLUX = .00 M**4/S**3; MOM. FLUX = .49 M**4/S**2.

* FULL METEOROLOGY ***

* SCREEN AUTOMATED DISTANCES ***

* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
10.	.4890E-04	1	3.0	3.0	960.0	9.6	3.4	1.6	NO
100.	100.3	3	1.0	1.0	320.0	12.8	12.5	7.5	NO
200.	98.30	4	1.0	1.0	320.0	12.8	15.6	8.6	NO
300.	96.03	5	1.0	1.0	5000.0	12.6	16.9	8.8	NO
400.	87.73	6	1.0	1.0	5000.0	12.3	14.7	7.1	NO
500.	92.33	6	1.0	1.0	5000.0	12.3	18.0	8.5	NO
600.	87.74	6	1.0	1.0	5000.0	12.3	21.3	9.8	NO
700.	79.99	6	1.0	1.0	5000.0	12.3	24.5	11.0	NO
800.	71.69	6	1.0	1.0	5000.0	12.3	27.7	12.0	NO
900.	64.18	6	1.0	1.0	5000.0	12.3	30.8	13.0	NO
1000.	57.57	6	1.0	1.0	5000.0	12.3	33.9	14.0	NO

MINIMUM 1-HR CONCENTRATION AT OR BEYOND 10. M:

122.	107.8	3	1.0	1.0	320.0	12.8	15.1	9.1	NO
------	-------	---	-----	-----	-------	------	------	-----	----

WASH= MEANS NO CALC MADE (CONC = 0.0)
WASH=NO MEANS NO BUILDING DOWNWASH USED
WASH=HS MEANS HUBER-SNYDER DOWNWASH USED
WASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
WASH=NA MEANS DOWNWASH NOT APPLICABLE, X(3)LB

** CAVITY CALCULATION - 1 ***	*** CAVITY CALCULATION - 2 ***
CONC (UG/M**3) = .0000	CONC (UG/M**3) = .0000
CRIT WS @10M (M/S) = 99.99	CRIT WS @10M (M/S) = 99.99
CRIT WS @ HS (M/S) = 99.99	CRIT WS @ HS (M/S) = 99.99
DILUTION WS (M/S) = 99.99	DILUTION WS (M/S) = 99.99
CAVITY HT (M) = 4.38	CAVITY HT (M) = 4.38
CAVITY LENGTH (M) = 4.49	CAVITY LENGTH (M) = 4.49
ALONGWIND DIM (M) = 3.05	ALONGWIND DIM (M) = 3.05

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
AMPLE TERRAIN	107.8	122.	0.

REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

P 256 396 176

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

U.S.G.P.O. 1989-234-555
PS Form 3800, June 1985

Sent to	Norm Tucker
Street and No.	Sun Graphic
P.O. State and Zip Code	1820 NW 21st St Pompano, FL 33060
Postage	
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	8-24-90 AC 06-184651

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:
 Norm Tucker, Pres.
 Sun Graphic, Inc.
 1820 NW 21st St.
 Pompano Beach, FL 33060

4. Article Number
 P 256 396 176

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee
 X

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

6. Signature - Agent
 X Teresa L. Flat

7. Date of Delivery
 8-27-90



Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

August 23, 1990

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Norm Nichol, President
Sun Graphic, Inc.
1820 Northwest 21st Street
Pompano Beach, Florida 33060

Dear Mr. Nichol:

Re: File No. AC 06-184651, Groundwater Air Stripper

The Department has made a preliminary review of your application for permit to construct a groundwater air stripper at your existing lithographic blanket manufacturing plant in Pompano Beach, Broward County, Florida. Before this application can be processed, we need the following information:

1. How much MEK is in the contaminated groundwater?
2. Has the leaking underground storage tank handled other solvents besides toluene? If so, what is their concentration in the groundwater?
3. How was the maximum and average concentrations of the BTEX compounds in the contaminated groundwater determined?
4. How will Sun Graphic, Inc. monitor the groundwater being treated in the air stripper?

Please answer these questions within 30 days of receipt of this letter.

We will resume processing the application after the requested information is received.

If you have any questions on this matter, please write to me or call Willard Hanks at (904)488-1344.

Sincerely,

C. H. Fancy, P.E.
Chief

Bureau of Air Regulation

CHF/WH/plm

c: Isidore Goldman, SE Dist.
Gary Carlson, Broward Co.
Robert Baker, P.E.

step

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
P.O. BOX 16000, TALLAHASSEE, FLORIDA 32316-0600



Permit Data Form

Project Source Name Sun Graphics
 Type Code: AC Subcode: 12 Check in: GP Exempt
 Permit Processor's Initial: JB Data Entry Operator's Initial: AD
 Correct Fee: 250
 Amount Received: \$250.00
 Amount Returned: 0
 Comments:

AC06-184651

CHECK NO.	CHECK DATE	VENDOR NO.
5550	08/01/90	010311

SUN GRAPHIC INC
 1820 NORTHWEST 21st STREET
 POMPANO BEACH, FLORIDA 33069
 (305) 974-0217



BARNETT BANK OF SOUTH FLORIDA N.A.
 CYPRESS CREEK
 828 N.W. 62 STREET, FT. LAUDERDALE, FL 33309

CHECK NO. 05550

63-286
670

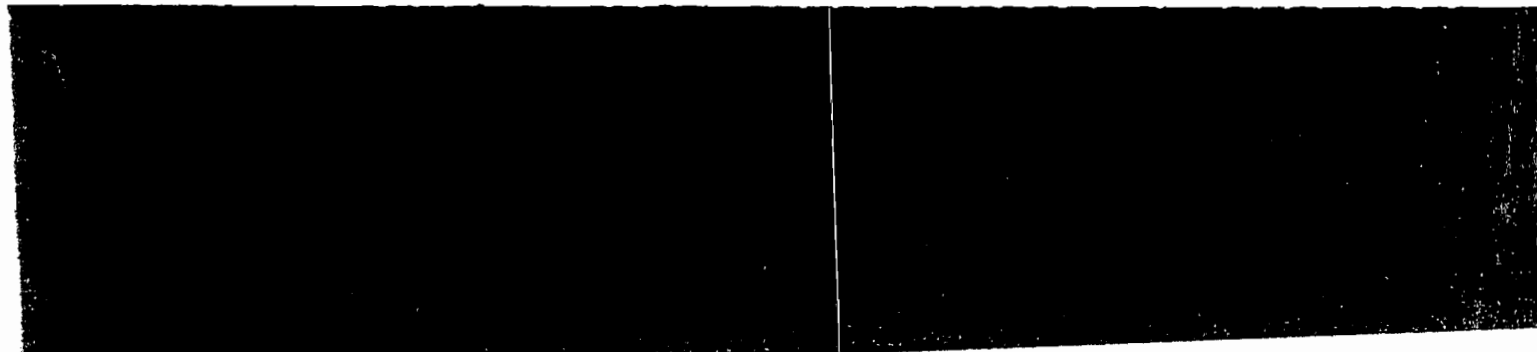
TWO HUNDRED FIFTY AND 00/100 DOLLARS

*****250.00

PAY
TO THE
ORDER OF

FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

[Signature]
 AUTHORIZED SIGNATURE





6821 S.W. Archer Road
Gainesville, FL 32608
TEL (904) 371-9451
FAX (904) 378-1500

RECEIVED

July 21, 1990
B-2157
30 AUG 3 AM 10 30

FLA. DEPARTMENT OF
ENVIRONMENTAL REG.
WEST PALM BEACH

Ms. Stephanie Brooks
Florida Department of
Environmental Regulation
Southeast District
1900 S. Congress Avenue
West Palm Beach, Florida 33406

RE: Sun Graphic, Inc.
Air Stripper Permit

Dear Ms. Brooks:

Attached please find the original and three copies of the air pollution construction permit application, and a check for \$250 for an air stripper servicing a groundwater remediation project.

An air toxic study shows that the emissions from the air stripper will be less than the FDER no-threat levels.

We hope to install the air stripping system in October 1990 to comply with the requirements of our Hazardous Material Contamination License issued by BCEQCB. The purpose of the air stripper is to treat contaminated groundwater.

Please contact me if you have any questions or need additional information to process the permit. Your help in expediting the review process is greatly appreciated.

Sincerely,

BAKER ENVIRONMENTAL ENGINEERING, INC.

Robert A. Baker, P.E.

RAB:led

Enclosures

cc: Norm Nichol
Dan Smolen
Daniela Banu

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



RECEIVED

AUG 3 1990

Dept. of Environmental Reg.
West Palm Beach

AC #6-184651

APPLICATION TO ~~OPERATE~~/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Stripper [] New¹ [] Existing¹

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

COMPANY NAME: Sun Graphic, Inc. COUNTY: Broward

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Air Stripper for contaminated groundwater City Pompano Beach

SOURCE LOCATION: Street 1820 N.W. 21st Street

UTM: East (17) 585.200 km North 2904.300 km

Latitude 26 ° 15 ' 26 "N Longitude 80 ° 08 ' 49 "W

APPLICANT NAME AND TITLE: Norm Nichol, President

APPLICANT ADDRESS: same as above

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Sun Graphic, Inc.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. 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:

Norm Nichol, President
Name and Title (Please Type)

Date: 7/23/90 Telephone No. 305/974-0217

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 ~~examined~~/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

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

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

Signed _____

Robert A. Baker

Robert A. Baker

Name (Please Type)

Baker Environmental Engineering, Inc.

Company Name (Please Type)

6821 S.W. Archer Road, Gainesville, FL 32608

Mailing Address (Please Type)

Florida Registration No. 21118

Date: 7/21/90

Telephone No. 904/371-9451

SECTION II: GENERAL PROJECT INFORMATION

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

Installation of an air stripping system for recovery and decontamination of groundwater. The system will have a pumping rate of approximately 18 gpm and will be removing toluene.

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

Start of Construction September 1990 Completion of Construction October 1990

- 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.)

\$20,000(+) for air stripper

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

None

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;
if power plant, hrs/yr _____ ; if seasonal, describe: _____

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

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

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

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

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

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

H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? No

a. If yes, for what pollutants? _____

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

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

1. Broward County is a non-attainment are for oxidants (ozone).
Since the source will be less than 100 TPY of VOCs, offsets and
LAER are not applied.
2. BACT is not applicable to this source since it is a minor source
in a non-attainment area.

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		
Groundwater	VOC	0.02 %	1.5	See Figure 1

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

1. Total Process Input Rate (lbs/hr): N/A
2. Product Weight (lbs/hr): N/A

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

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Toluene	0.009	0.039	N/A	N/A	0.009	0.039	
Benzene	0.00009	0.00039	N/A	N/A	0.00009	0.00039	
Ethyl Benzene	0.0018	0.00079	N/A	N/A	0.0018	0.00079	
Xylene	0.0009	0.00039	N/A	N/A	0.0009	0.00039	

¹See Section V, Item 2.

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

³Calculated from operating rate and applicable standard.

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

D. Control Devices: (See Section V, Item 4) None

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

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating. N/A

Annual Average _____ Maximum _____

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

The recovered and decontaminated groundwater will be discharged to the sewer.

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

Stack Height: _____ ft. Stack Diameter: _____ ft.
 Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.
 Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Not Applicable

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

Description of Waste _____

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

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

Manufacturer _____

Date Constructed _____ Model No. _____

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

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

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

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

Type of pollution control device: Cyclone Wet Scrubber Afterburner

Other (specify) _____

Brief description of operating characteristics of control devices: _____

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

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

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

Yes No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration

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

- | | |
|---------------------------|--------------------------|
| 1. Control Device/System: | 2. Operating Principles: |
| 3. Efficiency:* | 4. Capital Costs: |

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

10. Stack Parameters

- a. Height: ft.
- b. Diameter: ft.
- c. Flow Rate: ACFM
- d. Temperature: °F.
- e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

- j. Applicability to manufacturing processes;
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

- | | |
|-----------------------------|--------------------------|
| a. Control Device: | b. Operating Principles: |
| c. Efficiency: ¹ | d. Capital Cost: |
| e. Useful Life: | f. Operating Cost: |
| g. Energy: ² | h. Maintenance Cost: |
- i. Availability of construction materials and process chemicals:
 - j. Applicability to manufacturing processes:
 - k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

- | | |
|-----------------------------|--------------------------|
| a. Control Device: | b. Operating Principles: |
| c. Efficiency: ¹ | d. Capital Costs: |
| e. Useful Life: | f. Operating Cost: |
| g. Energy: ² | h. Maintenance Cost: |
- i. Availability of construction materials and process chemicals:
 - j. Applicability to manufacturing processes:
 - k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

- | | |
|----------------------|-----------------------------|
| 1. Control Device: | 2. Efficiency: ¹ |
| 3. Capital Cost: | 4. Useful Life: |
| 5. Operating Cost: | 6. Energy: ² |
| 7. Maintenance Cost: | 8. Manufacturer: |
- 9. Other locations where employed on similar processes:
 - a. (1) Company:
 - (2) Mailing Address:
 - (3) City:
 - (4) State:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

Not Applicable

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂* _____ Wind spd/dir

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

Other data recorded _____

Attach all data or statistical summaries to this application.

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

2. Instrumentation, Field and Laboratory

- a. Was instrumentation EPA referenced or its equivalent? Yes No
- b. Was instrumentation calibrated in accordance with Department procedures?
 Yes No Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from _____ / _____ / _____ to _____ / _____ / _____
month day year month day year
2. Surface data obtained from (location) _____
3. Upper air (mixing height) data obtained from (location) _____
4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.
2. _____ Modified? If yes, attach description.
3. _____ Modified? If yes, attach description.
4. _____ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

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

E. Emission Data Used in Modeling

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

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

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

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

SITE LOCATION

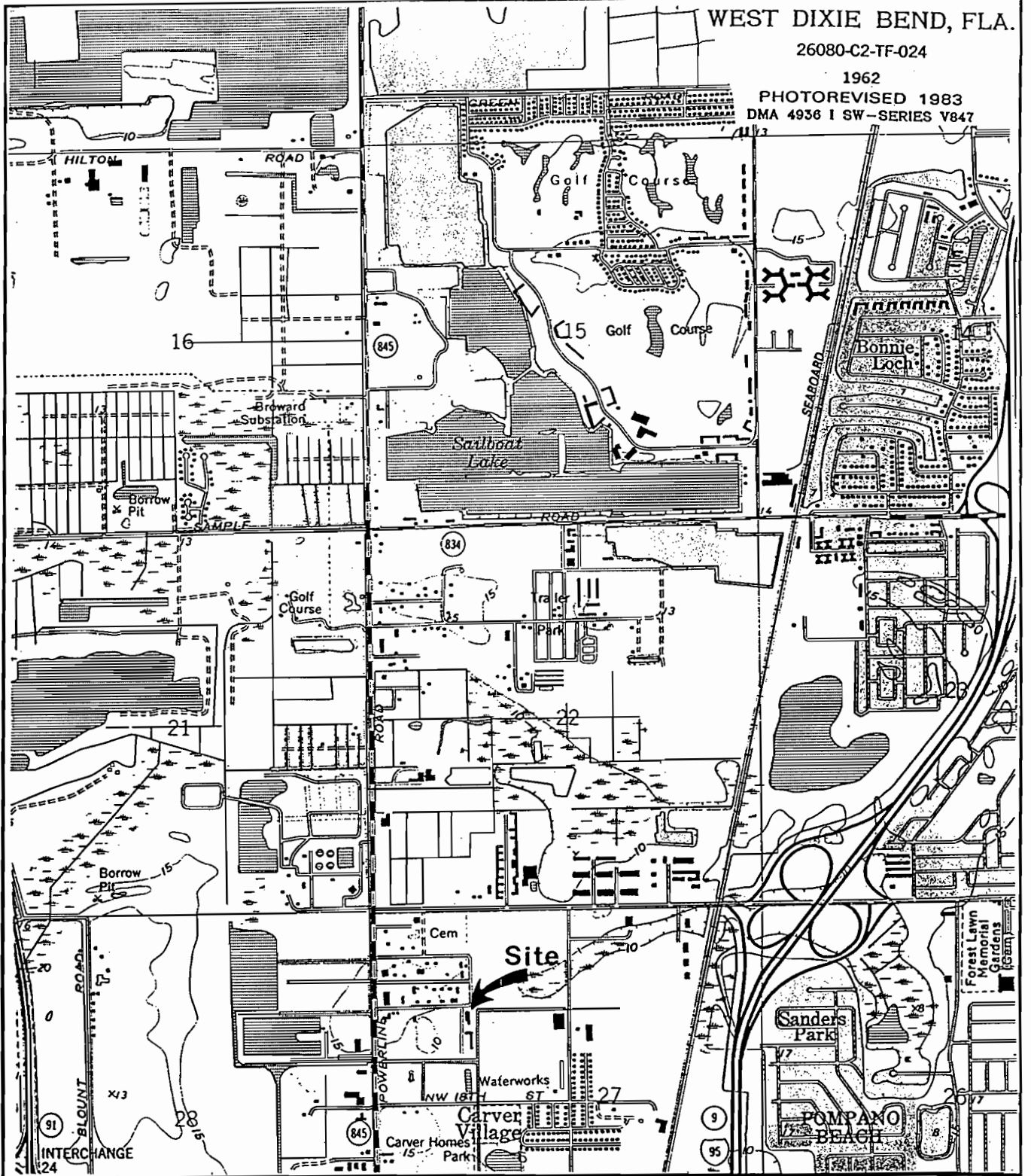
and

PLOT PLAN

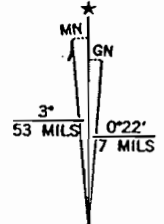
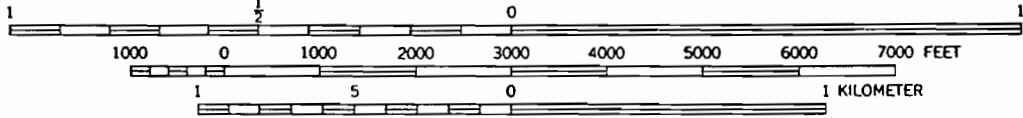
WEST DIXIE BEND, FLA.

26080-C2-TF-024

1962
PHOTOREVISED 1983
DMA 4936 I SW-SERIES V847



SCALE 1:24 000



CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

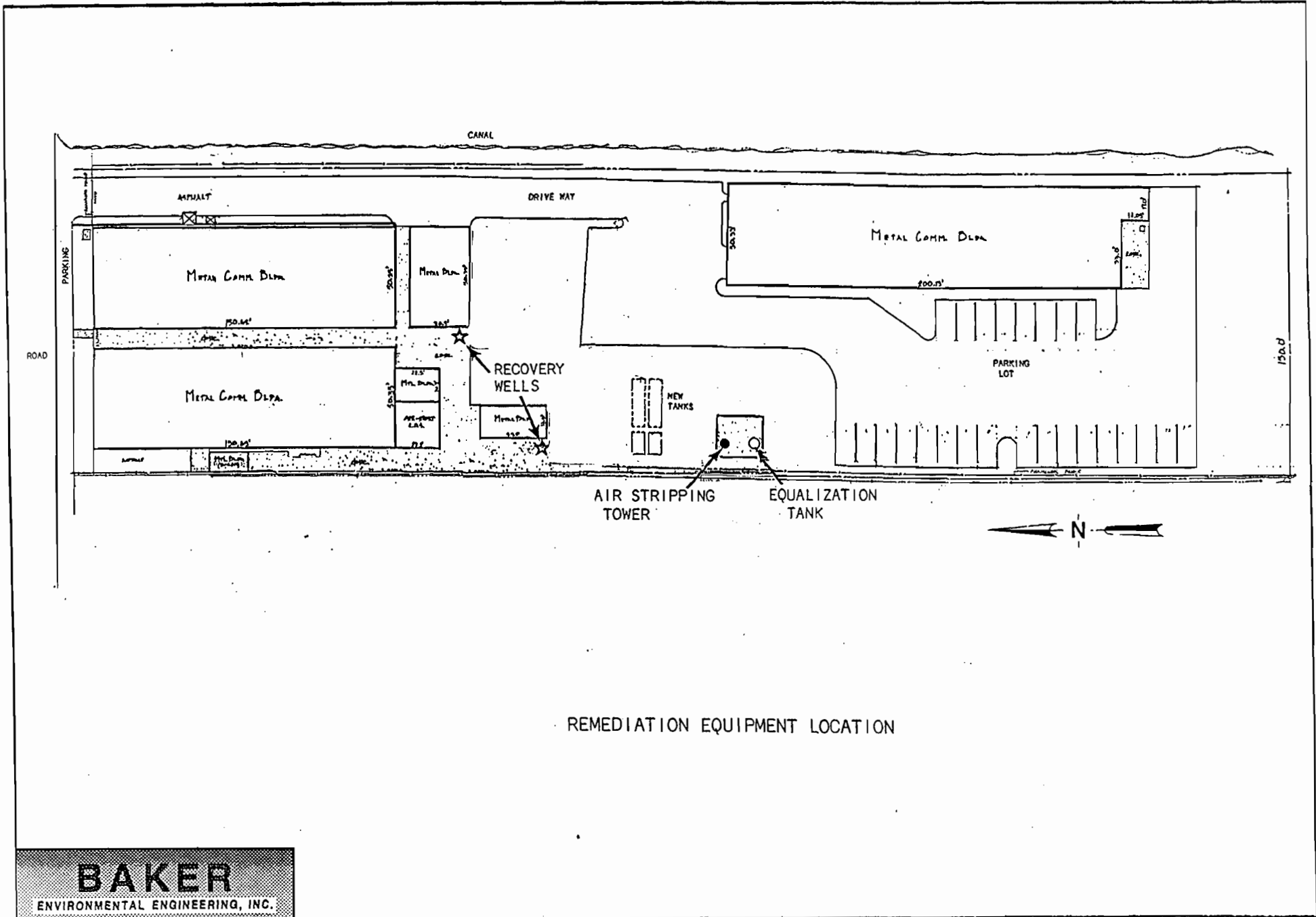


QUADRANGLE LOCATION

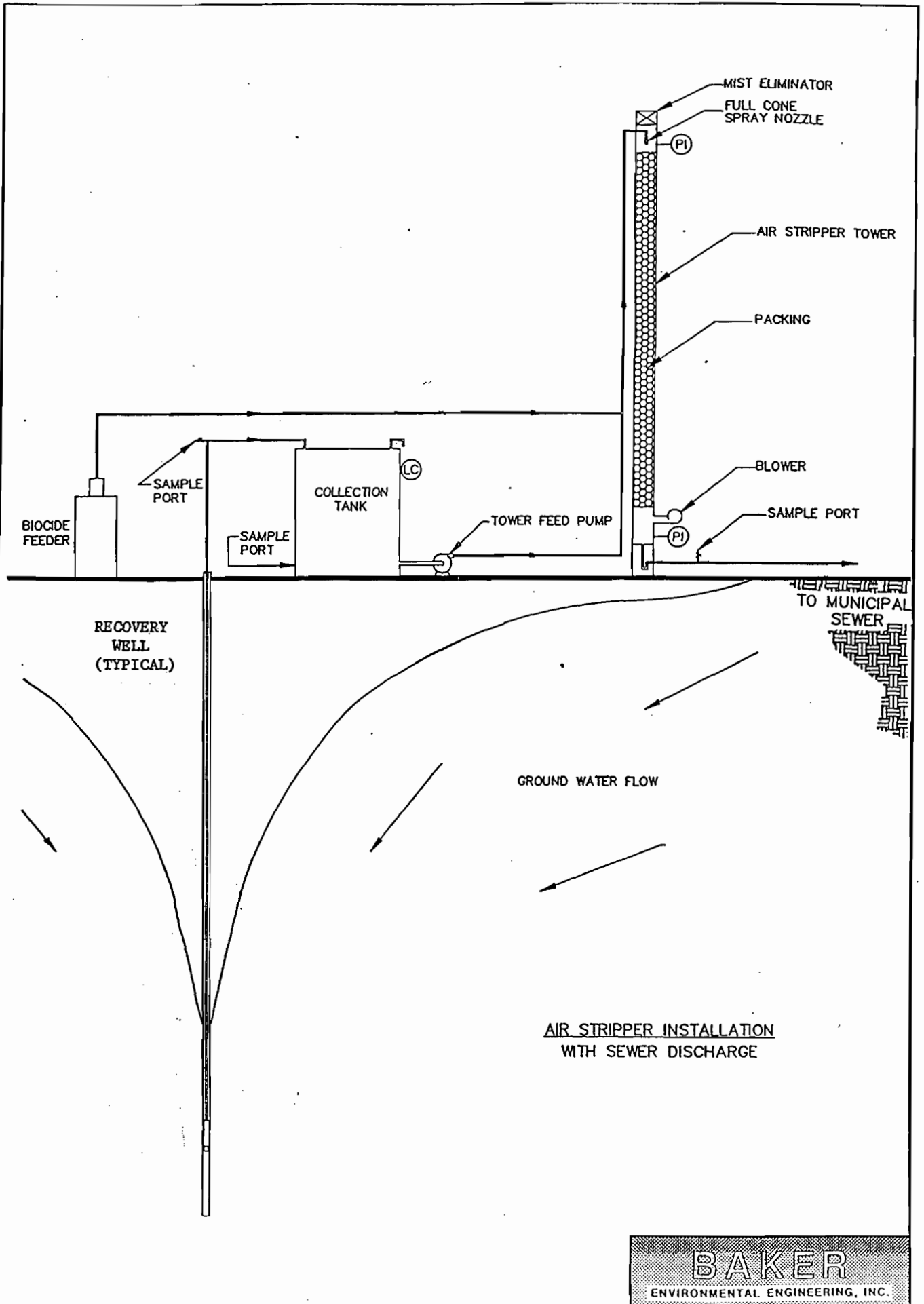
SITE LOCATION MAP

UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

BAKER
ENVIRONMENTAL ENGINEERING, INC.



REMEDIATION EQUIPMENT LOCATION



PROCESS DESCRIPTION

PROCESS DESCRIPTION

Overview

Sun Graphic, Inc. (SGI) plans to operate a groundwater remediation system (air stripper) to recover a past release of toluene from underground storage tanks. The groundwater contamination has the following characteristics:

<u>Parameter</u>	<u>Maximum Concentration</u> (ug/l)	<u>Average Concentration</u> (ug/l)
Toluene	170,000	<1,000
Benzene	65	<10
Ethyl Benzene	140	<20
Xylene	50	<10

The air stripper will have the following characteristics:

Pumping Rate	18 GPM
Air Flow	1,060 ACFM
Airstripper Height	27 feet (min)
Packing Height	22 feet
Diameter	1.5 feet
Operating Hours	8,260 hrs/year
Removal Efficiency	>99%

The air stripper is anticipated to be in operation over the next 5 years.

Air Emissions

The air emissions, assuming 100% stripping, are as follows:

<u>Parameter</u>	<u>Maximum</u>		<u>Average</u>	
	<u>(lb/hr)</u>	<u>(TPY)</u>	<u>(lb/hr)</u>	<u>(TPY)</u>
Toluene	1.531	6.707	0.009	0.0390
Benzene	0.0006	0.003	.00009	0.00039
Ethyl Benzene	0.0013	0.006	.00018	0.00079
Xylene	0.0005	0.002	.0009	0.00039

It is expected that after 3 to 6 months the average case will be occurring due to the fact that, by this time, the initial slug of contaminants will have passed.

AIR TOXIC MODELING RESULTS

Air Toxics

In order to evaluate any toxic effect of specific compounds, a Screen Drift Model was executed using a 1 lb/hr emission rate and the air stripper's characteristics. The maximum 1-hour concentration calculated by the model was 114.4 ug/m³. This result was then scaled for each contaminant and converted to an 8-hour, 24-hour, and annual concentration using the following EPA model conversion factors:

$$\begin{aligned}8\text{-hour} &= 0.7 \times 1\text{-hour} \\24\text{-hour} &= 0.4 \times 1\text{-hour} \\ \text{Annual} &= 0.1 \times 1\text{-hour}\end{aligned}$$

Table 1 summarizes these results. All four compounds were found to be within the calculated no threat levels.

Table 1. Air Toxic Emissions, Sun Graphic, Inc. - Air Stripper

	CAT	No Threat Levels (ug/m ³)			Model Results (ug/m ³)*		
		8-hour	24-hour	Annual	8-hour	24-hour	Annual
Toluene	B	--	--	2000	--	--	17.51
Benzene	A	30	7.1	0.12	0.048	0.027	0.007
Ethyl Benzene	A	435	1,036	--	0.104	0.06	--
Xylene	A	4350	1036	300	0.040	0.023	0.006

Notes:

*Based on:

Toluene (lb/hr)	1.5310
Benzene (lb/hr)	0.0006
Ethyl Benzene (lb/hr)	0.0013
Xylene (lb/hr)	0.0005

Model conversion factors:

8-hour	= 0.7
24-hour	= 0.4
Annual	= 0.1

(Note: Model results were maximum of 114.4 ug/m³ for 1 lb/hr).

Example:

$$\text{Toluene annual level} = 114.4 \text{ ug/m}^3 \times 1.53 \text{ lb/hr} \times .1 = 17.51 \text{ ug/m}^3$$

DATA CONVERSION

Sun Graphics Air Stripper Data 7/17/90

INPUT

18 GPM
1060 ACFM

	UG/L	MW	LB/HR	MG/M^3
TOLUENE	170000	92.14	1.5310	0.1929
BENZENE	100	116.25	0.0006	0.0001
ETHYL BENZENE	65	84.16	0.0013	0.0002
XYLENE	50	106.17	0.0050	0.0001

	INPUT	X FACTOR	OUTPUT
EMISSION RATE	1 LB/HR	0.125997	0.125997 G/S
STACK HEIGHT	27 FT	0.3048	8.2296 M
STACK DIA	18 IN	0.0254	0.4572 M
STACK FLOW	1060 ACFM	0.000472	0.50032 CUBIC M/S
VELOCITY *****	600 FPM	0.00508	3.047166 M/S
STACK TEMP	70 oF (5/9(oF-32))+273.15		294 oK
AMB TEMP	70 oF (5/9(oF-32))+273.15		294 oK
RECEPTOR HEIGHT	3.3 FT	0.3048	1.00584 M
BLD. HT	10 FT	0.3048	3.048 M
BLD WIDTH	10 FT	0.3048	3.048 M
BLD DEPTH	10 FT	0.3048	3.048 M
CONC. ****	1.57E-05 LB/CF	1.6E+10	2.52E+05 UG/M3

*** SCREEN-1.1 MODEL RUN ***
 *** VERSION DATED 88300 ***

UN GRAPHIC AIR STRIPPER RATE 1 LB/HR

IMPLE TERRAIN INPUTS:

SOURCE TYPE = POINT
 EMISSION RATE (G/S) = .1260
 STACK HEIGHT (M) = 8.23
 STK INSIDE DIAM (M) = .46
 STK EXIT VELOCITY (M/S) = 3.05
 STK GAS EXIT TEMP (K) = 294.00
 AMBIENT AIR TEMP (K) = 294.00
 RECEPTOR HEIGHT (M) = .00
 IOPT (1=URB,2=RUR) = 2
 BUILDING HEIGHT (M) = 3.05
 MIN HORIZ BLDG DIM (M) = 3.05
 MAX HORIZ BLDG DIM (M) = 3.05

UOY. FLUX = .00 M**4/S**3; MOM. FLUX = .49 M**4/S**2.

*** FULL METEOROLOGY ***

 ** SCREEN AUTOMATED DISTANCES **

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	0	.0	.0	.0	.0	.0	.0	NA
100.	108.9	3	1.0	1.0	320.0	12.4	12.5	7.5	NO
200.	104.7	4	1.0	1.0	320.0	12.4	15.6	8.6	NO
300.	102.1	5	1.0	1.0	5000.0	12.2	16.9	8.8	NO
400.	96.06	6	1.0	1.0	5000.0	11.9	14.7	7.1	NO
500.	98.47	6	1.0	1.0	5000.0	11.9	18.0	8.5	NO
600.	92.11	6	1.0	1.0	5000.0	11.9	21.3	9.8	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

118.	114.4	3	1.0	1.0	320.0	12.4	14.7	8.8	NO
------	-------	---	-----	-----	-------	------	------	-----	----

DWASH= MEANS NO CALC MADE (CONC = 0.0)
 DWASH=NO MEANS NO BUILDING DOWNWASH USED
 DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
 DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
 DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

 *** SCREEN DISCRETE DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
118.	114.4	3	1.0	1.0	320.0	12.4	14.6	8.7	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
 DWASH=NO MEANS NO BUILDING DOWNWASH USED
 DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED

DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** CAVITY CALCULATION - 1 ***	*** CAVITY CALCULATION - 2 ***
CONC (UG/M**3) = .0000	CONC (UG/M**3) = .0000
CRIT WS @10M (M/S) = 99.99	CRIT WS @10M (M/S) = 99.99
CRIT WS @ HS (M/S) = 99.99	CRIT WS @ HS (M/S) = 99.99
DILUTION WS (M/S) = 99.99	DILUTION WS (M/S) = 99.99
CAVITY HT (M) = 4.38	CAVITY HT (M) = 4.38
CAVITY LENGTH (M) = 4.49	CAVITY LENGTH (M) = 4.49
ALONGWIND DIM (M) = 3.05	ALONGWIND DIM (M) = 3.05

CAVITY CONC NOT CALCULATED FOR CRIT WS > 20.0 M/S. CONC SET = 0.0

 *** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
-----	-----	-----	-----
IMPLE TERRAIN	114.4	118.	0.

 * REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS *



6821 S.W. Archer Road
Gainesville, FL 32608
TEL (904) 371-9451
FAX (904) 378-1500

RECEIVED
JUL 27 1990

DER-BAQM

July 24, 1990
B-2253

Mr. Willard Hanks
Florida Department of
Environmental Regulations
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399

RE: Sun Graphic, Inc
File No. AC-06-170598 SOLVENT RECOVERY SYSTEM (SRS)

Dear Willard:

Attached please find a copy of our permit application of temporary air stripper to be used at SGI's groundwater remediation project. As we discussed, the expected VOC emissions are 0.04 tons per year and should not affect the overall facility from achieving emissions less than 100 tons of VOC per year.

The expected life of the groundwater problem ranges from 2 to 5 years.

Please let me know if you have any questions.

Sincerely,

BAKER ENVIRONMENTAL ENGINEERING, INC.

Robert A. Baker, P.E.

RAB:ljc

CC: Charlie Palmer
Norm Nichol
Dan Smolen
Mary Smallwood
W. HANKS
B. ANDREWS
C. FANCY

BAKER[WP]B-2253

July 23, 1990

Ms. Daniela Banu
Broward County Environmental Quality
Control Board
621 South Andrews Avenue
Ft Lauderdale, Fl 33301

Dear Ms. Banu:

Enclosed is the county permit application to operate an air stripper in conjunction with the remedial action at our facility in Pompano Beach. A check for \$30.00 is also enclosed. Also, enclosed is a copy of the state air permit application that is being submitted to Ms. Stephanie Brooks of the Florida Department of Environmental Regulation.

We hope to install the air stripping system in October, 1990 to comply with the requirements of our Hazardous Material Contamination License issued by BCEQCB. The purpose of the air stripper is to treat contaminated groundwater.

Please contact me if you have any questions or need additional information to process the permit. Your help in expediting the review process is greatly appreciated.

Sincerely,

Dan Smolen
Plant Manager

xc: Patricia Markey, Baker

BROWARD COUNTY ENVIRONMENTAL QUALITY CONTROL BOARD
500 S.W. 14TH COURT, FORT LAUDERDALE, FLORIDA 33315
TEL. - 765-5881

APPLICATION FOR POLLUTION CONTROL EQUIPMENT LICENSE

A FILING FEE OF \$20.00 MUST ACCOMPANY EACH APPLICATION. PLEASE MAKE CHECKS PAYABLE TO BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS. THIS FILING FEE WILL BE APPLIED TO THE TOTAL LICENSE FEE WHICH WILL BE DUE PRIOR TO ISSUANCE OF LICENSE.

1. LICENSE TO BE ISSUED TO:

Sun Graphic, Inc.
Business Name
1820 N.W. 21st Street, Pompano Beach, FL 33069
Mailing Address City Zip

2. ADDRESS AT WHICH EQUIPMENT IS LOCATED: 1820 N.W. 21st Street
3. MUNICIPALITY WHERE EQUIPMENT IS LOCATED: Pompano Beach
4. GENERAL NATURE OF BUSINESS: Printing Press Blanket Manufacturing
5. POLLUTION LICENSE ISSUED PREVIOUSLY? NO YES LICENSE NO. _____
6. PURSUANT TO PROVISIONS OF FLORIDA DEPARTMENT OF POLLUTION CONTROL AND REGULATIONS OF THE BROWARD COUNTY ENVIRONMENTAL QUALITY CONTROL BOARD, APPLICATION IS HEREBY MADE FOR AUTHORITY TO CONSTRUCT AND/OR OPERATE THE FOLLOWING EQUIPMENT:

EQUIPMENT DESCRIPTION: Air Stripper for Groundwater Decontamination

- | 7. LICENSE REQUEST FOR | ESTIMATED
STARTING DATE | ESTIMATED
COMPLETION DATE |
|--|----------------------------|------------------------------|
| <input checked="" type="checkbox"/> Construction or Installation | <u>7/90</u> | <u>10/90</u> |
| <input type="checkbox"/> Transfer of Operator, Owner or Lessee | _____ | _____ |
| <input type="checkbox"/> Transfer of Location | _____ | _____ |
| <input type="checkbox"/> Existing Equipment | _____ | _____ |

8. TYPE OR PRINT NAME AND OFFICIAL TITLE OF PERSON SIGNING THIS APPLICATION. THIS PERSON MUST BE A RESPONSIBLE MEMBER OF THE OPERATING ORGANIZATION.

NAME Dan Smolen TITLE Plant Manager PHONE 305/974-0217

9. SIGNATURE _____ DATE _____

THE LICENSE APPLICATION WILL NOT BE PROCESSED UNLESS PROPERLY COMPLETED.
REMEMBER - \$20.00 MUST ACCOMPANY EACH APPLICATION.