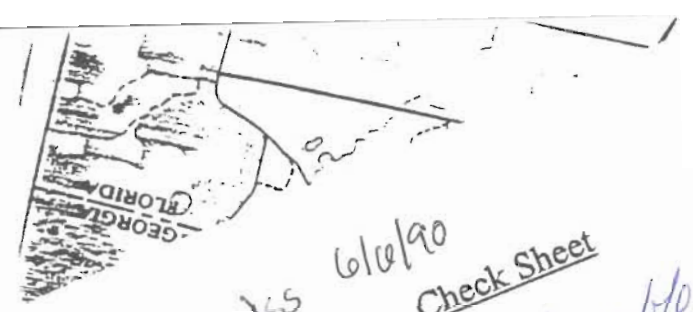

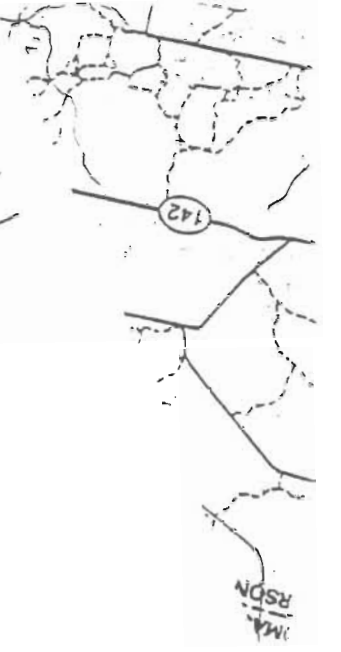

ISS 6/6/90

Check Sheet

Company Name: Procter & Gamble Cellulose
Permit Number: AC 62-02092
PSD Number:
Permit Engineer:

Cross References:
- ☑ AC 17-113551
- ☑ A062-02383
- ☑ AO 62-02381
- -02382
- -02383
- -02094
- -02095
- -02096
- -02097
- -02098

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

Intent:
- ☐ Intent to Issue
- ☐ Notice of Intent to Issue
- ☐ Technical Evaluation
- ☐ BACT or LAER Determination
- ☒ Unsigned Permit "Proposed Permitting Strategy"
- ☑ 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

Revision #5

Is your RETURN ADDRESS completed on the reverse side?

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

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Bruce Harding
Environmental Control Manager
Buckeye Florida
Route 3 Box 260
Perry, Florida 32347

4a. Article Number
Z127 632 547

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
10-23-95

5. Signature (Addressee)

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

6. Signature (Agent)
[signature]

PS Form 3811, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 127 632 547

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

UNITED STATES POSTAL SERVICE

Sent to
Mr. Bruce Harding
Environmental Control Manager
Street and No.
Buckeye Florida
P.O., State and ZIP Code
Route 3 Box 260
Perry, Florida 32347

Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

Rule Change (extension)
AC62-197417

PS Form 3800, March 1993

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 20, 1995

file
~~application~~
will
refund's
take cared
ARMS

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Bruce Harding
Environmental Control Manager
Buckeye Florida
Route 3, Box 260
Perry, Florida 32347

Dear Mr. Harding:

Re: Extension of Permit Nos. AC 62-197417, Pulping Sidestream, and AC62-172092, No. 2 Bleach Plant.

In accordance with our previous correspondence, enclosed you will find a copy of the recently enacted rule language which extends your air construction permit (Rule 62-213.420(1)(a)4., F.A.C.). Therefore, no action is required by the Department and your $100 fee ($50 per permit) will be refunded.

Please note the new application dates for the Title V permits have been changed. The acid rain part of the application is due not later than January 1, 1996. The remaining part of your Title V application is due on June 15, 1996.

If you have any questions, contact Mr. Al Linero at the letterhead address or call him at (904)488-1344.

Sincerely,

A. Linero P.E. for

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

CHF/al/kw

Enclosure

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

August 31, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Bruce Harding
Environmental Control Manager
Buckeye Florida, Limited Partnership
Route 3, Box 260
Perry, Florida 32347

Dear Mr. Harding:

Re: Extension of Permit Nos. AC62-197417, Pulping Sidestream and AC62-172092, No. 2 Bleach Plant

This letter serves as the Department's intent to extend the referenced construction permits which expire today. We had previously indicated by our letter of August 30 that we would rely on an expected automatic extension by rule of current construction permits. Buckeye Florida (aka Buckeye Cellulose) does not wish to rely on a rule which has not yet been promulgated and wishes to have the Department act on the matter expeditiously.

It is the Department's intent to extend the permits until January 31, 1996, after which the referenced units can continue to operate following submittal of the facility Title V permit, issuance of an operating permit, or extension of the construction permit by the anticipated rule. We expect to send Buckeye Florida the requested permit extension by September 8.

Please keep the Northwest District informed of the status of the projects and their compliance with permit conditions and rules. If you have any questions please call me at (904)488-1344.

Sincerely,

A. A. Linero, P.E.
Administrator,
New Source Review Section

AAL/aal/l

cc: C. Kirts, NED

Is your RETURN ADDRESS completed on the reverse side?

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

I also wish to receive the following services (for an extra fee):-
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Bruce Harding, EC M
Buckeye Fla. Ltd Partnership
Route 3, Box 210
Perry, Fl 32347

4a. Article Number
Z 392 979 038

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
9/8/95

5. Signature (Addressee)

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

6. Signature (Agent)
A Moore

PS Form 3811, December 1991 *U.S. GPO: 1993—352-714 DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Z 392 979 038

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

Bruce Harding
Buckeye Fla
Perry Fl

PS Form 3800, [illegible]

Postage	$
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	9-5-95

AC62-197417
AC62-172092

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Bruce Harding
Environmental Control Manager
Buckeye Florida, Limited Partnership
Route 3, Box 260
Perry, Florida 32347

4a. Article Number
Z 392 979 034

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
8-31-95

5. Signature (Addressee)

6. Signature (Agent)
A Moore

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

PS Form 3811, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 392 979 034

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

UNITED STATES POSTAL SERVICE

PS Form 3800, March 1993

Sent to: Bruce Harding	
Street and No. Rt 3 Box 260	
P.O., State and ZIP Code Perry FL 32347	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$

Postmark or Date
8/30/95
ACC62-197417
ACC62-192092

3748 2608 tx.doc

file

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

August 30, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Bruce Harding
Environmental Control Manager
Buckeye Florida, Limited Partnership
Route 3, Box 260
Perry, Florida 32347

Dear Mr. Harding

Re: Extension of Permit Nos AC 62-197417, Pulping Sidestream, and AC62-172092, No. 2 Bleach Plant.

On August 15 the Department received your application letter, dated August 10, requesting an extension of the expiration date of the above referenced permits. The attached proposed rule language will, if adopted, extend the air construction permits by law. It is anticipated that the rule will be adopted in early September. If the rule is adopted within 90 days of receipt of your application, the Department will not be required to respond further. However, we will inform you upon adoption of the proposed rule.

If the rule, for any reason, is not adopted within 90 days of receipt of your application we will act upon your request in a timely manner. Please note that your air construction permits are valid until the Department acts upon your request.

Should you have any questions please contact me at (904) 488-1344.

Sincerely,

A. A. Linero, P.E.
Administrator, New Source Review Section

AAL/kw

Attachment

NOTICE OF CHANGE IN PROPOSED RULE

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DOCKET NO: 95-38R

CHAPTER TITLE: CHAPTER NO.:

Operation Permits for Major Sources of Air Pollution 62-213

RULE TITLE: RULE NO.:

Permit Applications 62-213.420

The Department has made a change to the proposed rule which appeared in the Florida Administrative Weekly, Volume 21, Number 30, dated July 28, 1995, page 4958, so that the following section(s) will read as set forth below:

62-213.420 Permit Applications

(1)(a)1.a. Acid Rain Sources will submit applications for the entire source by June 15, 1996 ~~January 1, 1996~~. The Acid Rain Part of each such application, however, shall be submitted no later than January 1, 1996.

b.(ii) June 15, 1996 ~~February 1, 1996~~, otherwise.

c. All other sources subject to the permitting requirements of this chapter will submit applications by June 15, 1996 ~~February 1, 1996~~.

2. Except as provided at Rule 62-213.420(1)(a)4., F.A.C., ~~except for sources that are subject to the Florida Electrical Power Plant Siting Act (FEPPSA),~~ a source that commences operation after January 1, 1996, must file an application for an operation permit under this chapter ninety days before expiration of the source's construction permit, but no later than 180 days after commencing operation. Except as provided at Rule 62-213.420(1)(a)4., F.A.C., a~~A~~ source that has applied for an Electrical Power Plant Siting Certification prior to January 1, 1996, but has not but has not been issued the certification as of that date, or a source that has been issued an Electrical Power Plant Siting Certification prior to January 1, 1996, but has not commenced operation by that date, shall file an application for an operation permit under this cChapter ~~no later than~~ 180 days after commencing operation. Sources subject to the FEPPSA that apply for Electrical Power Plant Siting Certification subsequent to January 1, 1996, may, at their option, ~~shall~~ apply for a permit under the provisions of this chapter at the same time the Florida Power Plant Siting Certification application is submitted.

4. The expiration dates of all air construction permits for Title V sources that expire between September 1, 1995, and November 1, 1996 ~~September 1, 1996~~, are hereby extended to the later of November 1, 1996, or 240 days after commencing operation ~~September 1, 1996~~. Facilities with such air construction permits which have not commenced operation on January 1, 1996, shall apply

for a permit under the provisions of this chapter on the later of September 1, 1996, or 180 days after commencing operation.
Specific Authority: 403.061, 403.087, F.S.
Law Implemented: 403.061, 403.0872, F.S.
History: New 11-28-93; Amended 4-62-94; Formerly 17-213.420; Amended 11-23-94, 4-2-95,_____.

NAME OF PERSON ORIGINATING PROPOSED RULE: Howard L. Rhodes, Director, Division of Air Resources Management
NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Virginia B. Wetherell, Secretary
DATE PROPOSED RULE APPROVED: July 17, 1995

Is your RETURN ADDRESS completed on the reverse side?

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

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. C. S. Aiken
Plant Manager
Buckeye Florida
Route 3, Box 260
Perry, Florida 32347

4a. Article Number
P 872 562 500

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
11/24/93

5. Signature (Addressee)

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

6. Signature (Agent)
Melissa McNutt

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

Thank you for using Return Receipt Service.

P 872 562 500

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

UNITED STATES POSTAL SERVICE

Sent to: Mr. C. S. Aiken	
Street and No.: Route 3, Box 260	
P.O., State and ZIP Code: Perry, Florida 32347	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date: Mailed: 11/23/93 AC 62-172092	

PS Form 3800, JUNE 1991

Florida Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

November 19, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. C. S. Aiken
Plant Manager
Buckeye Florida
Route 3, Box 260
Perry, Florida 32347

Dear Mr. Aiken:

Re: Amendment to Construction Permit
AC 62-172092: #2 Bleach Plant and R-8 ClO_2 Generator Plant

The Department has reviewed the above request contained in Mr. Clifford Henry's letter received June 15, 1993, and Mr. Ray Perry's letter received August 16, 1993. The request to adjust the process input rates to the #2 Bleach Plant in order to make it compatible with the #2 Batch Digester System is acceptable; and, the request to extend the expiration date, in order to allow time for emission test reviews and to obtain an Operation Permit, is acceptable. Therefore, the following will be changed and added:

1. Expiration Date
From: December 31, 1993
To: May 31, 1994

2. Specific Condition No. 13

FROM: Maximum allowable total process input rates shall not exceed:

a. CEHDED: 660 unbleached bone dry tons/day
b. DEDED: 900 unbleached bone dry tons/day

TO: Maximum allowable total process input rates shall not exceed:

a. CEHDED: 660 equivalent air dry metric machine tons/day or
720 unbleached bone dry short tons/day
b. DEDED: 900 equivalent air dry metric machine tons/day or
981 unbleached bone dry short tons/day

3. Attachments to be Incorporated:
   - o Mr. Clifford Henry's letter with attachment received June 15, 1993.
   - o Mr. Ray Perry's letter received July 28, 1993.
   - o Mr. Ray Perry's letter with attachments received August 16, 1993.
   - o Mr. Ray Perry's letter with attachment received October 1, 1993, via FAX.

This letter must be attached to the Construction Permit, No. AC 62-172092, and shall become a part of the permit.

Sincerely,

Howard L. Rhodes
Director
Division of Air Resources Management

HLR/BM/rbm

Attachments

cc: J. Cole, NED
A. Kinghorn, P.E., SEC
B. Harding, BF
R. Perry, BF
J. Braswell, Esq., DEP

Final Determination

Buckeye Florida
Taylor County
Perry, Florida

Construction Permit
AC 62-172092

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

November 19, 1993

Final Determination

November 19, 1993

Buckeye Florida

AC 62-172092 Amendment

The construction permit amendment application package has been reviewed by the Department. The Department's Intent to Issue was distributed on October 6, 1993, and available for public inspection at the Department's Northeast District office and Bureau of Air Regulation office. Public Notice of the Department's Intent to Issue was published in the Taco Times on October 13, 1993.

There were no comments received during the public notice period. Therefore, it is recommended that the construction permit amendment be issued as drafted.

Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes

FROM: Clair Fancy

DATE: November 19, 1993

SUBJ: Approval of a Construction Permit Amendment
AC 62-172092: #2 Bleach Plant & R-8 CLO_2 Generator
Buckeye Florida

Attached for your approval and signature is a construction permit amendment prepared by the Bureau of Air Regulation for the above referenced company to adjust the process input rates to the #2 Bleach Plant in order to be compatible with the #2 Batch Digester System (BDS); and, to extend the expiration date. The expiration date extension will allow time for review of performance tests and to apply for and receive an operation permit.

Buckeye Florida processes wood to produce various paper related products. The digested pulp from the #2 BDS is, after some intermediate processes, specifically bleached in the #2 Bleach Plant. Because of the digesting requirements, no pulp from the #1 BDS is processed in the #2 Bleach Plant. Therefore, the request was not considered an increase in production and the actual performance tests were run at the production rate of the #2 BDS (records show that the #2 BDS has operated at the proposed rates). The existing facility is located outside of Perry, Taylor County, Florida.

I recommend your approval and signature.

CHF/BM/rbm

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

NOV 0 3 1993

4APT-AEB

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

RE: Amendment/Revision of Permit PSD-FL-137 (Cedar Bay)

Dear Mr. Fancy:

As requested in your letter dated September 24, 1993, we have reviewed the revised draft Prevention of Significant Deterioration (PSD) permit and technical evaluation for the above referenced source. The revised permit incorporates the modifications to the originally permitted project which are the result of proceedings under the State's Power Plant Siting Act. These revisions include the requirement for the addition of add-on NO_x controls, lowering the allowable sulfur content of fuels, utilizing continuous emissions monitors (CEMs) for compliance, and several operational changes which will result in reductions in most emission limits from those determined to be BACT in the original permit. We concur with your technical review and proposed permit conditions.

Your letter requested that EPA review and approve the revised permit in accordance with the partial delegation of authority for implementation of the PSD program for power plants located in Florida. Under the partial delegation agreement, your agency conducts the technical and administrative portions of the program while final permit issuance authority is retained by EPA until such time as necessary amendments to State statutes are made and full delegation is granted. By letter dated September 27, 1993, FDEP submitted amendments to the PPSA and requested full delegation of the PSD program for power plants located in Florida. By letter dated October 26, 1993, EPA granted full delegation of the PSD program to the State, including final permit issuance authority. Thus, it is appropriate that FDEP issue the revised final permit for Cedar Bay Cogeneration, Inc. (PSD-FL-137A).

Thank you for the opportunity to review and comment on this package. If you have any questions on these comments, please contact Mr. Gregg Worley of my staff at (404) 347-5014.

Sincerely yours,

Jewell A. Harper, Chief
Air Enforcement Branch
Air, Pesticides, and Toxics
Management Division

cc: B. Mitchell

~~Victor~~ Patty 11/10
FYI - I made
a copy for Bruce -
Please return to
me for distribution
& filing
Regards
Patty

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
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I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. C. S. Aiken
Plant Manager
Buckeye Florida
Route 3, Box 260
Perry, Florida 32347

4a. Article Number
P 230 524 415

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
10-6-93

5. Signature (Addressee)

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

6. Signature (Agent)
A Moore

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

Thank you for using Return Receipt Service.

P 230 524 415

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

UNITED STATES POSTAL SERVICE

Sent to: Mr. C. S. Aiken	
Street and No.: Route 3, Box 260	
P.O., State and ZIP Code: Perry, Florida 32347	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date: Mailed: 10/5/93 AC 62-172092	

PS Form 3800, June 1991

Florida Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

October 5, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. C. S. Aiken
Plant Manager
Buckeye Florida
Route 3, Box 260
Perry, Florida 32347

Dear Mr. Aiken:

Re: Request for Amendment to Construction Permit
AC 62-172092: #2 Bleach Plant and R-8 ClO_2 Generator Plant

Attached is one copy of the Department's Intent to Issue a Permit Amendment and proposed letter amendment to the air construction permit, No. AC 62-172092, to adjust the process input rates to the #2 Bleach Plant in order to be compatible with the #2 Batch Digester System; and, to extend the expiration date. The expiration date extension will allow time for review of performance tests and to apply for and receive an Operation Permit.

If there are any questions, please call Bruce Mitchell at (904)488-1344 or submit any written comments you wish to have considered concerning the Department's proposed action to me.

Sincerely,

John C Brown Jr

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

CHF/BM/rbm

Attachments

cc: J. Cole, NED
A. Kinghorn, P.E., SEC
B. Harding, BF
R. Perry, BF
J. Braswell, Esq., DEP

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of
Application for Permit Amendment by:

Buckeye Florida
Rt. 3, Box 260
Perry, Florida 32347

DEP File No. AC 62-172092
Taylor County

INTENT TO ISSUE

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment (copy attached) for the proposed project as detailed in the application/request specified above, for the reasons stated below.

The applicant, Buckeye Florida, applied on June 15, 1993, to the Department for a permit amendment to adjust the process input rates to the #2 Bleach Plant (BP) in order to be compatible with the #2 Batch Digester System (BDS); also, a request was made in a meeting on August 16 to extend the expiration date to allow for emissions test review and to apply for and receive an Operation Permit. The original agency action permitted the #2 BP to bleaching sequences (C: chlorination; E: caustic extraction; H: sodium hypochlorite; and, D: chlorine dioxide) and process input rates of "CEHDED: 660 unbleached bone dry tons/day" and "DEDED: 900 unbleached bone dry tons/day"; and, the #2 BDS is permitted at "1200 unbleached bone dry tons/day" ("tons" means "short tons"). The permittee provided calculations to show that the original process input rates should have been stated in "equivalent air dry metric machine tons/day", or a different rate if "short tons" is used. Therefore, the error was one of a conversion factor, which was provided in the original application for the project. The #2 BP has been performance tested under the "DEDED" bleaching sequence and the tests were conducted within the 90-100% range of the proposed process input rate; and, the emission test results are being prepared for submittal.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-210 thru 17-297 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an amendment is required for the proposal.

Pursuant to Section 403.815, F.S. and 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 a Permit Amendment. 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

than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the amendment. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address listed below or telephone (904)488-1344. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, 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 amendment.

The Department will issue the permit amendment 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, 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. Petitions filed by the 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, F.S.

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/request 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 PROTECTION

_____

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on _____ to the listed persons.

Clerk Stamp

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

_____ _____
Clerk Date

Copies furnished to:

J. Cole, NED
B. Harding, BF
J. Braswell, Esq., DEP
A. Kinghorn, P.E., SEC
R. Perry, BF

State of Florida
Department of Environmental Protection
Notice of Intent to Issue a Permit Amendment

The Department of Environmental Protection (Department) hereby gives notice of its intent to issue a permit amendment to Buckeye Florida, Rt. 3, Box 260, Perry, Taylor County, Florida 32347, to adjust the process input rates to the #2 Bleach Plant (BP) in order to be compatible with the #2 Batch Digester System (BDS); also, a request was made in a meeting on August 16 to extend the expiration date to allow for emissions test review and to apply for and receive an Operation Permit. The original agency action permitted the #2 BP to bleaching sequences (C: chlorination; E: caustic extraction; H: sodium hypochlorite; and, D: chlorine dioxide) and process input rates of "CEHDED: 660 unbleached bone dry tons/day" and "DEDED: 900 unbleached bone dry tons/day"; and, the #2 BDS is permitted at "1200 unbleached bone dry tons/day" ("tons" means "short tons"). The permittee provided calculations to show that the original process input rates should have been stated in "equivalent air dry metric machine tons/day", or a different rate if "short tons" is used. Therefore, the error was one of a conversion factor, which was submitted in the original application for the project. The #2 BP has been performance tested under the "DEDED" bleaching sequence and the tests were conducted within the 90-100% range of the proposed adjusted process input rate; and, the emission test results are being prepared for submittal. A determination of Best Available Control Technology (BACT) was not required.

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 (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 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, F.S.

The Petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,

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

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

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

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia
Tallahassee, Florida 32301

Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

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

Florida Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

DRAFT

October xx, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. C. S. Aiken
Plant Manager
Buckeye Florida
Route 3, Box 260
Perry, Florida 32347

Dear Mr. Aiken:

Re: Amendment to Construction Permit
AC 62-172092: #2 Bleach Plant and R-8 ClO_2 Generator Plant

The Department has reviewed the above request contained in Mr. Clifford Henry's letter received June 15, 1993, and Mr. Ray Perry's letter received August 16, 1993. The request to adjust the process input rates to the #2 Bleach Plant in order to make it compatible with the #2 Batch Digester System is acceptable; and, the request to extend the expiration date, in order to allow time for emission test reviews and to obtain an Operation Permit, is acceptable. Therefore, the following will be changed and added:

1. Expiration Date
From: December 31, 1993
To: May 31, 1994

2. Specific Condition No. 13

FROM: Maximum allowable total process input rates shall not exceed:

a. CEHDED: 660 unbleached bone dry tons/day
b. DEDED: 900 unbleached bone dry tons/day

TO: Maximum allowable total process input rates shall not exceed:

a. CEHDED: 660 equivalent air dry metric machine tons/day or 720 unbleached bone dry short tons/day
b. DEDED: 900 equivalent air dry metric machine tons/day or 981 unbleached bone dry short tons/day

DRAFT

3. Attachments to be Incorporated:
   - o Mr. Clifford Henry's letter with attachment received June 15, 1993.
   - o Mr. Ray Perry's letter received July 28, 1993.
   - o Mr. Ray Perry's letter with attachments received August 16, 1993.
   - o Mr. Ray Perry's letter with attachment received October 1, 1993, via FAX.

This letter must be attached to the Construction Permit, No. AC 62-172092, and shall become a part of the permit.

Sincerely,

Howard L. Rhodes
Director
Division of Air Resources Management

HLR/BM/rbm

Attachments

cc: J. Cole, NED
A. Kinghorn, P.E., SEC
B. Harding, BF
R. Perry, BF
J. Braswell, Esq., DEP

Attachments

Buckeye Florida
Route 3, Box 260 • Perry, Florida 32347
Telephone: (904) 584-0121

June 9, 1993

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

Re: Construction Permit No. AC62-172092, for the No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant.

Dear Mr. Fancy:

We have discovered an inconsistency with No. 2 Bleach Plant Permit No. AC62-172092 and the No. 2 Batch Digester System Permit No. AC62-141917. The maximum allowable input rate in Specific Condition No. 13 of permit AC62-172092 is listed as 900 unbleached bone dry tons per day (UBDTPD) or 37.5 tons per hour (TPH). During the testing required by Specific Condition No. 4 of AC62-172092, we discovered that this number does not represent the process capability and is also inconsistent with the production rate limit (1200 UBDTPD or 50 TPH) for the #2 Batch Digester System.

We ask that the Department review the attachment and issue an amendment to Construction Permit No. AC62-172092 for the No. 2 Bleach Plant. We would like to change the maximum input rate to 1185 UBDTPD or 49 TPH. We have enclosed a check for $250 to cover the processing fee.

If you have any questions or need additional information, please contact me at (904)584-0347.

Sincerely,

BUCKEYE FLORIDA LIMITED PARTNERSHIP

Clifford Henry

Clifford Henry
Environmental Control Manager

001031

1993 JUN 15 PM 1:17

AIR - MAIL ROOM
RECEIVED

ATTACHMENT

AC62-172092 No. 2 Bleach Plant

A review of the No. 2 Bleach Plant permit application indicates that the 900 UBDTPD was listed as the maximum input rate. This limit was also included in the construction permit. Unfortunately, this number is incorrect. The convention within the mill is to refer to all process production in terms of equivalent "Off the machine", air dry metric tons. The error in the bleach plant limit was due to a miscommunication within the mill with regard to units of measure and point of measurement.

The #2 Batch Digesting System has a maximum production rate of 1200 UBDTPD or 50 TPH listed in both the construction (AC62-141917) and operating (AO62-202122) permits. There is an average fiber loss between the digesters and the bleach plant of 1.2%. This would be the equivalent of 1185.6 UBDTPD or 49.4 TPH maximum input rate to the bleach plant.

During the testing required by Specific Condition No. 4, we measured the average hourly feed rate to be 1007 UBDTPD or 42 TPH. The maximum hourly rate was 1046 UBDTPD or 43.6 TPH. Thus we have demonstrated that we can achieve 43.6 TPH or 89% of the proposed 49 TPH unbleached feed limit on an hourly basis.

July 27, 1993
Perry, FL

Buckeye Florida

Route 3, Box 260 • Perry, Florida 32347 • Telephone: (904) 584-0121

Mr. Bruce Mitchell
Permitting Engineer
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Quarterly Progress Report
Construction Permit AC62-172092, #2 Bleach Plant and
R-8 Chlorine Dioxide Generator Plant

Dear Mr. Mitchell:

We completed the emissions testing for the bleach plant and chlorine dioxide plant in accordance with the "Post Construction and Evaluation Plan" (PCE) dated July 29, 1992. The testing was conducted during late May and the results were submitted to RUST Environment & Infrastructure (formerly SEC Donohue) for modeling during late June. We will submit a formal report containing the results of the testing and the modeling for your review in a timely manner.

If you have any questions, please call me at (904) 584-0576.

Sincerely,

BUCKEYE FLORIDA, LIMITED PARTNERSHIP

Ray Perry

Ray Perry
Air Systems Coordinator

CC: Robert J. Leetch, P.E.
FDEP Northeast District Office

Buckeye Florida
Route 3, Box 260 • Perry, Florida 32347
Telephone: (904) 584-0121

RECEIVED
AUG 16 1993
Division of Air
Resources Management

August 13, 1993

Mr. Bruce Mitchell
Permitting Engineer
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Construction Permit AC62-172092, #2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant

Dear Mr. Mitchell:

I have attached the documentation that we discussed during our conversation on August 5, 1993. I hope that this information will meet your needs. The data shows that we have not increased our maximum production capacity. I have also attached documentation to show the mill convention for calculating production tonnage.

The point of confusion is the "900 bone dry unbleached tons of pulp per day" rate listed in the permit & the permit application. I did not discover that there was a problem until I began to compile the data taken during the emissions testing in May. My best guess is that the rate was given to the application writer as "900 Tons per Day". It should have been given as "900 Equivalent Air Dry Metric Tons Per Day" off the machine. This translates into 45 (short) Tons per hour of unbleached feed to the #2 Bleach Plant.

The rate change as requested, in the letter dated June 9, 1993, signed by Clifford Henry, would make the #2 Bleach Plant permit consistent with the #2 Digesting System permits. As the attachments will show, we can operate the bleach plant at a maximum rate of 45 tons per hour. During the emissions testing we had one hour at 44 tons per hour. This is 90% of the requested 49 Tons per hour rate.

I appreciate your help in resolving this issue. If you have any questions, please call me at (904)-584-0333.

Sincerely,

BUCKEYE FLORIDA, LIMITED PARTNERSHIP

Ray Perry

Ray Perry
Air Systems Coordinator

Attachment 1

#2 Mill Production Review

1) Maximum demonstrated capability[1] pre 10/90:

review of production logs for calendar year 1989 and 1990 indicates a maximum production rate of **77 blows/day** from the #2 Digesting System (see attachment 3a)

2) Maximum demonstrated capability[1] post 10/90:

review of production logs for calendar year 1991, 1992, and 1993 indicates a maximum production rate of **77 blows/day** from the #2 Digesting System (see attachment 3b & 3c)

3) Conversion of Blows to Tons of Pulp:

Based on a nominal yield of 11.1 ADMT[2]/blow

(77 blows/day) x (11.1 ADMT/blow) = 855 ADMT/day

4) Conversion to Bone dry tons (still metric):

assume 10 percent moisture

855 ADMT/day - (855 x 0.10) = 770 BDMT/day

5) Convert to short tons:

1 metric ton = 1.1023 short tons

770 BDMT/day x 1.1023 = 849 BDST/day

6) Convert to unbleached feed to #2 Bleach Plant

assume loss of 9.0% between bleach feed and off the paper machine; see Attachment 4 Part 5

849 BDST/day = (bleached feed) x (0.91)
bleached feed = 933 BDUST/day @ 77 blows/day

pulp yield per blow can vary by 5%

933 BDUST/day + (933 x 0.05) = **980 BDUST/day**

or a 40.8 Tons/hour average rate

Footnotes:

1 - New chlorine dioxide generator was connected to bleach plant and began operation in October of 1990

2 - Air dry metric machine tons

Attachment 2

#2 Bleach Plant Rate Calculations

(Reference - Attachments 4 & 5)

1) Bleach Plant rate is measured in terms of equivalent air dry metric machine tons per day.

2) The maximum bleach plant rate is "900 equivalent air dry metric machine tons per day". This translates into 1072 bone dry unbleached short tons per day (45 Tons per hour).

(900 EADMTPD/0.0551) x 0.0605 = 988 actual ADMTPD

add 8.5% loss to get true feed rate:

988 ADMTPD = (Feed) x 0.915 or 1080 ADUMTPD

assume 10% moisture for air dry pulp:

1080 ADUMTPD - (1080 x .010) = 972 BDUMTPD

convert to short tons:

972 BDMTPD x 1.1023 = 1072 BDUSTPD or **45 Tons per hour**

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

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

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

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. C. S. Aiken
Plant Manager
Buckeye Florida
Route 3, Box 260
Perry, FL 32347

4a. Article Number
P 872 562 571

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
10/7/93

5. Signature (Addressee)

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

6. Signature (Agent)
R Moore

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

Thank you for using Return Receipt Service.

P 872 562 571

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

UNITED STATES POSTAL SERVICE

Sent to Mr. C. S. Aiken, Buckeye FL	
Street and No. Rt. 3, Box 260	
P.O., State and ZIP Code Perry, FL 32357	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date Mailed: 10-6-93 Permit: AC 62-172092	

PS Form **3800**, JUNE 1991

File Copy

Florida Department of
Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 6, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. C. S. Aiken
Plant Manager
Buckeye Florida
Route 3, Box 260
Perry, Florida 32347

Dear Mr. Aiken:

Re: Request for Amendment to Construction Permit
AC 62-172092: #2 Bleach Plant and R-8 ClO_2 Generator Plant

Attached is one copy of the Department's Intent to Issue a Permit Amendment and proposed letter amendment to the air construction permit, No. AC 62-172092, to adjust the process input rates to the #2 Bleach Plant in order to be compatible with the #2 Batch Digester System; and, to extend the expiration date. The expiration date extension will allow time for review of performance tests and to apply for and receive an Operation Permit.

If there are any questions, please call Bruce Mitchell at (904)488-1344 or submit any written comments you wish to have considered concerning the Department's proposed action to me.

Sincerely,

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

CHF/BM/rbm

Attachments

cc: J. Cole, NED
A. Kinghorn, P.E., SEC
B. Harding, BF
R. Perry, BF
J. Braswell, Esq., DEP

10-6-93 BM

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of
Application for Permit Amendment by:

Buckeye Florida
Rt. 3, Box 260
Perry, Florida 32347

DEP File No. AC 62-172092
Taylor County

INTENT TO ISSUE

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment (copy attached) for the proposed project as detailed in the application/request specified above, for the reasons stated below.

The applicant, Buckeye Florida, applied on June 15, 1993, to the Department for a permit amendment to adjust the process input rates to the #2 Bleach Plant (BP) in order to be compatible with the #2 Batch Digester System (BDS); also, a request was made in a meeting on August 16 to extend the expiration date to allow for emissions test review and to apply for and receive an Operation Permit. The original agency action permitted the #2 BP to bleaching sequences (C: chlorination; E: caustic extraction; H: sodium hypochlorite; and, D: chlorine dioxide) and process input rates of "CEHDED: 660 unbleached bone dry tons/day" and "DEDED: 900 unbleached bone dry tons/day"; and, the #2 BDS is permitted at "1200 unbleached bone dry tons/day" ("tons" means "short tons"). The permittee provided calculations to show that the original process input rates should have been stated in "equivalent air dry metric machine tons/day", or a different rate if "short tons" is used. Therefore, the error was one of a conversion factor, which was provided in the original application for the project. The #2 BP has been performance tested under the "DEDED" bleaching sequence and the tests were conducted within the 90-100% range of the proposed process input rate; and, the emission test results are being prepared for submittal.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-210 thru 17-297 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an amendment is required for the proposal.

Pursuant to Section 403.815, F.S. and 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 a Permit Amendment. 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the amendment. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address listed below or telephone (904)488-1344. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, 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 amendment.

The Department will issue the permit amendment 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, 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. Petitions filed by the 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, F.S.

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/request 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 PROTECTION

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 10/6/93 to the listed persons.

Clerk Stamp

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

Barbara Boutwell — Clerk
10/6/93 — Date

Copies furnished to:

J. Cole, NED
B. Harding, BF
J. Braswell, Esq., DEP
A. Kinghorn, P.E., SEC
R. Perry, BF

State of Florida
Department of Environmental Protection
Notice of Intent to Issue a Permit Amendment

The Department of Environmental Protection (Department) hereby gives notice of its intent to issue a permit amendment to Buckeye Florida, Rt. 3, Box 260, Perry, Taylor County, Florida 32347, to adjust the process input rates to the #2 Bleach Plant (BP) in order to be compatible with the #2 Batch Digester System (BDS); also, a request was made in a meeting on August 16 to extend the expiration date to allow for emissions test review and to apply for and receive an Operation Permit. The original agency action permitted the #2 BP to bleaching sequences (C: chlorination; E: caustic extraction; H: sodium hypochlorite; and, D: chlorine dioxide) and process input rates of "CEHDED: 660 unbleached bone dry tons/day" and "DEDED: 900 unbleached bone dry tons/day"; and, the #2 BDS is permitted at "1200 unbleached bone dry tons/day" ("tons" means "short tons"). The permittee provided calculations to show that the original process input rates should have been stated in "equivalent air dry metric machine tons/day", or a different rate if "short tons" is used. Therefore, the error was one of a conversion factor, which was submitted in the original application for the project. The #2 BP has been performance tested under the "DEDED" bleaching sequence and the tests were conducted within the 90-100% range of the proposed adjusted process input rate; and, the emission test results are being prepared for submittal. A determination of Best Available Control Technology (BACT) was not required.

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 (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 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, F.S.

The Petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,

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

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

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

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia
Tallahassee, Florida 32301

Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

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

Florida Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

October xx, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. C. S. Aiken
Plant Manager
Buckeye Florida
Route 3, Box 260
Perry, Florida 32347

Dear Mr. Aiken:

Re: Amendment to Construction Permit
AC 62-172092: #2 Bleach Plant and R-8 ClO_2 Generator Plant

The Department has reviewed the above request contained in Mr. Clifford Henry's letter received June 15, 1993, and Mr. Ray Perry's letter received August 16, 1993. The request to adjust the process input rates to the #2 Bleach Plant in order to make it compatible with the #2 Batch Digester System is acceptable; and, the request to extend the expiration date, in order to allow time for emission test reviews and to obtain an Operation Permit, is acceptable. Therefore, the following will be changed and added:

1. Expiration Date
From: December 31, 1993
To: May 31, 1994

2. Specific Condition No. 13

FROM: Maximum allowable total process input rates shall not exceed:

a. CEHDED: 660 unbleached bone dry tons/day
b. DEDED: 900 unbleached bone dry tons/day

TO: Maximum allowable total process input rates shall not exceed:

a. CEHDED: 660 equivalent air dry metric machine tons/day or 720 unbleached bone dry short tons/day
b. DEDED: 900 equivalent air dry metric machine tons/day or 981 unbleached bone dry short tons/day

3. Attachments to be Incorporated:
   - o Mr. Clifford Henry's letter with attachment received June 15, 1993.
   - o Mr. Ray Perry's letter received July 28, 1993.
   - o Mr. Ray Perry's letter with attachments received August 16, 1993.
   - o Mr. Ray Perry's letter with attachment received October 1, 1993, via FAX.

This letter must be attached to the Construction Permit, No. AC 62-172092, and shall become a part of the permit.

Sincerely,

Howard L. Rhodes
Director
Division of Air Resources Management

HLR/BM/rbm

Attachments

cc: J. Cole, NED
A. Kinghorn, P.E., SEC
B. Harding, BF
R. Perry, BF
J. Braswell, Esq., DEP

Buckeye Florida
Route 3, Box 260 • Perry, Florida 32347
Telephone: (904) 584-0121

October 15, 1993

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

RE: Buckeye Florida, Limited Partnership
Facility: 31JAX620001
Permit: AC62-172092
Publication of "Notice of Intent to Issue a Permit Amendment".

Dear Mr. Fancy:

Enclosed is one copy of the Affidavit verifying publication of the "Notice of Intent to Issue a Permit Amendment" ("Notice of Intent") to extend the expiration date of construction permit No. AC62-172092, and to adjust the process input rates for No.2 Bleach Plant. The "Notice of Intent" was received by Buckeye Florida, Limited Partnership (Buckeye) on October 7, 1993. The "Notice of Intent" was published one time in accordance with Rule number 17-103.150 of the F.A.C.

The date of publication of the "Notice of Intent" was October 13, 1993 in the "Taco Times" Legal Ad section. The "Taco Times" is a newspaper with general circulation in the affected area of Taylor County, Florida. The date of publication was within the 30 day period from the date on which the document was received by Buckeye. This proof of publication is being provided to the Department within seven days of the date of publication.

If you have any questions or need additional information, please contact me at (904) 584-0333.

Sincerely,

BUCKEYE FLORIDA, LIMITED PARTNERSHIP

Ray Perry

Ray Perry
Air Systems Coordinator

RECEIVED
OCT 19 1993
Division of Air Resources Management

cc: B. Mitchell
J. Cole, NE Dist

"First in Cellulose"

THE TACO TIMES
Published Weekly in City of Perry
County of Taylor
State of Florida

STATE OF FLORIDA,
COUNTY OF TAYLOR

AFFIDAVIT OF PUBLICATION

Before me, the undersigned authority, personally appeared DONALD D. LINCOLN, who on oath says that he is the PUBLISHER of the Perry News-Herald, weekly newspaper published in Perry, Taylor County, Florida, that the attached copy of advertisement in re: Buckeye - Dept. of Environmental Protection was published in said newspaper in the issues of: October 13, 1993

Affiant says further that the said Perry News-Herald is a newspaper published at Perry in said Taylor County, Florida, and that the said newspaper has heretofore been continuously published in said Taylor County, Florida, each week; has been entered as second class mail matter at the Post Office in Perry, Florida, in said Taylor County, Florida for a period of one year next proceeding the first publication of the attached copy of notice to appear: and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Donald D. Lincoln, Publisher

Sworn to and subscribed before me this 14th day of Oct., 1993.

Notary Public

NOTARY PUBLIC, STATE OF FLORIDA
My Commission Expires Jan. 24, 1995
Bonded through The Travelers
CC 076897

State of Florida
Department of Environmental Protection
Notice of Intent to Issue a Permit
Amendment

The Department of Environmental Protection (Department) hereby gives notice of its intent to issue a permit amendment to Buckeye, Florida, Rt 3 Box 3, Box 260, Perry, Taylor County, Florida 32347, to adjust the process input rates to the #2 Bleach Plant (BP) in order to be compatible with the #2 Batch Digester System (BDS); also, a request was made in a meeting on August 16, to extend the expiration date to allow for emissions test review and to apply for and receive an Operation Permit. The original agency action permitted the #2 BP to bleaching sequences (c: chlorination; E caustic extraction; H: sodium hypochlorite; and D: chlorine dioxide) and process input rates of "CEHDED: 660 unbleached bone dry tons/day" and DEDED: 900 unbleached bone dry tons/day"; and, the #2 BDS is permitted at "1200 unbleached bone dry tons/day" ("tons" means "short tons"). The permittee provided calculations to show that the original process input rates should have been stated in "equivalent air dry metric machine tons/day", or a different rate if, "short tons" is used. Therefore, the error was one of a conversion factor, which was submitted in the original application for the project. The #2 BP has been performance tested under the "DEDED" bleaching sequence and the tests were conducted within the 90-100% range of the proposed adjusted process input rate; and, the emission test results are being prepared for submittal. A determination of Best Available Control Technology (BACT) was not required.

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(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 statment 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.

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Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia
Tallahassee, FL 32301

Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, FL 32256-7577

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

PM
10-4-93
Perry, FL

Buckeye Florida

Route 3, Box 260 • Perry, Florida 32347
Telephone: (904) 584-0121

October 1, 1993

Mr. Bruce Mitchell
Permitting Engineer
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Construction Permit AC62-172092, #2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant

Dear Mr. Mitchell:

I have attached the documentation per our conversation this morning. This should replace "Attachment 2" of my letter of August 13, 1993 with the corrections we discussed. I have also since found that the second and third paragraphs of that letter contain incorrect information:

The last line of the second paragraph of the letter should read: **This translates into 41 (short) Tons per hour of unbleached feed to the #2 Bleach Plant.**

The second and third sentence of the third paragraph of the letter should read: **As the attachments will show, we can operate the bleach plant at a maximum rate of 41 tons per hour. During the emissions testing, the highest recorded rate was at 39.6 tons per hour.**

The last sentence of the third paragraph is no longer relevant.

I would like to suggest changing the language for Specific Condition No. 13 to the following:

13. Maximum allowable total process input rates shall not exceeded:

a. CEHDED: 660 equivalent air dry metric machine tons/day or 720 bone dry tons/day of unbleached feed

b. DEDED: 900 equivalent air dry metric machine tons/day or 981 bone dry tons/day of unbleached feed

I appreciate your help in resolving this issue. If you have any questions, please call me at (904)-584-0333.

Sincerely,

BUCKEYE FLORIDA, LIMITED PARTNERSHIP

Ray Perry

Ray Perry
Air Systems Coordinator

Attachment 2
Revised 10/1/93

#2 Bleach Plant Rate Calculations

(Reference - Attachments 4 & 5)

1) Bleach Plant rate is measured in terms of equivalent air dry metric machine tons per day.

2) The maximum bleach plant rate is 900 "equivalent air dry metric machine tons per day" when operating in the DEDED bleaching sequence. This translates into 981 bone dry unbleached short tons per day (41 Tons per hour).

   CALCULATION:

   a) assume 10% moisture for air dry pulp:

      900 EADMTPD - 10% moisture = 810 MTPD bone dry

   b) assume 9.0% loss to get true bleach plant feed rate:

      810 MTPD = (Feed) x 0.910 or 890 UMTPD

   c) convert to short tons:

      890 UMTPD x 1.1023 = **981** BDUSTPD

   or **41 Tons per hour** unbleached feed to the bleach plant when operating in the DEDED sequence

3) The maximum bleach plant rate is 660 "equivalent air dry metric machine tons per day" when operating in the CEHDED bleaching sequence. This translates into 720 bone dry unbleached short tons per day (30 Tons per hour).

   CALCULATION:

   a) assume 10% moisture for air dry pulp:

      660 EADMTPD - 10% moisture = 594 MTPD bone dry

   b) assume 9.1% loss to get true bleach plant feed rate:

      594 MTPD = (Feed) x 0.909 or 653 UMTPD

   c) convert to short tons:

      653 UMTPD x 1.1023 = **720** BDUSTPD

   or **30 Tons per hour** unbleached feed to the bleach plant when operating in the CEHDED sequence.

BUCKEYE FLORIDA
ROUTE 3 BOX 260
HIGHWAY 30
PERRY, FLORIDA 32347

FOLEY MILL ENVIRONMENTAL CONTROL GROUP
FAX # (904) 584-9517

FROM:

____ Bruce Harding; Environmental Control Manager
____ Dave Weeden; Wastewater Treatment System Manager
____ Edye Rowell; Chemicals & Solid Waste Coordinator
X Ray Perry; Air Systems Coordinator
____ Paul Bollermann; Environmental Technician

TO: Bruce Mitchell
BAR

MESSAGE: These changes will correct the translational error. The correct calculations are on page 2 of this ~~fax~~. Thanks again for your help. If I can provide you any ~~furthur~~ data please call.

Pages following this cover sheet: 2

The parties above can be reached at the following phone Nos.

Bruce Harding	(904) 584-0106
Dave Weeden	(904) 584-0398
Edye Rowell	(904) 584-0104
Ray Perry	(904) 584-0576 or 584-0333
Paul Bollermann	(904) 584-0576

Buckeye Florida
Route 3, Box 260 • Perry, Florida 32347
Telephone: (904) 584-0121

RECEIVED
AUG 16 1993
Division of Air
Resources Management

August 13, 1993

Mr. Bruce Mitchell
Permitting Engineer
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Construction Permit AC62-172092, #2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant

Dear Mr. Mitchell:

I have attached the documentation that we discussed during our conversation on August 5, 1993. I hope that this information will meet your needs. The data shows that we have not increased our maximum production capacity. I have also attached documentation to show the mill convention for calculating production tonnage.

The point of confusion is the "900 bone dry unbleached tons of pulp per day" rate listed in the permit & the permit application. I did not discover that there was a problem until I began to compile the data taken during the emissions testing in May. My best guess is that the rate was given to the application writer as "900 Tons per Day". It should have been given as "900 Equivalent Air Dry Metric Tons Per Day" off the machine. This translates into 45 (short) Tons per hour of unbleached feed to the #2 Bleach Plant.

The rate change as requested, in the letter dated June 9, 1993, signed by Clifford Henry, would make the #2 Bleach Plant permit consistent with the #2 Digesting System permits. As the attachments will show, we can operate the bleach plant at a maximum rate of 45 tons per hour. During the emissions testing we had one hour at 44 tons per hour. This is 90% of the requested 49 Tons per hour rate.

I appreciate your help in resolving this issue. If you have any questions, please call me at (904)-584-0333.

Sincerely,

BUCKEYE FLORIDA, LIMITED PARTNERSHIP

Ray Perry

Ray Perry
Air Systems Coordinator

Attachment 1

#2 Mill Production Review

1) Maximum demonstrated capability[1] pre 10/90:

review of production logs for calendar year 1989 and 1990 indicates a maximum production rate of **77 blows/day** from the #2 Digesting System (see attachment 3a)

2) Maximum demonstrated capability[1] post 10/90:

review of production logs for calendar year 1991, 1992, and 1993 indicates a maximum production rate of **77 blows/day** from the #2 Digesting System (see attachment 3b & 3c)

3) Conversion of Blows to Tons of Pulp:

Based on a nominal yield of 11.1 ADMT[2]/blow

(77 blows/day) x (11.1 ADMT/blow) = 855 ADMT/day

4) Conversion to Bone dry tons (still metric):

assume 10 percent moisture

855 ADMT/day - (855 x 0.10) = 770 BDMT/day

5) Convert to short tons:

1 metric ton = 1.1023 short tons

770 BDMT/day x 1.1023 = 849 BDST/day

6) Convert to unbleached feed to #2 Bleach Plant

assume loss of 9.0% between bleach feed and off the paper machine; see Attachment 4 Part 5

849 BDST/day = (bleached feed) x (0.91)
bleached feed = 933 BDUST/day @ 77 blows/day

pulp yield per blow can vary by 5%

933 BDUST/day + (933 x 0.05) = **980 BDUST/day**

or a 40.8 Tons/hour average rate

Footnotes:

1 - New chlorine dioxide generator was connected to bleach plant and began operation in October of 1990

2 - Air dry metric machine tons

Attachment 2

#2 Bleach Plant Rate Calculations

(Reference - Attachments 4 & 5)

1) Bleach Plant rate is measured in terms of equivalent air dry metric machine tons per day.

2) The maximum bleach plant rate is "900 equivalent air dry metric machine tons per day". This translates into 1072 bone dry unbleached short tons per day (45 Tons per hour).

(900 EADMTPD/0.0551) x 0.0605 = 988 actual ADMTPD

add 8.5% loss to get true feed rate:

988 ADMTPD = (Feed) x 0.915 or 1080 ADUMTPD

assume 10% moisture for air dry pulp:

1080 ADUMTPD - (1080 x .010) = 972 BDUMTPD

convert to short tons:

972 BDMTPD x 1.1023 = 1072 BDUSTPD or **45 Tons per hour**

Attachment 3a

PRODUCTION DATE
07/29/89

DAILY OPERATIONS SUMMARY REPORT
****

	**No. 1 MILL ** STOCK: V-60		** No. 2 MILL ** STOCK: P-1		** TOTAL MILL DAILY SUMMARY	
	BLOWS	TONS	BLOWS	TONS	BLOWS	TONS
ACT.	72	618	77	853	149	1,471
BUD.	58.9	505	65.9	730	125	1,235
EFFIC	100.0%	113	98.7%	123	99.3%	236

*** TOTAL MILL SUMMARY***

	ACT	BUD	DIFFERENCE
MONTH TO DATE	32,171	30,768	1,403
YEAR TO DATE	32,171	30,768	1,403

SAFETY NOTES: 2 NEAR MISSES: #1 RW ROLL STOP CAME DN ON FINISHING EMPLOYEE'S FOOT. STEEL TOE SHOES PROTECTED FOOT. FINISHING EMPLOYEE CAUGHT BETWEEN 2 ROLLS ON #2 RW.

ENVIRONMENTAL: LEVEL GREEN, PULP IN ACID SWR BACK IN LIMTS, CHNGED OUT BLEACH W1 SEAL RING

NO.1 MILL RESULTS/SUMMARY:

QUALITY: V-60: CA RESULTS HIGH AND OUT OF LIMITS ON 8/4, 4/12

RELIABILITY: #1 PAPER MACHINE R.I.S. % UPTIME = 94.7%
IMPACTS TO UPTIME:
RAN PK SPEED, 12/8 & 8/4.
BROKE AT 2ND BREAKER ON 4/12

NO.2 MILL RESULTS/SUMMARY:

QUALITY: P-1: CATCHING 687, 12/8. CR 683 SINCE THEN.
USING UNSCREENED CHIPS TO KEEP UP WITH DIGESTING

RELIABILITY: #2 PAPER MACHINE R.I.S. % UPTIME = 100%
IMPACTS TO UPTIME:

RAN PEAK SPEED ALL THREE SHIFTS

LIQUOR SYSTEM/UTILITIES RESULTS/SUMMARY

QUALITY: ADDING NAOH & NASH TO FILT & USED TNKS AND BATCHING SYNTHETIC FRESH DUE TO THE LOW WHITE LIQ INV
SERVICE WATER HARDNESS WAS HIGH UNTIL 22:00, IN LIMITS NOW

RELIABILITY: RECOVERY BOILER R.I.S. % UPTIME= 92.2%
#4 RB ON LINE @ 0220 & ON LIQ @ 0400.
#4 RB RATE LIMITED- HI SUPERHTR TEMP 'TIL 4/12

PRODUCTION DATE
10/25/92

FOLEY DAILY OPERATIONS SUMMARY REPORT
****

	**No. 1 MILL ** STOCK: V-81		** No. 2 MILL ** STOCK: NMC/HPZII		** TOTAL MILL DAILY SUMMARY	
	BLOWS	TONS	BLOWS	TONS	BLOWS	TONS
ACT.	60	498	77	870	137	1,368
BUD.	62.2	516	70.1	792	132	1,308
EFFIC	87.0%	-18	98.7%	78	93.2%	60

*** TOTAL MILL SUMMARY***

	ACT	BUD	DIFFERENCE
MONTH TO DATE	30,349	30,035	314
YEAR TO DATE	135,953	132,149	3,804

BUDGET REFLECTS 25 HOUR DAY Time change

SAFETY NOTES: FA 4/12: PWRHSE EMPL GOT BLK LIQ IN EYE, 1ST RESP FLUSHED IT OUT.

ENVIRONMENTAL: LEVEL YELLOW, INCOMING LOAD ELEVATED.

NO.1 MILL RESULTS/SUMMARY:

QUALITY: V-81: 12/8 AVGS: VISC 7.4, CA AG 8.0, MED DIRTS OOL
8/4 AVGS: VISC 7.09, Ca 10.
4/12 AVGS: VISC 7.3, Ca 9.0, S-21.5 1.49.

RELIABILITY: #1 BLEACH PLANT R.I.S. % UPTIME = 85.0%
IMPACTS TO UPTIME:
550 TPD TIL DOWN @ 19:30, W10 DIL'N PUMP MOTOR BURNT UP. REPLACED MOTOR, S/U @ 23:00.

NO.2 MILL RESULTS/SUMMARY:

QUALITY: NMC: CR 682
BRIGHTNESS AVGS: 12/8, 85.0

RELIABILITY: #2 PAPER MACHINE R.I.S. % UPTIME = N/A
IMPACTS TO UPTIME:
580-595 FPM DRYER LIMITED ALL DAY.

LIQUOR SYSTEM/UTILITIES RESULTS/SUMMARY

QUALITY: SVC H2O QUALITY GOOD ALL DAY.

RELIABILITY: RECOVERY BOILER R.I.S. % UPTIME= 100%
RB'S @ AIM RATES ALL DAY.

Attachment 3c

PRODUCTION DATE
02/08/93

FOLEY DAILY OPERATIONS SUMMARY REPORT
****

	**No. 1 MILL ** STOCK: V-60		** No. 2 MILL ** STOCK: NMC/HPZII		** TOTAL MILL DAILY SUMMARY	
	BLOWS	TONS	BLOWS	TONS	BLOWS	TONS
ACT.	65	559	77	870	142	1,429
BUD.	60.5	520	67.4	762	128	1,282
EFFIC	90.3%	39	98.7%	108	94.7%	147

*** TOTAL MILL SUMMARY***

	ACT	BUD	DIFFERENCE
MONTH TO DATE	10,428	10,090	338
YEAR TO DATE	263,756	262,345	1,411

SAFETY NOTES: NO INCIDENTS

ENVIRONMENTAL: LEVEL GREEN

NO.1 MILL RESULTS/SUMMARY:

QUALITY: V-60: 12/8 AVGS: VISC 5.3, CA 26, S-21.5 3.4
VISC 5.4, CA 22, S-21.5 3.3 8/4
4/12 AVGS: VISC 5.3, Ca 27.

RELIABILITY: #1 PAPER MACHINE R.I.S. % UPTIME = 83.9%
IMPACTS TO UPTIME:
430 FPM 12/8,DN 7:45-8:50,CRUSHED OUT @ 1ST BREAKER
DN 10:20-12:30, BROKE @ 2ND BREAKER, LINED OUT TO
370 FPM. INCRSD TO AIM @ 16:20.

NO.2 MILL RESULTS/SUMMARY:

QUALITY: NMC: CR 682

RELIABILITY: #2 PAPER MACHINE R.I.S. % UPTIME = 96.0%
IMPACTS TO UPTIME:
HPZ II: 575 FPM, DN 05:00-06:00, LOST @ THE REEL.
15.8 ADMT

LIQUOR SYSTEM/UTILITIES RESULTS/SUMMARY

QUALITY: SERVICE H2O OK

RELIABILITY: RECOVERY BOILER R.I.S. % UPTIME= 100%
RBS @ AIM RATE

Attachment 4

I N T E R D E P A R T M E N T A L C O R R E S P O N D E N C E

FR: Ned Kruis
TO: Distribution
SUBJECT: Tonnage Calculations

DATE: October 25, 1990

The following guidelines and shrinkage numbers should be used to calculate Tons/Day and Chemical Usage in Lbs/Day.

1-Tonnage calculations are based on tons as produced in Pulp drying in ADMTPD (Air Dryed Metric Tons Per Day). The tons in each department other than Pulp Drying are in EADMTPD (Equivalent ADMTPD), indicating that the true tons at the front end of that department are greater due to shrinkage (or yield loss).

2-RIS Speeds are in EADMTPD. This allows us to set all Aim Rates the same across the pulp stream.

3-Chemical usage numbers in lbs/ton are based on EADMTPD. This aligns these numbers with the budget figures.

4-Real time tonnage calculations use Bone Dry consistencies in %C and volumetric flows in GPM. To convert from gpm and %C to metric TPD, use 0.0545 as the multiplier. For ADMTPD, use 0.0605. For EADMTPD, use the appropriate shrinkage number.

5-Shrinkage numbers were obtained from the 1989 study report by Sirrine and are as follows.

GRADE		DIGESTING	W&S	BLEACH	PULPDRY
P-1 (#2 mill, NMC)	Shrinkage	0.0%	1.2%	8.5%	0.5%
	Multiplier	1.000	0.988	0.915	0.995
V-5 (V-61, A-5)	Shrinkage	0.0%	2.0%	11.0%	1.1%
	Multiplier	1.000	0.980	0.890	0.989
HPZ	Shrinkage	0.0%	1.4%	11.0%	1.1%
	Multiplier	1.000	0.986	0.890	0.989
V-60 (V-65)	Shrinkage	0.0%	1.8%	8.0%	1.1%
	Multiplier	1.000	0.982	0.920	0.989

Example:

1000 988 904 899

Subject: TDC Calculated Tons Per Day

Ray Perry

The TDC calculated Tons Per Day at the Front End of Bleaching are in **Equivalent Air Dried Metric Tons Per Day (EADMTPD).**

This means that the tons calculated are equivalent "tons across the Reel" in Pulp Drying. Since there is shrinkage between Bleaching and Pulp Drying, the **actual tons** at the Front End of Bleach are **higher** than the number indicates.

No. 1 Bleach is measured at the Front End

EADMTPD = GPM * %C * 0.0526

The GPM is from FIC5106, which is measured after the Break Tank.
The %C is from VIC5102, which is measured just before the Break Tank.

No. 2 Bleach is measured at the downstream side of Tower D-11

EADMTPD = GPM * %C * 0.0551

The GPM is from FIC5833, which is the stock leaving D-11
The %C is from VIC5834, which is in the same location as the flow.

The actual ADMTPD in these locations would use the conversion factor of 0.0605

You can assume that the shrinkage for Bleaching is about 10%. Therefore, just add 10% to the TDC number to come up with the actual tons at the **Front End** of each Bleach Plant. 8.5% more correct

If you have any other questions, please call me @ 561.

Ned Kruis

Process Rate Data for 11-May-93

Hourly Averages
PVR

PV RETRIEVAL REQUEST

17:42 12 May 93
PAGE 1

LEGEND: ' = Calculated time ~ = Time changed " = HG data # = Less than expected # samples

DATE/ TIME	5M1PDRTE TPD NO1 PLPD	5M1BLRTE NO1 FE BLE RATE	3M1WSRTE TPD NO1 WASH	3M1SCRTE TPD NO1 SCRN	5M2PDRTE TPD NO2 PLPD	5M2BLRTE TPD BLE RATE	5M2WSRTE TPD NO2 WASH	5M2SCRTE TPD NO2 SCRN
05/11/93								
08:00	568	549	559	512	865	866	815	848
09:00	567	550	464	459	859	867	830	849
10:00	568	549	453	413	841*	867	826	847
11:00	568	550	459	420	824	866	852	848
12:00	567	550	562	491	816	865	858	849
13:00	567	551	563	509	813	865	858	849
14:00	567	549	564	487	813	865	286	794
15:00	567	549	548	509	788	849	854	842
16:00	567	551	486	449	48	0	837	763
17:00	567	550	570	437	721	2	857	450
18:00	568	550	509	486	740	788	851	385
19:00	567	549	403	429	770	825	773	827
20:00	560	490	353	380	803	867	711	849

Attachment 6a

Equivalent Air Dry Metric Machine Tons

5M2BLRTE #2 Bleach Plant Rate

Process Rate Data for 12-May-93

Hourly Averages
PVR

PV RETRIEVAL REQUEST

17:43 12 May 93
PAGE 1

LEGEND: ' = Calculated time ~ = Time changed " = HG data * = Less than expected # samples

DATE/ TIME	5M1PDRTE TPD NO1 PLPD	5M1BLRTE NO1 FE BLE RATE	3M1WSRTE TPD NO1 WASH	3M1SCRTE TPD NO1 SCRN	5M2PDRTE TPD NO2 PLPD	5M2BLRTE TPD BLE RATE	5M2WSRTE TPD NO2 WASH	5M2SCRTE TPD NO2 SCRN
05/12/93								
07:00	528	490	598	608	866	867	796	849
08:00	529	490	559	585	866	868	787	834
09:00	545	490	564	554	865	868	735	813
10:00	569	509	491	542	852	868	748	835
11:00	568	495	527	439	846	868	847	839
12:00	567	489	39	109	847	867	844	837
13:00	567	484	5	13	845	829	849	839
14:00	567	430	564	505	847	821	852	839
15:00	568	494	587	574	845	805	871	839
16:00	567	491	578	584	848	775	833	838
17:00	567	490	533	590	848	778	852	837

Equivalent Air Dry metric machine Tons

5M2 BLRTE #2 Bleach Plant Rate

Attachment 6b

Hourly Averages
PVR

Pulp Rate Data for 13-May-93

PV RETRIEVAL REQUEST

20:49 13 May 93
PAGE 1

LEGEND: ' = Calculated time ~ = Time changed " = HG data * = Less than expected # samples

DATE/ TIME	3M1WSRTE TPD NO1 WASH	3M1SCRTE TPD NO1 SCRN	5M1BLRTE NO1 FE BLE RATE	5M1PDRTE TPD NO1 PLPD	5M2WSRTE TPD NO2 WASH	5M2SCRTE TPD NO2 SCRN	5M2BLRTE TPD BLE RATE	5M2PDRTE TPD NO2 PLPD
05/13/93								
07:00	442	530	490	567	848	866	820	863
08:00	518	476	490	568	860	866	670	862
09:00	518	503	490	567	859	866	302	863
10:00	523	524	495	567	878	867	829	861
11:00	520	550	483	567	880	866	821	855
12:00	525	553	480	566	875	853	824	866
13:00	518	516	490	567	879	847	852	864
14:00	524	520	490	566	882	860	872	863
15:00	521	545	491	566	888	860	871	864
16:00	521	582	490	567	880	860	869	865
17:00	513	547	490	567	871	860	869	864
18:00	304	434	490	561	852	860	870	864
19:00	0	11	489	530	847	860	869	865
20:00	447	245	485	528	857	860	869	866

Equivalent Air Dry metric Machine Tons

5M2BLRTE #2 Bleach Plant Rate

Attachment 6c

PM
July 27, 1993
Perry, FL

Buckeye Florida

Route 3, Box 260 • Perry, Florida 32347 • Telephone: (904) 584-0121

Mr. Bruce Mitchell
Permitting Engineer
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Quarterly Progress Report
Construction Permit AC62-172092, #2 Bleach Plant and
R-8 Chlorine Dioxide Generator Plant

Dear Mr. Mitchell:

We completed the emissions testing for the bleach plant and chlorine dioxide plant in accordance with the "Post Construction and Evaluation Plan" (PCE) dated July 29, 1992. The testing was conducted during late May and the results were submitted to RUST Environment & Infrastructure (formerly SEC Donohue) for modeling during late June. We will submit a formal report containing the results of the testing and the modeling for your review in a timely manner.

If you have any questions, please call me at (904) 584-0576.

Sincerely,

BUCKEYE FLORIDA, LIMITED PARTNERSHIP

Ray Perry

Ray Perry
Air Systems Coordinator

CC: Robert J. Leetch, P.E.
FDEP Northeast District Office

Buckeye Florida
Route 3, Box 260 • Perry, Florida 32347
Telephone: (904) 584-0121

June 9, 1993

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

Re: Construction Permit No. AC62-172092, for the No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant.

Dear Mr. Fancy:

We have discovered an inconsistency with No. 2 Bleach Plant Permit No. AC62-172092 and the No. 2 Batch Digester System Permit No. AC62-141917. The maximum allowable input rate in Specific Condition No. 13 of permit AC62-172092 is listed as 900 unbleached bone dry tons per day (UBDTPD) or 37.5 tons per hour (TPH). During the testing required by Specific Condition No. 4 of AC62-172092, we discovered that this number does not represent the process capability and is also inconsistent with the production rate limit (1200 UBDTPD or 50 TPH) for the #2 Batch Digester System.

We ask that the Department review the attachment and issue an amendment to Construction Permit No. AC62-172092 for the No. 2 Bleach Plant. We would like to change the maximum input rate to 1185 UBDTPD or 49 TPH. We have enclosed a check for $250 to cover the processing fee.

If you have any questions or need additional information, please contact me at (904)584-0347.

Sincerely,

BUCKEYE FLORIDA LIMITED PARTNERSHIP

Clifford Henry

Clifford Henry
Environmental Control Manager

cc: Q. Cole

001031

1993 JUN 15 PM 1:17
RECEIVED
DER - MAIL ROOM

ATTACHMENT

AC62-172092 No. 2 Bleach Plant

A review of the No. 2 Bleach Plant permit application indicates that the 900 UBDTPD was listed as the maximum input rate. This limit was also included in the construction permit. Unfortunately, this number is incorrect. The convention within the mill is to refer to all process production in terms of equivalent "Off the machine", air dry metric tons. The error in the bleach plant limit was due to a miscommunication within the mill with regard to units of measure and point of measurement.

The #2 Batch Digesting System has a maximum production rate of 1200 UBDTPD or 50 TPH listed in both the construction (AC62-141917) and operating (AO62-202122) permits. There is an average fiber loss between the digesters and the bleach plant of 1.2%. This would be the equivalent of 1185.6 UBDTPD or 49.4 TPH maximum input rate to the bleach plant.

During the testing required by Specific Condition No. 4, we measured the average hourly feed rate to be 1007 UBDTPD or 42 TPH. The maximum hourly rate was 1046 UBDTPD or 43.6 TPH. Thus we have demonstrated that we can achieve 43.6 TPH or 89% of the proposed 49 TPH unbleached feed limit on an hourly basis.

Buckeye Florida
Route 3, Box 260 • Perry, Florida 32347
Telephone: (904) 584-0121

June 9, 1993

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

Re: Construction Permit No. AC62-172092, for the No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant.

Dear Mr. Fancy:

We have discovered an inconsistency with No. 2 Bleach Plant Permit No. AC62-172092 and the No. 2 Batch Digester System Permit No. AC62-141917. The maximum allowable input rate in Specific Condition No. 13 of permit AC62-172092 is listed as 900 unbleached bone dry tons per day (UBDTPD) or 37.5 tons per hour (TPH). During the testing required by Specific Condition No. 4 of AC62-172092, we discovered that this number does not represent the process capability and is also inconsistent with the production rate limit (1200 UBDTPD or 50 TPH) for the #2 Batch Digester System.

We ask that the Department review the attachment and issue an amendment to Construction Permit No. AC62-172092 for the No. 2 Bleach Plant. We would like to change the maximum input rate to 1185 UBDTPD or 49 TPH. We have enclosed a check for $250 to cover the processing fee.

If you have any questions or need additional information, please contact me at (904)584-0347.

Buckeye Florida, L.P.
MILL ACCOUNT
Perry, Florida 32347

IN SETTLEMENT OF YOUR ACCOUNT AS FOLLOWS:

AC62-172092

SUN BANK/MID FLORIDA N.A.

63-115
631

000763

06/14/93

$*****250.00*****

PAY TO THE ORDER OF Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

PAY

PAY $250.00

Joyce A. Arnaud
AUTHORIZED COUNTERSIGNATURE

Michael G. Wells
AUTHORIZED SIGNATURE

[redacted]

P 062 921 902

Receipt for Certified Mail

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

Sent to C.S. Aiken	
Street and No. Procter & Gamble	
P.O., State and ZIP Code Rt 3 Box 260 Perry, Fl	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 10-14-92	

AC 62-172092

PS Form **3800**, June 1991

PS Form **3811**, July 1983 **447-845**

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

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

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
C.S. Aiken, Plant MS
Procter & Gamble
Rt 3 Box 260
Perry, Fl 32347-9512

4. Type of Service:
☐ Registered ☐ Insured
☑ Certified ☐ COD
☐ Express Mail

Article Number: P062 921 902

Always obtain signature of addressee or agent and DATE DELIVERED. 10/15/92

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery

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

DOMESTIC RETURN RECEIPT

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

October 14, 1992

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. C. S. Aiken, Plant Manager
Procter & Gamble Cellulose
Rt. 3, Box 260
Perry, Florida 32347-9512

Dear Mr. Aiken:

Re: Amendment to Construction Permit-Expiration Date Extension
AC 62-172092: #2 Bleach Plant and R-8 ClO_2 Generator Plant

The Department has reviewed the above request contained in Mr. Clifford Henry's letter received July 31, 1992. The request is acceptable and the following will be changed and added:

1. Expiration Date
   From: December 31, 1992
   To: December 31, 1993

2. Attachments to be Incorporated
   - o Mr. Clifford Henry's letter received July 31, 1992.
   - o Mr. C. H. Fancy's letter dated August 3, 1992.
   - o Mr. Clifford Henry's letter and processing fee received August 12, 1992.
   - o Mr. Clifford Henry's letter with the Affidavit verifying publication received September 18, 1992.

This letter amendment must be attached to the construction permit, No. AC 62-172092, and shall become a part of the permit.

Sincerely,

Howard L. Rhodes

Howard L. Rhodes, P.E.
Director
Division of Air Resources Management

HLR/RBM/rbm

Attachments

cc: A. Kutyna, NED
A. Kinghorn, P.E., SEC
C. Henry, P&GCC
J. Braswell, Esq., DER

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

September 16, 1992

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

Re: Publication of "Notice of Intent to Issue Amendment" to extend the expiration date of construction permit No. AC62-172092, for the No. 2 Bleach Plant and Chlorine Dioxide Generator Plant.

Dear Mr. Fancy:

Enclosed is one copy of the Affidavit verifying publication of the "Notice of Intent to Issue Amendment" to extend the expiration date of construction permit No. AC62-172092, for No.2 Bleach Plant and Chlorine Dioxide Generator Plant. The "Notice of Intent to Issue Amendment" was received by P&G Cellulose on September 1, 1992. The "Notice of Intent to Issue Amendment" was published one time in accordance with DER Rule number 17-103.150 of the F.A.C.

The date of publication of the "Notice of Intent to Issue Amendment" was September 9, 1992 in the "Taco Times" Legal Advertisements section. The "Taco Times" is a newspaper with general circulation in the affected area of Taylor County, Florida. This date of publication was within the 30 day period from the date on which the document was received by the Procter & Gamble Cellulose Company.

If you have any questions or need additional information please contact me at (904)584-0347.

Very Truly Yours,

The Procter & Gamble Cellulose Co.

Michael R. Perry for

Clifford Henry
Environmental Control Manager

cc: B. Mitchell
A. Rutenna, NE Dist

THE TACO TIMES
Published Weekly in City of Perry
County of Taylor
State of Florida

STATE OF FLORIDA,
COUNTY OF TAYLOR

AFFIDAVIT OF PUBLICATION

Before me, the undersigned authority, personally appeared DONALD D. LINCOLN, who on oath says that he is the PUBLISHER of the Taco Times, weekly newspaper published in Perry, Taylor County, Florida, that the attached copy of advertisement being a notice to appear in re Intent to Issue PSD Construction Permit was published in said newspaper in the issues of: Sept. 9, (1992).

Affiant says further that the said Taco Times is a newspaper published at Perry in said Taylor County, Florida, and that the said newspaper has heretofore been continuously published in said Taylor County, Florida, each week; has been entered as second class mail matter at the Post Office in Perry, Florida, in said Taylor County, Florida for a period of one year next preceding the first publication of the attached copy of notice to appear; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the newspaper.

Donald D. Lincoln, Publisher

Sworn to and subscribed before me this 10th day of Sept., 1992.

Notary Public

Department of Environmental Regulation
Notice of Intent to Issue
Amendment

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit amendment to The Procter & Gamble Cellulose Company, Rt. 3 Box 260, Perry, Taylor County, Florida 32347, to extend the expiration date of construction permit, No. AC 62-172092, for the No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant. The expiration date, which will expire on Dec. 31, 1992, will be extended to Dec. 31, 1993, to allow time for start-up and testing of the newly constructed plants and to apply for an operation permit. The Department is issuing this intent to issue an Amendment for the reasons stated.

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 (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 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, F.S.

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/request 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 file a 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, Florida Administrative Code.

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

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

Department of Environmental Regulation
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

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

9/9

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: Howard L. Rhodes

FROM: Clair Fancy

DATE: October 12, 1992

SUBJ: Amendment to Construction Permit No. AC 62-172092
Expiration Date Extension
Procter & Gamble Cellulose Company
#2 Bleach Plant and R-8 ClO_2 Generator Plant

Enclosed for your review and signature is an expiration date extension amendment to the above referenced permit prepared by the Bureau of Air Regulation. The extension will allow for the start-up and performance testing of the newly constructed plants; and, will allow sufficient time to apply for an operation permit.

The original construction permit was for the modification of the mill's existing No. 2 Bleach Plant, which is primarily used to produce diaper-related pulp. The modification included the replacement of the existing No. 2 chlorine dioxide (ClO_2) generation process with a R-8 ClO_2 generation process, which will produce a ClO_2 solution that is virtually free of molecular chlorine, eliminate the use of sodium hypochlorite, and reduce the emissions of chlorine and chloroform (formed mainly in the chlorine and sodium hypochlorite stages).

The bleach plant receives digested and washed pulp from the digester systems. The pulp is reacted with various chemicals in a sequence (DEDED; D: ClO_2; E: caustic extraction) for purification, brightening and viscosity control. Chemicals are added in retention towers, and reactants are removed in washers. After being bleached, the pulp is dried on the paper machines and finished to customer specifications.

The Department's Intent was published in The Taco Times on September 9, 1992, for a 14-day Public Notice. There were no comments received. Therefore, I recommend approval and signature of the amendment.

CHF/BM/rbm

PS Form 3811, July 1983 447-845

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

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

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.
3. Article Addressed to:
C.S. Aiken, PH Mgr.
The Procter & Gamble Cellulose Co.
Route 3, Box 260
Perry, Fl 32347-9512

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P062921881

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X A Moore

7. Date of Delivery
8-31-92

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

DOMESTIC RETURN RECEIPT

P 062 921 881

Receipt for Certified Mail

UNITED STATES POSTAL SERVICE

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

Sent to C.S. Aiken	
Street and No. Procter & Gamble	
P.O., State and ZIP Code Perry, Fl	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 8/28/92	

AC 62-172092

PS Form 3800, June 1991

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

August 24, 1992

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. C. S. Aiken
Plant Manager
The Procter & Gamble Cellulose Company
Rt. 3, Box 260
Perry, Florida 32347-9512

Dear Mr. Aiken:

Re: Request for Amendment to Construction Permit No. AC 62-172092
#2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant
Expiration Date Extension

Attached is one copy of the Department's Intent to Issue a Permit Amendment and proposed letter amendment to air construction permit, No. AC 62-172092, to extend the expiration date from December 31, 1992, to December 31, 1993. The purpose of the extension is to allow for start-up and testing of the plants and to apply for an operation permit.

If there are any questions, please call Bruce Mitchell at (904)488-1344 or submit any written comments you wish to have considered concerning the Department's proposed action to me.

Sincerely,

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

CHF/BM/rbm

Attachments

cc: A. Kutyna, NED
A. Kinghorn, P.E., SEC
C. Henry, P&GCC
J. Braswell, Esq., DER

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application/Request for Permit Amendment by:

The Procter & Gamble Cellulose Company
Rt. 3, Box 260
Perry, Florida 32347

DER File No. AC 62-172092
Taylor County

INTENT TO ISSUE

The Department of Environmental Regulation gives notice of its intent to issue a permit amendment (copy attached) for the proposed project as detailed in the application/request specified above, to extend the expiration date of the construction permit of the #2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant.

The applicant, The Procter & Gamble Cellulose Company, applied/requested on August 12, 1992 (processing fee received), to the Department of Environmental Regulation for a permit amendment to extend the expiration date from December 31, 1992, to December 31, 1993. The purpose is to allow for start-up and testing of the plants and to apply for an operation permit.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that a construction permit amendment is required.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit Amendment. 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit amendment. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address listed below or telephone (904)488-1344. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, 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 amendment.

The Department will issue the permit amendment 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, 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. Petitions filed by the 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, F.S.

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/request 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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 8-28-92 to the listed persons.

Clerk Stamp

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

Clerk

8-28-92
Date

Copies furnished to:

A. Kutyna, NED
A. Kinghorn, P.E., SEC
C. Henry, P&GCC
J. Braswell, Esq., DER

Department of Environmental Regulation
Notice of Intent to Issue
Amendment

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit amendment to The Procter & Gamble Cellulose Company, Rt. 3, Box 260, Perry, Taylor County, Florida 32347, to extend the expiration date of construction permit, No. AC 62-172092, for the No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator Plant. The expiration date, which will expire on December 31, 1992, will be extended to December 31, 1993, to allow time for start-up and testing of the newly constructed plants and to apply for an operation permit. The Department is issuing this Intent to Issue an Amendment for the reasons stated.

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 (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 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, F.S.

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/request 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, Florida Administrative Code.

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

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

Department of Environmental Regulation
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

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

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

DRAFT

September xx, 1992

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. C. S. Aiken, Plant Manager
Procter & Gamble Cellulose
Rt. 3, Box 260
Perry, Florida 32347-9512

Dear Mr. Aiken:

Re: Amendment to Construction Permit-Expiration Date Extension
AC 62-172092: #2 Bleach Plant and R-8 ClO_2 Generator Plant

The Department has reviewed the above request contained in Mr. Clifford Henry's letter received July 31, 1992. The request is acceptable and the following will be changed and added:

1. Expiration Date
   From: December 31, 1992
   To: December 31, 1993

2. Attachments to be Incorporated
   - o Mr. Clifford Henry's letter received July 31, 1992.
   - o Mr. C. H. Fancy's letter dated August 3, 1992.
   - o Mr. Clifford Henry's letter and processing fee received August 12, 1992.

This letter amendment must be attached to the construction permit, No. AC 62-172092, and shall become a part of the permit.

Sincerely,

Howard L. Rhodes, P.E.
Director
Division of Air Resources Management

HLR/RBM/rbm

Attachments

cc: A. Kutyna, NED
A. Kinghorn, P.E., SEC
C. Henry, P&GCC
J. Braswell, Esq., DER

PROCTER & GAMBLE
CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
P.O. BOX 260
PERRY, FLORIDA 32347-0260
PHONE (904) 584-0121

July 31, 1992

Mr. C. H. Fancy
Chief
Bureau Of Air Regulation
Division Of Air Resources Management
2600 Blair Stone Road
Tallahassee Fl. 32301

RE: Construction Permit No. AC-172092
Project: No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator

Dear Mr. Fancy:

Procter & Gamble Cellulose is requesting and extension of time to complete the construction of No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator plant. The present permit expires on December 31, 1992. We are requesting that the permit be extended to November 1, 1993

The request for extension is due to a change in the mill wide shut down schedule. Initially we operated with annual mill wide shut downs during which major tie ins/start up took place. However, due to improvements in our preventive maintenance programs, we have extended the period between shut downs to 18 - 24 months. Thus the major shut down planned for this spring and has been delayed until the fall and thus delayed start up. Our existing schedule has the start-up of the R-8 scrubber in the fall, achieving reliable operation during the winter, and emissions testing during January - April, 1993. Giving this schedule, we will either submit the operating permit application by July 1993 or submit a plan to address issues by November 1993.

Permit extension is addressed in Specific Condition 10 and also addressed in the permitting strategy. I have previously informally notified the department of the need to extend the permit because of changes in the schedule.

Please call me (904) 584-0347 if you have any questions.

Sincerely,
THE PROCTER & GAMBLE CELLULOSE COMPANY

Clifford Henry
Environmental Control Manager

CC
Mr. A. Kutyna, DER NE District

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

August 3, 1992

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Clifford Henry
Environmental Control Manager
Procter & Gamble Cellulose
Rt. 3, Box 260
Perry, FL 32347-9512

Dear Mr. Henry:

RE: Air Construction Permit AC 62-172092
No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator
Request for Permit Extension

The Bureau of Air Regulation received your July 31, 1992, request for the above referenced project. On October 30, 1991, Rule 17-4.050(4)(o), F.A.C., was changed to require a $50 processing fee for permit extensions; therefore, we will not be able to take action on your request until the fee is received. If you have any questions, please call Patty Adams at (904)488-1344.

Sincerely,

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

CHF/pa

cc: Bruce Mitchell

PROCTER & GAMBLE
CELLULOSE

August 7, 1992

Mr. C. H. Fancy
Chief
Bureau Of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee Fl. 32301

RE: Construction Permit No. AC-172092
Project: No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator

Dear Mr. Fancy:

Enclosed is a check for $50. This payment is the processing fee for the permit extension to complete the construction of No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator plant.

Please call me (904) 584-0347 if you have any questions.

Sincerely,
THE PROCTER & GAMBLE CELLULOSE COMPANY

Clifford Henry

Clifford Henry
Environmental Control Manager

CC
Mr. Bruce Mitchell

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
P.O. BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-2012

August 7, 1992

Mr. C. H. Fancy
Chief
Bureau Of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee Fl. 32301

RE: Construction Permit No. AC-172092
Project: No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator

Dear Mr. Fancy:

Enclosed is a check for $50. This payment is the processing fee for the permit extension to complete the construction of No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator plant.

Please call me (904) 584-0347 if you have any questions.

Sincerely,
THE PROCTER & GAMBLE CELLULOSE COMPANY

Clifford Henry

Clifford Henry
Environmental Control Manager

CC
Mr. Bruce Mitchell

The Procter & Gamble Cellulose Company
Foley Mill Account
Perry, Florida 32347
IN SETTLEMENT OF YOUR ACCOUNT AS FOLLOWS:

SUN BANK/TALLAHASSEE N.A.
778 Main Office
2051 Thomasville Rd.
Tallahassee, FL 32312
63-778/631

003473

08/11/92

$*******50.00********

PAY TO THE ORDER OF Florida Department of Environmental Regulation
2600 Blair Stone Rd
Tallahassee, FL 32301

ck003473

Permit Extension Fee
AC-172092

PAY 50 AND 00 CTS.

AUTHORIZED COUNTERSIGNATURE

AUTHORIZED SIGNATURE

[redacted]

PROCTER & GAMBLE
CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
P.O. BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

August 7, 1992

Mr. C. H. Fancy
Chief
Bureau Of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee Fl. 32301

RE: Construction Permit No. AC-172092
Project: No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator

Dear Mr. Fancy:

Enclosed is a check for $50. This payment is the processing fee for the permit extension to complete the construction of No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator plant.

Please call me (904) 584-0347 if you have any questions.

Sincerely,
THE PROCTER & GAMBLE CELLULOSE COMPANY

Clifford Henry

Clifford Henry
Environmental Control Manager

CC
Mr. Bruce Mitchell
A. Kutyna, NE Dist

601031

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

August 3, 1992

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Clifford Henry
Environmental Control Manager
Procter & Gamble Cellulose
Rt. 3, Box 260
Perry, FL 32347-9512

Dear Mr. Henry:

RE: Air Construction Permit AC 62-172092
No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator
Request for Permit Extension

The Bureau of Air Regulation received your July 31, 1992, request for the above referenced project. On October 30, 1991, Rule 17-4.050(4)(o), F.A.C., was changed to require a $50 processing fee for permit extensions; therefore, we will not be able to take action on your request until the fee is received. If you have any questions, please call Patty Adams at (904)488-1344.

Sincerely,

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

CHF/pa

cc: Bruce Mitchell

SENDER:

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

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

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Clifford Henry
Environmental Control Mgr.
Procter & Gamble Cellulose
Rt 3 Box 260
Perry, Fl 32347-9512

4a. Article Number
P 710 058 517

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
8/7/92

5. Signature (Addressee)

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

6. Signature (Agent)
W M Daniels

PS Form **3811**, November 1990 ☆U.S. GPO: 1991—287-066 **DOMESTIC RETURN RECEIPT**

P 710 058 517

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

UNITED STATES POSTAL SERVICE

Sent to Clifford Henry	
Street & No. Procter & Gamble	
P.O., State & ZIP Code Perry, Fl 32347-	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	$
Postmark or Date AC 62-172092 8-6-92	

PS Form **3800**, June 1990

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

August 3, 1992

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Clifford Henry
Environmental Control Manager
Procter & Gamble Cellulose
Rt. 3, Box 260
Perry, FL 32347-9512

Dear Mr. Henry:

RE: Air Construction Permit AC 62-172092
No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator
Request for Permit Extension

The Bureau of Air Regulation received your July 31, 1992, request for the above referenced project. On October 30, 1991, Rule 17-4.050(4)(o), F.A.C., was changed to require a $50 processing fee for permit extensions; therefore, we will not be able to take action on your request until the fee is received. If you have any questions, please call Patty Adams at (904)488-1344.

Sincerely,

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

CHF/pa

cc: Bruce Mitchell

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

July 31, 1992

Mr. C. H. Fancy
Chief
Bureau Of Air Regulation
Division Of Air Resources Management
2600 Blair Stone Road
Tallahassee Fl. 32301

RE: Construction Permit No. AC-172092
Project: No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator

Dear Mr. Fancy:

Procter & Gamble Cellulose is requesting and extension of time to complete the construction of No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator plant. The present permit expires on December 31, 1992. We are requesting that the permit be extended to November 1, 1993

The request for extension is due to a change in the mill wide shut down schedule. Initially we operated with annual mill wide shut downs during which major tie ins/start up took place. However, due to improvements in our preventive maintenance programs, we have extended the period between shut downs to 18 - 24 months. Thus the major shut down planned for this spring and has been delayed until the fall and thus delayed start up. Our existing schedule has the start-up of the R-8 scrubber in the fall, achieving reliable operation during the winter, and emissions testing during January - April, 1993. Giving this schedule, we will either submit the operating permit application by July 1993 or submit a plan to address issues by November 1993.

Permit extension is addressed in Specific Condition 10 and also addressed in the permitting strategy. I have previously informally notified the department of the need to extend the permit because of changes in the schedule.

Please call me (904) 584-0347 if you have any questions.

Sincerely,
THE PROCTER & GAMBLE CELLULOSE COMPANY

Clifford Henry

Clifford Henry
Environmental Control Manager

CC
Mr. A. Kutyna, DER NE District
Bruce Mitchell 7-31-92 RBL

PROCTER & GAMBLE
CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

October 30, 1990

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

Reference Construction Permit No. AC 62-172092

Dear Mr. Fancy:

The following is the first quarterly report for Procter & Gamble Number construction of a new Chlorine dioxide generator and the modification to the 2 Mill Bleach plant.

1. Chlorine Dioxide Generator - R8

During July the motor control center was completed, cable trays installed, and a temporary tie-in for 15KV power was made. Tie-ins to the factory air system, water reservoir, acid sewer, and the R2 line were made without impact to mill production.

During the quarter we completed the erection of the cooling towers, chiller building, and the chlorine dioxide storage tanks. FRP piping for drains, the vent system and several process lines were also completed. The Pre-startup inspection was completed and the start up of the precess took place during September. The process was shut down during the Mill's extended shut down towards the end of September.

Operator training was completed during July. This training consisted of five one week classes with a high level of participation from the operators. Training for the Maintenance and the Electrical and Instrument teams was conducted by Albright and Wilson during August. Manager training was completed on August 8. Safe handling procedures for methanol were developed and shared with the operators and the P&G fire department.

2. Bleach Plant Modification

The structural steel for the transformer room and the block walls and roofing were completed during August. The monorail system over the brown stock MC pump and two chlorine dioxide heat exchanges were also installed. Towards the end of September all of the structural steel for the tank platforms were completed.

In July we completed the construction of the bleach feed and the D-11 down flow and up flow tubes, and began the tile work. This tank tile work was completed during August. The erection of carbon steel, stainless, and titanium piping began in July and was 98% completed by the end of September. During August we began construction of the D-11 scrubber and its platform. Additionally, several of the pumps (eg. hot water, caustic filtrate, D-11 agitator and stock pumps) were installed. The scrubber pumps and motors including the scrubber fan were installed during September. Additionally, 100% of the electrical loops for the water run were installed at that time.

Class room Principle Based Operating and Maintenance Procedures (PBOMP) training was completed during August. The operating team began executing field PSI checklist in preparation for start-up.

The process safety study was received from the contractor in August and our Process safety department began reviewing and field verifying the recommended equipment. The PSI documents were developed and executed as construction was completed and equipment installed. By September we had completed the dynamic PSI. The water and medium consistency test were successfully completed and the issues that were uncovered during the test were corrected. Schedules were developed to test the remaining equipment as they are installed.

Please call me at 904-584-0347 if you have any questions.

Very truly yours,

THE PROCTER & GAMBLE CELLULOSE COMPANY

Clifford Henry

Clifford Henry
Environmental Control Manager

CC

A. Kutyna, NE District

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

May 14, 1990

Mr. William A. Thomas, P.E.
Permitting and Standards Section
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: The Procter & Gamble Cellulose Company
Proposed Construction Permit for #2 Bleach Plant and R-8
Chlorine Dioxide Generation Process (Permit No. AC62-202092)

Dear Mr. Thomas:

The proposed permit referenced above was received on April 17, 1990 and the required one-time publication of the Notice of Intent to Issue Permit was initiated on April 27, 1990. The proof of publication has been submitted to the Bureau of Air Quality Management.

In the interest of technical accuracy, however, there are a couple of remaining discrepancies. As such, we are providing the following comments, which we would like the Department to consider in the final issuance of this permit:

1) **Technical Evaluation and Preliminary Determination (Section II - Rule Applicability; Paragraph 1 and Throughout)**

   We believe that all references to 40 CFR that are not identified by applicable section(s) are too broad and may lead to future confusion. As such, we would recommend the addition of the words "applicable sections of" prior to all references to 40 CFR, which are not already specified by section.

2) **Technical Evaluation and Preliminary Determination (Section III.A. - Emission Limitations; Paragraph 1)**

   Paragraph 1 does not accurately reflect the sources involved. As such, we would recommend that paragraph 1 be reworded as follows:

   > The pollutants to be regulated from the R-8 chlorine dioxide generation process and the No. 2 Bleach Plant and associated waste streams are....

If you have any questions regarding the comments above, please call me at (904) 584-0347. Thank you for your guidance and support on this important project.

Very truly yours,

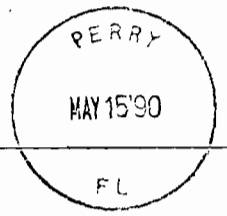
THE PROCTER & GAMBLE CELLULOSE COMPANY

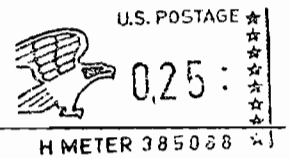
R. Andreu
Environmental Control Manager

RA:msw
SpeCond
cc: B. Mitchell
A. Kutyna

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512





Mr. William A. Thomas, P.E.
Permitting and Standards Section
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
P.O. BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

May 3, 1990

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

Dear Mr. Fancy:

This is to provide the required notice, pursuant to Section 403.815, FS & DER Rule 17-103.150, FAC, that The Procter & Gamble Cellulose Company has published the Notice of Proposed Agency Action on permit application AC62-172092. The proof of publication is enclosed.

Very truly yours,

THE PROCTER & GAMBLE CELLULOSE COMPANY

R. Andreu
Environmental Control Manager

RA:msw
Notice
Enclosure
cc: B. Mitchell
A. Kutyna, NE Dist

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512

PERRY MAY-3'90 FL

U.S. POSTAGE 0,25 : H METER 385038

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

THE PERRY NEWS-HERALD
Published Weekly in City of Perry
County of Taylor
State of Florida

STATE OF FLORIDA,
COUNTY OF TAYLOR

AFFIDAVIT OF PUBLICATION

Before me, the undersigned authority, personally appeared DONALD D. LINCOLN, who on oath says that he is the PUBLISHER of the Perry News-Herald, weekly newspaper published in Perry, Taylor County, Florida, that the attached copy of advertisement being a notice to appear in re: .....
Intent to Issue Permit
.....
was published in said newspaper in the issues of: .....
April 27, 1990

Affiant says further that the said Perry News-Herald is a newspaper published at Perry in said Taylor County, Florida, and that the said newspaper has heretofore been continuously published in said Taylor County, Florida, each week; has been entered as second class mail matter at the Post Office in Perry, Florida, in said Taylor County, Florida for a period of one year next preceding the first publication of the attached copy of notice to appear; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Donald D. Lincoln, Publisher

Sworn to and subscribed before me this 30th day of April, 1990

Notary Public

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXPIRES JAN 14, 1991
BONDED THROUGH THE TRAVELERS

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to The Procter and Gamble Cellulose Company, Rt. 3 Box 260, Perry, Florida 32347, for the modification of the existing No. 2 Bleach Plant located at the permittee's existing mill in Perry, Taylor County, Florida. The modification will allow the No. 2 Bleach Plant to operate a bleaching sequence of DEDED (D: chlorine dioxide; E: caustic extraction) and to maintain the capability to operate the existing bleaching sequence of CEHDED (C: chlorination; H: sodium hypochlorite). A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this intent to issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourtheen (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 perod shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

(a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

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

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

The application is available for public inspection during business hours, 8 a.m. to 5 p.m. Monday through Friday, except legal holidays at: Department of Environmental Regulation, Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Department of Environmental Regulation, Northeast District, 3426 Bills Road, Jacksonville, Florida 32207.

Any person may send written comments on the proposed action to Mr. Bill Thomas 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.

4/27

File Copy

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

March 19, 1990

RECEIVED
MAR 26 1990
DER - BAQM

Mr. Bruce Mitchell
Bureau of Air Quality Management
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: The Procter & Gamble Cellulose Company
Proposed Construction Permit for #2 Bleach Plant and R-8
Chlorine Dioxide Generation Process (Permit No. AC-172092)

Dear Mr. Mitchell:

This letter submits the information that we agreed to, during our 3/2/90 meeting, and some additional comments regarding the proposed construction permit referenced above.

As we discussed, we inadvertently based the methanol emissions calculations in Appendix A of the chlorine dioxide generation process construction permit application on the nominal production rate rather than the maximum process rate. As shown in the attached revision of Appendix A, at the maximum process rate, methanol emissions would be 3.6 tons/year (versus 3.3 tons/year). However, this does not change the maximum instantaneous rate during filling which is 12.1 lbs/hour. We also miscalculated the annual methanol flow rate that was provided in our previous comments. The correct annual rate corresponding to 2,457 gal/day is 896,805 gal/year.

As such, in order to incorporate these corrections we suggest the following changes/modifications:

1) Replace Appendix A and Page 5-4 of the chlorine dioxide generation process construction permit application with the enclosed replacements.

2) Modify Table 1 of Section III.A. of the technical evaluation and preliminary determination to reflect 0.6 tons/year of methanol working losses and 3.0 tons/year of fugitive methanol emissions, for a total of 3.6 tons/year (and less than 25 turnovers/year).

3) Modify Specific Condition A.7. of the proposed permit to reflect 3.6 tons/year methanol emissions.

4) Modify Specific Condition A.11. of the proposed permit to show 2,457 gal/day and 896,805 gal/year.

In addition, we would also recommend the following changes/modifications:

1) Technical Evaluation and Preliminary Determination (Section I.C.3.)
The measurement of fugitive emissions may present a very difficult, if not impossible, task. As such, we want to preserve the ability to estimate these emissions, if necessary. However, the word "quantify" in this section may be construed to mean "measure".

   Recommendation
   In the rewritten version of the sixth paragraph of Section I.C.3., replace "quantify" with "quantify/estimate".

2) Technical Evaluation and Preliminary Determination (Section II - Rule Applicability and Throughout) and Page 1 of 10 of the Proposed Permit
We believe that 40 CFR 60 is the only part of 40 CFR applicable to this permit.

   Recommendation
   Replace all references to "40 CFR" with "40 CFR 60".

If you have any questions regarding the information and comments above, please call me at (904) 584-0347. Thank you for your guidance and support on this important project.

Very truly yours,

THE PROCTER & GAMBLE CELLULOSE COMPANY

R. Andreu
Environmental Control Manager

RA:msw
#2BlPlt
Attachments

Bruce Mitchell
Andy Kutyna
John Glenn
CHF/BT

4-11-90 RA

APPENDIX A

METHANOL CALCULATIONS

METHANOL EMISSIONS

Basis:

- Vapor Pressure @ 68°F: 1.83 psia
- Storage Tank Data: Horizontal Pressure Vessel
  14 ft. diam. x 32 ft. TT
  37,000 gal. working vol.
- Methanol Usage: 2457 gal/day
  896,805 gal/year
  29.9 loads per year (each load = 30,000 gallons)
- Methanol Unloading Pump Maximum Capacity = 150 gpm
- Methanol MW = 32
- AP-42 Working Loss Equation:

$$WL = 2.4 \times 10^{-5} \times MW \times VP \times V \times N \times Kn \times Kc$$

where:
VP = Vapor Pressure, psia
V = Tank Volume, gal
N = Turnover Rate, yr^{-1}
Kn = Turnover Factor, (1.0)
Kc = Product Factor, (1.0)
MW = Molecular Weight

Average Methanol Emissions

Calculation of Average Turnovers (N) Per Year

2457 gal/day x 365 day/year x 1/37,000 gal

= 24.24 turnovers/year

Working Loss Calculation

Inputs: N = 24.24
Kc = 1
Kn = 1
V = 37,000
VP = 94.6 mm Hg = 1.83 psia
MW = 32

$2.4 \times 10^{-5} \times 32 \times 1.83 \times 37{,}000 \times 24.24 \times 1.0 \times 1.0 = 1261$ lb/year

1261 lb/year x ton/2000 lb = 0.6 ton/year

Fugitive Methanol Emissions From Piping

Component	Emission[1] Factor (kg/hr/source)	Component Count[2] To Storage	Component Count[2] To Process	Emissions To Storage kg/hr	Emissions To Process kg/hr
Valve	.0071	6	19	.0426	.1349
Flange	.00083	15	40	.0125	.0332
Sampling Connection	.0150	3	7	.045	.1050
Pump (Seal)	.0214	1	1	.0214	.0214
				0.1215	0.2945

1. Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and HAP, EPA Contract No. 68-02-4338, DCN #87-222-124-10-02, December, 1987.

2. Counted from P&IDs.

Emissions to Storage

0.1215 kg/hr x 1,000 lb/453.6 kg

= 0.2679 lb/hr x 30,000 gal/150 gpm x 1 hr/60 min

= 0.893 lb/load x 29.9 loads/yr

= 26.7 lb/yr = .01 tons/yr

Emissions to Process

0.2945 kg/hr x 1,000 lb/453.6 kg x 8,760 hr/yr

= 5,687 lb/yr = 2.8 tons/yr

Disconnect Loss

Density of methanol = 0.7924 x 62.4 lb/ft^3

Assume 4' long connection, 3" hose

Volume involved = $\pi/4\ (3/12)^2$ x 4 = 0.1964 ft^3 released per load
Methanol released = 0.1964 ft^3 x .7924 x 62.4 lb/ft^3

= 9.7 lb/load x 29.9 loads/yr

= 290 lb/yr = 0.15 tons/yr

Total fugitive losses from piping

= (.01 + 2.8 + 0.15) tons/yr

= 3.0 tons/yr

Total Average Methanol Emissions From F1

3.0 tons/yr + 1261 lb/yr/2,000 = 3.6 tons/year

Maximum Methanol Emissions

Basis:

- Temperature = 68°F
- Methanol Vapor Density = 1.1
- 150 gpm Maximum Fill Rate
- Raoult's Law:

$$y = \frac{xPV}{PT}$$

where: y = Mole Fraction Vapor Phase
PV = Vapor Pressure
PT = Total Pressure
x = Mole Fraction Liquid Phase (1.0)

- Air Density = 0.074 lb/ft^3

Displacement Rate

150 gal/min x ft^3/7.48 gal = 20.05 ft^3/min

Vapor Phase Methanol Mole Fraction

1.0 x 1.83 psia/14.7 psia = 0.124 mole fraction or volume fraction*

*Note: For ideal gas, mole fraction equals volume fraction.

Methanol Emissions During Filling

20.05 ft^3/min x 0.124 x 60 min/hr x 0.074 lb/ft^3 x 1.1 v.d. = 12.1 lb/hr

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		
$NaClO_3$	N/A	N/A	7520	Figure 5
NaCl	N/A	N/A	140	Figure 5
H_2SO_4	N/A	N/A	4860	Figure 5
CH_3OH	N/A	N/A	720	Figure 5

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

1. Total Process Input Rate (lbs/hr): See Section III A above.

2. Product Weight (lbs/hr): 54 TPD ClO_2

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 Figure 5
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
ClO_2	*	*	N/A	N/A	*	*	P1
Cl_2	*	*	N/A	N/A	*	*	P1
CH_3OH	12.1	0.6	N/A	N/A	1261	0.6	P2
CH_3OH	-	3.0	N/A	N/A	6000	3.0	Fugitive

[1]See Section V, Item 2.

[2]Reference 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)

[3]Calculated from operating rate and applicable standard.

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

* Information is not available to reliably predict actual emissions of these chemicals. Attachment I presents a process to measure and evaluate these emissions.

Meeting @ Procter & Gamble Cellulose Company @ BAR

3-2-90

Bruce Mitchell	FDER/DARM/BAR	(904) 488-1344
Bill Thomas	"	"
RAY ANDREW	PROCTER & GAMBLE CELLULOSE	904 584-0347
Sue Stevens	P+G – Memphis	901 320-8425
Clifford Henry	P & G Cellulose	
Bill Thomas	DER	
John Glunn	DER	

THE PROCTER & GAMBLE CELLULOSE COMPANY
R-2 PROCESS FLOW DIAGRAM

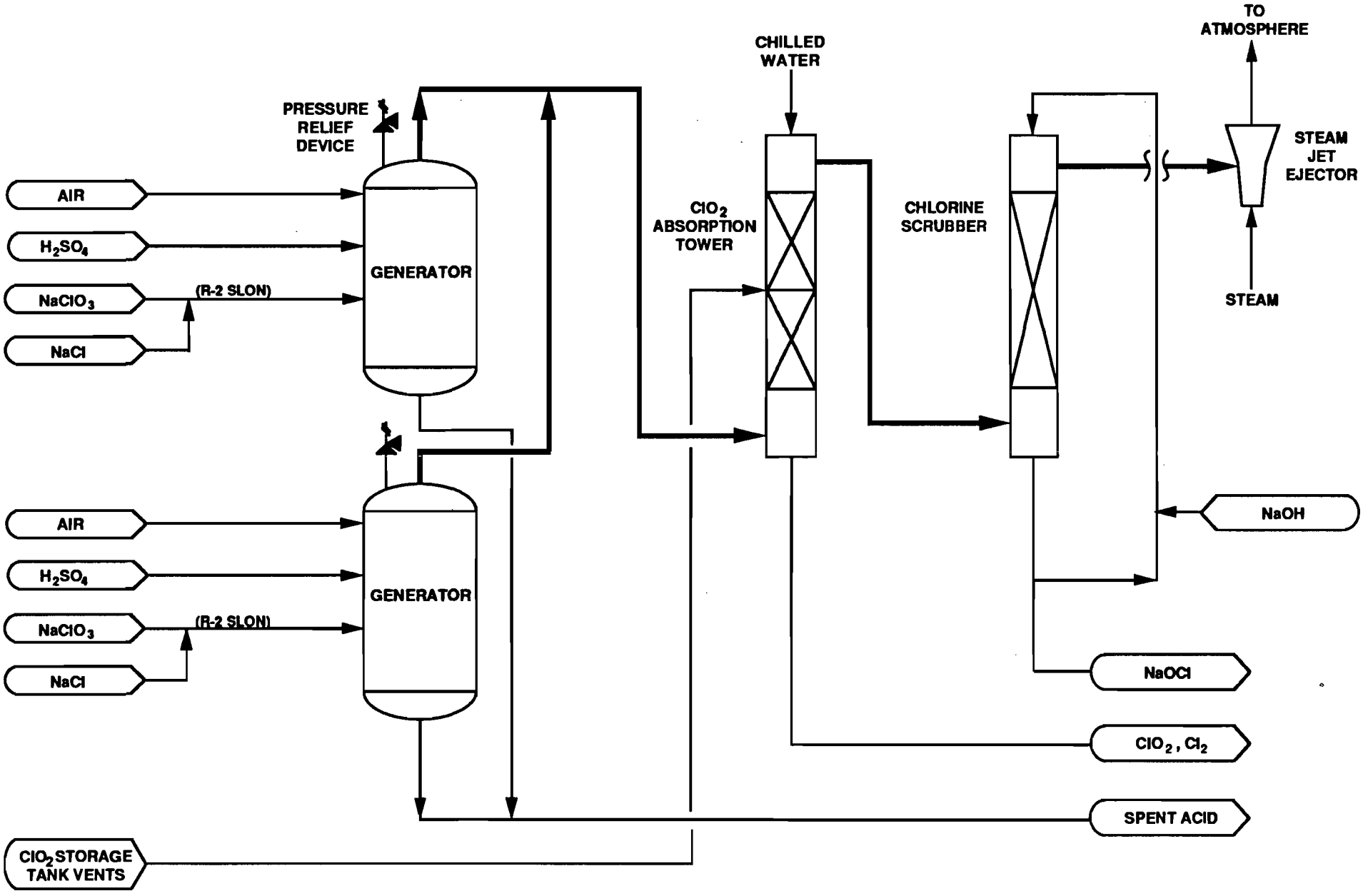


FIGURE 1

ClO_2 Gen

4-2

THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED R - 8 PROCESS FLOW DIAGRAM

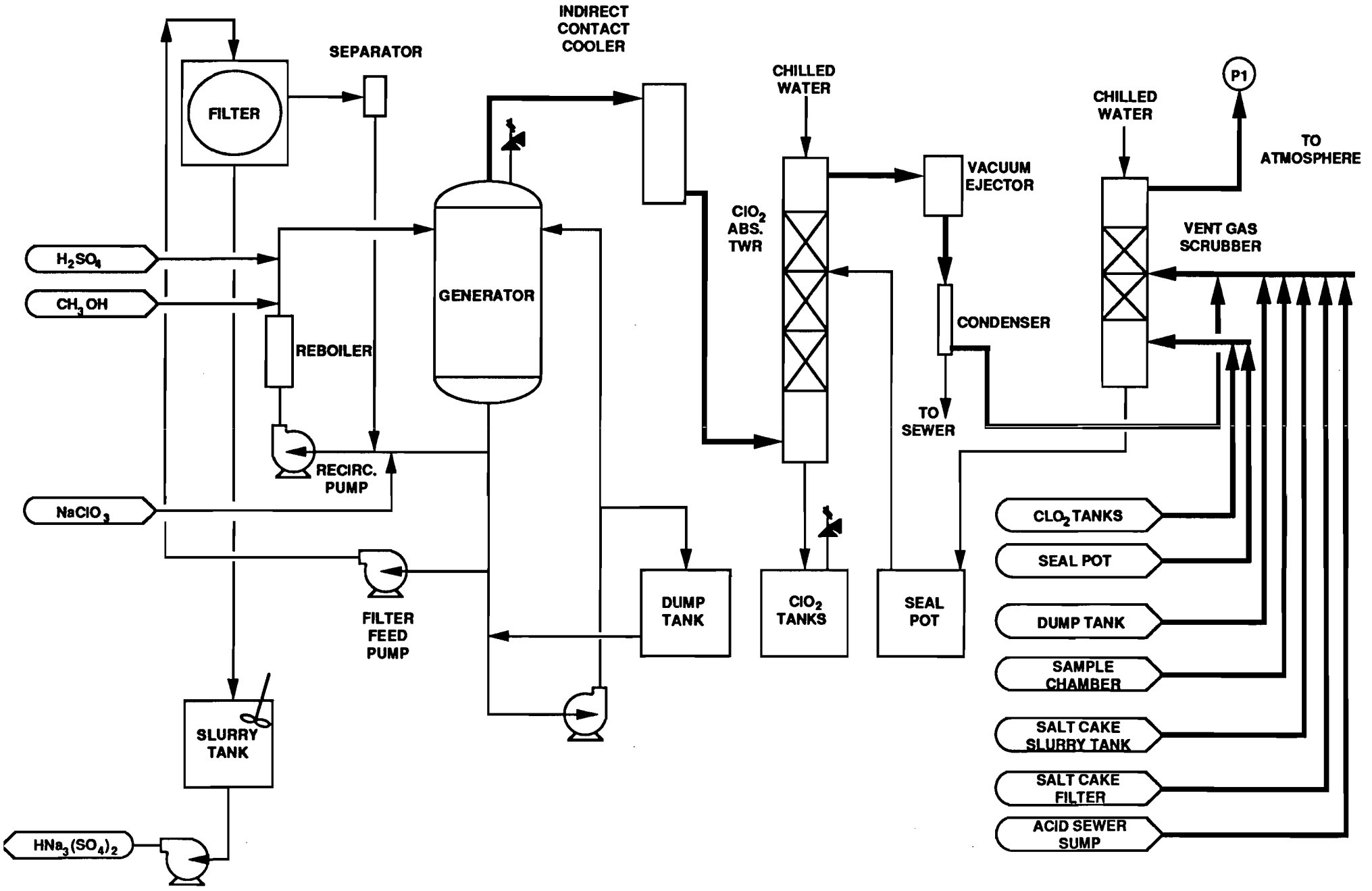


FIGURE 2

ClO_2 Gen

4-3

THE PROCTER & GAMBLE CELLULOSE COMPANY
EXISTING NO. 2 BLEACH PLANT FLOW DIAGRAM

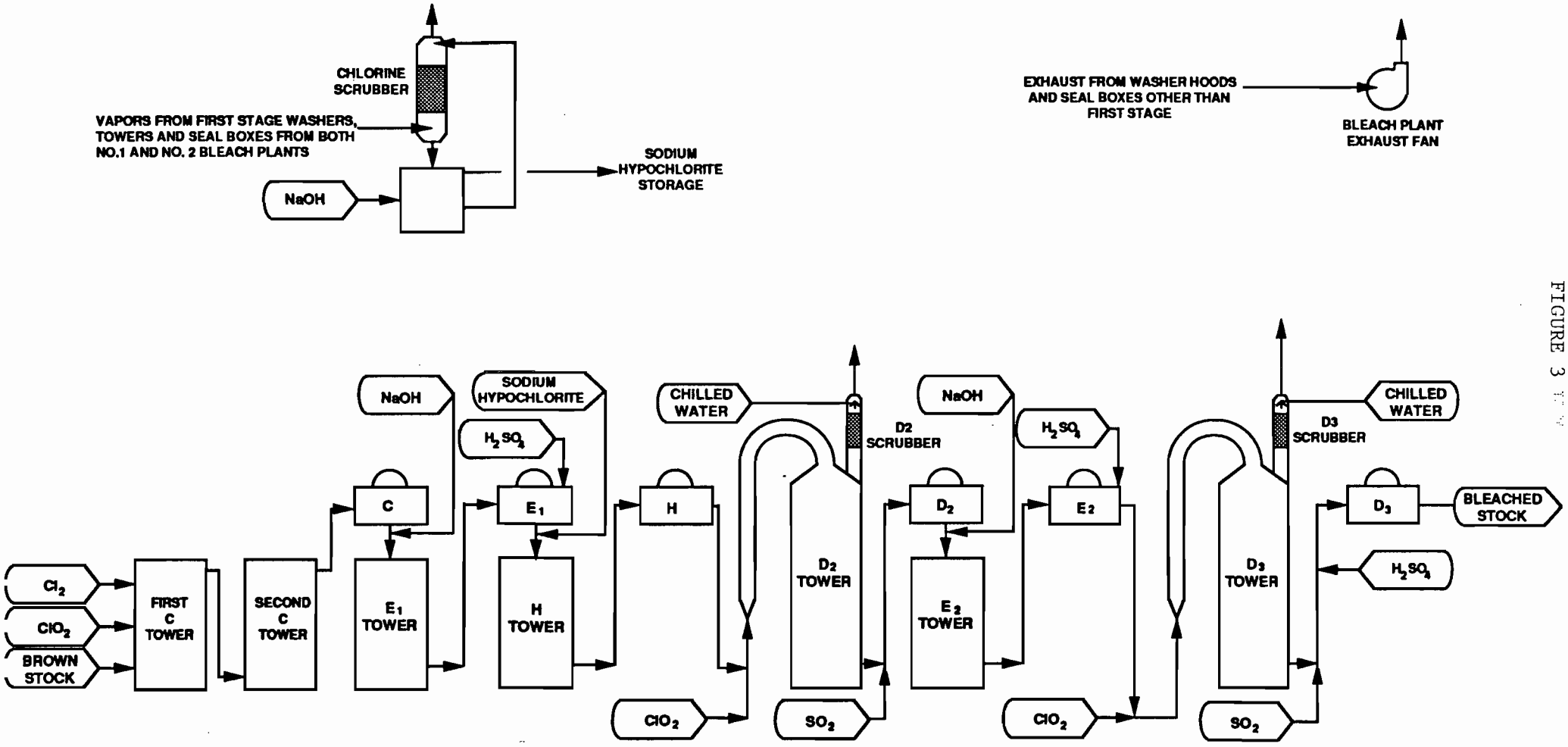


FIGURE 3

THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED NO. 2 BLEACH PLANT FLOW DIAGRAM
DEDED SEQUENCE

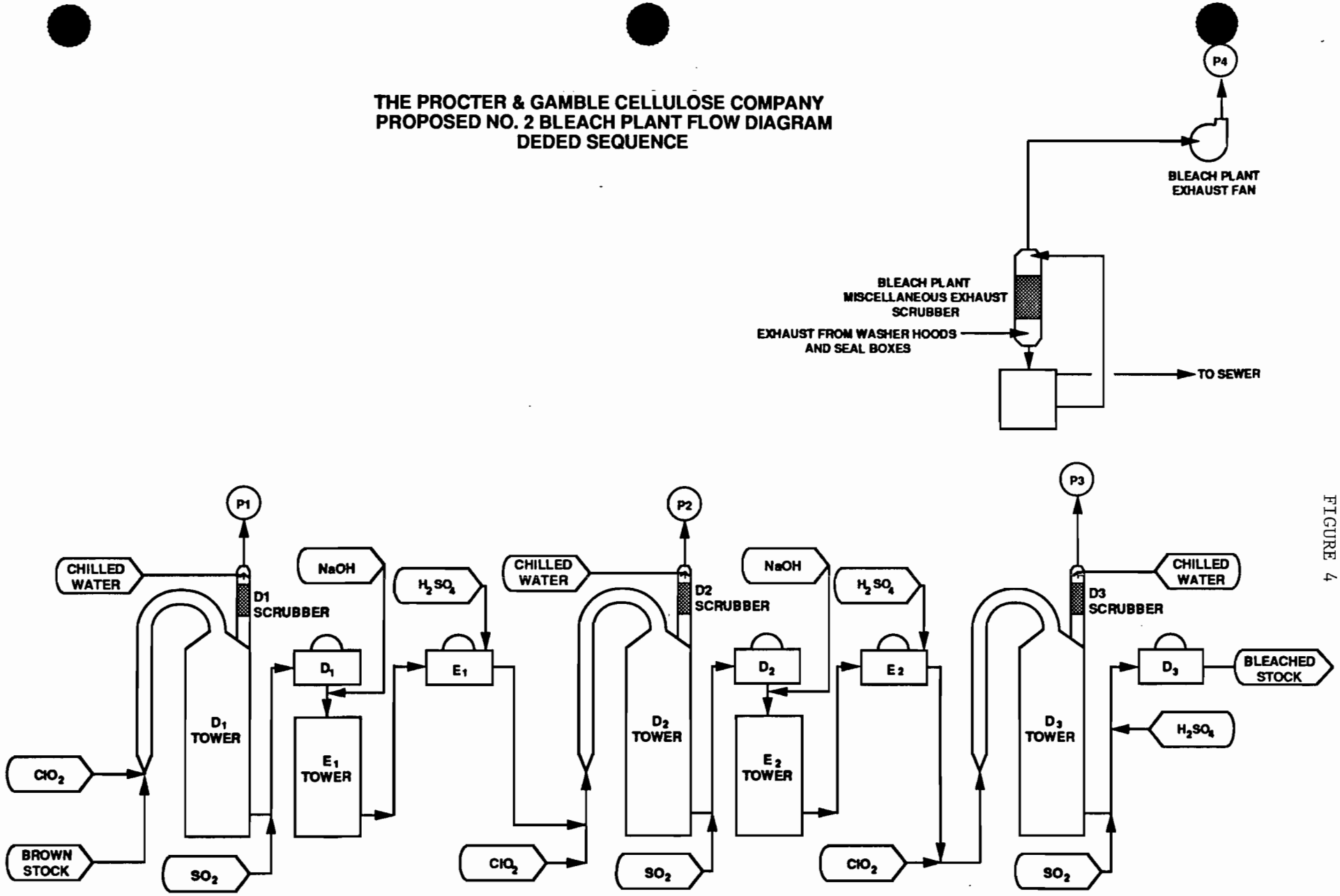


FIGURE 4

Note: D1 stage washer and seal box vented to Bleach Plant Miscellaneous Exhaust Scrubber during DEDED sequence.

THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED NO. 2 BLEACH PLANT FLOW DIAGRAM
CEHDED SEQUENCE

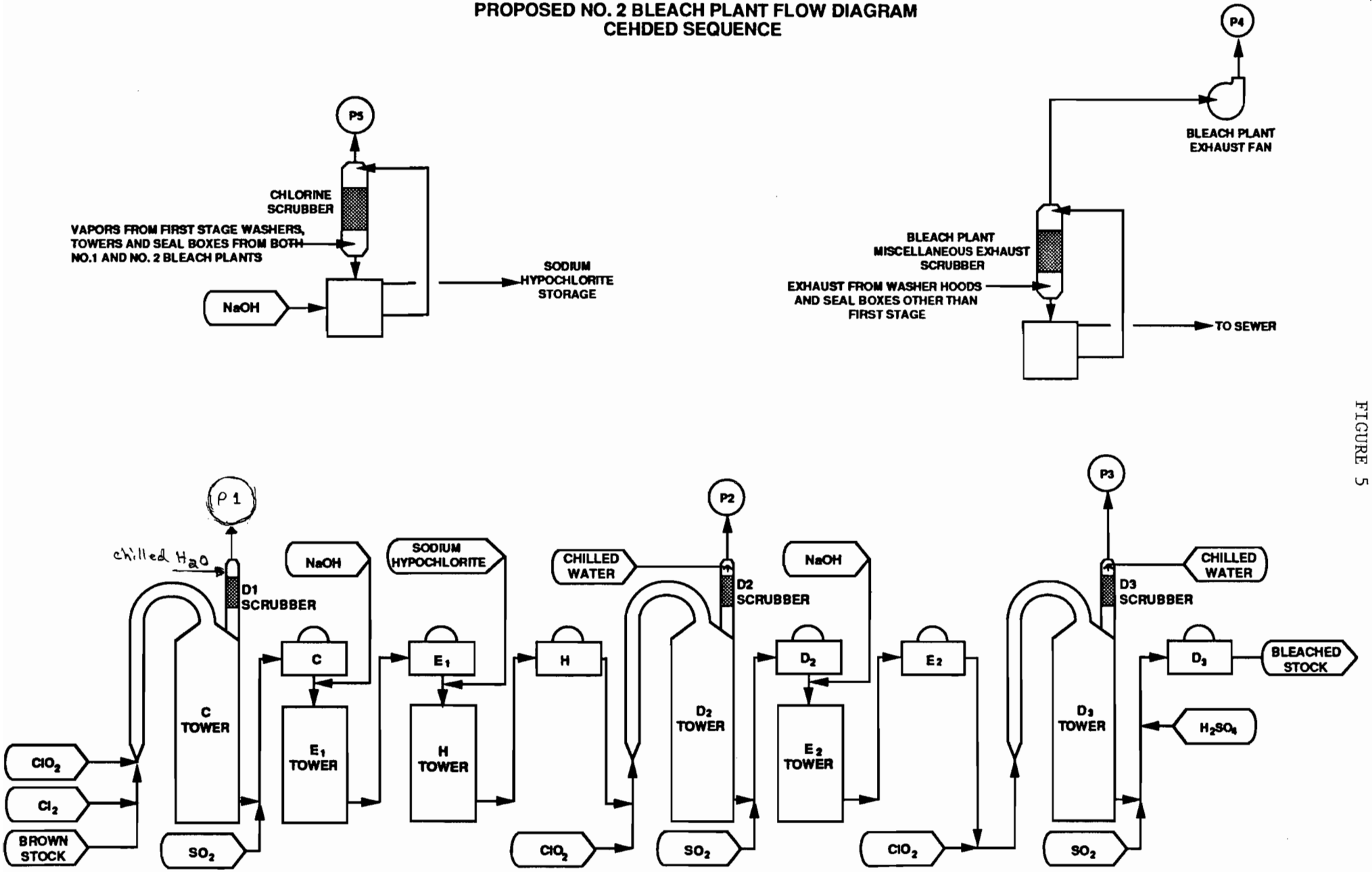


FIGURE 5

#2 Bleach Plant Modifications and Chlorine Dioxide Generation Process Replacement Project

Proposed Permitting Strategy

1) Approve the enclosed air construction permit applications for the proposed #2 Bleach Plant modifications and the Chlorine Dioxide generation process replacement project, which includes identified emissions control equipment.

2) As a condition in the construction permits, include the following requirements:

   A. Within three months following construction completion, start-up, and achievement of reliable operations, emissions of chlorine, chlorine dioxide, and chloroform will be measured, using testing methods agreed upon by the FDER and the permittee, at the appropriate points in the #2 Bleach Plant and the R-8 Chlorine Dioxide Generation Process: and other sources of these emissions (amended during 10/31/89 meeting):

   B. Within one month following receipt of the measurements in Item A, the measured emissions will be subjected to initial air toxics screening using criteria agreed to by the FDER and the permittee.

   C. The screening results will be used to consider whether:

      1) The achieved emissions levels are acceptable; or
      2) Additional control measures needed to meet the initial screening criteria are available and practical; or
      3) Detailed risk assessments are necessary to ensure that the practically achievable emissions are acceptable.

   D. For any pollutant addressed in this permit that fails to meet the criteria identified in Item B, the permittee shall submit within six months following receipt of screening results, a plan and schedule to the FDER which addresses the factors identified in Item C. The plan may include a recommendation to install additional control measures/process modifications, if needed and available and practical, or a recommendation to develop a risk assessment to demonstrate that the practically achievable emissions are acceptable.

   E. Air operation permits will not be granted for the #2 Bleach Plant and the Chlorine Dioxide generation process until the plan identified in Item D is approved by the FDER and completed.

      If additional time is needed to complete the steps identified in the plan, the construction permit will be extended accordingly.

ClO_2 aff.

after 5 of 12 (page)

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512
PHONE (904) 584-0121

February 22, 1990

RECEIVED
FEB 26 1990
DER - BAQM

Mr. William A. Thomas, P.E.
Permitting and Standards Section
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: The Procter & Gamble Cellulose Company
Proposed Construction Permit for #2 Bleach Plant and R-8
Chlorine Dioxide Generation Process (Permit No. AC-172092)

Dear Mr. Thomas:

The proposed permit referenced above was received on January 26, 1990. Following a detailed review, we have identified several issues and concerns associated with the Technical Evaluation and Preliminary Determination and proposed permit provisions. These issues must be addressed before we can accept the proposed permit.

To clarify our particular concerns, we have enclosed Attachment I. This document highlights each identified issue, contains a brief discussion of each, and provides our recommended modifications.

As we discussed, to adequately address and resolve these issues, we have filed a Motion for Extension of Time in Which to File a Petition for Formal Hearing. This approach will provide us with an extension of sixty (60) days (until April 10, 1990) in which to resolve the identified concerns.

We look forward to our meeting scheduled for March 2, 1990, during which we will initiate our discussions on this subject.

Very truly yours,

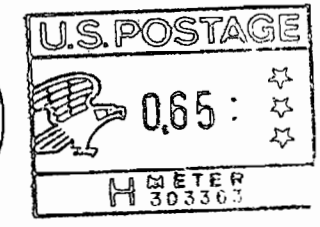
THE PROCTER & GAMBLE CELLULOSE COMPANY

R. Andreu
Environmental Control Manager

RA:msw
ChlDxd
Attachment
cc: B. Thomas
B. Mitchell
G. Glenn
A. Rutyna, NE Dist.
3-1-90 AM

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512



Mr. William A. Thomas, P.E.
Permitting and Standards Section
Florida Department of
  Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

The Procter & Gamble Cellulose Company
Proposed Construction Permit Number AC62-172092
Issues/Discussions/Recommendations

1) **Intent to Issue (Company Name)**
Issue/Discussion
The Company name is misspelled in the heading and throughout the proposed permit package. The correct spelling is The Procter & Gamble Cellulose Company

Recommendation
Correct the spelling of Procter throughout the proposed permit package.

2) **Intent to Issue (Page 1, 2nd Paragraph, 1st Sentence)**
Issue/Discussion
The reasons shown for the submitted applications (ie: "...for the permitting, modification, and post construction evaluation of the existing ...") are confusing and inappropriate. The permit rules identify two categories of permits: construction (which includes modifications) or operation. Under the rules, the appropriate designation for the submitted applications is "construction."

Recommendation
Modify the first sentence in the second paragraph to read as follows: The applicant, The Procter & Gamble Cellulose Company, applied on November 1, 1989, to the Department of Environmental Regulation to obtain a construction permit for the modification of the existing No. 2 Bleach Plant.

3) **Notice of Intent to Issue (Page 1 of 2, First Paragraph)**
Issue/Discussion
The issue discussed in comment #2 above applies here as well.

Recommendation
Modify the first paragraph as recommended in comment #2 above.

4) **Technical Evaluation and Preliminary Determination (Section I.B.1.)**
Issue/Discussion
As discussed in the permit application, this project will not eliminate the use of sodium hypochlorite in total. Sodium hypochlorite will continue to be used in the No. 1 Bleach plant and in the No. 2 Bleach Plant, when the CEHDED sequence is employed. As worded, Section I.B.1. is misleading and incorrect.

Recommendation
Modify section I.B.1. as follows:
....., eliminate the use of sodium hypochlorite in the No. 2 Bleach Plant when running the DEDED sequence, ...

5) **Technical Evaluation and Preliminary Determination (Section I.B.2.)**
Issue/Discussion
The description contained under Section I.B.2. does not address the installation of a new chilled water scrubber to control emissions from the new D stage tower.

Recommendation
Include a second sentence under Section I.B.2. to read as follows:
The new tower will be equipped with a new chilled water scrubber.

6)**Technical Evaluation and Preliminary Determination (Section I.B.4.)**
Issue/Discussion
The engineering firm, which is designing the No. 2 Bleach Plant modification, has just recently informed us that an error was made in their scrubber height calculations (regarding the existing chilled water scrubbers on the existing D2 and D3 stages). It appears that the existing chilled water scrubbers will be adequate. This will be verified as part of the post-construction emissions evaluation.

Recommendation
Delete section I.B.4.. Also replace page 4-1 of the #2 Bleach Plant construction permit application with the enclosed update.

7) **Technical Evaluation and Preliminary Determination (Section I.B.5.)**
Issue/Discussion
Some washers and seal pots (ie: the caustic extraction stages) have no emissions of the pollutants in question and, as such, we do not intend to vent these to the scrubber.

Recommendation
In section I.B.5., change "from washers and seal pots" to "from appropriate washers and seal pots."

8) **Technical Evaluation and Preliminary Determination (Section I.B.7.)**
Issue/Discussion
Some minor changes have been made in the scope of the new R-8 chlorine dioxide generation process. These include the addition of a second water chiller and the replacement of the existing sulfuric acid storage tanks.

Recommendation
In section I.B.7., replace "a new water chiller" with "new water chillers, a new sulfuric acid storage tank...." Also replaces page 4-6 of the R-8 chlorine dioxide generation process construction permit application with the enclosed updates.

9) **Technical Evaluation and Preliminary Determination (Section I.C.3.)**
Issues/Discussions
In the first paragraph in section I.C.3., the use of the words "dissolving grade pulps" is technically inappropriate to encompass the types of pulp that are produced via the CEHDED sequence. The use of the words "other grade pulps" is more appropriate.

In the last sentence of the third paragraph in section I.C.3., chloroform emissions are described as being controlled using chilled water scrubbers. Chilled water scrubbers do not effectively control chloroform emissions because the chloroform that condenses in them may be released elsewhere in the process. This project will result in a significant reduction in chloroform emissions because the main sources of chloroform generation, chlorine and sodium hypochlorite bleaching stages, will be eliminated for pulp grades using the DEDED sequence. Chloroform emissions will be addressed as part of the post-construction evaluation detailed in the referenced permitting strategy (Exhibit I).

The sixth paragraph is section I.C.3. is vague, confusing, and inappropriate for inclusion in the technical evaluation. As is contained in Exhibit 1 and the proposed specific conditions, issues regarding the potential volatility of the sewered filtrates will be addressed as part of the post-construction evaluation. In addition, the only component which may not be substantially chemically bound or unreactive in the sewered filtrates is chloroform. Any chlorine and chlorine dioxide present in the totally enclosed bleach plant acid sewer should react upon mixing with the combined mill effluent. Sewered scrubbing media should not contain any chlorine or chlorine dioxide, as these should have reacted with the hydroxide and the sodium sulfide in the scrubbing media.

Recommendations

1. In the first paragraph in section I.C.3., replace the words "dissolving grade pulps" with the words "other grade pulps."

2. Replace the last sentence of the third paragraph in section I.C.3. with the following sentence:
   This project will result in a significant reduction in chloroform emissions because the main sources of chloroform generation, chlorine and sodium hypochlorite bleaching stages, will be eliminated for pulp grades using the DEDED sequence.

3. Delete the sixth paragraph in section I.C.3.

10) **Technical Evaluation and Preliminary Determination (Section I.D.)**

Issue/Discussion

The proposed listing of sources is confusing and does not accurately reflect the proposed project. In addition, we do not understand the basis and rationale for the designated descriptions shown in the column to the right of each source.

Recommendations

1. Delete or modify the proposed listing of sources as follows:
   a. Delete seal pots, reboiler, salt cake filter, slurry tank, and dump tank from the source list. These are all components of the chlorine dioxide generator and should be considered as a single source.

b. Delete the sodium hypochlorite storage tanks. This tank is not a source of chlorine, chlorine dioxide, or chloroform emissions.

c. Delete chlorine stage reaction tower. This is the same piece of equipment as the first chlorine dioxide stage reaction tower.

d. Change the number of washers to four (4). There are six (6) washers in total, only four (4) of which are sources of emissions.

2. Delete the column to the right of the source listing.

11) **Technical Evaluation and Preliminary Determination (Section II - Rule Applicability, Paragraph 1 and Throughout)**
Issue/Discussion
We believe that subpart Kb on volatile organic liquid storage vessels [Specifically, 40 CFR 60.116(a), (b), and (d)] is the only section of 40 CFR applicable to this permit.

Recommendation
Replace all references to 40 CFR (July 1, 1988 version) with 40 CFR 60, Subpart Kb (July 1, 1989 version).

12) **Technical Evaluation and Preliminary Determination (Section II - Rule Applicability, Paragraphs 10, 11, 12, and 13)**
Issue/Discussion
Paragraphs 10, 11, 12, and 13 tend to conflict with the "Proposed Permitting Strategy" (Exhibit 1). For example, paragraph 10 indicates that "property line acceptable ambient concentrations were established for the pollutants along with the appropriate averaging times." Yet, No. 2.B. of the "Proposed Permitting Strategy" states that "the measured emissions will be subjected to initial air toxics screening using criteria agreed to by the FDER and the permittee." This is clearly conflicting language. In addition, paragraphs 11, 12, and 13 also contain some inconsistencies.

Specifically in regard to the criteria to be used for the initial screening process, there is a reason for the language that was included in No. 2.B. of the "Proposed Permitting Strategy." The ambient concentrations referenced in paragraph 10 are simply current Agency guidelines. Due to the ever-changing and evolving nature of the risk assessment sciences, we believe that it is inappropriate to predetermine the criteria to be used at some future date. A case in point is benzene, a known carcinogen. Following extensive scientific evaluation, the EPA just recently revised and adopted an acceptable ambient air standard for benzene, which is based on a risk level of 10^{-4}. As such, the intent of No. 2.B. of the "Proposed Permitting Strategy" is to (at some future date, prior to the emissions screening process) mutually agree on the appropriate screening criteria to be used, based on the best currently available scientific information. We strongly believe that, since neither State nor Federal ambient standards have yet been adopted for the pollutants in question, this is a reasonable approach.

Recommendation
Based on the discussion above, replace paragraphs 10, 11, 12, and 13 in section II with the following:

> Since neither State nor Federal ambient standards for chlorine, chlorine dioxide, and chloroform have yet been adopted, for reasonable assurance purposes (in accordance with FAC Rule 17-2.200) in issuing this construction permit, the permittee's "Proposed Permitting Strategy" (Exhibit 1) will be used to conduct a post-construction emissions evaluation and assessment.
>
> During the application submittal and review meeting on October 31, 1989 (fee received November 1, 1989), it was verbally agreed to amend the strategy contained in No. 2.A. of the "Proposed Permitting Strategy", to include other sources of potential emissions of chlorine, chlorine dioxide, and chloroform, that would contribute to the property line concentrations.

13) **Technical Evaluation and Preliminary Determination (Section III.A. - Emission Limitations; Paragraph 1)**
Issue/Discussion
Paragraph 1 does not adequately address the sources involved.

Recommendation
Reword paragraph 1 as follows:

> The pollutants to be regulated from the R-8 chlorine dioxide generation process and the No. 2 Bleach Plant and associated waste streams are ...

14) **Technical Evaluation and Preliminary Determination (Section III.A. - Emission Limitations; Paragraph 3, Including Table 2 and Associated Notes 1, 2, and 3)**
Issue/Discussion
The issue discussed in comment #12 above applies here as well. Specifically, it is inappropriate to predetermine the screening criteria to be used at some future date.

Recommendation
Replace paragraph 3, including Table 2 and associated notes 1, 2, and 3, with the following:

> Since neither State nor Federal ambient standards for chlorine, chlorine dioxide, and chloroform have yet been adopted, the permittee's "Proposed Permitting Strategy" (Exhibit 1), as amended, will be used to conduct a post-construction emissions evaluation and assessment.

15) **Technical Evaluation and Preliminary Determination (Section III.B. - Ambient Air Quality Analysis)**
Issue/Discussion
The language contained under this section is inconsistent with the other changes being recommended.

Recommendation
Replace the language under Section III.B. with the following:
Modeling will be performed in accordance with No. 2.B. of the "Proposed Permitting Strategy" (Exhibit 1).

16) **Technical Evaluation and Preliminary Determination (Figure 5)**
Issue/Discussion
We have discovered a minor error in Figure 5 and the corresponding description contained in the construction permit application. Our plans are to install a new alkaline scrubber to control emission from the appropriate washers and seal pots. This scrubber will serve both the DEDED and the CEHDED sequences.

Recommendation
Replace Figure 5 attached to the Technical Evaluation and Preliminary Determination with the corrected Figure 5 enclosed. In addition, replace the figure and respective process description in the No. 2 Bleach Plant construction permit application with the corrected sheets enclosed.

17) **Proposed Permit (Page 1 of 10)**
Issues/Discussions
1. First Paragraph (First Sentence) - The issue discussed in comment #11 applies here as well and throughout.

2. Second Paragraph (First Sentence) - The issue discussed in comment #2 applies here as well.

3. Proposed Listing of Sources - The issue discussed in comment #10 applies here as well.

Recommendations
1. Modify the references to 40 CFR as recommended in comment #11.

2. Modify the first sentence in the second paragraph to read as follows:
For the modification of the No. 2 Bleach Plant located ...

3. Delete or modify the proposed listing of sources as recommended in comment #10.

18) **Proposed Permit (Page 5 of 10, General Condition #13)**
Our understanding is that NSPS only applies to the methanol storage tank. Is this the intent of the language in General Condition #13?

19) **Proposed Permit (Page 7 of 10)**
Issues/Discussions
1. Specific Condition #A.6. - The frequency for the proposed progress report is excessive. We believe that a quarterly frequency is more appropriate.

2. Specific Condition #A.11. - There was, apparently, an error made in the calculation of the daily and annual maximum allowable process input rates of methanol to the chlorine dioxide generation process. Based on our calculations, the correct input rates should be 2457 gallons/day and 912,500 gallons/year.

Recommendations

1. In specific condition #A.6., replace the word monthly with quarterly.

2. In specific condition #A.11., correct the daily and annual maximum allowable process input rates to show 2457 gallons/day and 912,500 gallons/year.

20) **Proposed Permit (Page 8 of 10)**

Issues/Discussions

1. Specific Condition #B.2. - FAC Rule 17-2.700(2)(a) applies to compliance tests. The post-construction sampling we will perform is for purposes of making an initial emissions screening, not for compliance purposes. Therefore, it is inappropriate to reference this rule. However, we are willing to support a 15 day prior notification request.

2. Specific Condition #B.3. - FAC Rule 17-2.700(7) applies to compliance tests. The post-construction sampling we will perform is for purposes of making an initial emissions screening, not for compliance purposes. Therefore, it is inappropriate to reference this rule. We are, however, willing to support the 45 day test report submittal request.

3. Specific Condition #B.5. - The measurement of fugitive emissions may present a very difficult, if not impossible, activity. As such, we want to preserve the ability to estimate these emissions, if necessary. However, the use of the word "quantified" in this specific condition may be construed to mean "measured."

Recommendations

1. In specific condition #B.2., delete the reference to FAC Rule 17-2.700(2)(a).

2. In specific condition #B.3., delete the reference to FAC Rule 17-2.700(7).

3. In specific condition #B.5., replace the word "quantified" with the words "quantified/estimated."

21) **Proposed Permit (Page 9 of 10)**

Issues/Discussions

1. Specific Condition #B.6. - The same issue discussed in comment #20, regarding specific condition #B.5., applies here as well. Specifically, the word "established" may be construed to mean "measured."

2. Specific Condition #B.7. - As we discussed during our 10/31/89 permit application submittal and review meeting, the only data/information presently available is based on old and highly suspect Industry data that has been previously provided to the Department. As we discussed, due to the highly variable nature of this data (which, in our opinion makes it unreliable), we do not intend to use this information to conduct our post-construction emissions evaluation. Instead, our objective is to attempt to generate reliable data.

3. Specific Conditions #B.8. and #B.9. - In regard to the criteria to be used for the initial emissions screening process, the issues discussed in comment #12 apply here as well.

4. Specific Condition #10 - The use of the words "Federal Mandate" is unclear.

Recommendations

1. In specific condition #B.6., replace the word "established" with the words "quantified/estimated."

2. Delete specific condition #B.7.

3. Replace specific conditions #B.8. and #B.9. with the following:

   The permittee's "Proposed Permitting Strategy," as amended, will be used to conduct a post-construction emissions evaluation and assessment.

4. Modify specific condition #B.10. as follows:

   If no further actions are identified in the plan and schedule developed pursuant to No. 2D of the "Proposed Permitting Strategy," then source allowable emission limitations will be established and the construction permit will be amended. If additional action is identified, then allowable time will be established to implement the necessary actions. Then, source allowable emission limitations will be established and the construction permit will be amended. Any further Department action deemed necessary to reduce pollutant emissions from these sources through controls or process changes, or both, will be implemented through State or Federal rule development or voluntary action by the mill. Nothing in this paragraph waives any rights permittee may have under Florida rules and statutes.

22) **Proposed Permit (Expiration Date: June 30, 1991)**

Issue/Discussion

Based on the current schedule for the specification, design, construction, start-up, and post-construction emissions evaluation of the new alkaline scrubber, the proposed construction permit expiration date does not provide adequate time to complete the defined activities. March 1, 1992 represents a more appropriate deadline.

Recommendation

Change the expiration date on the proposed construction permit from June 30, 1991, to March 1, 1992.

23) **Due to emerging Federal legislation regarding air toxics, which may eventually require reductions of certain toxic air emissions based on certain baseline dates, we believe that it is crucial to officially document (as part of this permitting process) the emission reductions that are eventually realized.**

Recommendation

Add a specific condition, which reads as follows:

For potential future regulatory purposes, the emission reductions that result from this project will be estimated and the construction permit will be amended to document these reductions.

4. NO. 2 BLEACH PLANT MODIFICATION PROJECT DESCRIPTION

The existing No. 2 Bleach Plant which is primarily used to produce diaper-related pulp, currently utilizes a six stage bleaching sequence, commonly referred to as CEHDED. The letters in this sequence indicate the following bleaching stages:

C	Chlorination
E	Caustic Extraction
H	Sodium Hypochlorite
D	Chlorine Dioxide

The C stage and its associated washer are vented to a wet scrubber (common to the No. 1 and No. 2 Bleach Plants), which utilizes an alkaline solution to capture residual chlorine. The scrubber effluent is then used in the sodium hypochlorite stage. The D stage towers are vented to wet scrubbers utilizing chilled water on a once through basis. The resultant scrubber effluent gravity flows to the top of the respective D stage towers for efficient utilization of the captured chlorine dioxide. The existing No. 2 Bleach Plant is illustrated by Figure 4.

After completion of the proposed modification, the No. 2 bleach plant will normally employ a DEDED sequence when producing diaper-related pulp. The existing chlorination towers will be replaced with a new D stage upflow/downflow tower, and the existing sodium hypochlorite stage will be by-passed. The new D1 stage tower will be equipped with a chilled water scrubber. A new alkaline scrubber will be installed to control emissions from appropriate washers and seal boxes. Modifications to the No. 2 Bleach Plant also include ancillary pumps, piping, instrumentation, etc. required to produce bleached pulp with the new sequence. The proposed No. 2 Bleach Plant flow diagram (DEDED sequence) is included as Figure 5.

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unlikely that the generator pressure relief valve would be unseated under these circumstances.

In addition to the chlorine dioxide generation equipment, the project will also install the following associated major pieces of equipment:

- A new methanol storage tank.
- A new sodium chlorate storage tank.
- A new sodium chlorate mix tank.
- A new cooling tower.
- Two new water chillers.
- Two new chlorine dioxide storage tanks.
- A new sulfuric acid storage tank.

The project will also include the installation of the necessary structures and ancillary pumps, piping, instrumentation, etc., required to operate the process.

Use of the existing R-2 process will be discontinued once the new R-8 process is started up.

THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED NO. 2 BLEACH PLANT FLOW DIAGRAM
CEHDED SEQUENCE

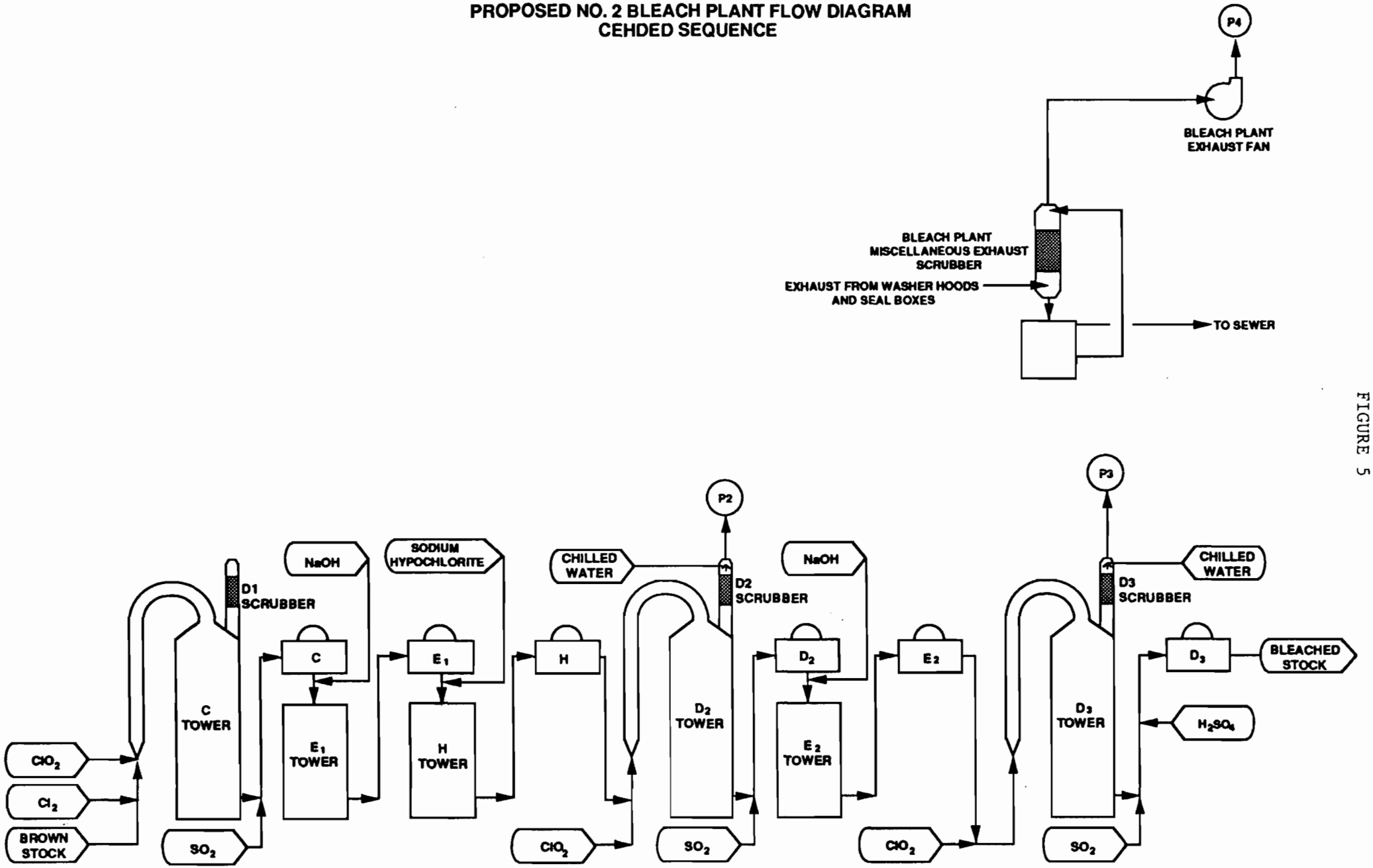
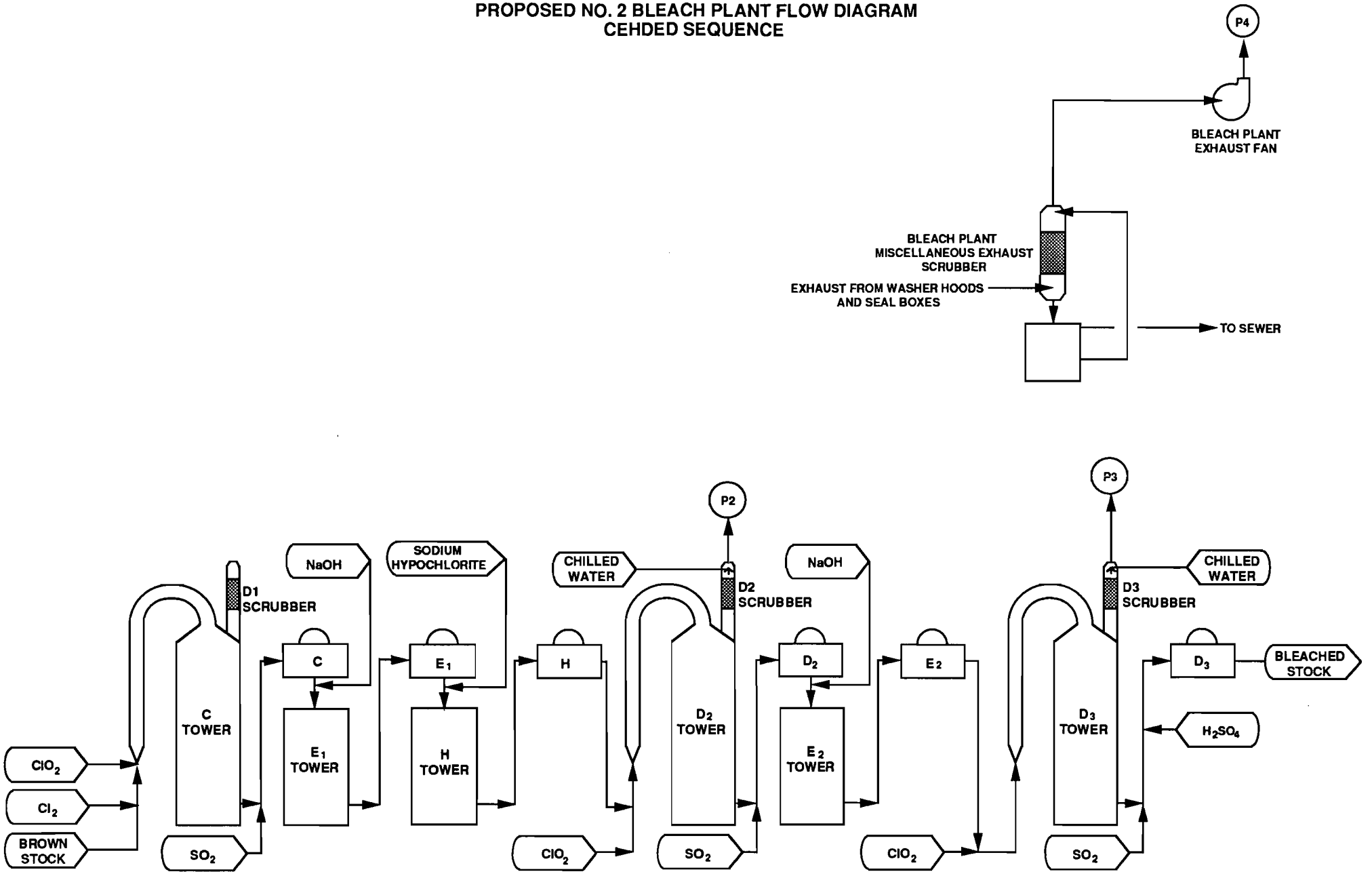


FIGURE 5

FIGURE 6
THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED NO. 2 BLEACH PLANT FLOW DIAGRAM
CEHDED SEQUENCE



PROCTER & GAMBLE
CELLULOSE

File Copy
Do Not Throw Out!

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9510
PHONE (904) 584-

February 22, 1990

RECEIVED
FEB 26 1990
DER - BAQM

Mr. William A. Thomas, P.E.
Permitting and Standards Section
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: The Procter & Gamble Cellulose Company
Proposed Construction Permit for #2 Bleach Plant and R-8
Chlorine Dioxide Generation Process (Permit No. AC-172092)

Dear Mr. Thomas:

The proposed permit referenced above was received on January 26, 1990. Following a detailed review, we have identified several issues and concerns associated with the Technical Evaluation and Preliminary Determination and proposed permit provisions. These issues must be addressed before we can accept the proposed permit.

To clarify our particular concerns, we have enclosed Attachment I. This document highlights each identified issue, contains a brief discussion of each, and provides our recommended modifications.

As we discussed, to adequately address and resolve these issues, we have filed a Motion for Extension of Time in Which to File a Petition for Formal Hearing. This approach will provide us with an extension of sixty (60) days (until April 10, 1990) in which to resolve the identified concerns.

We look forward to our meeting scheduled for March 2, 1990, during which we will initiate our discussions on this subject.

Very truly yours,

THE PROCTER & GAMBLE CELLULOSE COMPANY

R. Andreu
Environmental Control Manager

RA:msw
ChlDxd
Attachment

cc: B. Thomas
E. Mitchell
G. Dunn
J. Pietrzyna, NE Dist.

The Procter & Gamble Cellulose Company
Proposed Construction Permit Number AC62-172092
Issues/Discussions/Recommendations

1) **Intent to Issue (Company Name)**
Issue/Discussion
The Company name is misspelled in the heading and throughout the proposed permit package. The correct spelling is The Procter & Gamble Cellulose Company

Recommendation
Correct the spelling of Procter throughout the proposed permit package.

2) **Intent to Issue (Page 1, 2nd Paragraph, 1st Sentence)**
Issue/Discussion
The reasons shown for the submitted applications (ie: "...for the permitting, modification, and post construction evaluation of the existing ...") are confusing and inappropriate. The permit rules identify two categories of permits: construction (which includes modifications) or operation. Under the rules, the appropriate designation for the submitted applications is "construction."

Recommendation
Modify the first sentence in the second paragraph to read as follows: The applicant, The Procter & Gamble Cellulose Company, applied on November 1, 1989, to the Department of Environmental Regulation to obtain a construction permit for the modification of the existing No. 2 Bleach Plant.

3) **Notice of Intent to Issue (Page 1 of 2, First Paragraph)**
Issue/Discussion
The issue discussed in comment #2 above applies here as well.

Recommendation
Modify the first paragraph as recommended in comment #2 above.

4) **Technical Evaluation and Preliminary Determination (Section I.B.1.)**
Issue/Discussion
As discussed in the permit application, this project will not eliminate the use of sodium hypochlorite in total. Sodium hypochlorite will continue to be used in the No. 1 Bleach plant and in the No. 2 Bleach Plant, when the CEHDED sequence is employed. As worded, Section I.B.1. is misleading and incorrect.

Recommendation
Modify section I.B.1. as follows:
....., eliminate the use of sodium hypochlorite in the No. 2 Bleach Plant when running the DEDED sequence, ...
adds in order to produce other grades of pulp.

5) **Technical Evaluation and Preliminary Determination (Section I.B.2.)**
Issue/Discussion
The description contained under Section I.B.2. does not address the installation of a new chilled water scrubber to control emissions from the new D stage tower.

Recommendation
Include a second sentence under Section I.B.2. to read as follows:
The new tower will be equipped with a new chilled water scrubber.

6) **Technical Evaluation and Preliminary Determination (Section I.B.4.)**
Issue/Discussion
The engineering firm, which is designing the No. 2 Bleach Plant modification, has just recently informed us that an error was made in their scrubber height calculations (regarding the existing chilled water scrubbers on the existing D2 and D3 stages). It appears that the existing chilled water scrubbers will be adequate. This will be verified as part of the post-construction emissions evaluation.

Recommendation
Delete section I.B.4.. Also replace page 4-1 of the #2 Bleach Plant construction permit application with the enclosed update.

7) **Technical Evaluation and Preliminary Determination (Section I.B.5.)**
Issue/Discussion
Some washers and seal pots (ie: the caustic extraction stages) have no emissions of the pollutants in question and, as such, we do not intend to vent these to the scrubber.

Recommendation
In section I.B.5., change "from washers and seal pots" to "from appropriate washers and seal pots."

8) **Technical Evaluation and Preliminary Determination (Section I.B.7.)**
Issue/Discussion
Some minor changes have been made in the scope of the new R-8 chlorine dioxide generation process. These include the addition of a second water chiller and the replacement of the existing sulfuric acid storage tanks.

Recommendation
In section I.B.7., replace "a new water chiller" with "new water chillers, a new sulfuric acid storage tank...." Also replaces page 4-6 of the R-8 chlorine dioxide generation process construction permit application with the enclosed updates.

9) **Technical Evaluation and Preliminary Determination (Section I.C.3.)**
Issues/Discussions
In the first paragraph in section I.C.3., the use of the words "dissolving grade pulps" is technically inappropriate to encompass the types of pulp that are produced via the CEHDED sequence. The use of the words "other grade pulps" is more appropriate.

In the last sentence of the third paragraph in section I.C.3., chloroform emissions are described as being controlled using chilled water scrubbers. Chilled water scrubbers do not effectively control chloroform emissions because the chloroform that condenses in them may be released elsewhere in the process. This project will result in a significant reduction in chloroform emissions because the main sources of chloroform generation, chlorine and sodium hypochlorite bleaching stages, will be eliminated for pulp grades using the DEDED sequence. Chloroform emissions will be addressed as part of the post-construction evaluation detailed in the referenced permitting strategy (Exhibit I).

The sixth paragraph is section I.C.3. is vague, confusing, and inappropriate for inclusion in the technical evaluation. As is contained in Exhibit 1 and the proposed specific conditions, issues regarding the potential volatility of the sewered filtrates will be addressed as part of the post-construction evaluation. In addition, the only component which may not be substantially chemically bound or unreactive in the sewered filtrates is chloroform. Any chlorine and chlorine dioxide present in the totally enclosed bleach plant acid sewer should react upon mixing with the combined mill effluent. Sewered scrubbing media should not contain any chlorine or chlorine dioxide, as these should have reacted with the hydroxide and the sodium sulfide in the scrubbing media.

Recommendations

1. In the first paragraph in section I.C.3., replace the words "dissolving grade pulps" with the words "other grade pulps."

2. Replace the last sentence of the third paragraph in section I.C.3. with the following sentence:
   This project will result in a significant reduction in chloroform emissions because the main sources of chloroform generation, chlorine and sodium hypochlorite bleaching stages, will be eliminated for pulp grades using the DEDED sequence.

3. Delete the sixth paragraph in section I.C.3. revised

10) **Technical Evaluation and Preliminary Determination (Section I.D.)**

Issue/Discussion

The proposed listing of sources is confusing and does not accurately reflect the proposed project. In addition, we do not understand the basis and rationale for the designated descriptions shown in the column to the right of each source.

Recommendations

1. Delete or modify the proposed listing of sources as follows:
   a. Delete seal pots, reboiler, salt cake filter, slurry tank, and dump tank from the source list. These are all components of the chlorine dioxide generator and should be considered as a single source.

to be qualified

b. Delete the sodium hypochlorite storage tanks. This tank is not a source of chlorine, chlorine dioxide, or chloroform emissions.

c. Delete chlorine stage reaction tower. This is the same piece of equipment as the first chlorine dioxide stage reaction tower.

d. Change the number of washers to four (4). There are six (6) washers in total, only four (4) of which are sources of emissions.

2. Delete the column to the right of the source listing.

11) **Technical Evaluation and Preliminary Determination (Section II - Rule Applicability, Paragraph 1 and Throughout)**
Issue/Discussion
We believe that subpart Kb on volatile organic liquid storage vessels [Specifically, 40 CFR 60.116(a), (b), and (d)] is the only section of 40 CFR applicable to this permit.

No

Recommendation
Replace all references to 40 CFR (July 1, 1988 version) with 40 CFR 60, Subpart Kb (July 1, 1989 version).

12) **Technical Evaluation and Preliminary Determination (Section II - Rule Applicability, Paragraphs 10, 11, 12, and 13)**
Issue/Discussion
Paragraphs 10, 11, 12, and 13 tend to conflict with the "Proposed Permitting Strategy" (Exhibit 1). For example, paragraph 10 indicates that "property line acceptable ambient concentrations were established for the pollutants along with the appropriate averaging times." Yet, No. 2.B. of the "Proposed Permitting Strategy" states that "the measured emissions will be subjected to initial air toxics screening using criteria agreed to by the FDER and the permittee." This is clearly conflicting language. In addition, paragraphs 11, 12, and 13 also contain some inconsistencies.

Specifically in regard to the criteria to be used for the initial screening process, there is a reason for the language that was included in No. 2.B. of the "Proposed Permitting Strategy." The ambient concentrations referenced in paragraph 10 are simply current Agency guidelines. Due to the ever-changing and evolving nature of the risk assessment sciences, we believe that it is inappropriate to predetermine the criteria to be used at some future date. A case in point is benzene, a known carcinogen. Following extensive scientific evaluation, the EPA just recently revised and adopted an acceptable ambient air standard for benzene, which is based on a risk level of 10^{-4}. As such, the intent of No. 2.B. of the "Proposed Permitting Strategy" is to (at some future date, prior to the emissions screening process) mutually agree on the appropriate screening criteria to be used, based on the best currently available scientific information. We strongly believe that, since neither State nor Federal ambient standards have yet been adopted for the pollutants in question, this is a reasonable approach.

Recommendation
Based on the discussion above, replace paragraphs 10, ~~11, 12, and 13~~ amended in section II with the following:

> Since neither State nor Federal ambient standards for chlorine, chlorine dioxide, and chloroform have yet been adopted, for reasonable assurance purposes (in accordance with FAC Rule 17-2.200) in issuing this construction permit, the permittee's "Proposed Permitting Strategy" (Exhibit 1) will be used to conduct a post-construction emissions evaluation and assessment.
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> During the application submittal and review meeting on October 31, 1989 (fee received November 1, 1989), it was verbally agreed to amend the strategy contained in No. 2.A. of the "Proposed Permitting Strategy", to include other sources of potential emissions of chlorine, chlorine dioxide, and chloroform, that would contribute to the property line concentrations.

13) **Technical Evaluation and Preliminary Determination (Section III.A. - Emission Limitations; Paragraph 1)**
Issue/Discussion
Paragraph 1 does not adequately address the sources involved.

Recommendation
Reword paragraph 1 as follows:
> The pollutants to be regulated from the R-8 chlorine dioxide generation process and the No. 2 Bleach Plant and associated waste streams are ...

14) **Technical Evaluation and Preliminary Determination (Section III.A. - Emission Limitations; Paragraph 3, Including Table 2 and Associated Notes 1, 2, and 3)**
Issue/Discussion
The issue discussed in comment #12 above applies here as well. Specifically, it is inappropriate to predetermine the screening criteria to be used at some future date.

Recommendation
Replace paragraph 3, including Table 2 and associated notes 1, 2, and 3, with the following:

> Since neither State nor Federal ambient standards for chlorine, chlorine dioxide, and chloroform have yet been adopted, the permittee's "Proposed Permitting Strategy" (Exhibit 1), as amended, will be used to conduct a post-construction emissions evaluation and assessment.

15) **Technical Evaluation and Preliminary Determination (Section III.B. - Ambient Air Quality Analysis)**
Issue/Discussion
The language contained under this section is inconsistent with the other changes being recommended.

Recommendation
Replace the language under Section III.B. with the following:
Modeling will be performed in accordance with No. 2.B. of the "Proposed Permitting Strategy" (Exhibit 1).

16) **Technical Evaluation and Preliminary Determination (Figure 5)**
Issue/Discussion
We have discovered a minor error in Figure 5 and the corresponding description contained in the construction permit application. Our plans are to install a new alkaline scrubber to control emission from the appropriate washers and seal pots. This scrubber will serve both the DEDED and the CEHDED sequences.

Recommendation
Replace Figure 5 attached to the Technical Evaluation and Preliminary Determination with the corrected Figure 5 enclosed. In addition, replace the figure and respective process description in the No. 2 Bleach Plant construction permit application with the corrected sheets enclosed.

17) **Proposed Permit (Page 1 of 10)**
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1. First Paragraph (First Sentence) - The issue discussed in comment #11 applies here as well and throughout.

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Recommendations
1. Modify the references to 40 CFR as recommended in comment #11.

2. Modify the first sentence in the second paragraph to read as follows:
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Our understanding is that NSPS only applies to the methanol storage tank. Is this the intent of the language in General Condition #13?

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1. Specific Condition #A.6. - The frequency for the proposed progress report is excessive. We believe that a quarterly frequency is more appropriate.

2. Specific Condition #A.11. - There was, apparently, an error made in the calculation of the daily and annual maximum allowable process input rates of methanol to the chlorine dioxide generation process. Based on our calculations, the correct input rates should be 2457 gallons/day and 912,500 gallons/year. Appl. A to be resubmitted AC 62-172092

Recommendations

1. In specific condition #A.6., replace the word monthly with quarterly.

2. In specific condition #A.11., correct the daily and annual maximum allowable process input rates to show 2457 gallons/day and 912,500 gallons/year. resubmittal of App. A

20) **Proposed Permit (Page 8 of 10)**

Issues/Discussions

1. Specific Condition #B.2. - FAC Rule 17-2.700(2)(a) applies to compliance tests. The post-construction sampling we will perform is for purposes of making an initial emissions screening, not for compliance purposes. Therefore, it is inappropriate to reference this rule. However, we are willing to support a 15 day prior notification request.

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Recommendations

1. In specific condition #B.2., delete the reference to FAC Rule 17-2.700(2)(a).

2. In specific condition #B.3., delete the reference to FAC Rule 17-2.700(7).

3. In specific condition #B.5., replace the word "quantified" with the words "quantified/estimated."

21) **Proposed Permit (Page 9 of 10)**

Issues/Discussions

1. Specific Condition #B.6. - The same issue discussed in comment #20, regarding specific condition #B.5., applies here as well. Specifically, the word "established" may be construed to mean "measured." quantified/estimated

2. Specific Condition #B.7. - As we discussed during our 10/31/89 permit application submittal and review meeting, the only data/information presently available is based on old and highly suspect Industry data that has been previously provided to the Department. As we discussed, due to the highly variable nature of this data (which, in our opinion makes it unreliable), we do not intend to use this information to conduct our post-construction emissions evaluation. Instead, our objective is to attempt to generate reliable data. No change

3. Specific Conditions #B.8. and #B.9. - In regard to the criteria to be used for the initial emissions screening process, the issues discussed in comment #12 apply here as well.

4. Specific Condition #10 - The use of the words "Federal Mandate" is unclear.

Recommendations

1. In specific condition #B.6., replace the word "established" with the words "quantified/estimated."

2. Delete specific condition #B.7.

3. Replace specific conditions #B.8. and #B.9. with the following:

   Note: The permittee's "Proposed Permitting Strategy," as amended, will be used to conduct a post-construction emissions evaluation and assessment. and these values may be changed.

4. Modify specific condition #B.10. as follows:

   If no further actions are identified in the plan and schedule developed pursuant to No. 2D of the "Proposed Permitting Strategy," then source allowable emission limitations will be established and the construction permit will be amended. If additional action is identified, then allowable time will be established to implement the necessary actions. Then, source allowable emission limitations will be established and the construction permit will be amended. Any further Department action deemed necessary to reduce pollutant emissions from these sources through controls or process changes, or both, will be implemented through State or Federal rule development or voluntary action by the mill. Nothing in this paragraph waives any rights permittee may have under Florida rules and statutes.

9-10 rulemaking

22) **Proposed Permit (Expiration Date: June 30, 1991)**

Issue/Discussion

Based on the current schedule for the specification, design, construction, start-up, and post-construction emissions evaluation of the new alkaline scrubber, the proposed construction permit expiration date does not provide adequate time to complete the defined activities. March 1, 1992 represents a more appropriate deadline.

Recommendation

Change the expiration date on the proposed construction permit from June 30, 1991, to March 1, 1992. Dec. 31, 1992

23) **Due to emerging Federal legislation regarding air toxics, which may eventually require reductions of certain toxic air emissions based on certain baseline dates, we believe that it is crucial to officially document (as part of this permitting process) the emission reductions that are eventually realized.**

Recommendation

Add a specific condition, which reads as follows:

For potential future regulatory purposes, the emission reductions that result from this project will be estimated and the construction permit will be amended to document these reductions.

4. NO. 2 BLEACH PLANT MODIFICATION PROJECT DESCRIPTION

The existing No. 2 Bleach Plant which is primarily used to produce diaper-related pulp, currently utilizes a six stage bleaching sequence, commonly referred to as CEHDED. The letters in this sequence indicate the following bleaching stages:

C	Chlorination
E	Caustic Extraction
H	Sodium Hypochlorite
D	Chlorine Dioxide

The C stage and its associated washer are vented to a wet scrubber (common to the No. 1 and No. 2 Bleach Plants), which utilizes an alkaline solution to capture residual chlorine. The scrubber effluent is then used in the sodium hypochlorite stage. The D stage towers are vented to wet scrubbers utilizing chilled water on a once through basis. The resultant scrubber effluent gravity flows to the top of the respective D stage towers for efficient utilization of the captured chlorine dioxide. The existing No. 2 Bleach Plant is illustrated by Figure 4.

After completion of the proposed modification, the No. 2 bleach plant will normally employ a DEDED sequence when producing diaper-related pulp. The existing chlorination towers will be replaced with a new D stage upflow/downflow tower, and the existing sodium hypochlorite stage will be by-passed. The new D1 stage tower will be equipped with a chilled water scrubber. A new alkaline scrubber will be installed to control emissions from appropriate washers and seal boxes. Modifications to the No. 2 Bleach Plant also include ancillary pumps, piping, instrumentation, etc. required to produce bleached pulp with the new sequence. The proposed No. 2 Bleach Plant flow diagram (DEDED sequence) is included as Figure 5.

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unlikely that the generator pressure relief valve would be unseated under these circumstances.

In addition to the chlorine dioxide generation equipment, the project will also install the following associated major pieces of equipment:

- A new methanol storage tank.
- A new sodium chlorate storage tank.
- A new sodium chlorate mix tank.
- A new cooling tower.
- Two new water chillers.
- Two new chlorine dioxide storage tanks.
- A new sulfuric acid storage tank.

The project will also include the installation of the necessary structures and ancillary pumps, piping, instrumentation, etc., required to operate the process.

Use of the existing R-2 process will be discontinued once the new R-8 process is started up.

THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED NO. 2 BLEACH PLANT FLOW DIAGRAM
CEHDED SEQUENCE

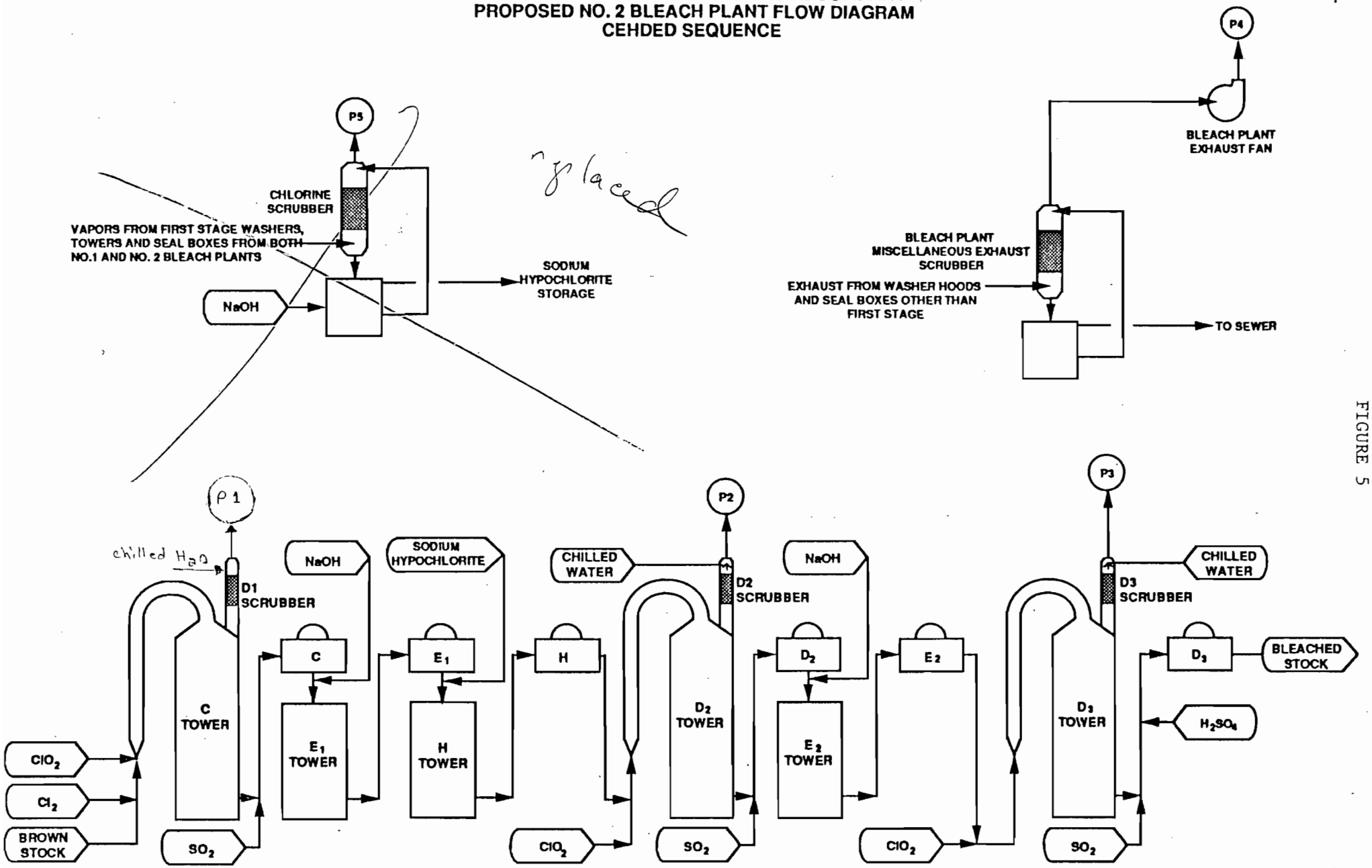


FIGURE 5

THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED NO. 2 BLEACH PLANT FLOW DIAGRAM
CEHDED SEQUENCE

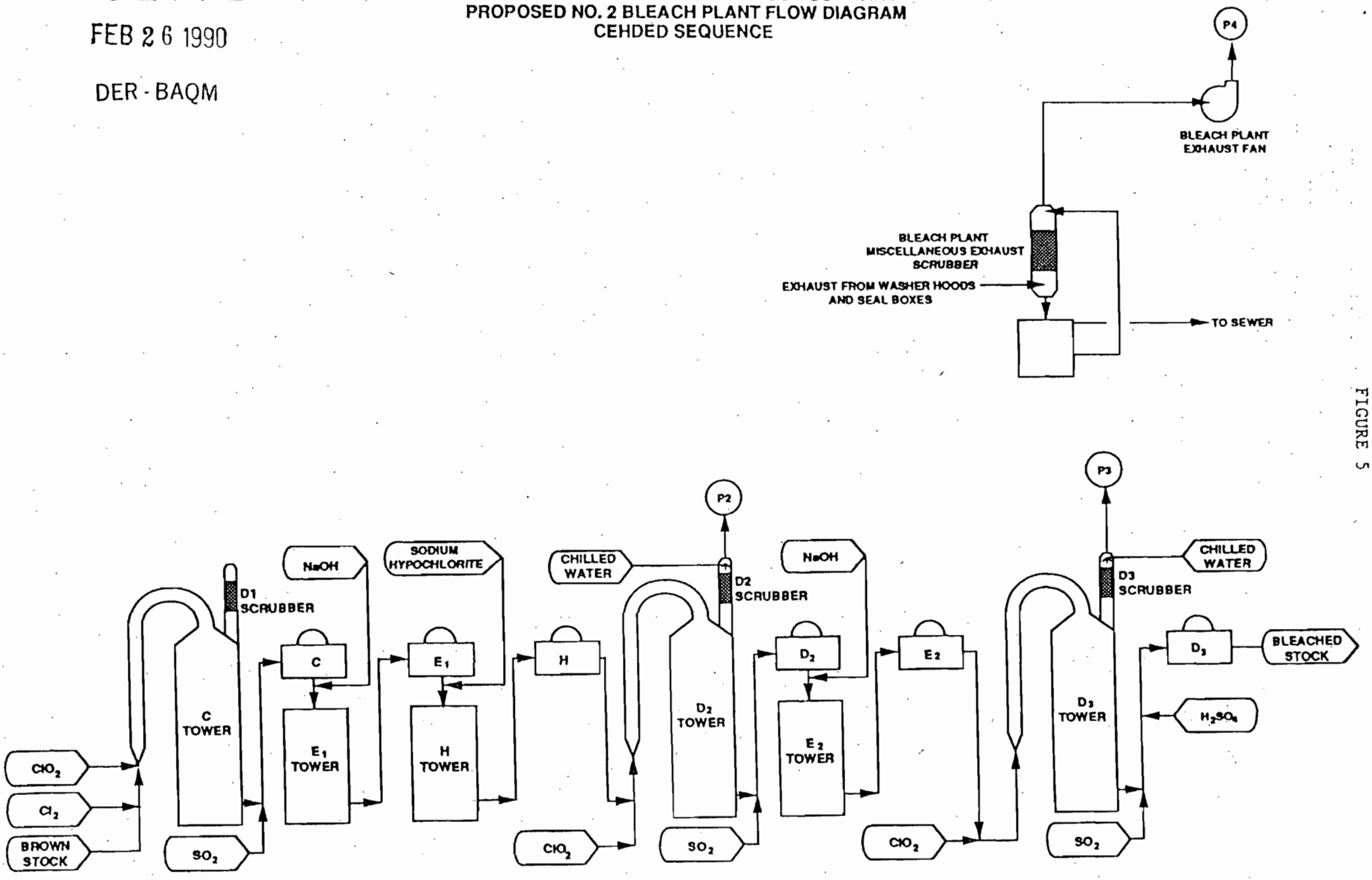
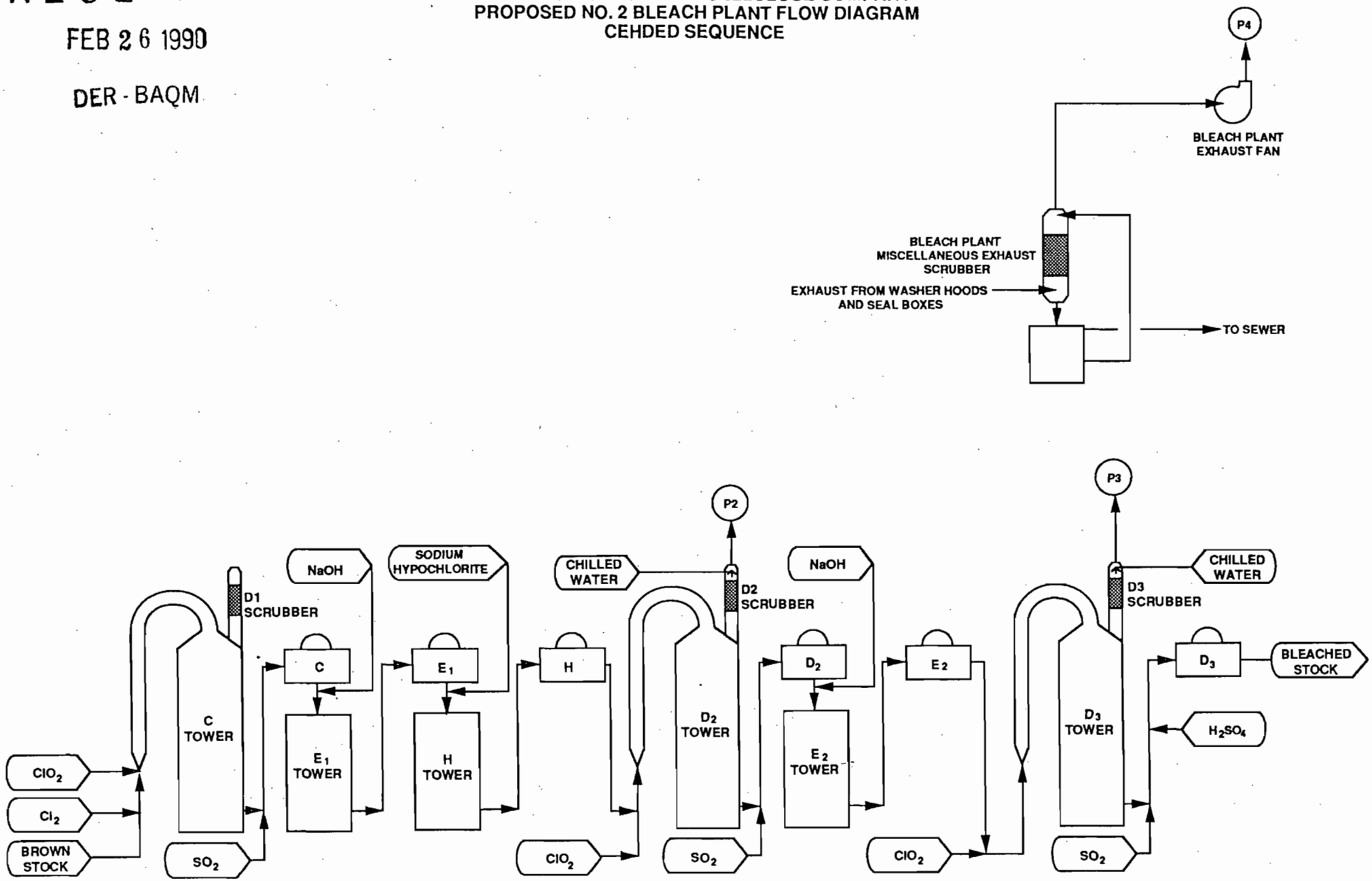


FIGURE 5

FIGURE 6
THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED NO. 2 BLEACH PLANT FLOW DIAGRAM
CEHDED SEQUENCE



THE PROCTER & GAMBLE CELLULOSE COMPANY

GENERAL OFFICES

P.O. BOX 599 CINCINNATI, OHIO 45201-0599

February 7, 1990

Bill Thomas
Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: The Procter & Gamble Cellulose Company
Draft Construction Permit No. AC62-172092

Dear Mr. Thomas:

This follows up on your conversation with Ray Andreu, our Foley plant environmental manager, on Tuesday, February 6.

Mr. Andreu explained that the Company has some concerns with certain provisions in the proposed permit which we received from the Department on January 26. Mr. Andreu will be reviewing those issues with the Department in the near future and working to seek resolution. However, to protect our ability to petition for an administrative hearing, we will be filing shortly with the Office of General Counsel a request for an extension of time in which to file a petition for a hearing.

Separately, you and Mr. Andreu discussed the publication of a notice of intent to issue in a local newspaper. In light of the fact that this is a proposed permit and that the Company desires to review certain issues on the proposed permit with the Department, it does not seem appropriate to publish a notice at this time. Therefore, as you and Mr. Andreu discussed, the Company will refrain from publishing the notice within the 30 day period mentioned in the Intent to Issue, and publication will be delayed until we determine whether the issues can be resolved.

If you have any concerns about this approach, please contact me or Mr. Andreu.

Sincerely,

Ann K. Bailey
Senior Counsel
(513) 983-4154

AKB:kkd
5533M
cc: Ray Andreu
B. Mitchell
A. Lutgna, NED
CHF/JRP

A. K. Bailey, 2-C

P.O. BOX 599
CINCINNATI, OHIO 45201-0599

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Bill Thomas
Departmentof Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

THE PROCTER & GAMBLE CELLULOSE COMPANY
GENERAL OFFICES
P.O. BOX 599 CINCINNATI, OHIO 45201-0599

February 7, 1990

Gary Smallridge, Esq.
Assistant General Counsel
Office of General Counsel
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: The Procter & Gamble Cellulose Company
Proposed Construction Permit No. AC 62-172092
DER File No. AC 62-172092

Dear Mr. Smallridge:

Enclosed for filing please find an original and one copy of The Procter & Gamble Cellulose Company's Motion for Extension of Time in Which to File a Petition for Formal Hearing.

Also, as we discussed in our telephone conversation today, I have sent a letter to Mr. Thomas confirming his discussion with Procter & Gamble's Ray Andreu that it is not appropriate to publish a notice of intent in a local newspaper at this time. We will delay that publication until we determine whether the issues we have with the proposed permit can be resolved through discussions with Department staff. Attached for your files is a copy of our February 7, 1990 confirming letter to Mr. Thomas.

Thank you for your attention to this matter.

Very truly yours,

Ann K. Bailey
Senior Counsel

AKB:kkd/5535M
Enclosure

cc: Ray Andreu - Procter & Gamble Cellulose
Sue Stevens - Procter & Gamble Cellulose
Bill Thomas - Department of Environmental Regulation

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

THE PROCTER & GAMBLE CELLULOSE COMPANY CONSTRUCTION PERMIT NO. AC 62-172092 Petitioner, vs. STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL REGULATION, Respondent.	)	OGC FILE NO.

MOTION FOR EXTENSION OF TIME IN
WHICH TO FILE A PETITION FOR FORMAL HEARING

Petitioner, The Procter & Gamble Cellulose Company, through its undersigned attorney, moves the Secretary of the Department of Environmental Regulation, pursuant to Section 17-103.070, Florida Administrative Code, to enter an order granting an extension of time to Petitioner for filing a Petition for Formal Hearing under Section 120.57, Florida Statute.

Petitioner, The Procter & Gamble Cellulose Company, received on January 26, 1990 a proposed Construction Permit No. AC 62-172092 to modify the Perry plant's existing No. 2 Bleach Plant.

Petitioner moves for this extension of time to enable it to meet informally with staff of the Department to attempt to resolve issues Petitioner has with the Technical Evaluation and the proposed permit. These issues include certain requirements of and language in the Technical Evaluation and the proposed permit such as Specific Conditions Nos. A.6, A.11, B.2, B.3, B.5, B.6, B.8, B.9, and B.10.

Accordingly, Petitioner requests an extension of sixty (60) days, until April 10, 1990, in which to file a Petition for Formal Hearing.

I HEREBY CERTIFY that Petitioner has consulted with the Department's Attorney, Gary Smallridge, who does not object to an extension of time for filing a Petition for Formal Hearing.

Respectfully submitted this 7th day of February, 1990.

Ann K. Bailey, Senior Counsel
The Procter & Gamble Cellulose Company
P.O. Box 599
Cincinnati, Ohio 45201-0599
(513) 983-4154

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Motion for Extension of Time in Which to File a Petition for Formal Hearing has been furnished by U.S. Mail to Gary Smallridge, Assistant General Counsel, Florida Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, this 7th day of February, 1990.

Ann K. Bailey

AKB:5537M

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:	4. Article Number
C. S. Aiken, Plant Mgr. The Proctor & Gamble Cellulose Co. Rt. 3, Box 260 Perry, FL 32347	P 938 762 814
	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 — Address X	8. Addressee's Address *(ONLY if requested and fee paid)*
6. Signature — Agent X A Moore	
7. Date of Delivery 1/26/90	

PS Form **3811**, Mar. 1988 * U.S.G.P.O. 1988-212-865 **DOMESTIC RETURN RECEIPT**

P 938 762 814

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

Sent to C. S. Aiken	
Street and No. Plant Mgr. Rt. 3, Box 260	
P.O., State and ZIP Code The Proctor & Gamble Cellulose Co. Perry, FL 32347	
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: 1/25/90 AC 62-172092	

PS Form 3800, June 1985

File Copy

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

January 24, 1990

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. C. S. Aiken
Plant Manager
The Proctor & Gamble Cellulose Company
Route 3, Box 260
Perry, Florida 32347

Dear Mr. Aiken:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for the permitting, modification, and post construction evaluation of the existing No. 2 Bleach Plant located at the permittee's existing mill in Perry, Taylor County, Florida. The modification will allow the No. 2 Bleach Plant to operate a bleaching sequence of DEDED and to maintain the capability to operate the existing bleaching sequence of CEHDED.

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

Sincerely,

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

CHF/BM/t

Attachments

cc: A. Kutyna, NE District
R. Andreu, P & GCC
A. Kinghorn, P.E., SEC
Reading File
Bruce
George Fears, DuPont Co.
} 1-25-90 RAM

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

The Proctor & Gamble Cellulose Co. DER File No. AC 62-172092
Route 3, Box 260
Perry, Florida 32347

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, The Proctor & Gamble Cellulose Company, applied on November 1, 1989, to the Department of Environmental Regulation to obtain a permit for the permitting, modification, and post construction evaluation of the existing No. 2 Bleach Plant. The modification will allow the No. 2 Bleach Plant to operate a bleaching sequence of DEDED (D: chlorine dioxide; E: caustic extraction) and to maintain the capability to operate the existing bleaching sequence of CEHDED (C: chlorination; H: sodium hypochlorite). The proposed project will occur at the applicant's existing facility located in Perry, Taylor 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 Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

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

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

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

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

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

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

Copies furnished to:

A. Kutyna, NE District
R. Andreu, P & GCC
A. Kinghorn, P.E., SEC

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 1-25-90.

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.

Kim Doker 1-25-90
Clerk Date

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

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to The Proctor & Gamble Cellulose Company, Rt. 3, Box 260, Perry, Florida 32347, for the permitting, modification, and post construction evaluation of the existing No. 2 Bleach Plant located at the permittee's existing mill in Perry, Taylor County, Florida. The modification will allow the No. 2 Bleach Plant to operate a bleaching sequence of DEDED (D: chlorine dioxide; E: caustic extraction) and to maintain the capability to operate the existing bleaching sequence of CEHDED (C: chlorination; H: sodium hypochlorite). A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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

The Petition shall contain the following information;

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

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

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

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

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

Department of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

Any person may send written comments on the proposed action to Mr. Bill Thomas 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

The Proctor & Gamble Cellulose Company
Taylor County
Perry, Florida

Construction Permit Number
AC 62-172092

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

January 24, 1990

I. Application

A. Applicant

The Proctor & Gamble Cellulose Company
Route 3, Box 260
Perry, Florida 32347

B. Project

The applicant has applied for a construction permit to modify the mill's existing No. 2 Bleach Plant, which is primarily used to produce diaper-related pulp. The proposed modification will include the following:

1. Replace the existing R-2 chlorine dioxide generation process (Figure 1) with a R-8 chlorine dioxide generation process (Figure 2), which will produce a chlorine dioxide solution that is virtually free of molecular chlorine, eliminate the use of sodium hypochlorite, and reduce emissions of chlorine and chloroform (formed mainly in the chlorine and sodium hypochlorite stages). However, methanol (VOC) emissions will occur due to the process change.

2. The existing chlorination towers will be replaced with a new D stage upflow/downflow tower.

3. The existing sodium hypochlorite stage will be by-passed, but kept on a stand-by basis.

4. The scrubbers on the existing D2 and D3 stage towers will be replaced with more efficient chilled water scrubbers.

5. A new alkaline scrubber will be installed to control emissions from washers and seal pots.

6. Installation of a new methanol storage tank (40 CFR 60, Subpart Kb).

7. Installation of a new sodium chlorate storage tank, a new sodium chlorate mix tank, a new cooling tower, a new water chiller, and two new chlorine dioxide storage tanks.

The proposed project will occur at the applicant's existing mill located Southeast of Perry on County Road 30. The UTM coordinates are Zone 17, 256.7 km East and 3328.7 km North.

C. Process and Controls

1. General

After the wood chips have been pressure cooked with an alkaline liquor in the batch digesters and then washed, the pulp is screened and sent to the Nos. 1 and 2 Bleach Plants where it is reacted with various chemicals in a sequence for purification, brightening and viscosity control. Chemicals are added in retention towers, and reactants are removed in washers. After being bleached, the pulp is dried on the paper machine and finished to customer specifications.

2. Existing No. 2 Bleach Plant

The existing No. 2 Bleach Plant utilizes a six-stage bleaching sequence (Figure 3) commonly referred to as CEHDED (C: chlorination; E: caustic extraction; H: sodium hypochlorite; and, D: chlorine dioxide). The chlorine dioxide solution is manufactured in a chemical generator employing the R-2 process which reacts sodium chlorate, sodium chloride and sulfuric acid to form a chlorine dioxide/chlorine gas mixture that is absorbed in chilled water and stored in connected storage tanks (supplies both bleach plants).

3. Proposed No. 2 Bleach Plant

After completion of the modification, the No. 2 Bleach Plant will normally employ a DEDED sequence (Figure 4) when producing diaper-related pulp. However, the mill wants to maintain the ability to produce dissolving grade pulps, which will employ a CEHDED sequence (Figure 5), by utilizing the existing sodium hypochlorite stage and supplying chlorine to the first stage.

The existing R-2 chlorine dioxide generation process will be replaced with a new R-8 chlorine dioxide generation process, which will react sodium chlorate, sodium chloride, methanol and sulfuric acid to form a chlorine dioxide solution that is virtually free of molecular chlorine.

Chlorine dioxide emissions will be controlled using chilled water scrubbers. When chlorine is in use, an alkaline scrubber will be used to control the emissions. Chloroform emissions will be controlled using chilled water scrubbers.

Potential emissions of methanol will occur from two areas, the chlorine dioxide generation process and the storage tank activities (filling, storage and working). Since the R-8 process reactions are driven by the presence of methanol, relief vent releases will be halted by interruption of the methanol flow when there are process problems. VOC emissions from the storage tank are considered fugitive.

Filtrates from the chlorine dioxide stage washers, the extraction stage, and the sodium hypochlorite stage (CEHDED sequence), are sewered and treated in the wastewater treatment plant.

There is concern over the constituents of the sewered materials/filtrates because of their volatility and potential to be emitted into the atmosphere from the sewers and the wastewater treatment plant. Unless the pollutants of concern (i.e., chlorine, chlorine dioxide, and chloroform) are chemically bound and unreactive up to and through the treatment at the wastewater treatment plant, then it will be assumed that all of the referenced pollutants scrubbed from the process will be emitted into the atmosphere from the sewers and the wastewater treatment plant.

D. Source Classification Codes

o 4-07-008-15	Methanol storage tank-breathing loss	10^3 gals storage capacity
o 4-07-008-16	Methanol storage tank-working loss	10^3 gals used per year
o 3-07-001-99	Chlorine dioxide generator (1)	TONS ADUP
o 3-07-001-99	Chlorine dioxide storage tanks (2)	TONS ADUP
o 3-07-001-99	Seal pots (2)	TONS ADUP
o 3-07-001-99	Reboiler	TONS ADUP
o 3-07-001-99	Sodium hypochlorite storage tank	TONS ADUP
o 3-07-001-99	Salt cake filter	TONS ADUP
o 3-07-001-99	Sodium chlorate mix tank	TONS ADUP
o 3-07-001-99	Sodium chlorate storage tank	TONS ADUP
o 3-07-001-99	Slurry/Dump tanks (4)	TONS ADUP
o 3-07-001-99	Chlorine stage reaction tower	TONS ADUP
o 3-07-001-99	Caustic stage extraction towers (2)	TONS ADUP
o 3-07-001-99	Sodium hypochlorite stage reaction tower	TONS ADUP
o 3-07-001-99	Chlorine dioxide stage reaction towers (3)	TONS ADUP
o 3-07-001-99	Washers (3)	TONS ADUP

II. Rule Applicability

The proposed project is subject to preconstruction review in accordance with Section 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version).

The application package was deemed complete on November 20, 1989.

Since the bleach plant is not exempted from permitting pursuant to F.A.C. Rule 17-2.210(3), the mill was required to obtain a construction permit for the proposed modification.

The existing facility is located in an area designated attainment pursuant to F.A.C. Rule 17-2.420.

The pollutant emissions to be expected from the proposed bleach plant operations are methanol (a VOC), chlorine, chlorine dioxide, and chloroform.

Review of the potential methanol emissions of 3.3 TPY from the storage tank and bleach plant operations shall be in accordance with F.A.C. Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration (PSD) or Nonattainment Requirements, and 40 CFR (July 1, 1988 version).

Pursuant to F.A.C. Rule 17-2.660, the methanol storage tank is subject to the Standards of Performance for Volatile Organic Liquid Storage Vessel, 40 CFR 60, Subpart Kb.

The methanol storage tank is subject to F.A.C. Rules 17-2.620(1) and (2): General Pollutant Emission Limiting Standards; 17-2.240: Circumvention; 17-2.250: Excess Emissions; 17-2.660: Standards of Performance for New Stationary Sources; and, 17-4.130: Plant Operation-Problems.

The methanol storage tank is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version).

As a first tier level of review, the pollutants chlorine, chlorine dioxide, and chloroform, were evaluated in accordance with F.A.C. Rule 17-2.520, with considerations given to carcinogenicity and toxicity using risk assessment guidelines. Through these considerations, property line acceptable ambient concentrations were established for each pollutant along with the appropriate averaging times.

After construction, a second tier level of review will be conducted. The review will entail evaluating sampling and analysis results (stacks and waste streams), modeling, and assumptions, as they relate to the Nos. 1 and 2 Bleach Plants and their associated waste streams.

If, through the review and negotiations, additional controls or process changes, or both, are deemed appropriate actions in order to achieve the established acceptable ambient concentrations at the property lines, then the Department will develop a contingency plan to include the appropriate action(s) to be taken with time frames. The contingency plan will be incorporated into and made a part of the construction permit.

The mill has committed (Exhibit 1), as part of the reasonable assurance requirement of F.A.C. Rule 17-2.200, to make the necessary post-construction changes to achieve these risk evaluated and established property line acceptable ambient concentrations. During the application submittal and review meeting on October 31, 1989 (fee received November 1, 1989), it was verbally agreed to amend the strategy contained in No. 2.A. of the "Proposed Permitting Strategy," to include other sources of potential emissions of chlorine, chlorine dioxide, and chloroform, that would contribute to the property line concentrations.

III. Summary of Emissions

A. Emission Limitations

The pollutants to be regulated from the No. 2 Bleach Plant and associated waste streams are VOC (methanol), chlorine, chlorine dioxide, and chloroform in accordance with F.A.C. Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version).

For PSD tracking purposes, the following table will present the potential VOC emissions from the methanol storage tank and process:

Table 1

Source	Pollutant	PSD Emissions Tracking (TPY)
Methanol Storage Tank	VOC	
1. Working Loss		0.4
Process	VOC	
1. Fugitives		2.9
	Total	3.3

Note: 1. Hours of operation at 8760
2. Storage tank volume: 37,000 gallons
3. Turnovers per year: <15

The following table will present the risk evaluated and established property line acceptable ambient concentrations and their averaging times for chloroform, chlorine, and chlorine dioxide:

Table 2

Chemical	Acceptable Ambient Conc.	Averaging Time
1. Chloroform	0.043 ug/m^3	annual
2. Chlorine	15.0 ug/m^3 (5ppb)	8-hour
	3.57 ug/m^3 (1.2 ppb)	24-hour
3. Chlorine dioxide	3.0 ug/m^3 (1 ppb)	8-hour
	0.71 ug/m^3 (0.24 ppb)	24-hour

Note:

1. Since chloroform is a carcinogen with an EPA unit risk value (a measure of its carcinogenic potency) and the facility will continuously emit this chemical, the acceptable ambient concentration is based on providing protection from the long-term exposure to chloroform. The level of protection, that corresponds to a one-in-a-million increased risk of developing cancer from continuous exposure to chloroform, is calculated by dividing 1.0E-6 by 2.3E-5 (the unit risk factor for chloroform). The resulting quotient is the acceptable ambient concentration. Since the health concern is for long-term exposure (and the unit risk factor reflects a 70-year exposure), the averaging time should be on a annual basis.

2. Chlorine is not a carcinogen but has an occupational exposure level (TLV) of 0.5 ppm (1.5 mg/m^3). The acceptable ambient concentration is based on providing two orders of magnitude below the occupational level. The two orders of magnitude represent protection for the differences between healthy workers and the more sensitive public, and the public's potential exposure to multiple chemicals, which may exert synergistic effects, or may produce exposures through other environmental media.

   The first ambient guideline is based on an 8-hour average concentration, as is the occupational exposure level. An additional protection factor which takes into account the public's continuous exposure, compared to a worker's exposure, which ceases in 8 hours, is provided by the longer-term 24-hour guideline. For the 24-hour guideline, the 8-hour guideline is divided by 4.2, which is the ratio between a 168-hour week of public exposure to a continuous emission and a worker's exposure to 40 hours of the toxic. The 24-hour guideline does not need to be used for batch operations or processes which operate for less than 8 hours. If a process can pass the 8-hour ambient guideline and does not operate more than 8 hours, then its average ambient concentration for 24 hours will be well below the 24-hour guideline.

3. The acceptable ambient concentration for chlorine dioxide* is derived by the same methodology as was used for chlorine. The occupational exposure level is 0.3 mg/m^3 (0.1 ppm). Dividing the TLV by 100 gives the 8-hour acceptable ambient concentration, and dividing the TLV by 420 gives the 24-hour guideline.

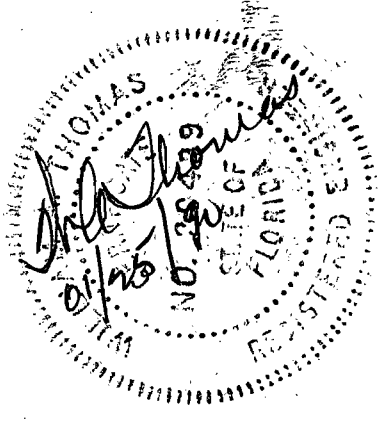
* A side note to add is that the facility representatives indicated that chlorine dioxide is very reactive and rapidly breaks down to chlorine in the atmosphere. An acceptable ambient concentration guideline may not be appropriate for chlorine dioxide, but the facility needs to provide verification for that statement.

B. Ambient Air Quality Analysis

For the second tier level of review, modeling will be required.

IV. Conclusion

Based on the information and reasonable assurance commitments provided by The Proctor & Gamble Cellulose Company, the Department has reasonable assurance that the modification to the No. 2 Bleach Plant and associated processes, 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.



THE PROCTER & GAMBLE CELLULOSE COMPANY
R-2 PROCESS FLOW DIAGRAM

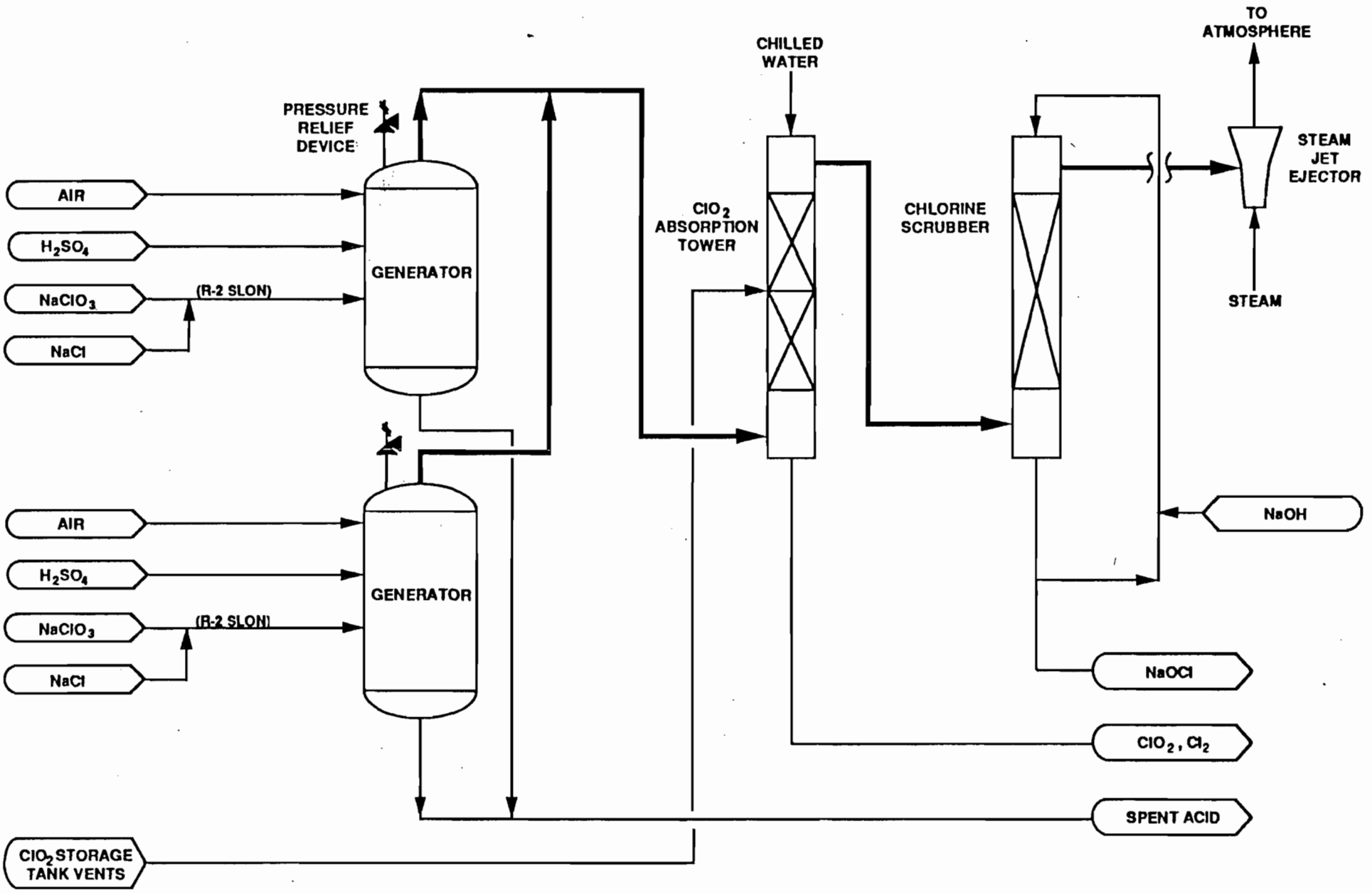


FIGURE 1

THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED R - 8 PROCESS FLOW DIAGRAM

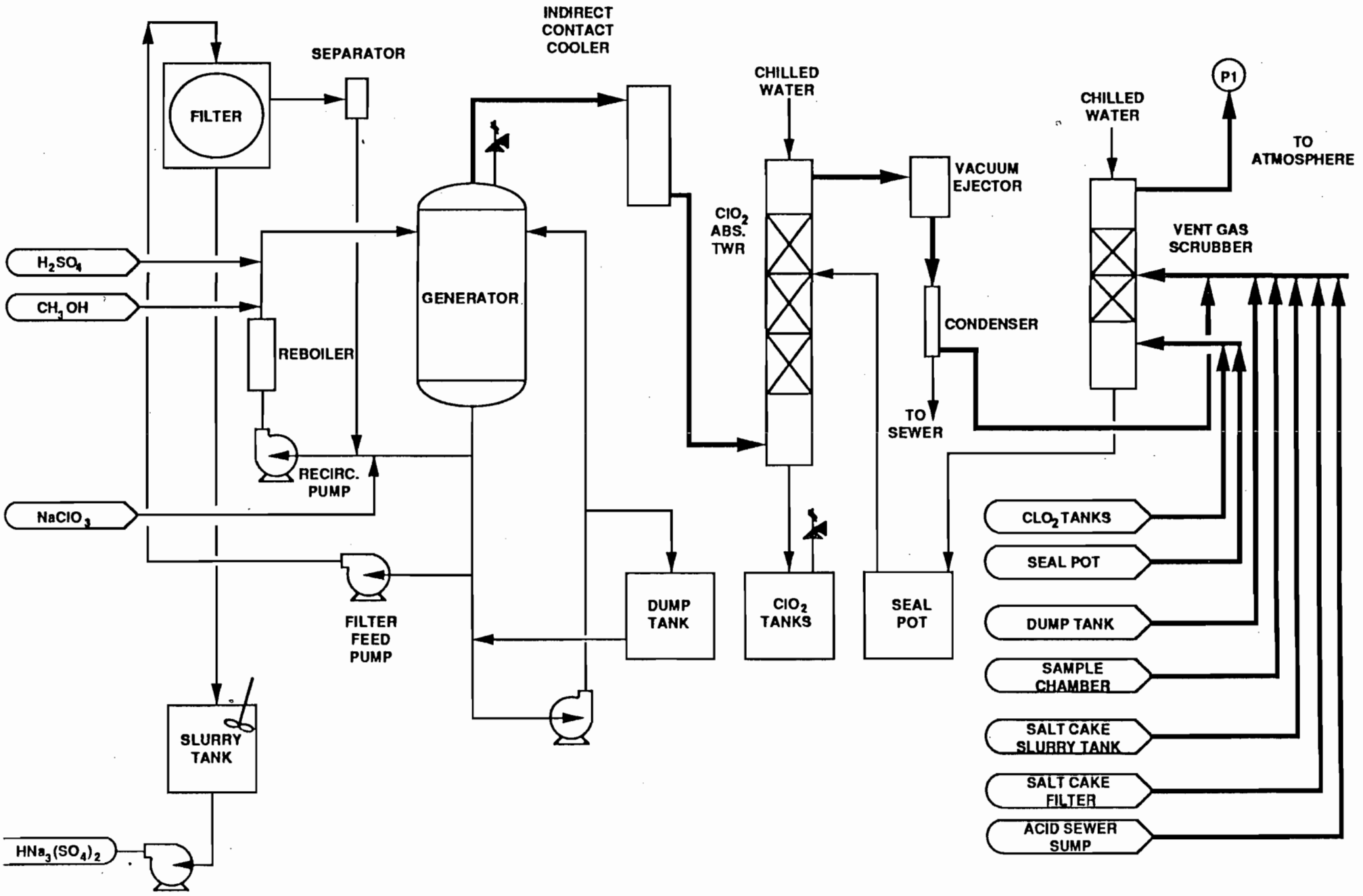


FIGURE 2

THE PROCTER & GAMBLE CELLULOSE COMPANY
EXISTING NO. 2 BLEACH PLANT FLOW DIAGRAM

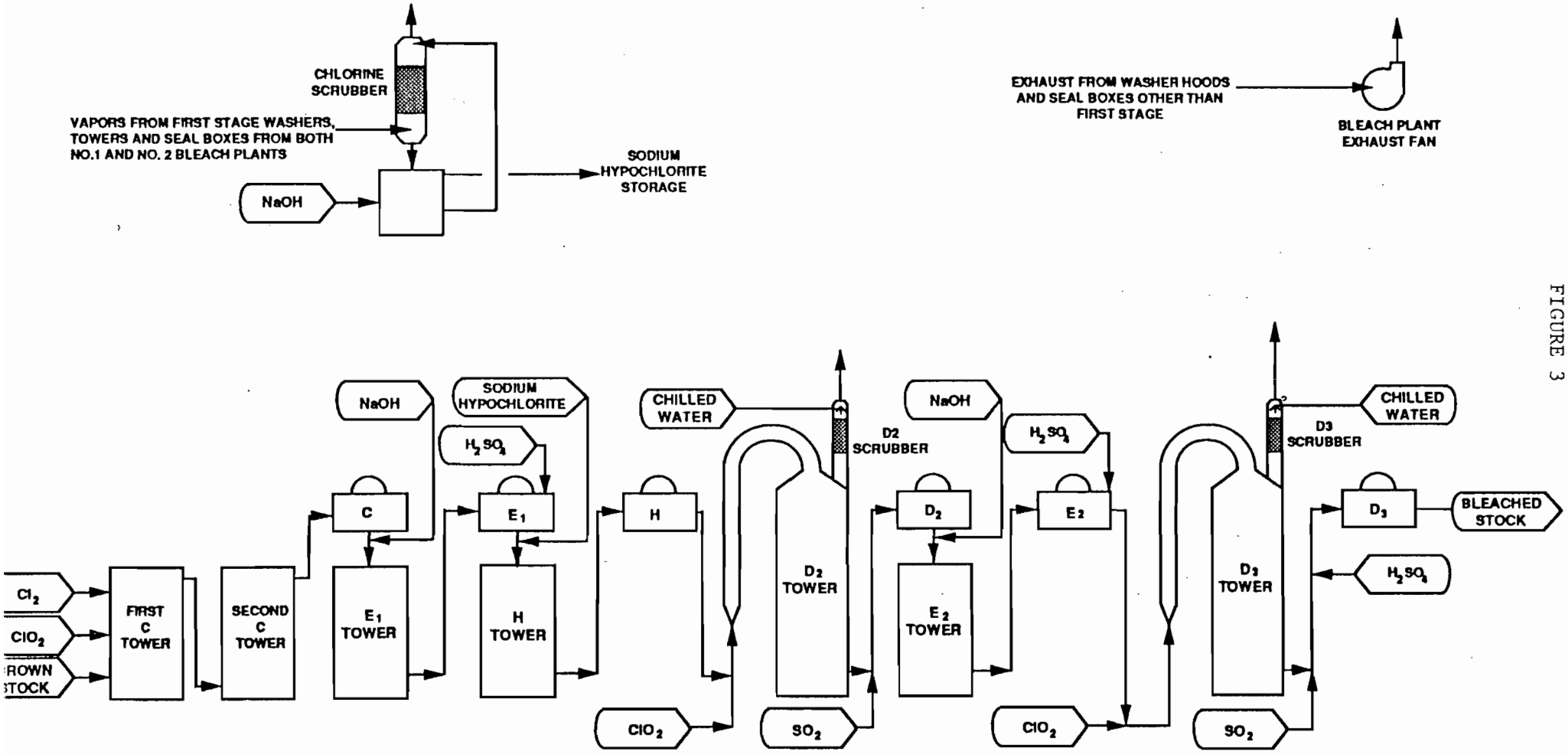


FIGURE 3

THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED NO. 2 BLEACH PLANT FLOW DIAGRAM
DEDED SEQUENCE

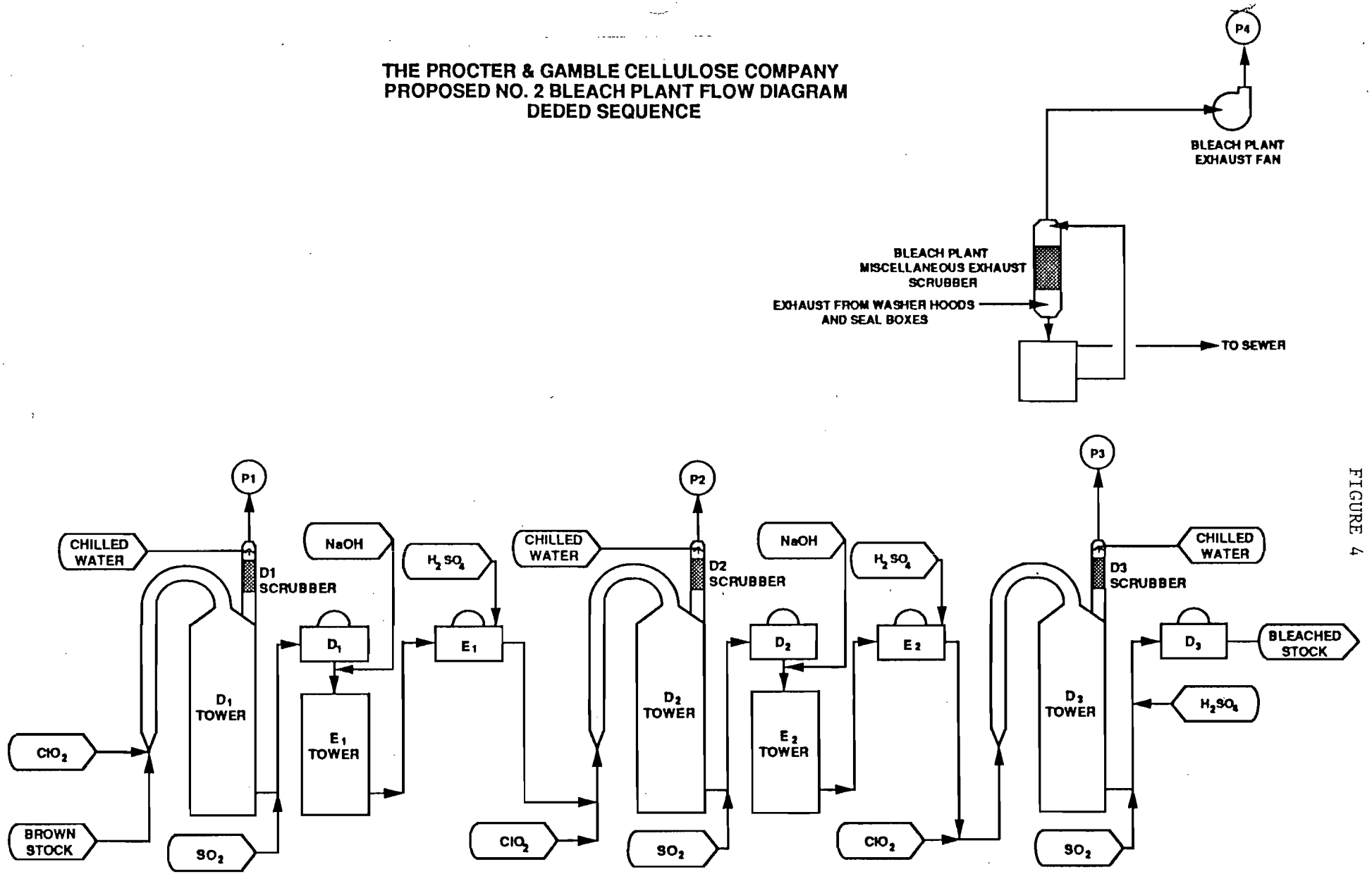


FIGURE 4

Note: D1 stage washer and seal box vented to Bleach Plant Miscellaneous Exhaust Scrubber during DEDED sequence.

THE PROCTER & GAMBLE CELLULOSE COMPANY
PROPOSED NO. 2 BLEACH PLANT FLOW DIAGRAM
CEHDED SEQUENCE

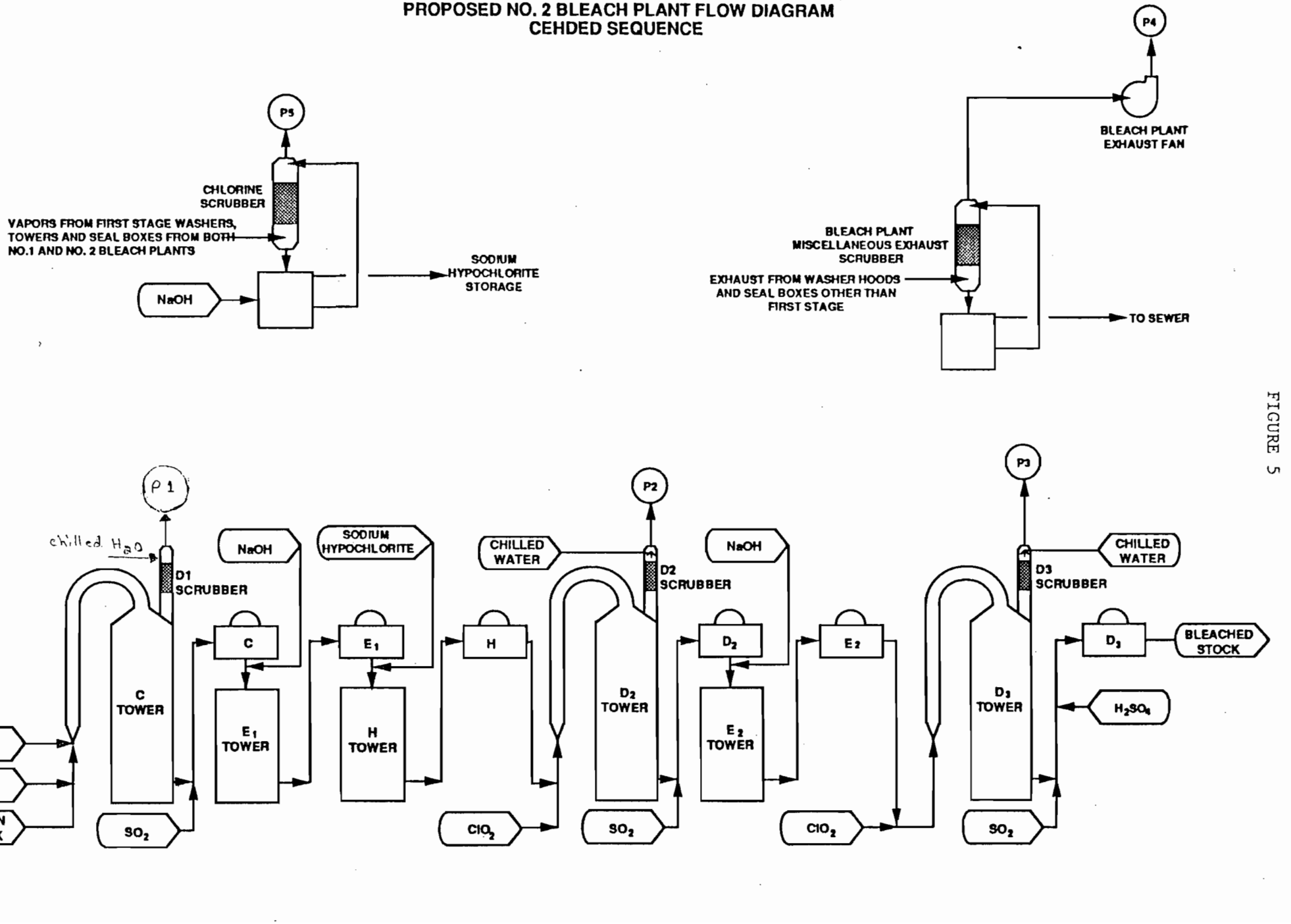


FIGURE 5

EXHIBIT 1

#2 Bleach Plant Modifications and Chlorine Dioxide Generation Process Replacement Project

Proposed Permitting Strategy

1) Approve the enclosed air construction permit applications for the proposed #2 Bleach Plant modifications and the Chlorine Dioxide generation process replacement project, which includes identified emissions control equipment.

2) As a condition in the construction permits, include the following requirements:

   A. Within three months following construction completion, start-up, and achievement of reliable operations, emissions of chlorine, chlorine dioxide, and chloroform will be measured, using testing methods agreed upon by the FDER and the permittee, at the appropriate points in the #2 Bleach Plant and the R-8 Chlorine Dioxide Generation Process: and other sources of these emissions (amended during 10/31/89 meeting).

   B. Within one month following receipt of the measurements in Item A, the measured emissions will be subjected to initial air toxics screening using criteria agreed to by the FDER and the permittee.

   C. The screening results will be used to consider whether:

      1) The achieved emissions levels are acceptable; or
      2) Additional control measures needed to meet the initial screening criteria are available and practical; or
      3) Detailed risk assessments are necessary to ensure that the practically achievable emissions are acceptable.

   D. For any pollutant addressed in this permit that fails to meet the criteria identified in Item B, the permittee shall submit within six months following receipt of screening results, a plan and schedule to the FDER which addresses the factors identified in Item C. The plan may include a recommendation to install additional control measures/process modifications, if needed and available and practical, or a recommendation to develop a risk assessment to demonstrate that the practically achievable emissions are acceptable.

   E. Air operation permits will not be granted for the #2 Bleach Plant and the Chlorine Dioxide generation process until the plan identified in Item D is approved by the FDER and completed.

      If additional time is needed to complete the steps identified in the plan, the construction permit will be extended accordingly.

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:
The Proctor & Gamble Cellulose Corporation
Route 3, Box 260
Perry, Florida 32347

Permit Number: AC 62-172092
Expiration Date: June 30, 1991
County: Taylor
Latitude/Longitude: 30°03'59"N
83°33'12"W
Project: No. 2 Bleach Plant and R-8 Chlorine Dioxide Generator

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting, modification, and post construction evaluation of the No. 2 Bleach Plant located at the permittee's existing mill in Perry, Taylor County, Florida. The modification will allow the No. 2 Bleach Plant to operate a bleaching sequence of DEDED (D: chlorine dioxide; E: caustic extraction) and to maintain the capability to operate the existing bleaching sequence of CEHDED (C: chlorination; H: sodium hypochlorite); replace the existing R-2 chlorine dioxide generation process with a R-8 chlorine dioxide generation process; replace or upgrade various control systems; install a methanol storage tank, a sodium chlorate storage tank, a sodium chlorate mixing tank, and two chlorine dioxide storage tanks; replace the existing chlorination towers with a new D stage upflow/downflow tower; and, install a new water chiller.

The UTM coordinates are Zone 17, 256.7 km East and 3328.7 km North.

The Source Classification Codes are:

o 4-07-008-15	Methanol storage tank-breathing loss	10^3 gals storage capacity
o 4-07-008-16	Methanol storage tank-working loss	10^3 gals used per year
o 3-07-001-99	Chlorine dioxide generator (1)	TONS ADUP
o 3-07-001-99	Chlorine dioxide storage tanks (2)	TONS ADUP
o 3-07-001-99	Seal pots (2)	TONS ADUP
o 3-07-001-99	Reboiler	TONS ADUP
o 3-07-001-99	Sodium hypochlorite storage tank	TONS ADUP
o 3-07-001-99	Salt cake filter	TONS ADUP
o 3-07-001-99	Sodium chlorate mix tank	TONS ADUP
o 3-07-001-99	Sodium chlorate storage tank	TONS ADUP
o 3-07-001-99	Slurry/Dump tanks (4)	TONS ADUP
o 3-07-001-99	Chlorine stage reaction tower	TONS ADUP

Source Classification Codes cont'd:

o 3-07-001-99	Caustic stage extraction towers (2)	TONS ADUP
o 3-07-001-99	Sodium hypochlorite stage reaction tower	TONS ADUP
o 3-07-001-99	Chlorine dioxide stage reaction towers (3)	TONS ADUP
o 3-07-001-99	Washers (3)	TONS ADUP

The sources 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. Applications to Construction Air Pollution Sources, DER Form 17-1.202(1), received November 1, 1989.
2. Mr. Ray Andreu's letter with attachments received November 20, 1989.
3. "Proposed Permitting Strategy" document submitted as an attachment to the application packages and, with verbal agreement, amended 10/31/89 during a meeting at the Bureau of Air Regulation.
4. The Technical Evaluation and Preliminary Determination dated January 24, 1990.

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.

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.

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. This permit also constitutes compliance with New Source Performance Standards (NSPS).

14. The permittee shall comply with the following:

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

GENERAL CONDITIONS:

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

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

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

SPECIFIC CONDITIONS:

A. General

1. The No. 2 Bleach Plant is permitted to operate continuously (i.e., 8760 hrs/yr).

2. Objectionable odors shall not be allowed off the facility's property in accordance with F.A.C. Rule 17-2.620(2).

3. The No. 2 Bleach Plant is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4.

SPECIFIC CONDITIONS:

4. The No. 2 Bleach Plant is subject to the provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation-Problems.

5. For reasonable assurance purposes in issuing this construction permit, the permittee's "Proposed Permitting Strategy", which is an attachment to the application packages received October 31, 1989, is adopted by reference and as amended during the application submittal and review meeting held at the Bureau of Air Regulation (BAR) on October 31, 1989. Any deviation(s) from this strategy will require Departmental approval.

6. Referencing Specific Condition No. A.5, a monthly progress report on the No. 2 Bleach Plant modification shall be submitted to the Department's Northeast District and BAR.

7. For PSD tracking purposes, the projected potential VOC emissions from the methanol storage tank are 3.3 TPY.

8. The methanol storage tank is subject to the applicable provisions of 40 CFR 60, Subpart Kb, in accordance with F.A.C. Rule 17-2.660. Specifically, the source is subject to the provisions of 40 CFR 60.116b (a) and (b) (July 1, 1988 version).

9. The methanol storage tank is subject to the provisions of F.A.C. Rules 17-2.620(1): General Pollutant Emission Limiting Standards; 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation-Problems.

10. The methanol storage tank is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version).

11. Maximum allowable total process input rate of methanol to the chlorine dioxide generation process shall not exceed 1457 gallons/day and 531,805 gallons/year.

12. Maximum product weight of chlorine dioxide from the chlorine dioxide generation process shall not exceed 54 tons/day and 19,710 tons/year.

SPECIFIC CONDITIONS:

13. Maximum allowable total process input rates shall not exceed:

a. CEHDED: 660 unbleached bone dry tons/day
b. DEDED: 900 unbleached bone dry tons/day

B. Post-Construction

1. Before conducting any sampling and analysis, a meeting to establish testing protocol shall be held at the Department. If possible and prior to the meeting, the following information shall be submitted to the Department for evaluation:

a. Identification of all sources and their associated waste streams, including sources of fugitive emissions, that have the potential to emit chlorine, chlorine dioxide, and chloroform;

b. Proposed sampling procedures/methods and analysis for determining chlorine, chlorine dioxide, and chloroform emissions (air) and concentrations (waste streams); and,

c. Proposed testing dates.

2. The Department's Northeast District and BAR shall be notified in writing 15 days prior to conducting tests in accordance with F.A.C. Rule 17-2.700(2)(a).

3. Test reports shall be submitted to the Department's Northeast District and BAR no later than 45 days after the last sampling run of each test is completed in accordance with F.A.C. Rule 17-2.700(7).

4. Mass emissions tests for chlorine, chlorine dioxide, and chloroform, shall be conducted on all emitting sources identified in Specific Condition No. B.1.a., with exception to fugitive emitting sources. Testing shall be conducted with the No. 2 Bleach Plant operating in the CEHDED sequence and then the DEDED sequence, or visa versa.

5. Sources of fugitive emissions of chlorine, chlorine dioxide, and chloroform, shall have their potential emissions quantified and submitted to the Department's Northeast District and BAR. The submittal should include all calculations, reference material, and assumptions.

SPECIFIC CONDITIONS:

6. Concentrations of chlorine, chlorine dioxide, and chloroform, shall be established for the waste streams identified in Specific Condition No. B.1.a.

7. Referencing Specific Condition No. B.6., if the mill has already established data that is being requested, please submit copies to the Department's Northeast District and BAR for review.

8. Using risk assessment guidelines, the property line acceptable ambient concentrations and their averaging times for chloroform, chlorine, and chlorine dioxide, are:

Chemical	Acceptable Ambient Conc.	Averaging Time
1. Chloroform	0.043 ug/m^3	annual
2. Chlorine	15.0 ug/m^3 (5ppb)	8-hour
	3.57 ug/m^3 (1.2 ppb)	24-hour
3. Chlorine dioxide	3.0 ug/m^3 (1 ppb)	8-hour
	0.71 ug/m^3 (0.24 ppb)	24-hour

9. Upon completion of testing/sampling and analysis (stacks and waste streams), quantification of any fugitive pollutant emissions, and modeling, the mill's and Department's representatives shall conduct a meeting to discuss these results/findings and to determine if any further add-on controls or process changes, or both, are deemed necessary. If no further action is required, then source allowable emission limitations will be established and the construction permit will be amended.

10. If additional action is deemed necessary, then allowable time will be established to implement the necessary actions, test, model, and submit the results. Then, source allowable emission limitations will be established and the construction permit will be amended. Any further Department action deemed necessary to reduce pollutant emissions from these processes through controls or process changes, or both, will be implemented through rule development, federal mandate, or voluntary action by the mill.

11. 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).

SPECIFIC CONDITIONS:

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

Issued this _____ day
of _____, 1990

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
Dale Twachtmann, Secretary

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

November 20, 1989

Mr. Bruce Mitchell
Bureau of Air Quality Management
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Construction Permit Applications for #2 Bleach Plant and Chlorine Dioxide Generation Process
The Procter & Gamble Cellulose Company

Dear Mr. Mitchell:

We want to thank you and the other members of the Bureau of Air Quality management staff for the assistance provided during our 10/31/89 construction permit application submittal meeting. As we committed, attached are copies of the material/information that you requested during the meeting.

Attachment I contains the copies of the exhibits that were presented at the 10/31/89 meeting by Sirrine Environmental Consultants, which show the wide variation in the available Industry emissions data.

Attachment II contains information on typical conservation vent devices. As you may recall, a conservation vent will be used to minimize emissions from the proposed methanol storage tank associated with the new R-8 chlorine dioxide generation process. While the methanol tank detailed engineering design phase has not yet been completed and we have not yet selected the exact type of conservation vent device to be used, this information should allow you to assess the conservation vent concept.

In addition, we have also initiated discussions with the National Council of the Paper Industry for Air and Stream Improvement (NCASI) to address the establishment of appropriate emission testing methods for chlorine, chlorine dioxide, and chloroform. Hopefully, we will be able to share a recommendation with you sometime early in 1990.

Again, thank you for your support on this environmentally beneficial endeavor. We look forward to hearing from you in the very near future. In the meantime, if we can provide any additional clarification, please do not hesitate to call me at (904) 584-0347.

Very truly yours,

THE PROCTER & GAMBLE CELLULOSE COMPANY

R. Andreu
Environmental Control Manager

RECEIVED
NOV 20 1989
DER - BAQM

RA:msw
CPA#2BP
Attachments

11-22

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~~BFF~~ → FYI

PA

Attachment I

INDUSTRY ESTIMATES
1986-1988

WASTE WATER TREATMENT PLANT

$CHCl_3$ 0-2.28 lb/ton pulp
with 63% volatilized

INDUSTRY ESTIMATES
1986-1988

BLEACH PLANT

Cl_2	0.02-10.1 lb Cl_2/ton pulp with scrubber efficiencies of 75% to 99%
ClO_2	0.1-10.8 lb ClO_2/ton pulp with scrubber efficiencies of 50% to 99%
$CHCl_3$	0.0-2.19 lb $CHCl_3$/ton pulp based on hypochlorite use

INDUSTRY ESTIMATES

1986-1988

CHEMICAL GENERATION

Cl_2	0-1.6 lb/ton pulp
ClO_2	0.07-0.9 lb/ton pulp

VARIATION IN UNCONTROLLED CHLORINE DIOXIDE EMISSIONS FROM BLEACH PLANTS SAMPLED BY NCASI

PLANT ID	BLEACHING SEQUENCE	SOURCES	ClO2 EMISSIONS IN LBS/TON MIN	MAX	AVG
W2	CdEoDEpD	Cd & D TOWERS, SEAL BOXES AND WASHER HOODS	0.61	1.22	0.99
W3	CEHD	C & D TOWERS, SEAL BOXE AND WASHER HOODS; ClO2 GENERATOR FOLLOWING ALKALINE SCRUBBER	0.06	0.18	0.10
W4	CdEHHD	WASHER HOOD VENTS, D TOWER AND SEAL BOX	0.07	1.95	0.64
S6	(CD)EHDED (2 LINES), CED(EH)D	ALL TOWERS, SEAL BOXES, AND WASHERS	0.56	1.01	0.83
S8	CHDED (3 LINES)	ALL TOWERS, SEAL BOXES, AND WASHER HOODS	0.03	0.18	0.09
S9	C/DEoD	C/D AND D TOWERS, WASHE HOODS, AND SEAL BOXES	0.15	0.57	0.37
S10	C/DEoDED	ALL TOWERS, SEAL BOXES, AND WASHER HOODS	1.28	2.41	1.72
S7	C/DOD	C\D AND D TOWERS AND WASHERS	1.22	25.50	5.29
S12	C/DEoD	D TOWER	1.30	1.70	1.50
AVERAGE OF MILLS TESTED BY NCASI			0.59	3.86	1.28

ADAPTED FROM JAIN AND DALLONS, NATIONAL COUNCIL OF THE PAPER INDUSTRY FOR AIR AND STREAM IMPROVEMENT, INC., "CONTROL OF CHLORINE AND CHLORINE DIOXIDE EMISSIONS FROM BLEACH PLANTS", TAPPI 1989 ENVIRONMENTAL CONFERENCE PROCEEDINGS, PP 507-512.

VARIATION IN UNCONTROLLED Cl2 EMISSIONS FROM BLEACH PLANTS SAMPLED BY NCASI

PLANT ID	BLEACHING SEQUENCE	SOURCES	Cl2 EMISSIONS IN LBS/TON MIN	MAX	AVG
W1	CEoHP	C TOWER, WASHER AND SEAL BOX	0.00	0.46	0.14
W2	CdEoDEpD	Cd & D TOWERS, SEAL BOXES AND WASHER HOODS	0.04	0.28	0.15
W3	CEHD	C & D TOWERS, SEAL BOXE AND WASHER HOODS; ClO2 GENERATOR FOLLOWING ALKALINE SCRUBBER	0.76	10.42	5.12
W4	CdEHHD	Cd SEAL BOX, WASHER HOOD VENTS, D TOWER AND SEAL BOX	0.01	3.42	0.82
W7	CEoH	C TOWER, SEAL BOX AND WASHER HOOD	0.00	0.01	0.01
W8	CEH	C TOWER AND SEAL TANK, WASHER HOODS	0.47	2.11	1.25
S6	(CD)EHDED (2 LINES), CED(EH)D	ALL TOWERS, SEAL BOXES, AND WASHERS	0.07	0.36	0.15
S8	CHDED (3 LINES)	ALL TOWERS, SEAL BOXES, AND WASHER HOODS	0.26	1.44	0.66
S9	C/DEoD	C/D AND D TOWERS, WASHE HOODS, AND SEAL BOXES	0.01	0.07	0.04
S10	C/DEoDED	ALL TOWERS, SEAL BOXES, AND WASHER HOODS	0.07	0.12	0.10
S7	C/DOD	C\D AND D TOWERS AND WASHERS	0.34	10.26	3.99
S12	C/DEoD	D TOWER	0.18	0.13	0.10

Attachment II

THE PROCTER & GAMBLE CELLULOSE COMPANY
FOLEY PLANT
PERRY, FLORIDA

CONSERVATION VENTS

When volatile organic compounds are stored in tanks, increases in the ambient temperature will result in increased volatilization of the stored material. If the storage tank is directly vented to the atmosphere, and thus maintained at atmospheric pressure, then the volatilized organics will be emitted to the environment due to the increase in vapor volume. These emissions are known as breathing losses.

When the ambient temperature increases, a conservation vent will allow pressure to build up in the tank to the compounds equilibrium value, or to the conservation vent set pressure, whichever is less. The volatilized organics will thereby be contained in the fixed vapor space above the liquid. The conservation vent will open and allow vapors to escape in the event that its set pressure is exceeded. Once enough vapors have escaped to allow the pressure to be reduced to below the set pressure, then the conservation vent will automatically reseat and prevent further releases to the air.

During filling operations, the displacement of the vapor volume in the tank will result in pressurization of the tank until the set pressure is reached. As described above, the conservation vent will open until filling is completed. Conservation vents are often also designed to be vacuum breakers. A vacuum condition may be created either by significant temperature decreases or the withdrawal of liquid from the tank. In these instances, the device will open to allow air into the tank, thus breaking the vacuum.

Practical Process Engineering

A Working Approach to Plant Design

Henry J. Sandler
Senior Process Engineer, United Engineers & Constructors Inc.

Edward T. Luckiewicz
Adjunct Professor, Drexel University

SEE PAGE 101 FOR BRIEF DESCRIPTION OF A CONSERVATION VENT

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The editors for this book were Betty Sun and Beatrice E. Eckes, the designer was Naomi Auerbach, and the production supervisor was Thomas G. Kowalczyk. It was set in Plantin by University Graphics, Inc.

Printed and bound by R. R. Donnelley & Sons Company.

2. Jacketing is shown on the body of the flow diagram, and the word "jacketed" is entered in the tracing column of the line tabulation.
3. A line is "bundled" when it is placed next to a hot or refrigerated line, and both lines are then insulated together. The word "bundled" is placed in the tracing column of the line tabulation.

Boundary definitions. (See Fig. 3.40.)

1. While building outlines per se are seldom defined on engineering flow diagrams, it may be necessary to locate a change point through which a pipeline passes for tracing, insulation, piping classification, or safety reasons.
2. The transition between classifications is marked by a short indicator perpendicular to the piping line. The boundary conditions are delineated.

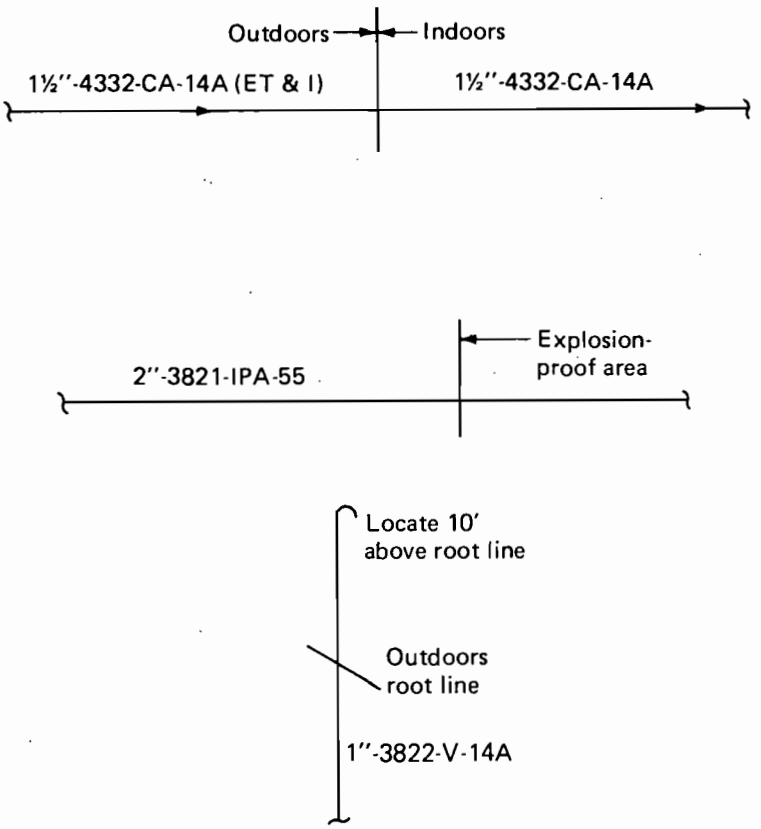


Figure 3.40 Boundary definitions.

Instrumentation and safety. The process engineer enters all sensing instrumentation, control valves, and safety devices on the P&ID or engineering flow diagram and designates whether instrument measurements are to local, or remotely indicated, or as recorded points. The instrument engineer completes the control loops on the P&ID or on a separate instrumentation flow diagram.

The following subsections discuss some of the more common instruments and safety devices to be considered for application on a flow diagram. Other specialized items should be provided as required.

Relief valves

1. A relief valve, also known as a pressure safety valve, protects equipment or piping from pressures beyond its design maximum allowable working pressure (MAWP).

2. Typical situations for relief-valve application are:
   a. Any vessel, exchanger, column, or other equipment that can be completely isolated by valving must be protected from an external fire or runaway exothermic heats of reaction.
   b. Vessels with an open vent or overflow that is of such size or length that excessive pressure could be generated in the event of fire or reaction excursion must be protected.
   c. Protection is also needed when the maximum discharge pressure of a pump or compressor feeding a piece of equipment or piping is greater than its MWAP and the pump or compressor can be deadheaded through the equipment or piping.
   d. Exchangers need protection when a liquid "cold" side is isolated and expanded owing to the continued flow of the "hot" side.
   e. A relief valve is usually placed after a pressure-reduction valve to ensure that subsequent equipment is protected in the event of a malfunction of the reduction valve.
   f. If a relief valve may not reseat completely owing to fouling by solids or gummy materials, a pair of relief valves is used in parallel and two ganged three-way valves are incorporated in the piping so that there is always one relief valve functioning with the equipment while the other is being cleaned.
3. Table 3.7 lists several of the basic codes that govern the sizing and installation of relief valves.
4. The sizes of relief-valve inlet and discharge lines are shown on the flow diagrams. The discharge side of most vapor safety valves is usually larger than that of the inlet, while those in liquid service usually have equal inlet and discharge connections.

TABLE 3.7 Codes Governing the Sizing and Installation of Relief Valves and Rupture Disks

Code*	Title
API RP 521	Guide for Pressure Relief and Depressuring Systems
API RP 526	Flanged Steel Safety Relief Valves for Use in Petroleum Refining
API RP 520	Recommended Practice for the Design and Installation of Pressure Relieving Systems in Refineries Part I: Design Part II: Installation
ASME Sec. VIII	Par. UG-125 General Par. UG-126 Safety and Relief Valves Par. UG-127 Rupture Disks Par. UG-128 Liquid Relief Par. UG-132 Determination of Pressure Relieving Requirements Par. UG-133 Pressure Setting Par. UG-134 Installation Par. UG-230 Capacity Calculation

*API: American Petroleum Institute, Washington, D.C. 20037; ASME: American Society of Mechanical Engineers, New York, N.Y. 10017.

Rupture disks

1. A rupture disk is an alternative to a relief valve when it is acceptable to allow pressure in equipment or piping to fall and to lose material until atmospheric pressure is reached.
2. It consists of a frangible wafer of composite materials or a thin metallic element which is shattered or ripped apart at a predetermined pressure.
3. The material of the wafer and the metallic element must be compatible with the fluid in the equipment or piping. A thin membrane of Teflon or other polymeric material is used to prevent chemical attack of the disk and results in an economical construction.
4. A rupture disk can be placed ahead of a relief valve to protect the relief valve from plugging or to permit the valve to be constructed of more economical materials. A pressure gauge is usually placed between the relief valve and the rupture disk to indicate the integrity of the disk.

Vacuum breakers

1. A vacuum breaker permits atmospheric air or a compatible gas or vapor to enter a vessel at a determined vacuum level to prevent collapse of the unit at its maximum vacuum design pressure.
2. Typical situations that require a vacuum breaker are the withdrawal of liquid with insufficient replacement of gas or vapor, the condensation of vapors in an isolated piece of equipment whereby the pressure in the vessel is reduced, and the connection of vessels to a powered vent system.

Conservation vents

1. A conservation vent is a combination of a relief valve and a vacuum breaker.
2. It normally allows storage vessels containing volatile fluids to float within a limited pressure range so that the loss of vapors is reduced.

Flame arresters

1. The vent on any unit containing an inflammable fluid should be provided with a flame arrester to prevent backflashing if the discharge vapors become ignited.
2. Conservation vents may be purchased with integral flame arresters.

Pressure sensors

1. Pressure connections to equipment should be made, where possible, in the gas or vapor space to eliminate corrections for hydraulic head.
2. Units such as filters, baghouses, heat exchangers, or distillation columns which induce considerable pressure drops often have a differential-pressure measurement across the unit in addition to an absolute- or gauge-pressure sensor at the inlet or discharge.
3. A pressure gauge on the discharge of a pump provides information regarding the operation of the pump; a permanent gauge (PI) may be installed, or a valved provisional tap (PP) may be used instead.
4. Pressure gauges should be isolated from equipment or piping with a suitable valve or chemical seal. The latter is used with corrosive fluids, toxic fluids, slurries, or fluids that would solidify in the gauge. All isolating valves and chemical seals are shown on the flow diagrams.

TYPICAL CONSERVATION VENT

Shand & Jurs

Product Data Sheet BV-020

BREATHER VALVES

MODEL 94020

DESCRIPTION:

Shand & Jurs Model 94020 Breather Valves are designed utilizing over 50 years of experience in producing high quality and dependable conservation fittings. Continued design improvements provide these valves with high efficiency, maximum flow capacity, and minimum leakage. The easily serviceable configuration and lightweight construction reduces maintenance and installation costs.

These are just a few of the important features incorporated into the Model 94020 design. Probably the most important is the variety of construction materials available as part of the standard design. The wide range of highly corrosive and toxic products encountered in the petroleum, petrochemical, chemical and related industries, demand breather valves that can withstand these conditions and function with reliability. For those few conditions where standard materials are not suitable, special materials are readily available.

Standard materials of construction are low copper aluminum, cast iron, cast steel, 304 stainless steel and 316 stainless steel for body materials. All critical aluminum parts are anodized for added protection and moving parts are stainless steel. Seats are of corrosive resistant molded thermosetting phenolic, aluminum or 316 stainless steel, and are easily replaced.

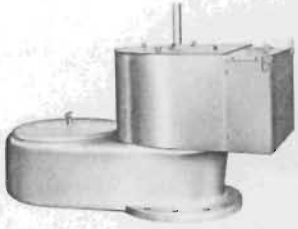
Diaphragms are cushion seated and are constructed of FEP Teflon for reliability and extended service life. Teflon diaphragms contribute to high resistance to adhesion of ice and gum formations, thus assuring protection against pallet sticking to the seating surface. In addition, the body is self-draining and drip rings keep condensates from the seating surfaces. The carefully engineered body, seat, and pallet assembly results in a superior combination of tight sealing and high capacity at low over-pressure with minimal blowdown.

For dependable performance, Shand & Jurs Breather Valves utilize pressure pallets that are both peripherally and center stem guided, while the vacuum pallets utilize a unique free floating hinge arrangement that assures optimum air flow into tank.

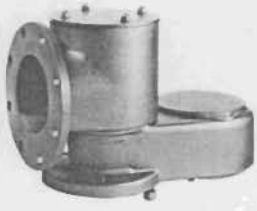
Model 94020 Breather Valves are available in a full range of sizes and configurations, such as closed vent hoods, cryogenic hoods and flame snuffers. Standard pressure and vacuum settings are 1/2 oz./sq. in. with maximum pressure settings of 24 oz./sq. in. and 5 oz./sq. in. for vacuum.

FEATURES:

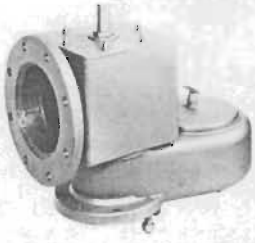
- Low copper aluminum alloy construction reduces need for special materials in corrosive and extreme temperature service.
- Peripheral and stem guided pressure pallet assures smooth lift and closure. Free floating hinged vacuum pallet assures reliable operation and contributes to high flow.
- Unique floating diaphragm construction assures positive seal and minimal blow-down, thus conserving valuable tank content.
- Capacity certified in accordance with API standards.



BREATHER VALVE WITH CRYOGENIC HOOD OPTION



2", 3" & 4" BREATHER VALVE WITH CLOSED VENT OPTION



6", 8", 10" & 12" BREATHER VALVE WITH CLOSED VENT OPTION (STEEL WELDMENT SHOWN)

6", 8", 10" & 12" BREATHER VALVE WITH FLAME SNUFFER OPTION

SPECIFICATIONS AND MATERIALS

Sizes:
2", 3", 4", 6", 8", 10" & 12"

Standard Settings*:
Pressure & Vacuum — ½ oz./sq. in.
(.865 in. W.C.)

Maximum Pressure Setting:
2", 3", 4" — 24 oz./sq. in.
6", 8", 10" — 16 oz./sq. in.
12" — 10 oz./sq. in.

Maximum Vacuum Setting:**
All sizes — 5 oz./sq. in.

Service and Body Material:
Normal: Cast Low Copper Aluminum
Low Temperature: Cast Low Copper Aluminum
Severe: Cast Iron
Cast Steel
Cast 304 Stainless Steel
Cast 316 Stainless Steel
Normal: Cast Iron

Seats:
Phenolic for 2", 3" & 4" sizes
Aluminum for 6", 8", 10" & 12" sizes
316 Stainless Steel for all sizes

Type of Flange Connection:
Screwed or flanged for 2" & 3" sizes
Flanged for 4", 6", 8", 10" & 12" sizes
Raised face flange available, except for aluminum body material.

Temperature Range:
All weather —
– 50 to – 300 °F (Low Temperature Service)

Options available:
Flame Snuffer for all sizes and materials, except Low Temperature Service. Closed Vent for all sizes and materials. Materials substitutions as required. Cleaning for Oxygen Service.

Notes:
*2" Valve Severe Service Only
- Pressure Setting: .867 oz./sq. in.
- Vacuum Setting: .608 oz./sq. in.

**Modification may be required to vacuum port for installations where product contamination may occur. See figure 4 for Principle of Operation. Caution - Any obstruction to vacuum port may alter the set point.

TYPE OF SERVICE

Component	Normal Aluminum	Low Temperature	Severe	Normal Iron
Body	CA	CA	CI, CS, 4SS, 6SS	CI
Cover	CA	CA	CI, CS, 4SS, 6SS	CI
Hood	PS	PA	PS	PS
Seats*	PH, AL	AL	PH, **6SS	PH, AL
Stem Guide	GI	GI	GI	GI
Pallets	AL	AL	6SS	AL
Guide Posts	3SS	3SS	3SS	3SS
Pressure Stem	3SS	3SS	3SS	3SS
Vacuum Stem	AL	AL	AL	
Hinge Post	6SS	6SS	6SS	6SS
Hinge Spring	6SS	6SS	6SS	6SS
Screens	GS	GS	4SS	GS
Retainer	AL	AL	6SS	AL
Hardware	ZS	6SS	ZS, **6SS	ZS
Diaphragms	FEP	FEP	FEP	FEP

*Teflon seats available for 2", 3", 4" and 6" sizes
**Phenolic for Severe Iron only
**Zinc Plated Steel for Severe Iron only

Material Legend:

AL — Aluminum
CA — Cast Aluminum
CI — Cast Iron
GI — Galvanized Iron
3SS — 303 S.S.
GS — Galvanized Steel
CS — Cast Steel
PS — Spun Steel
PA — Spun Aluminum
4SS — 304 S.S.
FEP — FEP Teflon
AIF — Asbestos Imp. Fiber
PVC — Polyvinyl Chloride
ZS — Zinc Plated Steel
6SS — 316 S.S.

PRINCIPLE OF OPERATION

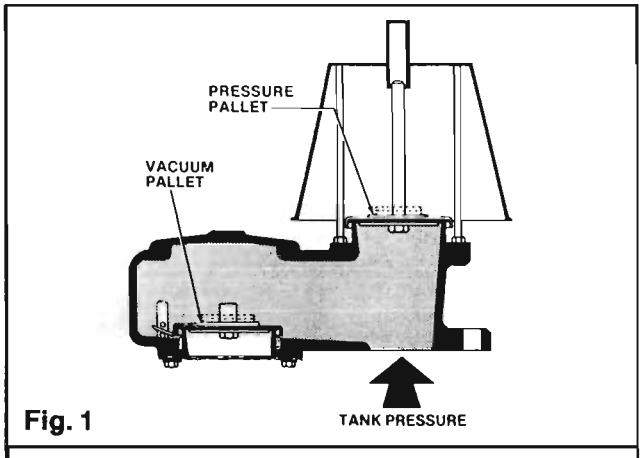


Fig. 1

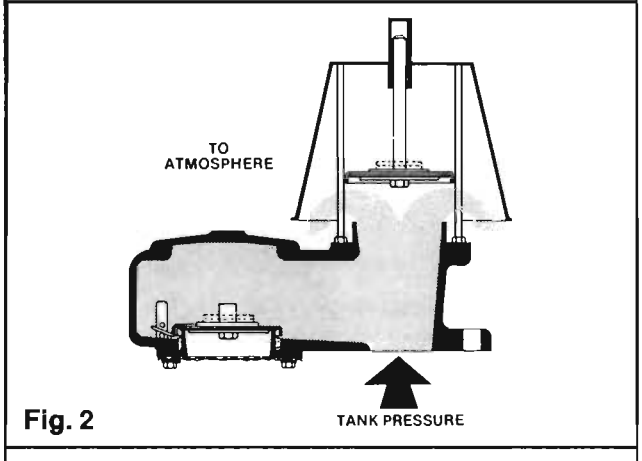


Fig. 2

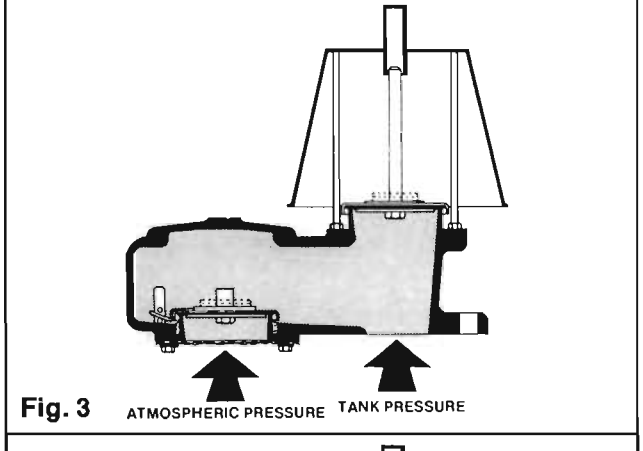


Fig. 3

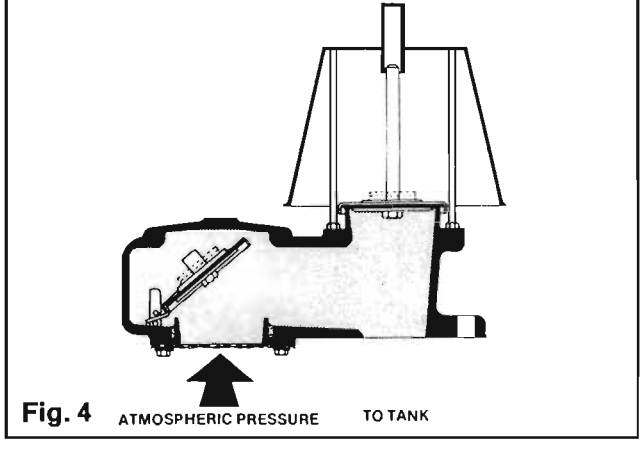


Fig. 4

Figure 1 and 3 shows the relation of the pressure or vacuum pallet assembly to the seat when atmospheric and tank pressures are equal. The "wrap around" effect of the resilient diaphragm on the edge of the seat and the resulting high ratio of seating force to seating area affords a tight seal.

As the pressure or vacuum increases the pallet begins to rise. Because there is still a wrap-around effect on the edge of the seat, good sealing is maintained. Teflon diaphragm memory and lapped seating surface further enhance sealing characteristics.

As increasing pressure or vacuum continues to lift the pallet, the diaphragm is held in close proximity to the seat by the flat plane memory of the diaphragm material.

As set pressure or vacuum is reached the diaphragm leaves the seat (see Figure 2 and 4) and the escaping vapor lifts the pallet even further.

The vacuum pallet, after it has risen about 1/8 inch above the seat, swings wide open in an arc on a point contact hinge. The tilted pallet then deflects the incoming air stream directly into the tank instead of into a dead end space in the breather body.

In the closing cycle escaping gas or incoming air on the pallet holds the Teflon diaphragm close to the pallet surface until peripheral seat contact is very near 100% causing closure to occur at a valve very close to the setting value, further contributing to the very low blowdown characteristic.

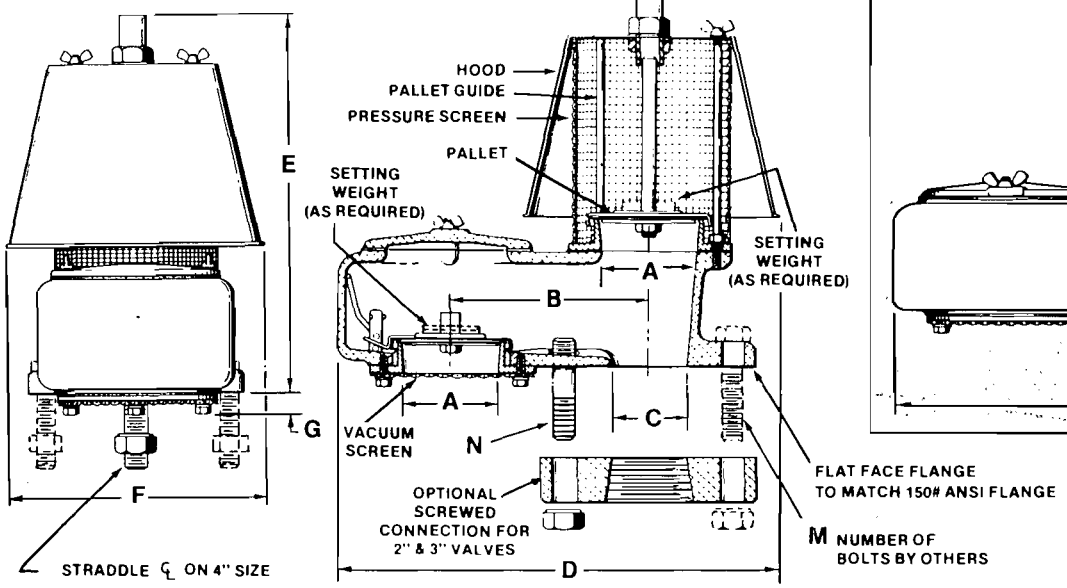
HOW TO ORDER:

Specify:

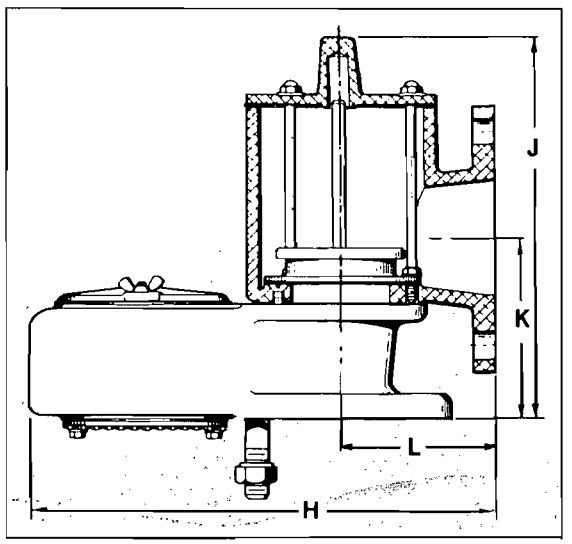
1. Model 94020 Breather Valve
2. Size, body material and service
3. Screwed or flanged connection on 2" and 3" size
4. Closed vent, or vent to atmosphere with or without flame snuffer
5. Pressure and vacuum settings if other than normal setting
6. Type of cleaning, if for oxygen service
7. Optional materials of constructions as required

OUTLINE DIMENSIONS

2", 3" & 4"
OPEN VENT MODEL

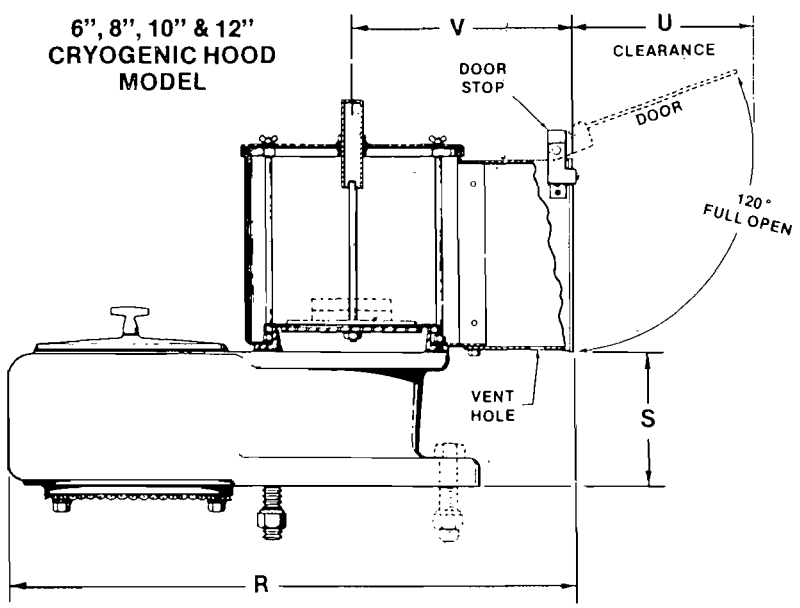


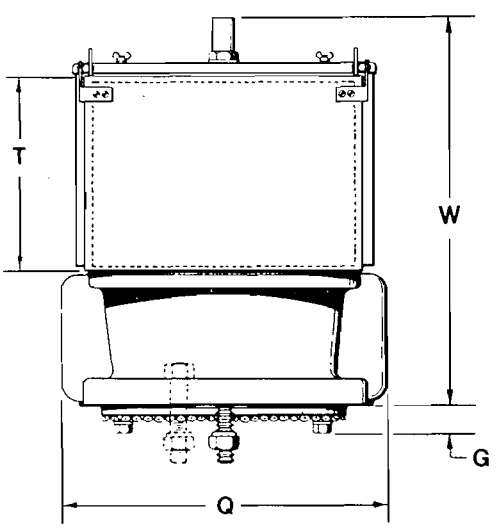
2", 3" & 4"
CLOSED VENT MODEL



VENT SIZE (Inches)	DIMENSIONS — INCHES										NO. OF BOLTS	NO. OF STUDS	CLOSED VENT FLANGE SIZE	NET WEIGHT LBS.		SHIPPING WT. LBS.	
	A	B	C	D	E & J	F	G	H	K	L	M	N		ALUM.	IRON	ALUM.	IRON
2	2-23/32	5-9/16	2-5/32	12-1/8	10-5/8	6-3/4	5/8	13	4-15/16	4-1/4	3	1	3	9	24	11	26
3	4	7-3/16	3-5/32	15-5/8	13	9-3/8	5/8	16-3/16	5-3/16	5-7/8	3	1	4	14	37	17	40
4	5-9/32	8-15/16	4-1/8	18-7/8	15-1/8	11-1/8	5/8	19-1/4	5-15/16	7	6	2	6	20	52	26	58

6", 8", 10" & 12"
CRYOGENIC HOOD
MODEL



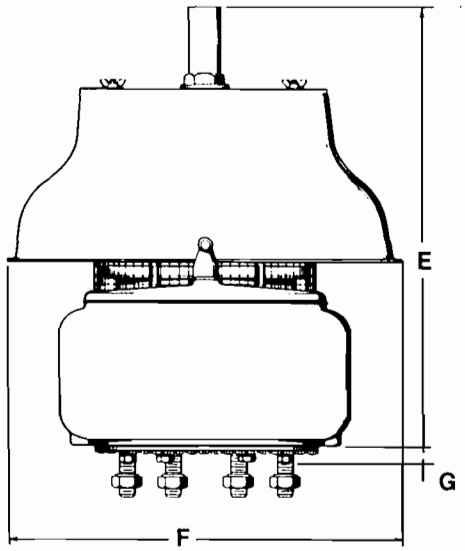


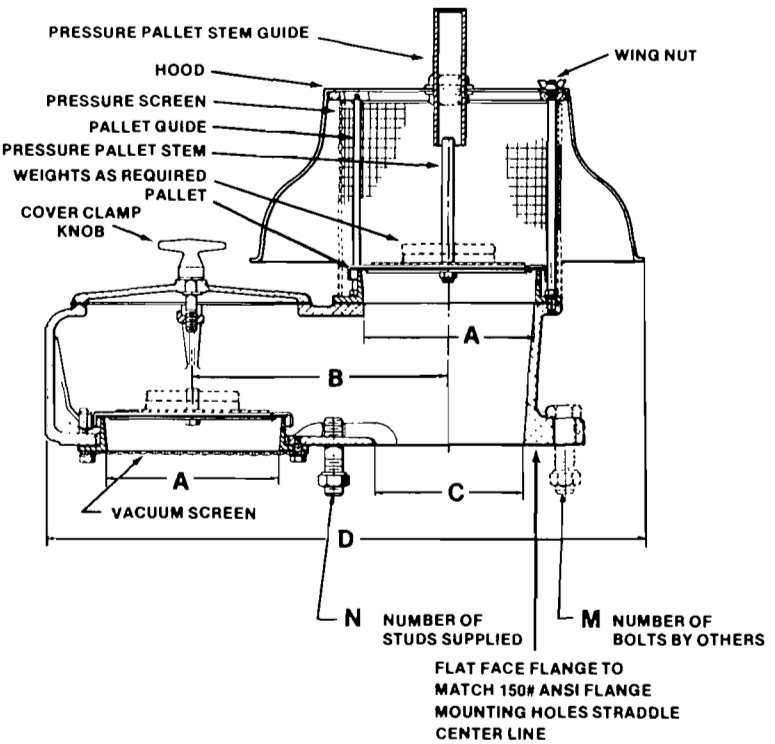
VENT SIZE* (Inches)	DIMENSIONS — INCHES								CRYOGENIC HOOD	
	G	R	Q	S	T	U	V	W	NET WEIGHT LBS.	SHIPPING WT. LBS.
6	5/8	28-3/4	12-1/8	5-5/8	8-1/8	8-1/2	11-1/2	17-1/16	41	95
8	11/16	33-3/8	14-11/16	7-3/8	9-5/8	10	12-1/2	21-1/4	63	122
10	3/4	39-11/16	17-1/2	8-3/8	11-3/8	11-5/8	14-3/16	25-1/2	95	165
12	3/4	43	19-3/4	10	12-5/8	13	15-3/8	29-7/8	132	198

*Cryogenic Hood for 2", 3" & 4" size available on request.
All designs subject to change. Certified dimensions and specifications available on request.

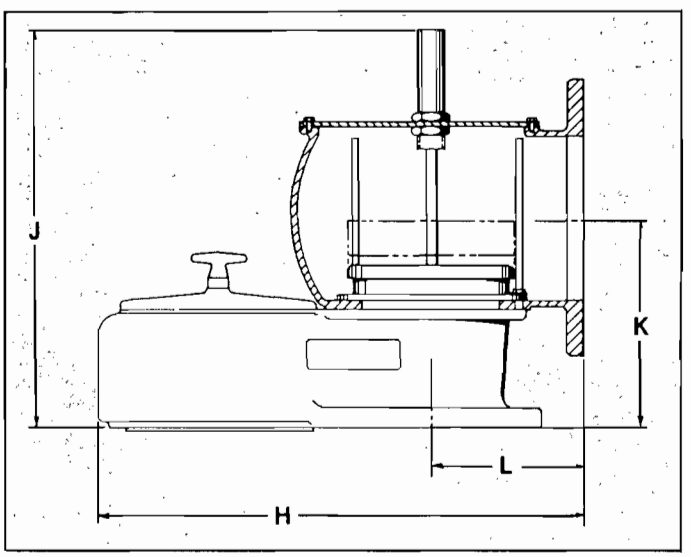
OUTLINE DIMENSIONS

6", 8", 10" & 12"
OPEN VENT MODEL





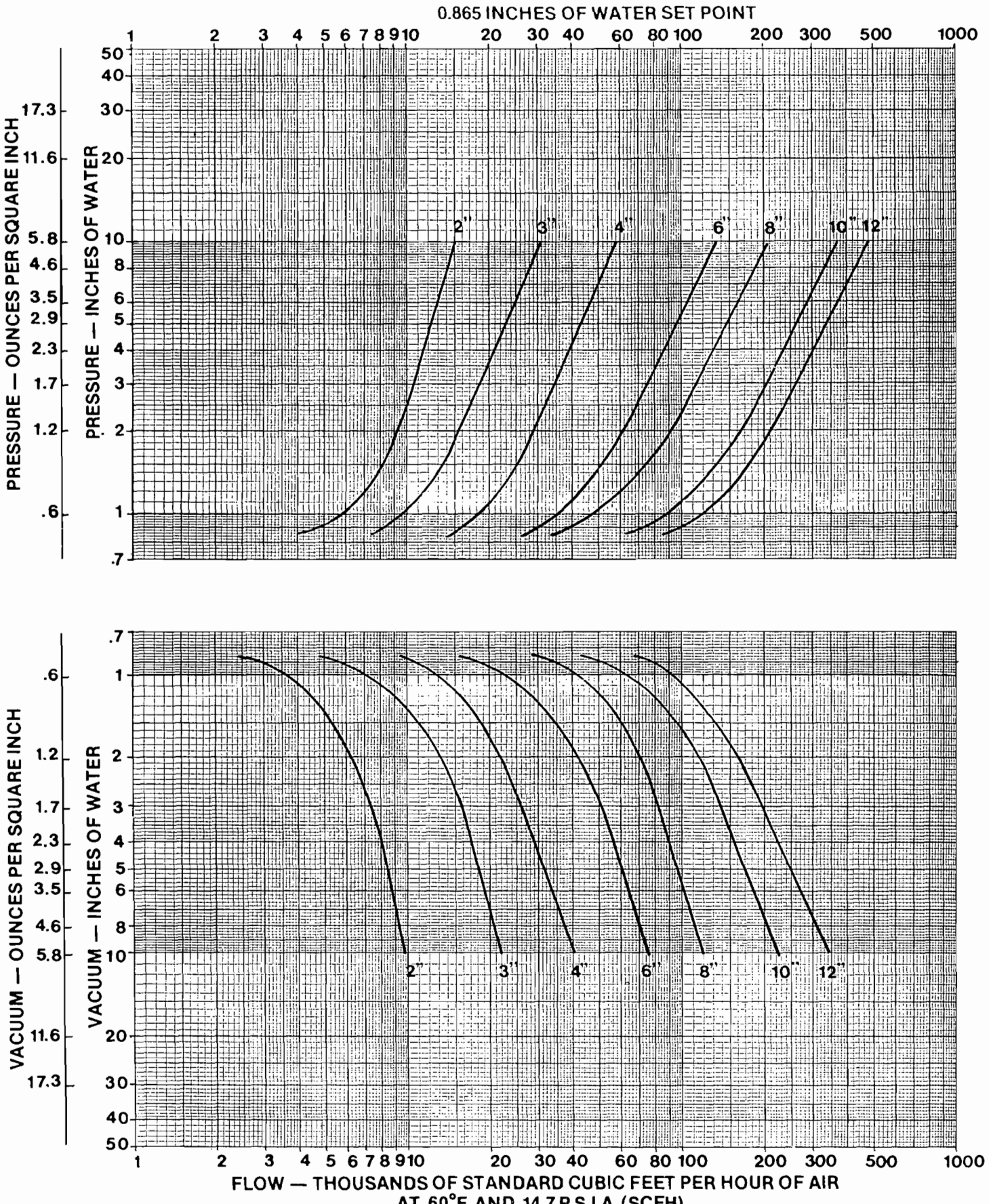
6", 8", 10" & 12"
CLOSED VENT MODEL



VENT SIZE (Inches)	DIMENSIONS — INCHES											NO. OF BOLTS	NO. OF STUDS	CLOSED VENT FLANGE SIZE	NET WEIGHT LBS.		SHIPPING WT. LBS.	
	A	B	C	D	E	F	G	H	J	K	L	M	N		ALUM.	IRON	ALUM.	IRON
6	7-7/32	10-9/16	6-5/32	24-1/2	17-1/16	15-3/4	5/8	24-7/8	17-3/4	10-3/16	8-1/4	4	4	8	36	83	55	102
8	9-9/16	13-1/8	8-11/64	30-11/16	21-1/4	20-3/8	11/16	30-1/4	22-1/8	12-33/64	9-3/4	4	4	10	57	130	84	157
10	12-1/8	15-5/16	10-1/4	37-3/8	25-5/8	25-1/2	3/4	36-1/4	26-7/16	14-3/4	11-19/32	6	6	12	91	208	152	269
12	14-3/8	18-9/16	12-1/4	43-3/8	29-7/8	29-7/8	3/4	41-1/4	30-5/8	16-11/16	12-13/16	8	4	14	119	276	191	348

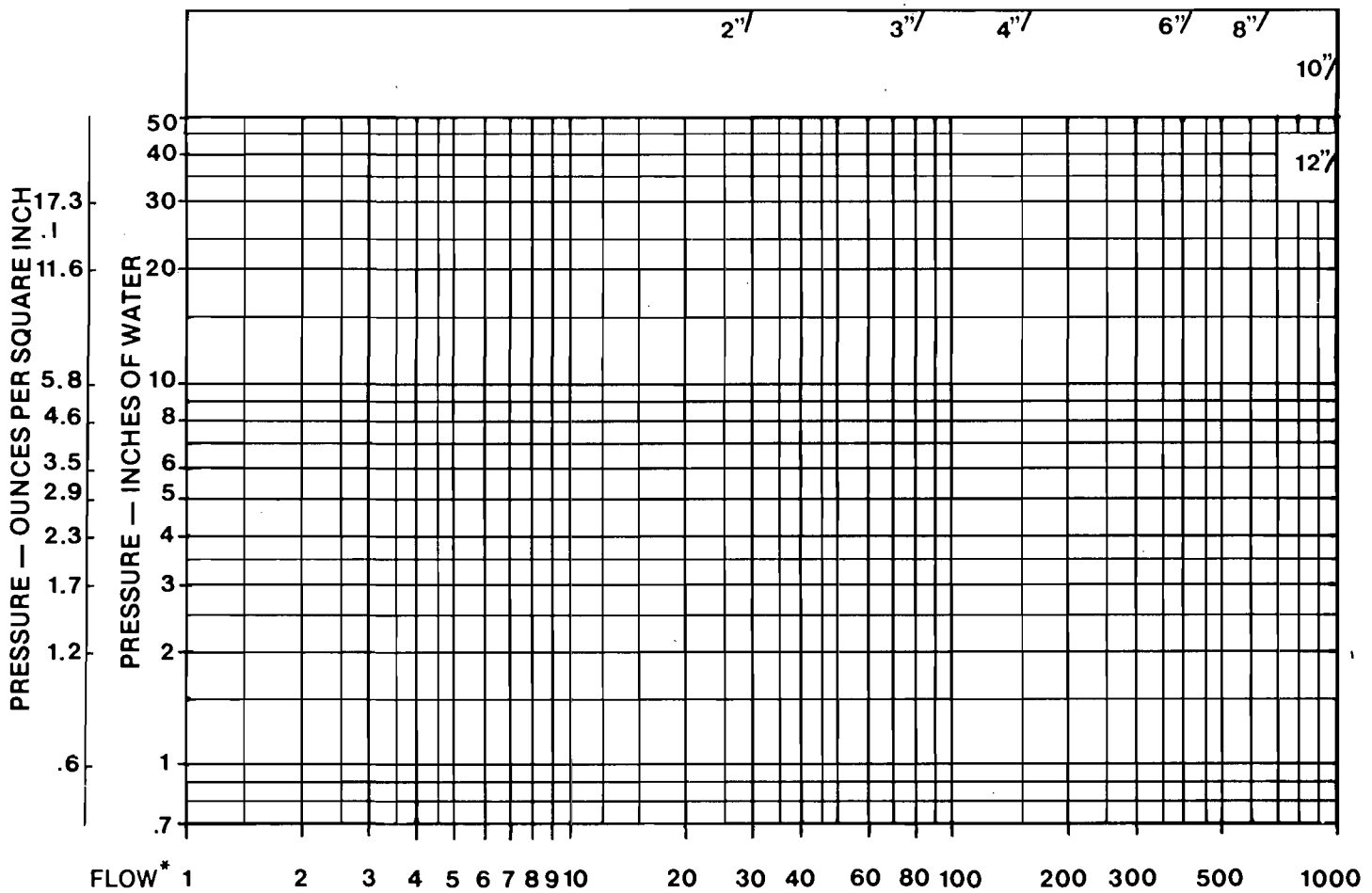
Shipping weights for open vent models without flame snuffer are for domestic packing only.

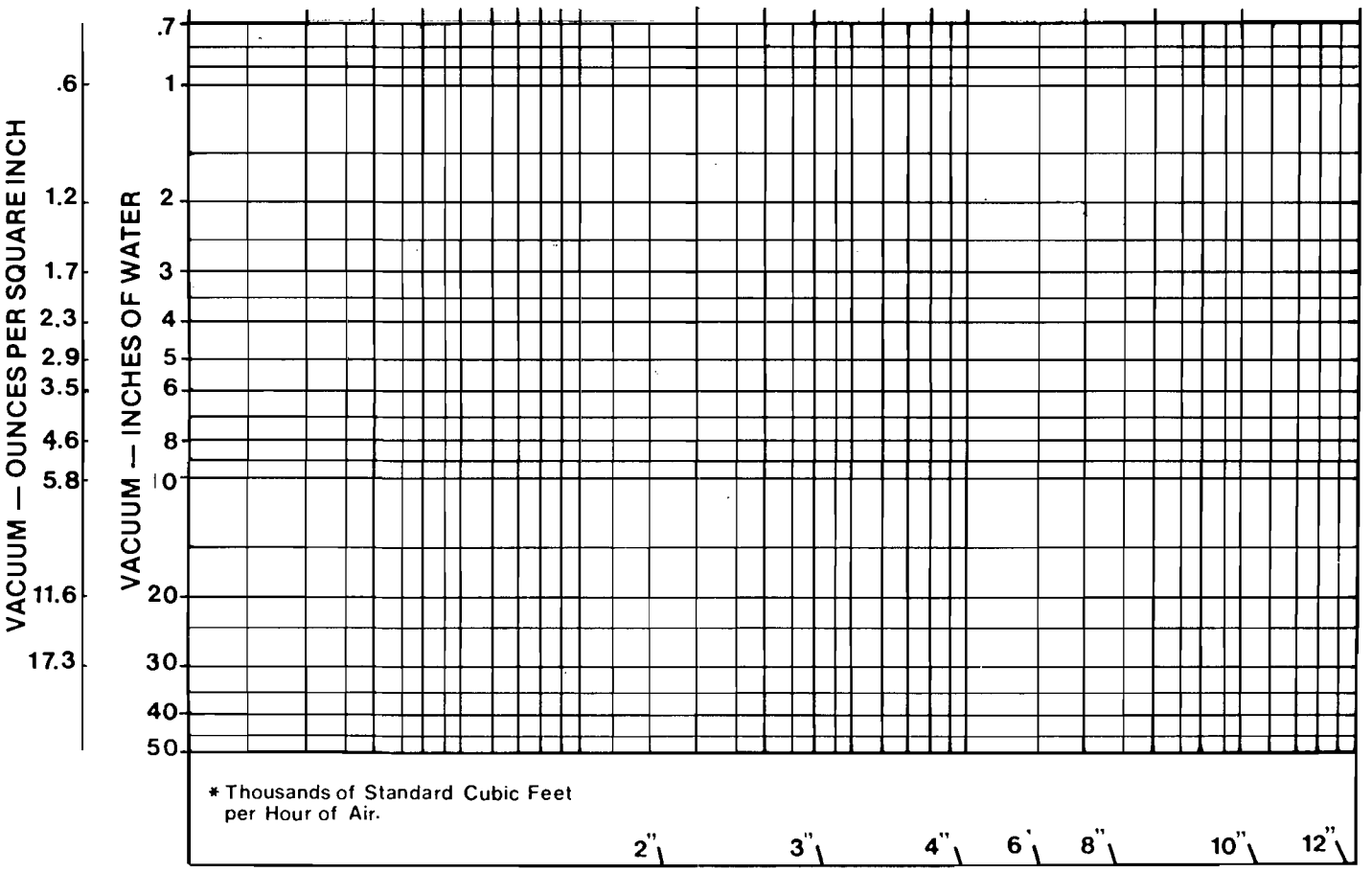
FLOW CAPACITY FOR MODEL 94020 BREATHER VALVES



Curve data by actual test
Certified data available upon request

PRESSURE AND VACUUM GRIDS USED FOR ELEVATED SETTINGS.





GPE CONTROLS

A BRUNSWICK COMPANY

BREATHER VALVES

MODEL 94020

MAY 1982

6511 Oakton Street • Morton Grove, Illinois 60053 • (312)966-4000

PRINTED IN U.S.A.

TYPICAL CONSERVATION VENT

Shand & Jurs

Product Data Sheet BV-040

BREATHER VALVES
(SPRING LOADED)
MODEL 94040

DESCRIPTION:

The Shand and Jurs Model 94040 Spring loaded Breather Valves are designed utilizing over 50 years of experience in producing high quality and dependable conservation valves and safety fittings. This valve meets the need of higher pressure settings required on storage tanks (ideally suited when blanketed with nitrogen or other inert gas), process vessels and piping common to the petroleum, chemical and petro-chemical industries.

Higher pressure settings are accommodated using a unique method of spring loading which ensures highly reliable operation and reduces excessive venting of product at a relatively low cost. Pressure settings range from 1 psi through 15 psi for sizes 2 to 10 inches, and up to 10 psi for the 12 inch size. Screw and flange type connections are offered for the 2" and 3" size and flange only for sizes 4" to 12". Vacuum protection is provided utilizing a weight loaded free-floating pallet and hinge assembly that assures optimum air flow into tank.

The pallet to seat diaphragm is cushion seated Teflon coated fiberglass for long service life and optimum reliability. This diaphragm helps to ensure a high resistance to any ice and gum formations, and prevents the pallet from sticking to the seat. The carefully engineered body, seat and pallet offers a superior combination of tight sealing and high capacity at lower overpressure.

One of the more important features which should be considered in the Model 94040 design, is the variety of construction materials available. A wide range of highly corrosive and toxic products common to the petroleum, petro-chem and chemical industries, require that a breather valve is able to withstand this environment and still function reliably. For few instances where our standard materials may not be suitable, optional materials are readily available.

Standard materials offered are aluminum, cast iron, cast steel and 304/316 grade stainless steel. All critical aluminum parts have been anodized, and stainless or chrome vanadium steel is used for moving parts to provide long service life. Seats are available for a variety of applications. Standard seats are phenolic, aluminum and 316 stainless steel.

FEATURES:

- Low copper aluminum alloy construction reduces need for special materials in normal service.
- Peripheral and stem guided pressure pallet assures smooth lift and closure.
- Unique diaphragm construction assures positive seal and minimal blowdown, thus conserving valuable tank content.
- Inspection of internal components without removing breather.
- Variety of materials to withstand highly corrosive and toxic products
- Sealed set point adjustment eliminates re-calibration following valve inspection.
- Pallet lip design contributes to high flow characteristics.

SPECIFICATIONS AND MATERIALS

Sizes:
2",3",4",6",8", 10" & 12"
Pressure - Minimum 1 psi
Vacuum - 2 oz./Sq.in.(3.46 in.w.c)

Maximum Pressure Setting:*
2" to 10" - 15 psi and 12" - 10 psi

Maximum Vacuum Setting:
All sizes - 5 oz./sq.in.

Temperature Range:
-50 to +220°F

* Open vent service to 5 psi only for Aluminum and Iron service.

Service and Body Material:
Normal: Cast Low Copper Aluminum
Severe: Steel
316 Stainless Steel
Normal: Cast Iron

Seats:
Phenolic for 2", 3" & 4" sizes
Aluminum for 6", 8", 10" & 12" sizes
316 SS. for all the sizes

Type of Flange Connection:
Screwed or flanged for 2" & 3" sizes
Flanged for 4", 6", 8", 10" & 12" sizes
Raised Face flange available, except for aluminum body material.

TYPE OF SERVICE

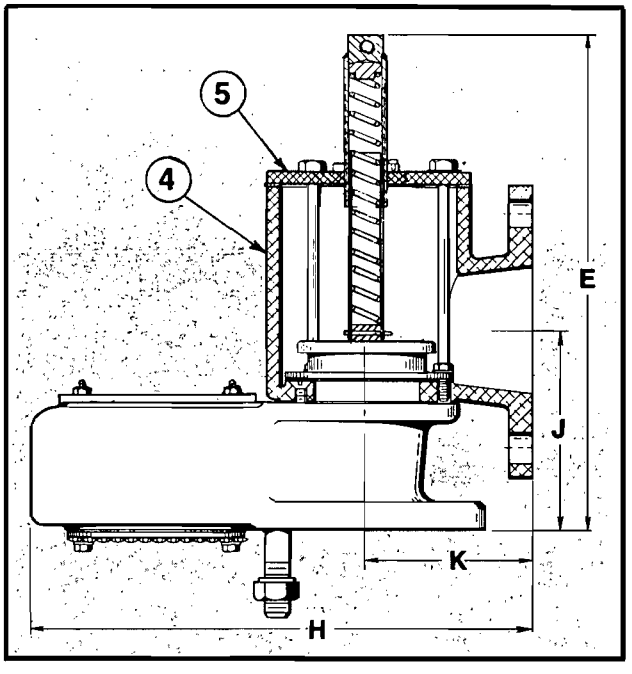
Index No	Component	Normal		Severe	
		Aluminum	Iron	Steel	SS
1	Body	CA	CI	STL	6SS
2	Vacuum Cover	AL	STL	STL	6SS
3	Open Vent Hood	**SS, STL	**SS, STL	--	
4	Closed Vent Hood	AL	CI	STL	6SS
5	Closed Vent Cover	AL	STL	STL	6SS
6	Seats*	•PH	•PH	6SS	
7	Spring Adjuster	6SS	6SS	6SS	
8	Adjuster Stop	6SS	6SS	6SS	
9	Spring	CVS	CVS	CVS	
10	Pallets	AL	AL	6SS	
11	Side Guides	3SS	3SS	3SS	
12	Press. Stem	3SS	3SS	3SS	
13	Stem Guide Tube	4SS	4SS	4SS	
14	Vacuum Stem	AL	AL	6SS	
15	Hinge Post	AL	AL	6SS	
16	Hinge Spring	6SS	6SS	6SS	
17	Screens	GS	GS	GS	4SS
18	Retainer Plate	AL	AL	6SS	
19	Diaphragms	TCF	TCF	TCF	
20	Bushing***	AL	6SS	6SS	
--	Hardware	ZS	ZS	6SS	

• Aluminum used for 6", 8", 10" & 12" only.
* Teflon seats available for 2", 3" & 4" sizes only.
** SS for 2", 3", 4" & 6" sizes only.
*** Used with 6", 8", 10" & 12" only.

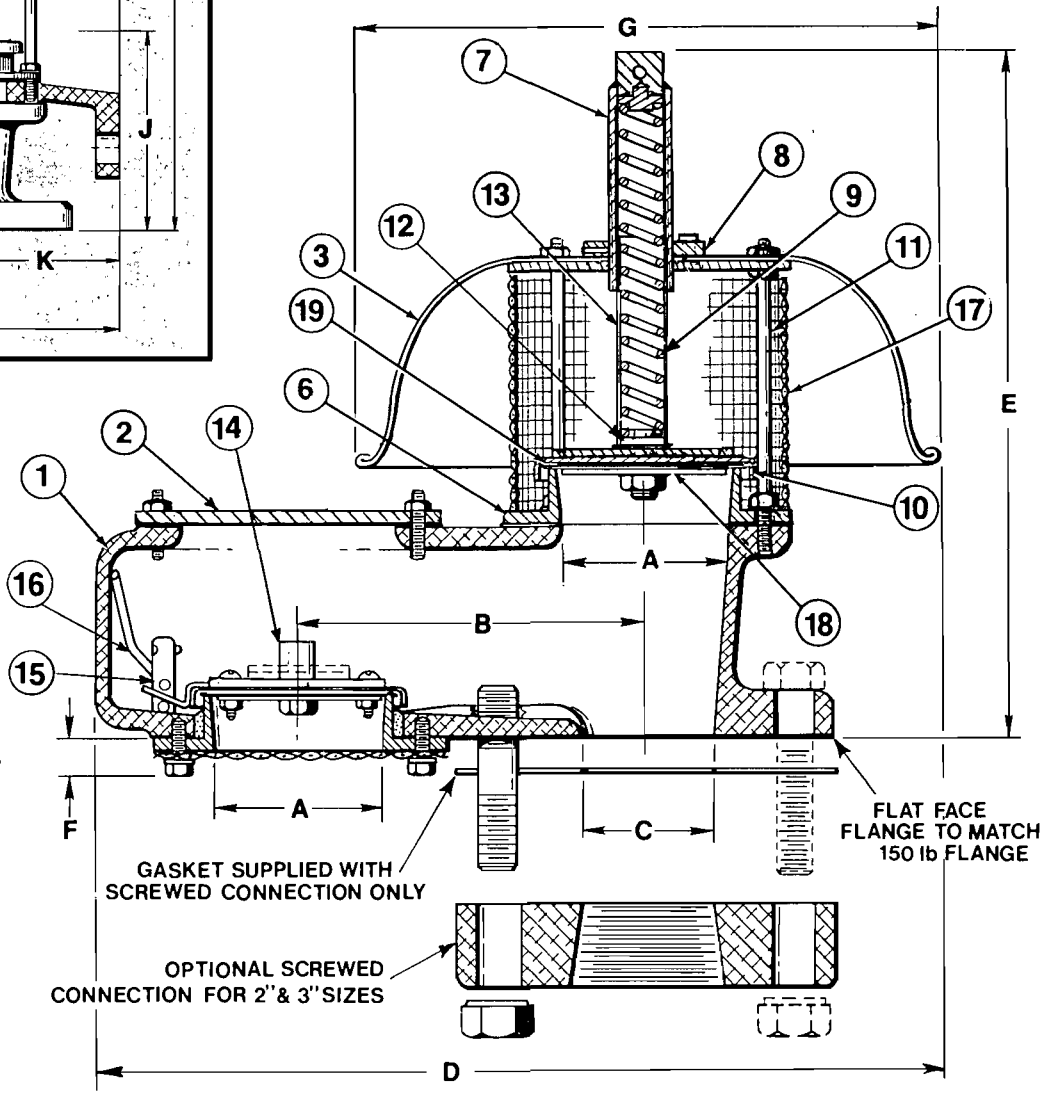
MATERIAL LEGEND:

AL - Aluminum	PH - Phenolic	3SS - 303 Stainless Steel
CA - Cast Aluminum	SS - Stainless Steel	4SS - 304 Stainless Steel
CI - Cast Iron	STL - Steel	6SS - 316 Stainless Steel
CVS - Chrome Vanadium Steel	TCF - Teflon Coated Fiberglass	
GS - Galvanized Steel	ZS - Zinc Plated Steel	

OUTLINE DIMENSIONS for 2", 3" & 4" Models



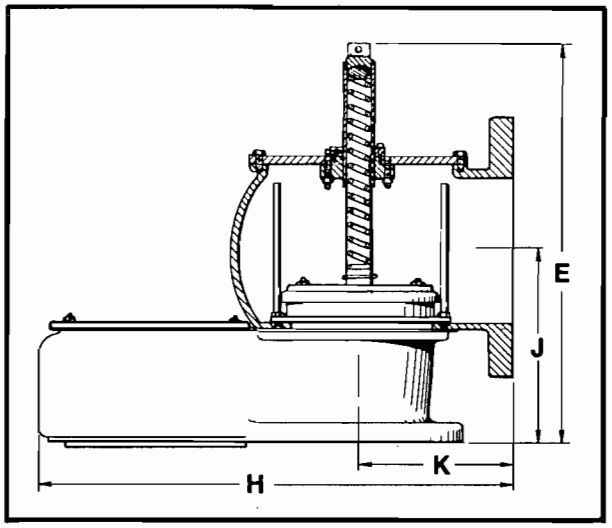
CLOSED VENT



OPEN VENT

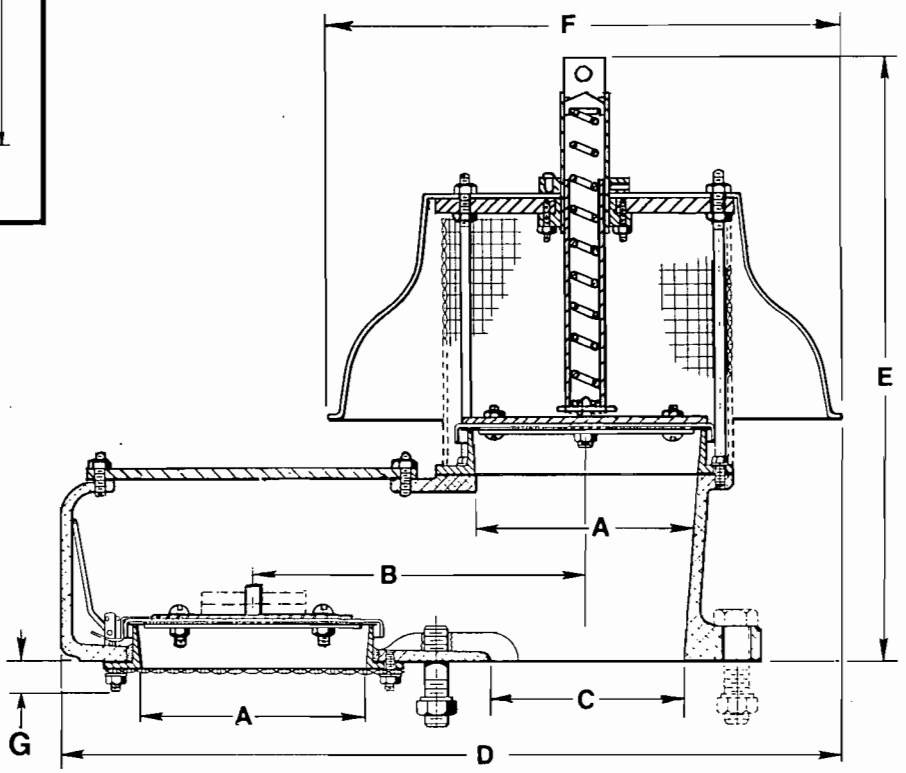
VENT SIZE	DIMENSIONS — INCHES									
	A	B	C	D	E	F	G	H	J	K
2	$2\frac{3}{4}$	$5\frac{1}{2}$	$2\frac{1}{8}$	$15\frac{1}{4}$	$19\frac{1}{8}$	$\frac{5}{8}$	$12\frac{5}{8}$	13	5	$4\frac{1}{4}$
3	4	$7\frac{1}{4}$	$3\frac{1}{8}$	$17\frac{3}{4}$	$19\frac{3}{4}$	$\frac{5}{8}$	$13\frac{1}{2}$	$16\frac{1}{4}$	$5\frac{1}{4}$	$5\frac{7}{8}$
4	$5\frac{1}{4}$	9	$4\frac{1}{8}$	$21\frac{1}{8}$	$20\frac{3}{4}$	$\frac{5}{8}$	$15\frac{7}{8}$	$19\frac{1}{4}$	6	7

OUTLINE DIMENSIONS for 6", 8", 10" & 12" Models



CLOSED VENT

OPEN VENT



VENT SIZE	DIMENSIONS – INCHES									
	A	B	C	D	E	F	G	H	J	K
6	$7\frac{1}{4}$	$10\frac{1}{2}$	$6\frac{1}{8}$	26	$22\frac{5}{8}$	$18\frac{5}{8}$	$\frac{5}{8}$	$24\frac{7}{8}$	$10\frac{1}{8}$	$8\frac{1}{4}$
8	$9\frac{1}{2}$	$13\frac{1}{8}$	$8\frac{1}{8}$	$30\frac{5}{8}$	$24\frac{3}{4}$	$20\frac{3}{8}$	$\frac{5}{8}$	$30\frac{1}{4}$	$12\frac{1}{2}$	$9\frac{3}{4}$
10	$12\frac{1}{8}$	16	$10\frac{1}{4}$	$37\frac{3}{8}$	28	$25\frac{1}{2}$	$\frac{3}{4}$	$36\frac{1}{4}$	$14\frac{3}{4}$	$11\frac{1}{2}$
12	$14\frac{3}{8}$	$18\frac{1}{2}$	$12\frac{1}{4}$	$43\frac{3}{8}$	31	$29\frac{7}{8}$	$\frac{3}{4}$	$41\frac{1}{4}$	$16\frac{5}{8}$	$12\frac{3}{4}$

GPE CONTROLS
A BRUNSWICK COMPANY

BREATHER VALVES
(SPRING LOADED)
MODEL 94040

6511 Oakton Street • Morton Grove, Illinois 60053 • (312)966-4000
PRINTED IN U.S.A.

PROCTER & GAMBLE CELLULOSE

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

October 31, 1989

Mr. Bruce Mitchell
Bureau of Air Quality Management
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: #2 Bleach Plant Modifications and Chlorine Dioxide Generation Process Replacement Project.
Air Construction Permit Applications

Dear Mr. Mitchell:

Enclosed are four (4) copies each of the Air Construction Permit application packages for the planned #2 Bleach Plant modifications and chlorine dioxide generation process replacement project. Also enclosed is a check in the amount of $600 to cover the fee for filing the applications.

As we have previously discussed, the planned project consists of two changes to the existing processes:

1) Modifications to the existing #2 Bleach Plant to implement a new process, which will virtually eliminate the use of molecular chlorine and sodium hypochlorite in the production of our fluff (diaper-related) pulp via chlorine dioxide substitution; and

2) The replacement of the existing R-2 chlorine dioxide generation process with an R-8 generation process, which will produce the quantity and quality of chlorine dioxide that is required by the new #2 Bleach Plant process.

These changes are solely aimed at improving our environmental position. Consistent with our historical leadership in the environmental arena, the Procter & Gamble Cellulose Company is voluntarily responding to European market concerns about chlorine bleaching by developing a process that will virtually eliminate the use of sodium hypochlorite and molecular chlorine in our #2 Bleach Plant. In fact, when completed, the planned modifications are expected to result in a reduction of approximately 50% of the total plant use of molecular chlorine, which will significantly reduce the potential for the formation of 2,3,7,8-tetrachloro-dibenzo-p-dioxin and other chloro-organic compounds. The planned changes are also expected to result in reduced air emission of chlorine and chloroform which is formed mainly in the chlorine and sodium hypochlorite stages. The additional scrubbing capacity being provided is also expected to reduce air emissions of chlorine dioxide.

The Procter & Gamble Cellulose Company historically has been a leader in air emissions control. In 1970, a high energy tail gas scrubber was installed on the existing chlorine dioxide generation process. In the following year, collection and wet scrubbing systems were installed on all chlorine and chlorine dioxide stages in the bleach plant. As a result, the Procter & Gamble Cellulose Company was the first pulp mill in Florida to control bleach plant related emissions.

Although no existing emission limiting standards apply to these sources, we understand that the DER is developing air toxics review guidelines that will be used to assess proposed projects of this nature. While the planned changes are actually expected to result in reductions in the air emissions in question, we are committed to work with your staff to support the recommended emissions assessment process.

However, we are extremely concerned that the proposed air toxics review process, which has not yet been formally adopted by the State of Florida nor the EPA, may result in unwarranted additional constraints. Our basic concerns are founded on the fact that:

1) No emissions data are available for the pollutants in questions. Emissions estimates should not be relied upon when making final judgements on potential public health risks and costly emissions control requirements.

2) The recommended ambient criteria for the pollutants in question, which are based on derived fractions of existing allowable workplace exposure standards, have not been subjected to the scientific scrutiny that is necessary to utilize them as a regulatory tool.

In consideration of these concerns and our mutual desire to proceed with the proposed modifications which will reduce the emissions of the pollutants in question, we propose the employment of the permitting strategy contained in Attachment I.

As we have previously shared, our plans are to initiate construction activities on the above referenced projects in early December. As such, we would appreciate your expedient consideration and approval of the respective air construction permit applications.

The information contained in the enclosed permit application packages is believed to be complete and self explanatory. However, if you have any questions, please contact Mr. Ray Andreu at (904) 584-0347.

Very truly yours,

THE PROCTER & GAMBLE CELLULOSE COMPANY

C. S. Aiken

C. S. Aiken
Plant Manager

CSA/RA:msw
#2BlcPlt
Enclosures

Attachment I

#2 Bleach Plant Modifications and
Chlorine Dioxide Generation Process
Replacement Project

Proposed Permitting Strategy

1) Approve the enclosed air construction permit applications for the proposed #2 Bleach Plant modifications and the chlorine dioxide generation process replacement project, which includes identified emissions control equipment.

2) As a condition in the construction permits, include the following requirements:

   A. Within three months following construction completion, start-up, and achievement of reliable operations, emissions of chlorine, chlorine dioxide, and chloroform will be measured, using testing methods agreed upon by the FDER and the permittee, at the appropriate points in the #2 Bleach Plant and the R-8 Chlorine Dioxide Generation Process.

   B. Within one month following receipt of the measurements in Item A, the measured emissions will be subjected to initial air toxics screening using criteria agreed to by the FDER and the permittee.

   C. The screening results will be used to consider whether:

      1) The achieved emissions levels are acceptable; or
      2) Additional control measures needed to meet the initial screening criteria are available and practical; or
      3) Detailed risk assessments are necessary to ensure that the practically achievable emissions are acceptable.

   D. For any pollutant addressed in this permit that fails to meet the criteria identified in Item B, the permittee shall submit within six months following receipt of screening results, a plan and schedule to the FDER which addresses the factors identified in Item C. The plan may include a recommendation to install additional control measures/process modifications, if needed and available and practical, or a recommendation to develop a risk assessment to demonstrate that the practically achievable emissions are acceptable.

   E. Air operation permits will not be granted for the #2 Bleach Plant and the Chlorine Dioxide generation process until the plan identified in Item D is approved by the FDER and completed.

      If additional time is needed to complete the steps identified in the plan, the construction permit will be extended accordingly.

RA:msw
#2BlcPlt

Attendees

10-31-89 Meeting @ BAR 9:30 a.m.

Bruce Mitchell	DER/BAR	(904) 488-1344
John Glunn	DER/BAR	"
Bill Thomas	DER/BAR	"
Tom Rogers	DER/BAMA	"
Suzanne Thomas	Sirrine Env. Cons.	(803) 234-3016
John Rice	P&G Cellulose, Mobs	(901) 320-8371
Ray Audreu	P&G Cellulose, Perry	

SIRRINE ENVIRONMENTAL CONSULTANTS

Post Office Box 24000
Greenville, South Carolina 29616
(803) 234-3016 FAX (803) 234-3069

SUZANNE T. THOMAS, P.E.
Environmental Project Engineer

CHLORINE DIOXIDE GENERATION
PROCESS REPLACEMENT PROJECT
AIR PERMIT APPLICATION

THE PROCTER & GAMBLE CELLULOSE COMPANY
FOLEY PLANT

PERRY, FLORIDA

SEC JOB NO. G-9263

OCTOBER 1989

PREPARED BY:

SIRRINE ENVIRONMENTAL CONSULTANTS
GREENVILLE, SOUTH CAROLINA

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LIST OF FIGURES

1.0 INTRODUCTION

This report contains the air construction permit application for the replacement of the existing chlorine dioxide generation process at the Procter & Gamble Cellulose Company Foley Plant in Perry, Florida. This replacement will support the planned changes to the No. 2 Bleach Plant, which are covered in the report entitled: No. 2 Bleach Plant Modification Project - Air Permit Application.

These changes, which are being voluntarily made in response to European market concerns about chlorine bleaching, involve the development of a process for producing diaper-related pulp using a chlorine dioxide solution that is virtually free of molecular chlorine, and elimination of the use of sodium hypochlorite. This process modification is expected to result in a reduction of approximately 50% of the present total plant use of molecular chlorine, which will also significantly reduce the potential for the formation of 2,3,7,8 tetrachlorodibenzo-p-dioxin and other chloro-organic compounds. The proposed modifications will result in reduced air emissions of chlorine and chloroform which is formed mainly in the chlorine and sodium hypochlorite stages. Improved scrubbing will result in a reduction of chlorine dioxide emissions.

The Procter & Gamble Cellulose Company has historically been a leader in air emissions control. In 1970, a high energy tail gas scrubber was installed on the existing chlorine dioxide generation facility. The following year, collection and wet scrubbing systems were installed on all chlorine and chlorine dioxide stages in the bleach plant. As a result, the Procter & Gamble Cellulose Company was the first pulp mill in Florida to control bleach plant related emissions.

The changes proposed in this report will consist of replacing the existing R-2 chlorine dioxide generation process with an R-8 generation process, which produces a chlorine dioxide solution that is virtually free of molecular chlorine. This project is essential for the implementation of the proposed modifications to the No. 2 Bleach Plant.

2.0 APPLICABLE REGULATIONS

The existing R-2 chlorine dioxide generation process was initially permitted by the Florida Department of Environmental Regulation (DER), formerly known as the Florida Department of Pollution Control, on May 18, 1973 and renewed on May 15, 1975. On January 25, 1980, the Procter & Gamble Cellulose Company was notified by the DER that it would not be necessary for this permit to be renewed in the future. However, the DER did request that they be notified prior to the implementation of future changes to this process. This project seeks to replace the existing chlorine dioxide generation process. This air construction permit application package serves as notice to the DER of proposed changes.

Current State of Florida air permitting regulations require the submittal of air permit applications for DER review prior to the construction of a new source or modification of an existing source which will result in an increase in emission levels of pollutants regulated under Chapter 17-2, F.A.C. Since this project involves the construction of a new source (to replace an existing source) and involves a small increase in a pollutant regulated under Chapter 17-2, F.A.C., an air construction permit is required.

Although no specific existing emission limiting standards apply to emissions of chlorine and chlorine dioxide from this process, the DER is developing air toxics review guidelines that will be used to assess proposed projects of this nature. The procedure to be followed in applying these guidelines is to model the air emissions of concern to evaluate the potential ground-level impact at the facility property line. In the absence of promulgated allowable ambient concentrations, the ground-level impact assessment will utilize criteria that are based on derived fractions of existing allowable workplace exposure standards. These recommended criteria will then be used as a screening mechanism to evaluate the emissions from a process.

3.0 FOLEY PLANT DESCRIPTION

3.1 USGS Location Map

Figure 1 shows the USGS location of the plant site. The plant is located at Universal Transverse Mercator (UTM) coordinates of approximately 256.74 kilometers east and 3,328.70 kilometers north.

3.2 Site Plot Plan

Figure 2 shows the location of the existing and proposed chlorine dioxide generators.

3.3 Plant Process Description

Figure 3 is a simplified flow diagram representative of the kraft pulping process used at the Procter & Gamble Cellulose Foley Plant. Wood chips are charged into batch digesters where they are cooked under pressure in alkaline liquor containing sodium hydroxide and sodium sulfide. The cooked chips are blown from the digester and washed in a three-stage, counter current washing system. Wash liquor from these stages, known as black liquor, contains organics extracted from the wood as well as the spent cooking chemicals. The black liquor is concentrated and sent to a recovery furnace, where the organics are burned as fuel and the inorganics are recovered as smelt. The cooking chemicals are recovered from the smelt by reacting it with lime and removing the lime mud that is formed in the reaction. The lime mud is filtered and calcined in a kiln to recover the lime for re-use.

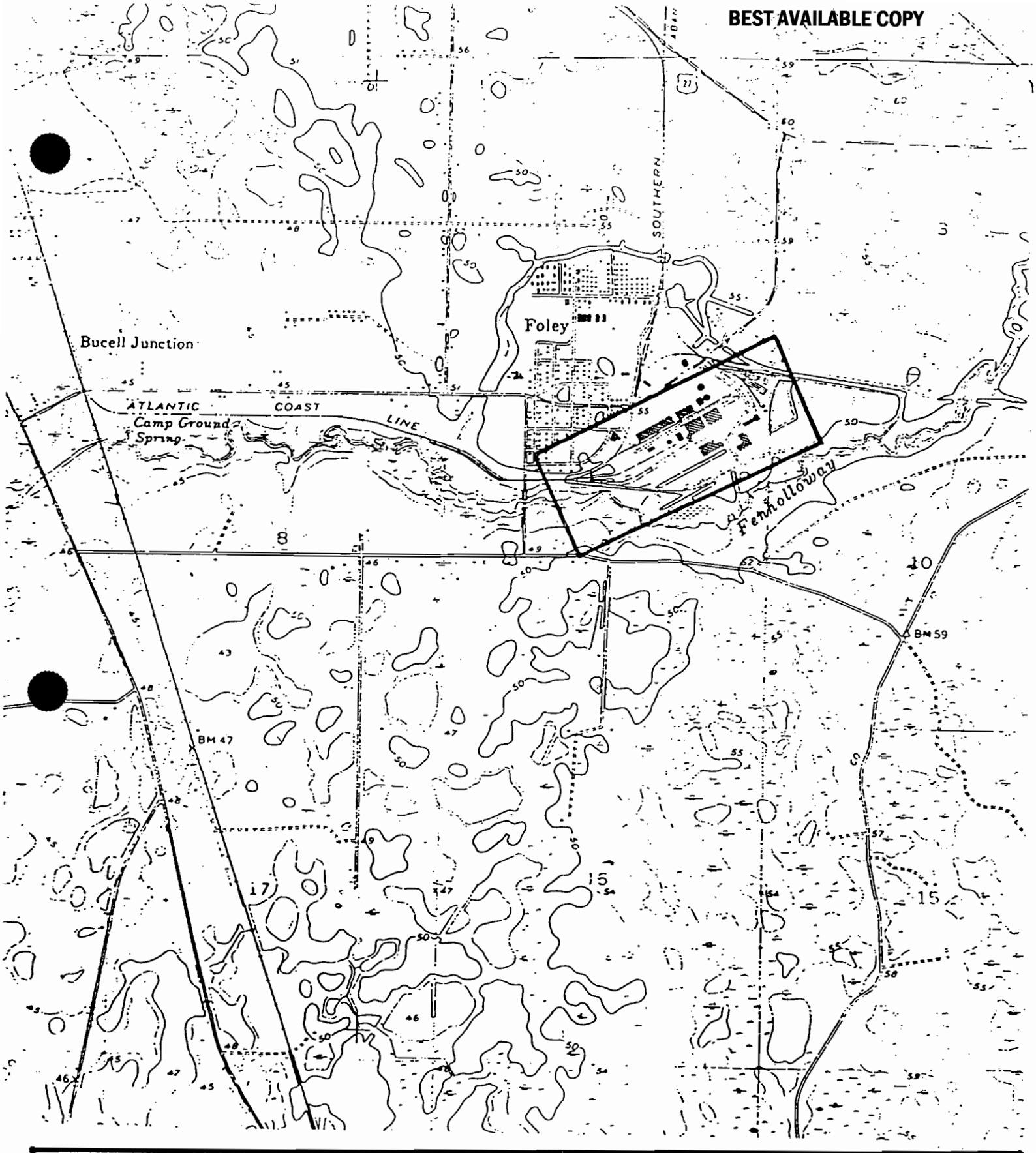


FIGURE 1

U.S.G.S. Location Map

Procter & Gamble Cellulose Co.

Foley Plant — Perry, Florida

G—9263

SIRRINE ENVIRONMENTAL CONSULTANTS

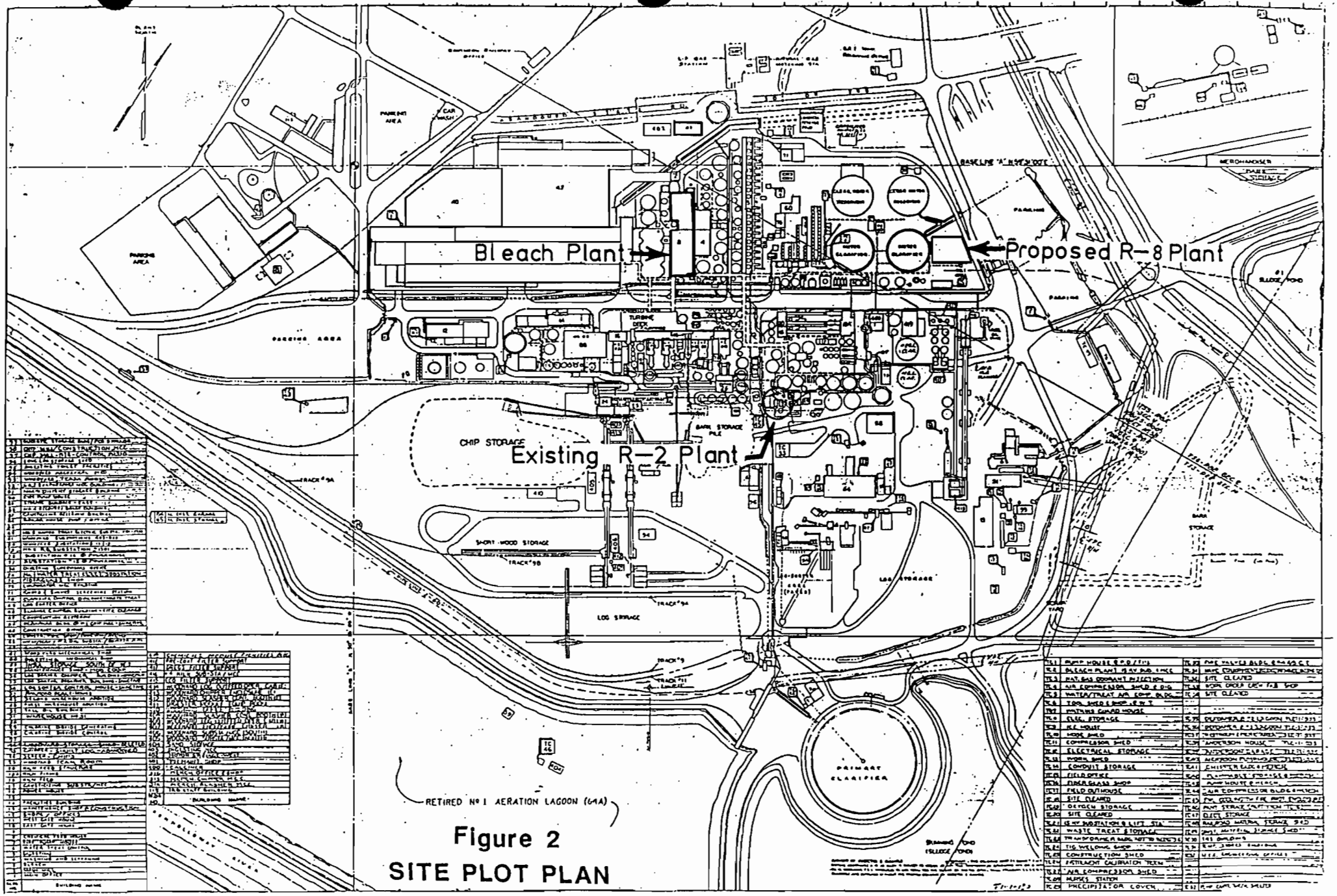
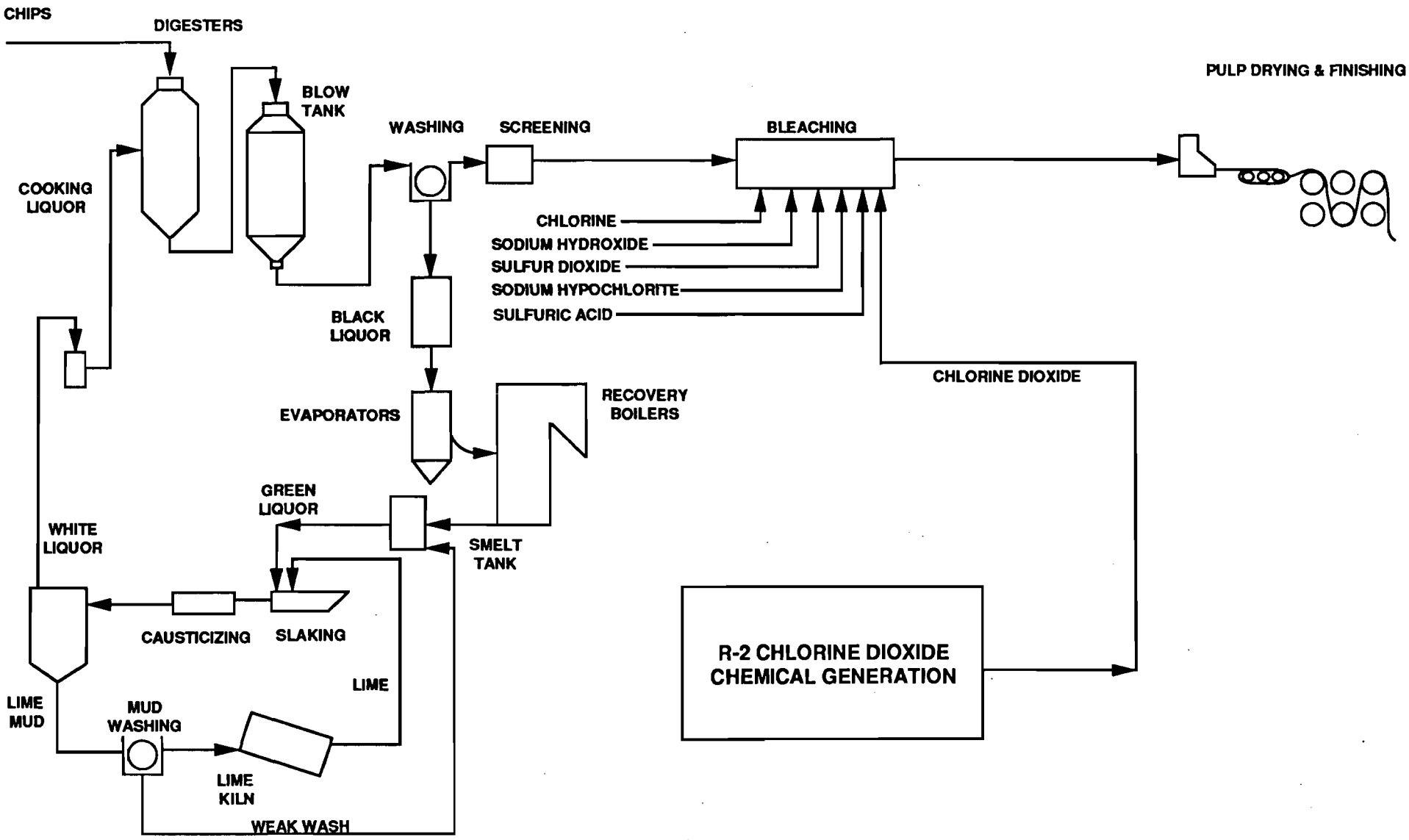


Figure 2

SITE PLOT PLAN

FIGURE 3
THE PROCTER AND GAMBLE CELLULOSE COMPANY
SIMPLIFIED EXISTING PROCESS FLOW DIAGRAM



After being washed, the pulp is screened and enters the bleach plant where it is reacted with chlorine, caustic, sodium hypochlorite and chlorine dioxide for purification, brightening and viscosity control. Chemicals are added in retention towers, and reactants are removed in washers. The chlorine dioxide solution is manufactured on site in a chemical generator employing the R2 process which reacts sodium chlorate, sodium chloride and sulfuric acid to form a chlorine dioxide/chlorine gas mixture that is absorbed in chilled water. After being bleached, the pulp is dried on the paper machine and finished to customer specifications.

4.0 CHLORINE DIOXIDE GENERATION PROCESS REPLACEMENT PROJECT DESCRIPTION

The existing R-2 chlorine dioxide generation process, which is shown in Figure 4, produces the chlorine dioxide solution that is presently required by the No. 1 and No. 2 Bleach Plants. A premixed (R-2) solution of sodium chloride and sodium chlorate in water reacts with sulfuric acid to produce the following typical reaction:

$$NaClO_3 + NaCl + H_2SO_4 \dashrightarrow ClO_2 + \tfrac{1}{2} Cl_2 + Na_2SO_4 + H_2O.$$

The ClO_2 and Cl_2 gases are stripped from the generators by a stream of forced air. The air-gas mixture passes through an absorption tower where cold water absorbs the ClO_2 to form a solution containing approximately 8 gpl ClO_2 and 1.6 gpl Cl_2. This solution is stored in connected storage tanks which are vented to the absorption tower and which subsequently supply the bleach plants. The residual air and chlorine continue through a caustic scrubber where chlorine is absorbed to form a weak sodium hypochlorite solution. This solution is used in the sodium hypochlorite stages in the bleach plant. The spent generator solution is highly acidic and contains sodium sulfate which serves as sulfur and sodium make-up to the cooking liquor system.

The existing R-2 chlorine dioxide generation process will be unable to produce the quality and quantity of chlorine dioxide required by the proposed No. 2 Bleach Plant process. As a result, this project will replace the existing R-2 chlorine dioxide generation process with an R-8 generation process that will be able to meet these requirements. In the R-8 process, shown in Figure 5, sodium chlorate (with a small amount of sodium chloride) and methanol are reacted with sulfuric acid in a generator/crystallizer to produce the following primary reaction:

$$3NaClO_3 + 2H_2SO_4 + 0.85\ CH_3OH \dashrightarrow 3ClO_2 + Na_3H(SO_4)_2 + 2.2H_2O + 0.06\ CH_3OH + 0.52\ HCOOH + 0.27\ CO_2$$

The generating system consists of a generator and a tube and shell heat exchanger, termed the reboiler. The generator liquor is circulated by an axial pump in the line between the exchanger and the generator. The sodium chlorate is introduced before the exchanger while the sulfuric acid and methanol are added at the exchanger discharge. Steam is supplied to the exchanger and, under the vacuum conditions in the generator, the water introduced into the system is evaporated resulting in crystallization of by-product sodium sesquisulfate, the acidic form of sodium sulfate.

The evaporated water acts as the diluent, replacing most of the air in the R-2 chlorine dioxide production system. The chlorine dioxide gas passes into an indirect contact cooler where the evaporated water is partially condensed, increasing the concentration of the chlorine dioxide. This stream of chlorine dioxide and water vapor then passes into the chlorine dioxide absorption tower, which utilizes chilled water as the absorption/scrubbing medium. Ernissions from the chlorine dioxide absorption tower are subjected to additional scrubbing before being released. The resulting chlorine dioxide solution, which is virtually free of molecular chlorine, will be stored in two chlorine dioxide storage tanks (which will also be vented to the chlorine dioxide vent scrubber) for subsequent supply to the bleach plants. The generator indirect contact cooler and absorption tower are maintained under vacuum by a steam jet ejector.

Generator slurry is continuously pumped to a vacuum filter. Here the sodium sesquisulfate is continuously removed, and the filtrate and wash water are returned to the generator. The sodium sesquisulfate is fed by gravity into a dissolving tank and normally used as sulfur and sodium make-up to the cooking liquor system. When sulfur and sodium make-up to the liquor cycle is not needed, the sodium sesquisulfate solution will be sewered. Provisions will be included to allow use of this solution for tall oil acidulation.
Certain conditions, generally resulting from contamination by organic materials in the

generator raw materials or a loss of pressure or concentration control, can result in a decomposition of chlorine dioxide to chlorine and oxygen as follows:

$$ClO_2 \longrightarrow \tfrac{1}{2} Cl_2 + O_2$$

Under this condition, all of the ClO_2 in the gas leaving the reactor has been converted to Cl_2. Chlorine is less easily dissolved in chilled water, thus there may be a momentary increase in the vent gas scrubber discharge of chlorine to the atmosphere.

This reaction rapidly releases heat and increases the pressure in the system due to the temperature increase and an increase in the number of moles of gas during the decomposition reaction. Typically the pressure does not exceed atmospheric pressure in the reactor. However, there is the possibility of higher than normal gas concentrations or temperatures, which may cause a pressure increase which results in the unseating of the pressure relief vent on the generator itself, releasing these gases to the operating area.

Since the R8 process reactions are driven by the presence of methanol and very quickly use up the methanol that is present, relief vent releases will be halted by interruption of the methanol flow until the process condition that caused the decomposition can be corrected.

Decompositions of this nature can theoretically occur in any system containing chlorine dioxide. Therefore, each of the storage locations and use points are protected by process safety measures to provide adequate pressure rating or pressure relief devices.

Another potential upset condition known as a "white-out", may occur when the chlorine dioxide generator vessel contents are depleted of all chloride ions. This condition is generally less severe than the previously described upset. However, the observed effects may be similar in that a temporary increase in chlorine emissions from the vent gas scrubber may occur. The duration of a "white-out" is normally very short, and it is highly

unlikely that the generator pressure relief valve would be unseated under these circumstances.

In addition to the chlorine dioxide generation equipment, the project will also install the following associated major pieces of equipment:

- A new methanol storage tank
- A new sodium chlorate storage tank
- A new sodium chlorate mix tank
- A new cooling tower
- A new water chiller.
- Two new chlorine dioxide storage tanks.

The project will also include the installation of the necessary structures and ancillary pumps, piping, instrumentation, etc., required to operate the process.

Use of the existing R-2 process will be discontinued once the new R-8 process is started up.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

$600 pd. 11-1-89 Recpt.#117670

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DER - BAQM

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

AC 62-172092

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

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

COMPANY NAME: The Procter & Gamble Cellulose Company COUNTY: Taylor

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) Chlorine Dioxide Generator

SOURCE LOCATION: Street 5 to 6 miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: C.S. Aiken, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260 Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of The Procter & Gamble Cellulose Company

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. Furthe I agree to maintain and operate the pollution control source and pollution contr facilities in such a manner as to comply with the provision of Chapter 403, Flori 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-transferab and I will promptly notify the department upon sale or legal transfer of the permitt establishment.

*Attach letter of authorization
Previously submitted

Signed: C.S. Aiken

C.S. Aiken, Plant Manager
Name and Title (Please Type)

Date: 10/26/89 Telephone No. (904) 584-0121

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 designed/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 judgment, tha

[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 _____

Mr. A.M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants
Company Name (Please Type)

P.O. Box 24000, Greenville, SC 29616
Mailing Address (Please Type)

Florida Registration No. 0038928 Date: 10-31-89 Telephone No. (803) 234-3004

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.

See Sections 1, 2, and 4.

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

Start of Construction January 1990 Completion of Construction January 1991

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.)

Total Project: $ 23,000,000

Total Air Pollution Control: $ 168,000 (Installed)

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

A062-2381, Issued: May 19, 1975, Expires: Upon Modification of Existing Chlorine Dioxide Plant.

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

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? No

   a. If yes, has "offset" been applied? N/A

   b. If yes, has "Lowest Achievable Emission Rate" been applied? N/A

   c. If yes, list non-attainment pollutants. N/A

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

3. Does the State "Prevention of Significant Deterioriation" (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? N/A

   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.

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		
$NaClO_3$	N/A	N/A	7520	Figure 5
NaCl	N/A	N/A	140	Figure 5
H_2SO_4	N/A	N/A	4860	Figure 5
CH_3OH	N/A	N/A	720	Figure 5

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

1. Total Process Input Rate (lbs/hr): See Section III A above.

2. Product Weight (lbs/hr): 54 TPD ClO_2

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/yr	T/yr	
ClO_2	*	*	N/A	N/A	*	*	P1 Figure 5
Cl_2	*	*	N/A	N/A	*	*	P1
CH_3OH	12.1	0.4	N/A	N/A	747	0.4	P2
CH_3OH	-	2.9	N/A	N/A	5,800	2.9	Fugitive

[1]See Section V, Item 2.

[2]Reference 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)

[3]Calculated from operating rate and applicable standard.

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

* Information is not available to reliably predict actual emissions of these chemicals. Attachment I presents a process to measure and evaluate these emissions.

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Vent Gas Scrubber	ClO_2, Cl_2	*	N/A	*

E. Fuels Equipment specifications will be provided at a later date.

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.

Annual Average _____ Maximum _____

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

The R-8 chlorine dioxide process generates an acidic effluent containing sodium sesquisulfate ($Na_3H(SO_4)_2$). This effluent will normally be used for sodium and sulfur make-up in the recovery boilers. On occasions when no make-up is required to the liquor cycle, the effluent will be sewered. Provisions may be made at a later date to allow use of the effluent for tall oil acidulation.

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

Stack Height: This information will be provided following detailed design of the scrubber ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

N/A

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

Description of Waste _____

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

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

Manufacturer _____

Date Constructed _____ Model No. _____

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

Stack Height: _____ ft. Stack Diamter: _____ 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: N/A

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

N/A

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)]
   N/A
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. Refer to Attachment I and Appendix A.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
   Refer to Attachment I and Appendix A.
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.) This information will be provided following detailed design of scrubbers.
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). This information will be provided following detailed design of scrubbers.
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.
   Refer to Figure 3.
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).
   Refer to Figure 1.
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.
   Refer to Figure 2.

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 [X] No

Contaminant	Rate or Concentration

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

[ ] Yes [X] No

Contaminant	Rate or Concentration

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

N/A

Contaminant	Rate or Concentration

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

N/A

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).

N/A

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:

[1]Explain method of determining efficiency.
[2]Energy 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:

N/A

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:

[1]Explain method of determining efficiency.
[2]Energy 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:

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

N/A

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____no. sites _____ TSP _____( ) SO^{2}* _____ 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.

APPENDIX A

METHANOL CALCULATIONS

METHANOL EMISSIONS

new tank installation

Basis:

- Vapor Pressure @ 68°F: 1.83 psia
- Storage Tank Data: Horizontal Pressure Vessel
  14 ft. diam. x 32 ft. TT
  37,000 gal. working vol.
- Methanol Usage: 1457 gal/day
  ~~17.7~~ loads per year (each load = 30,000 gallons)
- Methanol Unloading Pump Maximum Capacity = 150 gpm
- Methanol MW = 32
- AP-42 Working Loss Equation:

$$WL = 2.4 \times 10^{-5} \times MW \times VP \times V \times N \times Kn \times Kc$$

where:
VP = Vapor Pressure, psia
V = Tank Volume, gal
N = Turnover Rate, yr^{-1}
Kn = Turnover Factor, (1.0)
Kc = Product Factor, (1.0)
MW = Molecular Weight

Average Methanol Emissions

Calculation of Average Turnovers (N) Per Year

1457 gal/day x 365 day/year x 1/37,000 gal

= 14.37 turnovers/year

Working Loss Calculation

Inputs: N = 14.37
Kc = 1
Kn = 1
V = 37,000
VP = 94.6 mm Hg = 1.83 psia
MW = 32

$2.4 \times 10^{-5} \times 32 \times 1.83 \times 37{,}000 \times 14.37 \times 1.0 \times 1.0 = 747$ lb/year

747 lb/year x ton/2000 lb = 0.4 ton/year

Fugitive Methanol Emissions From Piping

Component	Emission[1] Factor (kg/hr/source)	Component Count[2] To Storage	Component Count[2] To Process	Emissions To Storage kg/hr	Emissions To Process kg/hr
Valve	.0071	6	19	.0426	.1349
Flange	.00083	15	40	.0125	.0332
Sampling Connection	.0150	3	7	.045	.1050
Pump (Seal)	.0214	1	1	.0214	.0214
				0.1215	0.2945

1. Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and HAP, EPA Contract No. 68-02-4338, DCN #87-222-124-10-02, December, 1987.

2. Counted from P&IDs.

Emissions to Storage

0.1215 kg/hr x 1,000 lb/453.6 kg

= 0.2679 lb/hr x 30,000 gal/150 gpm x 1 hr/60 min

= 0.893 lb/load x 17.7 loads/yr

= 15.8 lb/yr = .01 tons/yr

Emissions to Process

0.2945 kg/hr x 1,000 lb/453.6 kg x 8,760 hr/yr

= 5,687 lb/yr = 2.8 tons/yr

Disconnect Loss

Density of methanol = 0.7924 x 62.4 lb/ft^3

Assume 4' long connection, 3" hose

Volume involved = $\pi/4\ (3/12)^2$ x 4 = 0.1964 ft^3 released per load
Methanol released = 0.1964 ft^3 x .7924 x 62.4 lb/ft^3

= 9.7 lb/load x 17.7 loads/yr

= 172 lb/yr = 0.09 tons/yr

Total fugitive losses from piping

= (.01 + 2.8 + 0.09) tons/yr

= 2.9 tons/yr

Total Average Methanol Emissions From F1

2.9 tons/yr + 747 lb/yr/2,000 = 3.3 tons/year

Maximum Methanol Emissions

Basis:

- Temperature = 68°F
- Methanol Vapor Density = 1.1
- 150 gpm Maximum Fill Rate
- Raoult's Law:

$$y = \frac{xPV}{PT}$$

where: y = Mole Fraction Vapor Phase
PV = Vapor Pressure
PT = Total Pressure
x = Mole Fraction Liquid Phase (1.0)

- Air Density = 0.074 lb/ft^3

Displacement Rate

150 gal/min x ft^3/7.48 gal = 20. ft^3/min

Vapor Phase Methanol Mole Fraction

1.0 x 1.83 psia/14.7 psia = 0.124 mole fraction or volume fraction*

*Note: For ideal gas, mole fraction equals volume fraction.

Methanol Emissions During Filling

20.05 ft^3/min x 0.124 x 60 min/hr x 0.074 lb/ft^3 x 1.1 v.d. = 12.1 lb/hr

Rao Perry
2457-0576

NO. 2 BLEACH PLANT
MODIFICATION PROJECT

AIR PERMIT APPLICATION

THE PROCTER & GAMBLE CELLULOSE COMPANY
FOLEY PLANT

PERRY, FLORIDA

SEC JOB NO. G-9263

OCTOBER, 1989

PREPARED BY:

SIRRINE ENVIRONMENTAL CONSULTANTS
GREENVILLE, SOUTH CAROLINA

TABLE OF CONTENTS

LIST OF FIGURES

1. INTRODUCTION

This report contains the air construction permit application for changes that will be made to the No. 2 Bleach Plant at The Procter & Gamble Cellulose Company Foley Plant in Perry, Florida. These changes, which are being voluntarily made in response to European market concerns about chlorine bleaching, involve the development of a process for producing diaper-related pulp using a chlorine dioxide solution that is virtually free of molecular chlorine and elimination of the use of sodium hypochlorite. This process modification is expected to result in a reduction of approximately 50% of the total plant use of molecular chlorine, which will also significantly reduce the potential for the formation of 2,3,7,8 tetrachloro-dibenzo-p-dioxin and other chloro-organic compounds. The proposed modifications will result in reduced air emissions of chlorine and chloroform, which is formed mainly in the chlorine and sodium hypochlorite stages, from the No. 2 Bleach Plant. Improved scrubbing will result in a reduction of chlorine dioxide emissions.

The Procter & Gamble Cellulose Company has historically been a leader in air emissions control. In 1970, a high energy tail gas scrubber was installed on the existing chlorine dioxide generation facility. The following year, collection and wet scrubbing systems were installed on all chlorine and chlorine dioxide stages in the bleach plant. As a result, the Procter & Gamble Cellulose Company was the first pulp mill in Florida to control bleach plant related emissions.

This project will replace the existing R-2 chlorine dioxide generation process with an R-8 generation process, which produces a chlorine dioxide solution that is virtually free of molecular chlorine, and modify the No. 2 Bleach Plant to enable the use of this new bleaching solution. As is presently the case, provisions will remain to produce dissolving grade pulps in the No. 2 Bleach Plant in the event that market conditions warrant.
The No. 1 Bleach Plant will remain unchanged at this time because the technology to produce dissolving grade pulps without the use of molecular chlorine has not yet been developed.

The proposed changes to the chlorine dioxide generation process are covered in the report entitled: Chlorine Dioxide Generation Process Replacement Project - Air Permit Application.

2. APPLICABLE REGULATIONS

The No. 1 and No. 2 Bleach Plant processes were initially permitted by the Florida Department of Environmental Regulation (DER), formerly known as the Florida Department of Pollution Control, on May 18, 1973 and renewed on May 15, 1975. On January 25, 1980, the Procter & Gamble Cellulose Company was notified by the DER that it would not be necessary for these permits to be renewed in the future. However, the DER did request that they be notified prior to the implementation of future changes to these processes. Since this project seeks to modify the No. 2 Bleach Plant, this air construction permit application package serves as notice to the DER of proposed changes.

Current State of Florida air permitting regulations require the submittal of air permit applications for DER review prior to the construction of a new source or modification of an existing source which will result in an increase in emission levels of pollutants regulated under Chapter 17-2, F.A.C. While the proposed modifications to the No. 2 Bleach Plant do not involve air pollutants that are regulated under Chapter 17-2, F.A.C., and will in fact reduce air toxics emissions, the DER has requested the submittal of an air construction permit application due to emerging concerns about air toxics.

Although no specific existing emission limiting standards apply to this modification, the DER is developing air toxics review guidelines that will be used to assess proposed projects of this nature. The procedure to be followed in applying these guidelines is to model the air emissions of concern to evaluate the potential ground-level impact at the facility property line. In the absence of promulgated allowable ambient concentrations, the ground-level impact assessment will utilize criteria that are based on unit risk factors or derived fractions of existing allowable workplace exposure standards. These recommended criteria will then be used as a screening mechanism to evaluate the emissions from a process.

3. FOLEY PLANT DESCRIPTION

3.1 USGS Location

Figure 1 shows the USGS location of the plant site. The plant is located at Universal Transverse Mercator (UTM) coordinates of approximately 256.74 kilometers east and 3,328.70 kilometers north.

3.2 Site Plot Plan

Figure 2 shows the location of the No. 2 Bleach Plant.

3.3 Plant Process Description

Figure 3 is a simplified flow diagram representative of the kraft pulping process used at the Procter & Gamble Cellulose Foley Plant. Wood chips are charged into batch digesters where they are cooked under pressure in alkaline liquor containing sodium hydroxide and sodium sulfide. The cooked chips are blown from the digester and washed in a three-stage, counter current washing system. Wash liquor from these stages, known as black liquor, contains organics extracted from the wood as well as the spent cooking chemicals. The black liquor is concentrated and sent to a recovery furnace, where the organics are burned as fuel and the inorganics are recovered as smelt. The cooking chemicals are recovered from the smelt by reacting it with lime and removing the lime mud that is formed in the reaction. The lime mud is filtered and calcined in a kiln to recover the lime for re-use.

After being washed, the pulp is screened and enters the bleach plant where it is reacted with chlorine, caustic, sodium hypochlorite and chlorine dioxide for purification, brightening and viscosity control. Chemicals are added in retention towers, and reactants are removed in washers. The chlorine dioxide solution is manufactured on site in a chemical generator

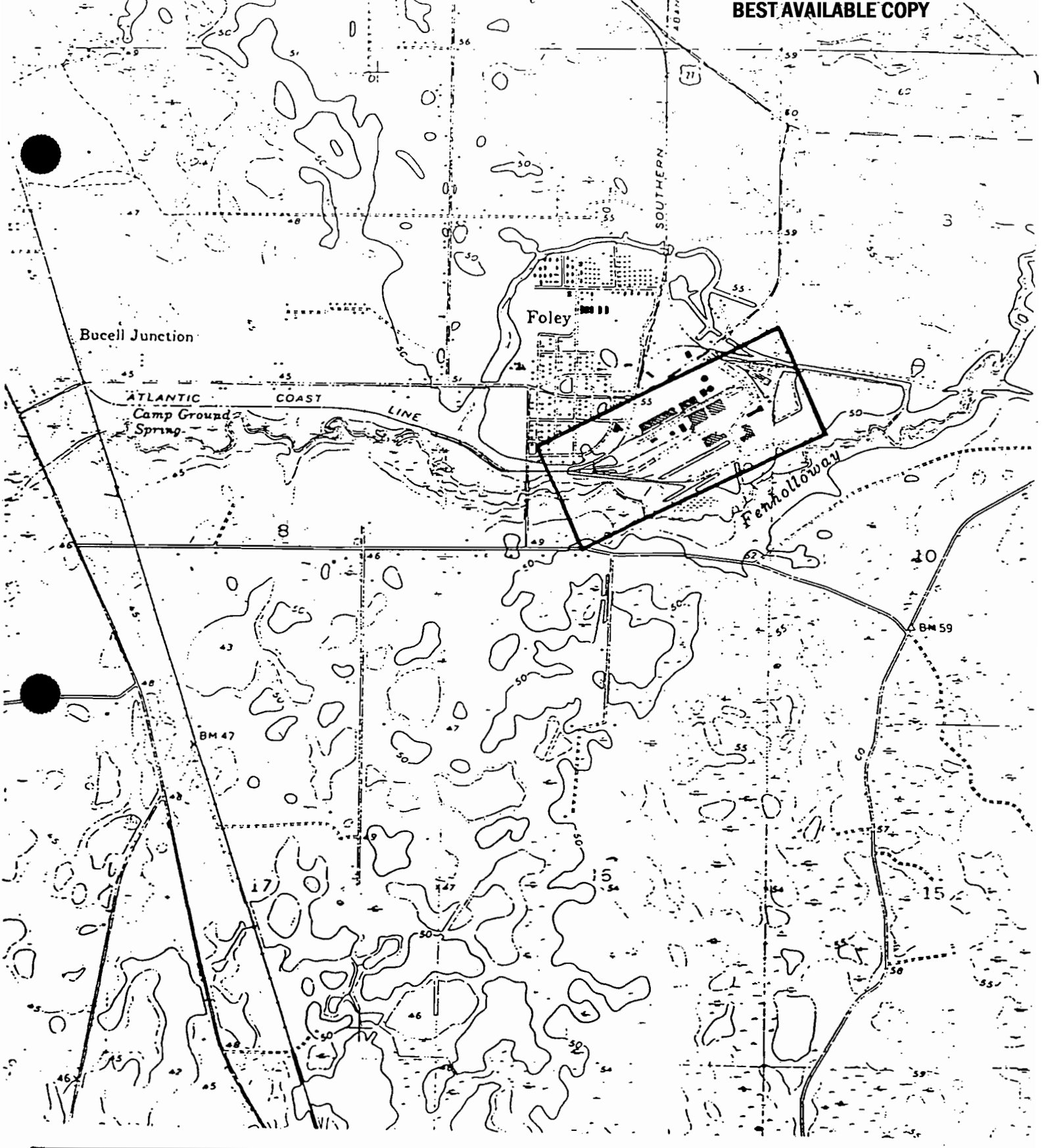


FIGURE 1

U.S.G.S. Location Map

Procter & Gamble Cellulose Co.

Foley Plant — Perry, Florida

G—9263

SIRRINE ENVIRONMENTAL CONSULTANTS

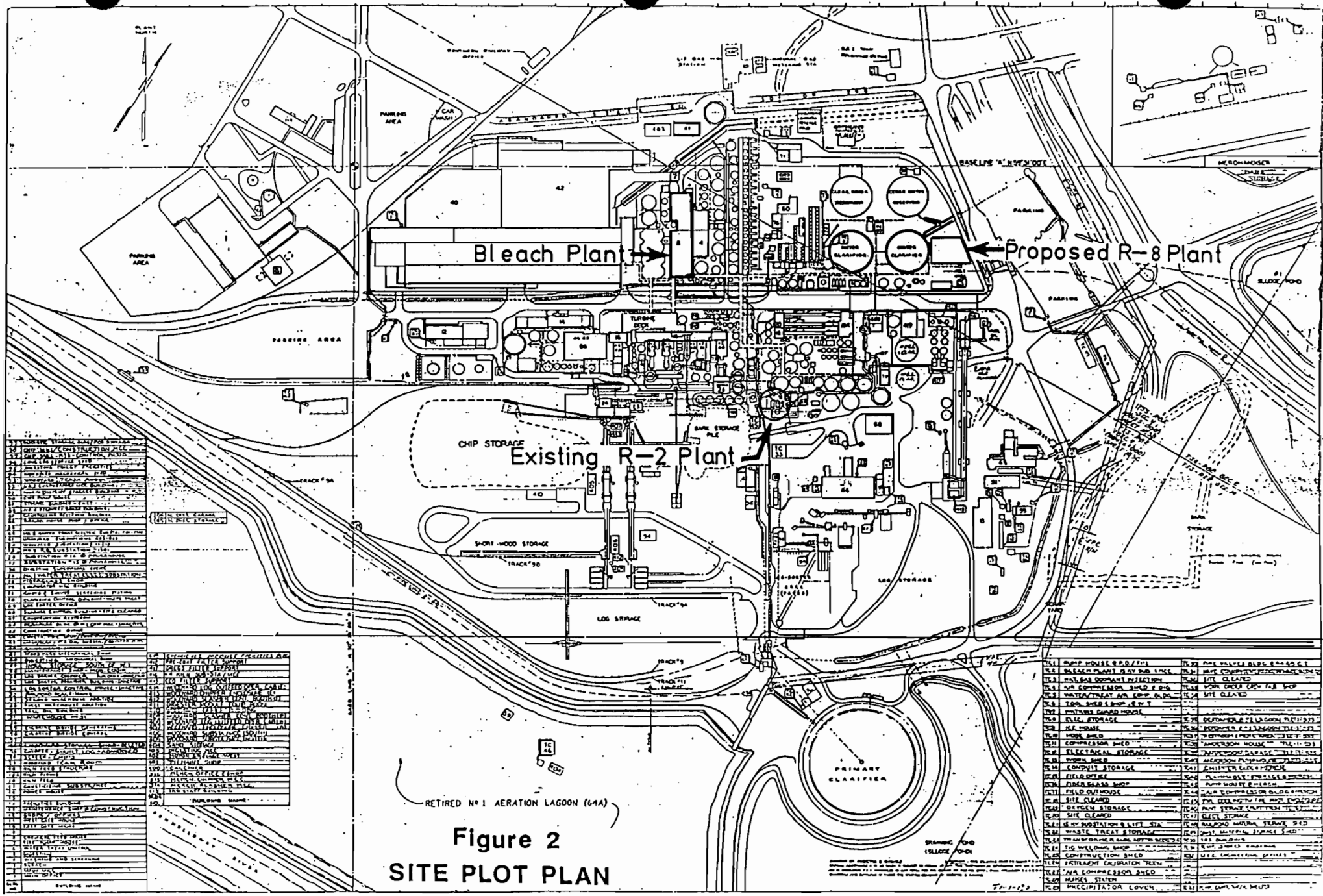
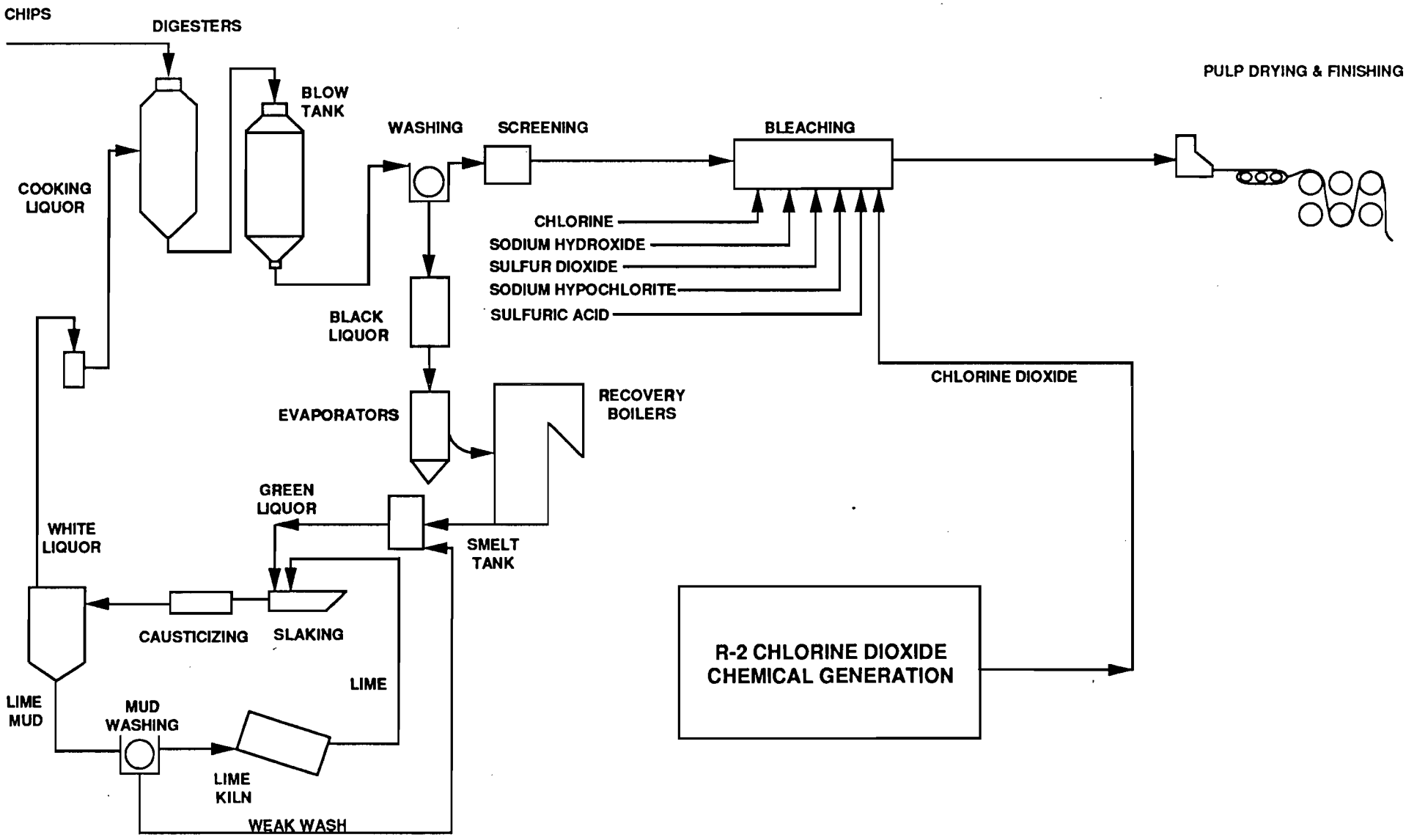


Figure 2
SITE PLOT PLAN

FIGURE 3
THE PROCTER AND GAMBLE CELLULOSE COMPANY
SIMPLIFIED EXISTING PROCESS FLOW DIAGRAM



employing the R2 process which reacts sodium chlorate, sodium chloride and sulfuric acid to form a chlorine dioxide/chlorine gas mixture that is absorbed in chilled water. After being bleached, the pulp is dried on the paper machine and finished to customer specifications.

4. NO. 2 BLEACH PLANT MODIFICATION PROJECT DESCRIPTION

The existing No. 2 Bleach Plant which is primarily used to produce diaper-related pulp, currently utilizes a six-stage bleaching sequence, commonly referred to as CEHDED. The letters in this sequence indicate the following bleaching stages:

C	Chlorination
E	Caustic Extraction
H	Sodium Hypochlorite
D	Chlorine Dioxide

The C stage and its associated washer are vented to a wet scrubber (common to the No. 1 and No. 2 Bleach Plants), which utilizes an alkaline solution to capture residual chlorine. The scrubber effluent is then used in the sodium hypochlorite stage. The D stage towers are vented to wet scrubbers utilizing chilled water on a once through basis. The resultant scrubber effluent gravity flows to the top of the respective D stage towers for efficient utilization of the captured chlorine dioxide. The existing No. 2 Bleach Plant is illustrated in Figure 4.

After completion of the proposed modification, the No. 2 Bleach Plant will normally employ a DEDED sequence when producing diaper-related pulp. The existing chlorination towers will be replaced with a new D stage upflow/downflow tower, and the existing sodium hypochlorite stage will be by-passed. The new D1 stage tower will be equipped with a new chilled water scrubber. The scrubbers on the existing D2 and D3 stage towers will be maintained and evaluated for adequacy, replaced with more efficient chilled water scrubbers. A new alkaline scrubber will be installed to control emissions from washers and seal pots. Modifications to the No. 2 Bleach Plant also include ancillary pumps, piping, instrumentation, etc. required to produce bleached pulp with the new sequence. The proposed No. 2 Bleach Plant flow diagram (DEDED sequence) is included as Figure 5.

rcd 2-26-90 corrected page submitted

The No. 2 Bleach Plant, however, will maintain the ability to utilize the existing sodium hypochlorite stage and to supply chlorine to the first stage to produce dissolving grade pulps in the event that market conditions warrant. As a result, provisions will remain to scrub the first stage with an alkaline solution to remove chlorine. Figure 6 shows the basic flow diagram for the proposed No. 2 Bleach Plant when operating the CEHDED sequence.

STATE OF FLORIDA

BEST AVAILABLE COPY

DEPARTMENT OF ENVIRONMENTAL REGULATION

RECEIVED

NOV 1 1989

DER - BAQM

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

AC62-172092

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

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

COMPANY NAME: The Procter & Gamble Cellulose Company COUNTY: Taylor

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) No. 2 Bleach Plant

SOURCE LOCATION: Street 5 to 6 miles southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: C.S. Aiken, Plant Manager

APPLICANT ADDRESS: Route 3 Box 260, Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of The Procter & Gamble Cellulose Company

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
Previously submitted

Signed: C.S. Aiken

C.S. Aiken, Plant Manager
Name and Title (Please Type)

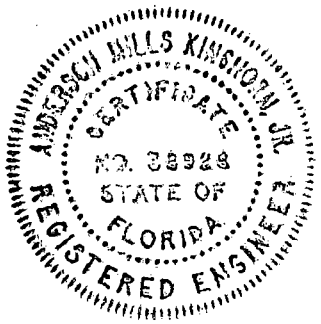
Date: 10/26/89 Telephone No. (904) 584-0121

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

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

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

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



Signed _____

Mr. A.M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants
Company Name (Please Type)

Post Office Box 24000, Greenville, SC 29616
Mailing Address (Please Type)

Florida Registration No 0038928 Date: 10-31-89 Telephone No. (803) 234-3004

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.

See Sections 1,2 and 4 of this report.

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

Start of Construction January 1990 Completion of Construction March 1991

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.)

Total Project: $20,000,000

Total Air Pollution Control: $ 225,000

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

#A062-2383, Issued: May 19, 1975, Expiration: Upon modification of bleach plant.

Existing permit includes both No. 1 and No. 2 Bleach Plants.

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? No

   a. If yes, has "offset" been applied? N/A

   b. If yes, has "Lowest Achievable Emission Rate" been applied? N/A

   c. If yes, list non-attainment pollutants. N/A

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

3. Does the State "Prevention of Significant Deterioriation" (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? N/A

   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.

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

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

SEE ATTACHED TABLE IIIA

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

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

1. Total Process Input Rate (lbs/hr): 660 unbleached bone dry tons/day CEHDED
900 unbleached bone dry tons/day DEDED

2. Product Weight (lbs/hr): _____

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 Figures 5&6
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Cl_2	*	*	N/A	N/A	*	*	P5
ClO_2	*	*	N/A	N/A	*	*	P1,P2,P3,P4
$CHCl_3$	*	*	N/A	N/A	*	*	P4

[1]See Section V, Item 2.

[2]Reference 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)

[3]Calculated from operating rate and applicable standard.

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

*Information is not available to reliably predict actual emissions of these chemicals. Attachment I presents a process to measure and evaluate these emissions.

TABLE III A

RAW MATERIALS AND CHEMICALS USED

Description	Contaminants Type	%wt	Utilization Rates lbs/hr DEDED	CEHDED
Unbleached Pulp (Bone Dry)	N/A	N/A	75,000	55,000
ClO_2	Cl_2	.04%	3,570	310
Cl_2	N/A	N/A	0	4,280
NaOH	N/A	N/A	2,450	3,900
NaOCl	N/A	N/A	0	2,910
$H2SO_4$	N/A	N/A	1,600	1,170
SO_2	N/A	N/A	220	200

NCASI ranges emissions

Cl_2 0.02 - 10.1 lb/ton of pulp

ClO_2 0.2 - 10.8

$CHCl_3$ 0.0 - 2.19

Waste water Treatment sys

$CHCl_3$ 0 - 2.28 lb/ton p/p

@ 63% volatilization from the waste water treatment sys

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
D1 ClO_2 Scrubber	ClO_2	*	N/A	*
D2 ClO_2 Scrubber	ClO_2	*	N/A	*
D3 ClO_2 Scrubber	ClO_2	*	N/A	*
Bleach Plant Misc. Exhaust Scrubber	ClO_2	*	N/A	*
Chlorine Scrubber (CEHDED only)	Cl_2	*	N/A	*

E. Fuels N/A *Equipment Specifications will be added at a later date.

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: N/A

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

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

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

Annual Average _____ Maximum _____

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

Filtrate from the D_1, D_2, and D_3 stage washers flows to the acid sewer for treatment in the wastewater treatment plant. Extraction stage filtrate flows to the alkaline sewer. When running the CEHDED sequence, the sodium hypochlorite stage filtrate also flows to the alkaline sewer, and the spent filtrate from the chlorination stage flows to the acid sewer. These sewers are treated in the wastewater treatment plant.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):
This information will be provided following detailed design of the scrubbers.

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

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

N/A

SECTION IV: INCINERATOR INFORMATION

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 Diamter: _____ 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:

N/A

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

N/A

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)]
   N/A
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.
   Refer to Attachment I
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
   Refer to Attachment I
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.)
   This information will be provided following detailed design of scrubbers.
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).
   This information will be provided following detailed design of scrubbers.
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.
   Refer to Figure 3
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).
   Refer Figure 1
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.
   Refer to Figure 2

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.

N/A

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 [X] No

Contaminant	Rate or Concentration

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

[ ] Yes [X] No

Contaminant	Rate or Concentration

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

N/A

Contaminant	Rate or Concentration

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

N/A

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:

[1]Explain method of determining efficiency.
[2]Energy 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: N/A

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:

[1]Explain method of determining efficiency.
[2]Energy 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:

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

N/A

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____no. sites _____ TSP _____( ) SO^{2}* _____ 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.

#2 Bleach Plant Modifications and Chlorine Dioxide Generation Process Replacement Project

Proposed Permitting Strategy

1) Approve the enclosed air construction permit applications for the proposed #2 Bleach Plant modifications and the Chlorine Dioxide generation process replacement project, which includes identified emissions control equipment.

2) As a condition in the construction permits, include the following requirements:

   A. Within three months following construction completion, start-up, and achievement of reliable operations, emissions of chlorine, chlorine dioxide, and chloroform will be measured, using testing methods agreed upon by the FDER and the permittee, at the appropriate points in the #2 Bleach Plant and the R-8 Chlorine Dioxide Generation Process: L + B1 BP

   B. Within one month following receipt of the measurements in Item A, the measured emissions will be subjected to initial air toxics screening using criteria agreed to by the FDER and the permittee.

   C. The screening results will be used to consider whether:

      1) The achieved emissions levels are acceptable; or
      2) Additional control measures needed to meet the initial screening criteria are available and practical; or
      3) Detailed risk assessments are necessary to ensure that the practically achievable emissions are acceptable.

   D. For any pollutant addressed in this permit that fails to meet the criteria identified in Item B, the permittee shall submit within six months following receipt of screening results, a plan and schedule to the FDER which addresses the factors identified in Item C. The plan may include a recommendation to install additional control measures/process modifications, if needed and available and practical, or a recommendation to develop a risk assessment to demonstrate that the practically achievable emissions are acceptable.

   E. Air operation permits will not be granted for the #2 Bleach Plant and the Chlorine Dioxide generation process until the plan identified in Item D is approved by the FDER and completed.

      If additional time is needed to complete the steps identified in the plan, the construction permit will be extended accordingly.

05-5-7-8-9

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL
3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207

PETER P. BALJET
EXECUTIVE DIRECTOR

W.D. FREDERICK, JR.
CHAIRMAN

May 19, 1975

Taylor County - AP
Buckeye Cellulose Corp.
Bleaching Vents

Mr. F. P. Smith, Plant Manager
The Buckeye Cellulose Corporation
Perry, Florida 32347

Dear Mr. Smith:

Pursuant to your recent application, enclosed is Permit No. A062-2383, dated May 19, 1975 to operate the subject pollution source.

This permit will expire on May 15, 1980 and will be subject to the conditions, requirements and restrictions checked or indicated otherwise on the attached sheet entitled "Permit Conditions".

This permit is issued under the authority of Florida Statutes 403.061(16). The time limits imposed herein are a condition to this permit and are enforceable under Florida Statute 403.161. You are hereby placed on Notice that the Department will review this permit before the scheduled date of expiry and will seek court action for any violation of the conditions and requirements of this permit.

You have ten days from the date of receipt hereof within which to seek a review of the conditions and requirements contained in this permit.

In future communication please refer to your permit number and source I.D. Your continued cooperation is appreciated.

Very truly yours,

Frank Watkins

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

FWjr:JRG:vk

cc: Central Files, Tallahassee
William F. Karns, P.E.

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL

OPERATION PERMIT CONDITIONS

FOR AIR POLLUTION SOURCES

(An "X" indicates applicable conditions)

DATE: May 19, 1975 PERMIT NO: A06202383

( ) 1. Test the emissions for the following pollutant(s) at intervals of from the date of this permit and submit two copies of test data to the regional engineer of this agency within fifteen days of such testing. Chapter 17-2.07(1).

( )	Particulates	( )	Sulfur Oxides
( )	Fluorides	( )	Nitrogen Oxides
( )	Plume Density	( )	Hydrocarbons

( ) 2. According to revised Chapter 17-2, (revised 1/18/72), this facility must be modified, up graded, or eliminated in order to comply with applicable emission limitations. *To insure compliance pursuant to the time limitation specified in Section 17-2.03(2), Chapter 17-2, Florida Administrative Code, the following steps toward compliance are made a condition of this permit.

(A) Submit on or before_____a final control plan for complying with Chapter 17-2, Florida Administrative Code. This plan is subject to approval by the regional office.

(B) Submit on or before_____a copy of contract(s) for modification/control equipment and/or fuels necessary to comply with Chapter 17-2.

(C) On or before_____, construction and/or modification must be initiated. Submit 60 days prior to this date construction permit applications and necessary information.

(D) Construction and/or modifications toward compliance must be completed by_____. Submit no later than_____ _____confirmation of this condition.

(E) Submit on or before_____proof of Compliance. This must include any changes in the construction permit application as submitted, and a final engineering report and _____to prove compliance. (test results and/or calculations)

* The applicable emission limitation for this facility is: _____Section_____Chapter 17-2, Florida Administrative Code.

(X) 3. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information:

(A) Annual amount of materials and/or fuels utilized.

(B) Annual emissions.

(C) Any changes in the information contained in the permit application.

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL

APPLICATION TO OPERATE/CONSTRUCT POLLUTION SOURCES

SECTION I – GENERAL INFORMATION FOR ALL POLLUTION SOURCES
I TO BE FILLED IN BY APPLICANT

Source Type: Air Pollution
Type application: [X] Operation [ ] Temporary Operation [ ] Construction
Status Source: [ ] New [x] Existing [ ] Modification

Source Name: The Buckeye Cellulose Corporation County: Taylor

Source Location: Street: 5 to 6 miles southeast of Perry City: Perry
(Water Source Only) Lat: ° ' " Long: ° ' "
(Air Source Only) UTM: East 256,740 North 3,328,700

Appl. Name and Title: F. P. Smith, Plant Manager
Appl. Address: Perry, Florida 32347

II TO BE FILLED IN BY REGION (*BY BUREAU OF PERMITTING)

Control No: Region County Type *Project

Type Permit	Date Rec'd	*Permit No.	*Issue Date	*Compl. Date	*Exp. Date

Source Description: Bleaching Vents
Control Equipment: Chilled water scrubbers on ClO2 tower vents
Caustic scrubber on Cl2 tower, washer and sealbox vents

Water Permits

Receiving Body Code: Surface Water Code:
Station No.: Influent: Effluent:

Effluent:	Average	Design	% Reduction
Flow rate, MGD			
BOD, lbs/day			
Susp. Sol., lbs/day			
Other:			

Air Permits

Operating Time: [X] Continuous [ ] Intermittent
Fuel: Type NA M-BTU/hr. In Put
Incinerator: Capacity, tons/day Type Waste
Mfg. & Model

Pollutant Emissions, lbs/day	Actual	Design	Allowable
Particulate			
Sulfur Oxides			
Other: ClO2, Cl2	Trace	NA	NA
NaOH, NaOCl	"	NA	NA

Implementation: Estimated Appl. Filing Date
Estimated Start of Const. Estimated Compliance Date

DESCRIPTION OF PROPOSED PROJECT

A. Describe the nature and extent of the proposed project. Refer to existing pollution control facilities, DPC permits conditions, orders and notices, expected improvement in performance of the facilities and state whether the proposed project will result in full compliance of the source. Attach additional sheet if necessary.

NA

B. Schedule of Project Covered in this Application (Construction Permit Application Only).

Federally or State Financed Projects only:

Planning Complete

Financing Program Complete

Indicate other local, state and/or federal agency approvals and dates

All projects:

Start of Construction

Completion of Construction

C. Costs of Construction (Show a breakdown of costs for individual components/units of the proposed project serving pollution control purpose only). Information on actual costs shall be furnished with the application for operation permit.

D. Indicate any previous DPC permits, issuance dates, and expiration dates.

AO-62-2096 5/18/73 6/1/75

AIR POLLUTION SOURCES & CONTROL DEVICES

A. Identification of Air Contaminants

1) [ ] Particulates
   a) [ ] Dust b) [ ] Fly Ash c) [ ] Smoke d) [ ] Other (Identify)

2) [ ] Sulfur Compounds
   a) [ ] SO_x as SO_2 b) [ ] Reduced Sulfur as H_2S c) [ ] Other (Identify)

3) [ ] Nitrogen Compounds
   a) [ ] NO_x as NO_2 b) [ ] NH_3 c) [ ] Other (Identify)

4) [ ] Flourides 5) [ ] Acid Mist 6) [X] Odor (minor)

7) [ ] Hydrocarbons 8) [ ] Volatile Organic Compounds

9) [X] Other (Specify): Traces of Cl_2, ClO_2, NaOH, & NaOCl

B. Raw Materials and Chemicals Used (Be Specific)

Description	Utilization Tons/day, lbs./day, etc.	Approximate Contaminant Content		Relate to Flow Diagram
		Type	% Wt.	
NA				

C. Process Weight:

1) Total Process Weight Rate NA lbs./hr. [See Sec. 17-2.04(2)]
2) Product Weight NA lb./hr. expressed as
3) Normal Operating Time 24 hrs/day, 7 days/wk, if seasonal describe: 50 wks/yr

D. Airborne Contaminants Discharged:

Name of Contaminant	Actual Discharge	Discharge Criteria*	Allowable Discharge*	Relate Location to Flow Diagram
ClO_2	Trace	NA	NA	05-5, -7, -8
Cl_2	Trace	NA	NA	05-9
ClO_2, NaOH, NaOCl	Trace	NA	NA	05-1, -2, -3, -4, -6

* Refer to Chapter 17-2 Florida Administrative Code
(Discharge Criteria: Process Weight Rate, #/ton P_2O_5, #/M BTU/hr etc.)

E. Control Devices:

Name	Eff.	Conditions of Operation, Particle Size Range, etc.	Relate to Flow Diagram
ClO_2 Scrubbers		NA	05-5,-7,-8
Cl_2 Vent Scrubber		NA	05-9

F. Fuels:

Type (Be specific)	Daily Consumption	Heat Input BTU/hr.	Relate to Flow Diagram
NA			

G. Describe briefly, without revealing trade secrets, the unit processes/operations generating the airborne emissions identified in this application:

Brownstock is processed through multiple bleaching stages to produce fully bleached kraft pulp.

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

White water containing fiber, organic wood residues, miscellaneous chemicals. Liquid wastes go to primary and secondary treatment.

STATEMENTS BY APPLICANT AND ENGINEER

A. Applicant

The undersigned owner or authorized representative of * The Buckeye Cellulose Corporation is fully aware that the statements made in this application for an Operating permit are true, correct and complete to the best of his knowledge and belief. Further, the undersigned agrees to maintain and operate the pollution source and pollution control facilities in such a manner as to comply with the provisions of Chapter 403 Florida Statutes and all the rules and regulations of the Department or revisions thereof. He also understands that a permit, if granted by the Department, will be non-transferable and he will promptly notify the Department upon sale or legal transfer of the permitted establishment.

F Smith

Signature of the Owner or Authorized Representative

F. P. Smith, Plant Manager

Name and Title (Please Type)

Date: APR 24 1975 Telephone No.: (904) 584-3311

* Attach a letter of authorization

B. Professional Engineer Registered in Florida:

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the control and discharge of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution source(s) with appropriate control facilities, when properly maintained and operated, will comply 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 the applicant a set of instructions for the proper maintenance and operation of the installation covered in this application.

Signature William F Karns

Mailing Address: R. M. Watkins & Company
Perry, Florida 32347

Name: William F. Karns (please type)

Telephone No.: (904) 584-3311

Florida Registration Number 8877 (Please affix seal)

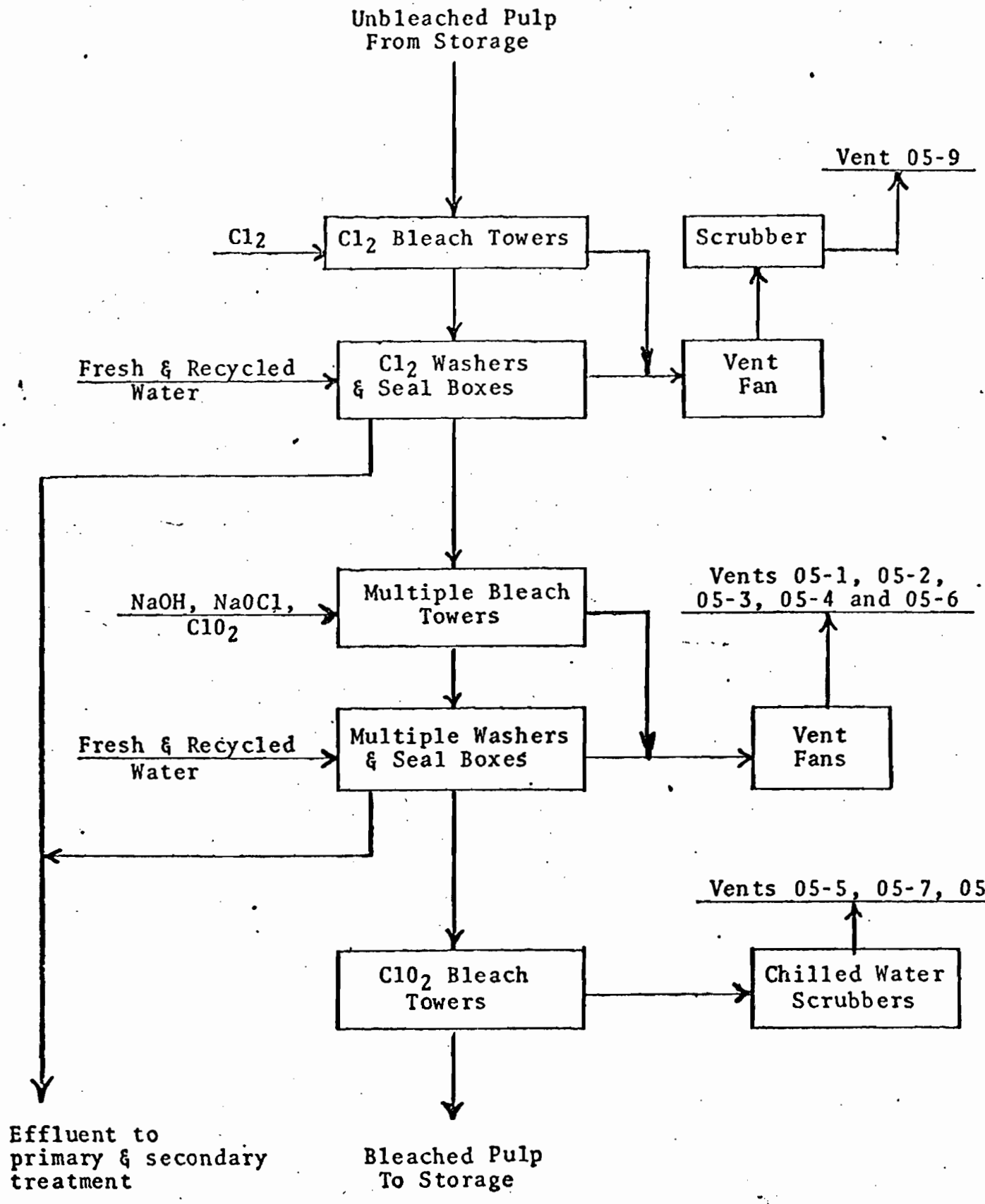
Date: APR 24 1975

WILLIAM F. KARNS
CERTIFICATE
NO.
8877
STATE OF
FLORIDA
REGISTERED ENGINEER

PERMITTED
BY
NORTHEAST REGION
DEPT. OF POLLUTION CONTROL
PERMIT NO. A062-2383
DATE 5/9/75

April 23, 1975

BLEACHING



3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER SUBDISTRICT

January 25, 1980

Mr. John H. Millican
Environmental Control Manager
The Buckeye Cellulose Corporation
Rt. 3, Box 260
Perry, Florida 32347

Dear Mr. Millican:

Taylor County - AP
Buckeye Cellulose Corp.
A062-2381 for ClO_2
-2382 for Brownstock Washing
-2383 for Bleaching Vents

Based on the data in the application forms in our file, we have determined that renewal of the above permits will not be required.

However, a file will be maintained on these vents and you are required to submit for our review any proposed changes, prior to implementing them, over the signatures of the plant manager and professional engineer.

If there are any questions, please contact us.

Sincerely,

Frank Watkins Jr

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

FW:jck

Vent 18-1

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL
3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207

PETER P. BALJET
EXECUTIVE DIRECTOR

May 19, 1975

W.D. FREDERICK, JR.
CHAIRMAN

Taylor County - AP
Buckeye Cellulose Corp.
ClO_2

Mr. F. P. Smith, Plant Manager
The Buckeye Cellulose Corporation
Perry, Florida 32347

Dear Mr. Smith:

Pursuant to your recent application, enclosed is Permit No. A062-2381, dated May 19, 1975 to operate the subject pollution source.

This permit will expire on May 15, 1980 and will be subject to the conditions, requirements and restrictions checked or indicated otherwise on the attached sheet entitled "Permit Conditions".

This permit is issued under the authority of Florida Statutes 403.061(16). The time limits imposed herein are a condition to this permit and are enforceable under Florida Statute 403.161. You are hereby placed on Notice that the Department will review this permit before the scheduled date of expiry and will seek court action for any violation of the conditions and requirements of this permit.

You have ten days from the date of receipt hereof within which to seek a review of the conditions and requirements contained in this permit.

In future communication please refer to your permit number and source I.D. Your continued cooperation is appreciated.

Very truly yours,

Frank Watkins

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

FWjr:JRG:vk

cc: Central Files, Tallahassee
William F. Karns, P.E.

BRUCE MITCHELL

BRUCE,
THESE ARE THE EXISTING
PERMITS I PROMISED YOU.
RAY ANDREU
PROCTER & GAMBLE

9-27-89
3:41-155 building RA

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL

OPERATION PERMIT CONDITIONS

FOR AIR POLLUTION SOURCES

(An "X" indicates applicable conditions)

DATE: May 19, 1975 PERMIT NO: A062-2381

( ) 1. Test the emissions for the following pollutant(s) at intervals of from the date of this permit and submit two copies of test data to the regional engineer of this agency within fifteen days of such testing. Chapter 17-2.07(1).

( )	Particulates	( )	Sulfur Oxides
( )	Fluorides	( )	Nitrogen Oxides
( )	Plume Density	( )	Hydrocarbons

( ) 2. According to revised Chapter 17-2, (revised 1/18/72), this facility must be modified, up graded, or eliminated in order to comply with applicable emission limitations. *To insure compliance pursuant to the time limitation specified in Section 17-2.03(2), Chapter 17-2, Florida Administrative Code, the following steps toward compliance are made a condition of this permit.

(A) Submit on or before_____a final control plan for complying with Chapter 17-2, Florida Administrative Code. This plan is subject to approval by the regional office.

(B) Submit on or before_____a copy of contract(s) for modification/control equipment and/or fuels necessary to comply with Chapter 17-2.

(C) On or before_____, construction and/or modification must be initiated. Submit 60 days prior to this date construction permit applications and necessary information.

(D) Construction and/or modifications toward compliance must be completed by_____. Submit no later than_____ _____confirmation of this condition.

(E) Submit on or before_____proof of Compliance. This must include any changes in the construction permit application as submitted, and a final engineering report and _____to prove compliance. (test results and/or calculations)

* The applicable emission limitation for this facility is: _____Section_____Chapter 17-2, Florida Administrative Code.

(X) 3. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information:

(A) Annual amount of materials and/or fuels utilized.

(B) Annual emissions.

(C) Any changes in the information contained in the permit application.

bc: Mr. T. M. Courtney
Mr. J. E. Farmer
Mr. W. F. Karns
★ Mr. S. J. Kruger
★ Mr. J. H. Millican
Mr. R. C. Peterson
Mr. A. H. Phelps
Mr. F. P. Smith

The Buckeye Cellulose Corporation
Address: Perry, Florida 32347, Phone: (904) 584-3311

April 24, 1975

Mr. Frank Watkins
Northeast Regional Engineer
Florida Department of Pollution Control
3426 Bills Road
Jacksonville, Florida 32207

Dear Mr. Watkins:

I am enclosing four (4) copies each of applications for permits to operate the following sources at our Foley plant:

		Permit No.
1)	Recausticizing Vents	AO-62-2094
2)	ClO_2 Generation Vent	AO-62-2095
3)	Bleaching Vents	AO-62-2096
4)	Digesting Vents	AO-62-2097
5)	Brownstock Washing Exhaust Vents	AO-62-2098

I discussed the subject permit applications by phone today with Mr. Johnny Cole. He is familiar with the details of our plans and schedules. However, if there is a need for more information, please phone me.

Very truly yours,

THE BUCKEYE CELLULOSE CORPORATION

W. S. Maddox
Group Manager

wf
Enclosures

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL

APPLICATION TO OPERATE/CONSTRUCT POLLUTION SOURCES

SECTION I – GENERAL INFORMATION FOR ALL POLLUTION SOURCES
I TO BE FILLED IN BY APPLICANT

Source Type: Air Pollution
Type application: [X] Operation [ ] Temporary Operation [ ] Construction
Status Source: [ ] New [X] Existing [ ] Modification

Source Name: The Buckeye Cellulose Corporation County: Taylor

Source Location: Street: 5 to 6 miles southeast of Perry City: Perry
(Water Source Only) Lat: ° ' " Long: ° ' "
(Air Source Only) UTM: East 256,740 North 3,328,700

Appl. Name and Title: F. P. Smith, Plant Manager
Appl. Address: Perry, Florida 32347

II TO BE FILLED IN BY REGION (*BY BUREAU OF PERMITTING)

Control No: Region County Type *Project

Type Permit	Date Rec'd	*Permit No.	*Issue Date	*Compl. Date	*Exp. Date

Source Description: ClO_2 Generation Vent
Control Equipment: Caustic scrubber

Water Permits

Receiving Body Code: Surface Water Code:
Station No.: Influent: Effluent:

Effluent:	Average	Design	% Reduction
Flow rate, MGD			
BOD, lbs/day			
Susp. Sol., lbs/day			
Other:			

Air Permits

Operating Time: [X] Continuous [ ] Intermittent
Fuel: Type NA M-BTU/hr. In Put
Incinerator: Capacity, tons/day Type Waste
Mfg. & Model

Pollutant Emissions, lbs/day	Actual	Design	Allowable
Particulate			
Sulfur Oxides			
Other: Cl_2	Trace	NA	NA
ClO_2	"	NA	NA

Implementation: Estimated Appl. Filing Date
Estimated Start of Const. Estimated Compliance Date

DESCRIPTION OF PROPOSED PROJECT

A. Describe the nature and extent of the proposed project. Refer to existing pollution control facilities, DPC permits, conditions, orders and notices, expected improvement in performance of the facilities and state whether the proposed project will result in full compliance of the source. Attach additional sheet if necessary.

NA

B. Schedule of Project Covered in this Application (Construction Permit Application Only).

Federally or State Financed Projects only:

Planning Complete

Financing Program Complete

Indicate other local, state and/or federal agency approvals and dates

All projects:

Start of Construction

Completion of Construction

C. Costs of Construction (Show a breakdown of costs for individual components/units of the proposed project serving pollution control purpose only). Information on actual costs shall be furnished with the application for operation permit.

D. Indicate any previous DPC permits, issuance dates, and expiration dates.

AO-62-2095 5/18/73 6/1/75

AIR POLLUTION SOURCES & CONTROL DEVICES

A. Identification of Air Contaminants

1) [ ] Particulates
   a) [ ] Dust b) [ ] Fly Ash c) [ ] Smoke d) [ ] Other (Identify)

2) [ ] Sulfur Compounds
   a) [ ] SO_x as SO_2 b) [ ] Reduced Sulfur as H_2S c) [ ] Other (Identify)

3) [ ] Nitrogen Compounds
   a) [ ] NO_x as NO_2 b) [ ] NH_3 c) [ ] Other (Identify)

4) [ ] Flourides 5) [ ] Acid Mist 6) [ ] Odor

7) [ ] Hydrocarbons 8) [ ] Volatile Organic Compounds

9) [x] Other (Specify): Chlorine, chlorine dioxide

B. Raw Materials and Chemicals Used (Be Specific)

Description	Utilization Tons/day, lbs./day, etc.	Approximate Contaminant Content		Relate to Flow Diagram
		Type	Wt.	

C. Process Weight:

1) Total Process Weight Rate: NA lbs./hr. (See Sec. 17-2.04[illegible])
2) Product Weight: NA lb./hr. expressed as
3) Normal Operating Time: 24 hrs/day, 7 days/wk, if seasonal describe: 50 wks/yr

D. Airborne Contaminants Discharged:

Name of Contaminant	Actual Discharge	Discharge Criteria*	Allowable Discharge*	Relate Location to Flow Diagram
Cl_2, ClO_2	Trace	NA	NA	18-1

* Refer to Chapter 17-2 Florida Administrative Code
(Discharge Criteria: Process Weight Rate, #/ton P_2O_5, #/M BTU/hr etc.)

E. Control Devices:

Name	Eff.	Conditions of Operation, Particle Size Range, etc.	Relate to Flow Diagram
Caustic scrubber		NA	18-1

F. Fuels:

Type (Be specific)	Daily Consumption	Heat Input BTU/hr.	Relate to Flow Diagram
NA			

G. Describe briefly, without revealing trade secrets, the unit processes/operations generating the airborne emissions identified in this application:

This is an R-2 ClO_2 generation system utilizing Na_2ClO_3, NaCl and H_2SO_4. A packed column is used to scrub chlorine from chlorine dioxide absorber vent gas utilizing 3% caustic solution.

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

All liquid wastes receive primary and secondary treatment.

STATEMENTS BY APPLICANT AND ENGINEER

A. Applicant

The undersigned owner or authorized representative of * The Buckeye Cellulose Corporation is fully aware that the statements made in this application for an Operating permit are true, correct and complete to the best of his knowledge and belief. Further, the undersigned agrees to maintain and operate the pollution source and pollution control facilities in such a manner as to comply with the provisions of Chapter 403 Florida Statutes and all the rules and regulations of the Department or revisions thereof. He also understands that a permit, if granted by the Department, will be non-transferable and he will promptly notify the Department upon sale or legal transfer of the permitted establishment.

O Smith

Signature of the Owner or Authorized Representative

F. P. Smith, Plant Manager

Name and Title (Please Type)

Date: APR 24 1975 Telephone No.: (904) 584-3311

* Attach a letter of authorization

B. Professional Engineer Registered in Florida:

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the control and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution source(s) with appropriate control facilities, when properly maintained and operated, will comply 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 the applicant a set of instructions for the proper maintenance and operation of the installation covered in this application.

Signature William F Karns

Mailing Address: R. & H. Watkins & Company
Perry, Florida 32347

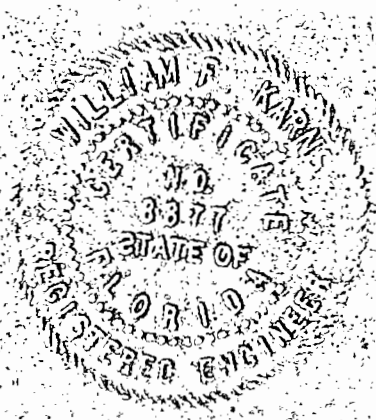
Name: William F. Karns
(please type)

Telephone No.: (904) 584-3311

Florida Registration Number 8877

Date: APR 24 1975

(Please affix seal)

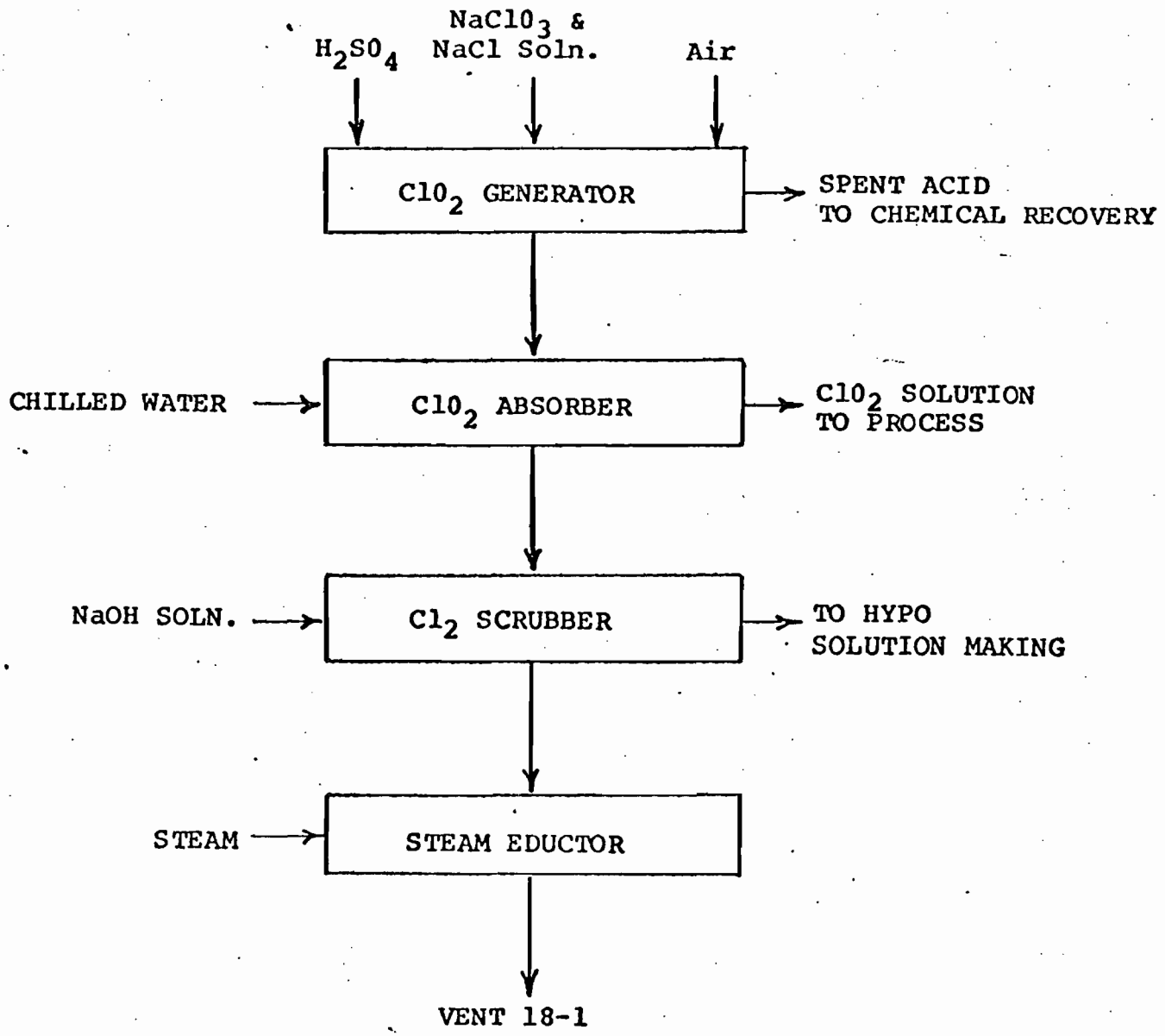


PERMITTED
BY
NORTHEAST REGION
DEPT. OF POLLUTION CONTROL
PERMIT NO. A062-2381
DATE 5/19/75

December 31, 1970

April 23, 1975

ClO_2 GENERATION FLOW SHEET



3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

G. DOUG DUTTON
SUBDISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER SUBDISTRICT

January 25, 1980

Mr. John H. Millican
Environmental Control Manager
The Buckeye Cellulose Corporation
Rt. 3, Box 260
Perry, Florida 32347

Dear Mr. Millican:

Taylor County - AP
Buckeye Cellulose Corp.
A062-2381 for ClO_2
-2382 for Brownstock Washing
-2383 for Bleaching Vents

Based on the data in the application forms in our file, we have determined that renewal of the above permits will not be required.

However, a file will be maintained on these vents and you are required to submit for our review any proposed changes, prior to implementing them, over the signatures of the plant manager and professional engineer.

If there are any questions, please contact us.

Sincerely,

Frank Watkins Jr

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

FW:jck

PM
Hand Delivered

Bruce Mitchell

PROCTER & GAMBLE CELLULOSE

Meetg: 1:45 - 2:30 9-21-89 RRM
I recommended that it be permitted in likeness as Champion Int. was.

THE PROCTER & GAMBLE CELLULOSE COMPANY
RT. 3, BOX 260
PERRY, FLORIDA 32347-9512
PHONE: (904) 584-0121

September 19, 1989

RECEIVED
SEP 21 1989
DER-BAQM

Mr. Bruce Mitchell
Bureau of Air Quality Management
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Planned Modifications to the #2 Bleach Plant
The Procter & Gamble Cellulose Company

Dear Mr. Mitchell:

As you are aware, on 9/14/89, we met with Mr. William A. Thomas and other members of the Bureau of Air Quality Management staff to review the modifications that are planned for our #2 Bleach Plant. We want to thank you for making the meeting arrangements and regret that you were unable to attend due to your travel schedule.

As we committed to Mr. Thomas, however, attached are copies of the material/ information that was shared at the meeting. Also attached is a table containing the estimated existing and expected air emissions, that will result from the project. This information was suggested by Mr. Thomas to support your review process. As we understand, you will probably assume the lead role in the evaluation of the planned changes and subsequent review of the construction permit application(s), that may be deemed necessary following the initial evaluation.

As we shared during the meeting, the project consists of two major changes (modifications to the existing #2 Bleach Plant process and replacement of the existing chlorine dioxide manufacturing facility), which are solely aimed at improving our environmental position. Consistent with our historical leadership in the environmental arena, Procter & Gamble is responding to world-wide concerns about chlorine bleaching by developing a process for producing our fluffs (diaper-related) pulp using a chlorine dioxide solution that is virtually free of molecular chlorine. In changing this process we will reduce the potential for the formation of unwanted chloro-organic compounds. As the attached information shows, the selected process modifications are also expected to result in significant reductions in various air emissions (particularly chlorine, chlorine dioxide, and chloroform).

Our present plans are to initiate construction activities in early December. As such, we would like to work with you to gain the appropriate Department reviews/approvals necessary to proceed with this schedule.

The immediate question or issue is: What, if any, are the construction permitting requirements? Our interpretation of the construction permitting requirements is included in the attached information. If construction permits are deemed to be necessary, we are prepared to submit the appropriate application(s) in early October. However, in order to meet this schedule, we will require your direction as soon as possible.

We look forward to hearing from you on the permitting question in the very near future. In the meantime, if we can provide any additional clarification, please do not hesitate to call me at (904) 584-0347.

Thanks you for your support on this important environmental initiative.

Very truly yours,

THE PROCTER & GAMBLE CELLULOSE COMPANY

R. Andreu
Environmental Control Manager

RA:msw
#2BlPlt
Attachment

cc: Mr. William A. Thomas
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

No. 2 Bleach Plant Modification Project
Pre-Application Meeting

Objectives

1. Determine/confirm which portions of the project will require construction permits.

2. Gain DER support for the achievement of the proposed construction start schedules.

The Procter & Gamble Cellulose Company
Environmental Achievements

Wastewater Treatment Program

We began the evaluation and design of our biological wastewater treatment program in 1964, eight years prior to the Clean Water Act of 1972. With this installation, which was completed in 1970, we became the first industrial facility in Florida and among the first in the Nation to install complete biological treatment.

From its inception, our wastewater treatment system has consistently delivered results that are significantly better than all established EPA standards for existing and new pulp mills. In fact, our historical results have been about 60% lower than the standards applicable to our plant. This performance is also 50% better than the next best performer.

In 1975, we recognized the negative environmental impact associated with stormwater run-off and we instituted a comprehensive program to collect all run-off from our 1,500 acre site into our treatment system. This was undertaken despite the absence of regulatory requirements.

The Procter & Gamble Cellulose Company
Environmental Achievements

Air Program

With the advent of the Clean Air Act, we were the first plant in Florida to submit a comprehensive plant-wide air pollution abatement plan that addressed the emerging regulations. While the plan was submitted in May of 1972, the actual implementation of our Air Emissions Control Program had already begun in 1971 - four years prior to the compliance deadline prescribed by the regulations. In fact, our #2 recovery boiler electrostatic precipitator was one of three units surveyed by the EPA to develop particulate limiting standards (NSPS) for the rest of the Industry.

Our concern for potentially toxic air emissions was addressed early on in our air emissions control program. In 1970, we installed a high energy tail gas scrubber in our chlorine dioxide generating plant. The following year, 1971, we also installed collection and scrubbing systems on all of our chlorine and chlorine dioxide bleaching stages. As a result, we were the first pulp mill in Florida to control bleach plant emissions.

In 1988, we became the recipient of the prestigious American Paper Institute (API) Environmental Achievement Award. This award recognized the outstanding environmental results that are being achieved with our new lime kiln in all air emission categories. In fact, our results will most likely serve as the new benchmark that all new sources will be expected to achieve.

The Procter & Gamble Cellulose Company
Environmental Achievements

Groundwater Protection Program

In 1985, in response to the emerging national concern for potential groundwater contamination due to leaking underground fuel storage tanks, we initiated (and have since completed) an underground tank elimination program. This policy was implemented, despite the absence of regulatory requirements.

Lands & Timber Management Program

Since 1984, we have completed almost 80,000 acres of bargain sales to the State of coastal property, as part of a program to save Florida's vanishing natural coastline. This represents about 65 miles of sensitive coastline, which will be preserved.

National Dioxin Study
Genesis of Pulp Industry Involvement

1983 -- Congress concerned - mandate to EPA to make study.
-- Study was to determine sources and to what degree the population was exposed.

1984 -- Pulp Industry analyzed and found no detectable levels of dioxin (detection limit 1 ppb).

1985 -- New analytical procedures developed 1,000 to 1,000,000 times more sensitive (ppt - ppq).
-- EPA using the new procedure found trace levels of dioxin in some waste sludges of Bleach Kraft mills (low ppt) and in some fish below mill discharges (mostly less than 20 ppt, Canadian Standard, or 25 ppt U.S. FDA standard).
-- EPA shared their findings with State, Media, and Industry.

1986 -- As a result of "National Dioxin Study" a "Joint EPA-Industry Five Plant Study" was initiated.

Joint EPA - Industry "Five Plant Study"

Objective

Determine the sources and quantities of dioxin within pulping process.

Results

Average concentrations detected:

Pulp	13 ppt
Wastewater	0.09 ppt
Waste Sludge	80 ppt

Conclusion

Most dioxin formed as trace contaminant during bleaching with elemental chlorine.

Since then, the EPA and Industry have jointly continued to gather more data and have begun evaluations of consumer, worker, and environmental safety.

Plant Facts

* Our operation is composed of numerous independent processes, each of which is intended to perform a specific function:
  -- Two separate pulp lines, each containing a digesting process, a bleaching process, and a pulp drying process.
  -- Common support systems/processes for both pulp mills (wood preparation, steam and power generation, and chemical recovery, etc.).

* Approximately 60% of our total production is produced in our #1 mill and is of the dissolving bleached kraft variety (used in the production of chemical derivatives such as rayon, ethers, lacquers, and numerous other products).

* The pulp produced in the #2 mill is primarily used in the manufacture filters and disposable diapers.

* The proposed project only involves our #2 bleach plant and one of our common support systems (chlorine dioxide generation facility).

* Bleach plants were initially permitted in 1975, but subsequent permit renewal was not required by DER.

FOLEY #2 BLEACH PLANT
FUNDAMENTAL CHANGE

ELIMINATE THE USE OF MOLECULAR CHLORINE VIA CHLORINE DIOXIDE SUBSTITUTION.

BLEACHING EQUIVALENCIES:

1 lb. ClO_2 = 2.63 lb. Cl_2

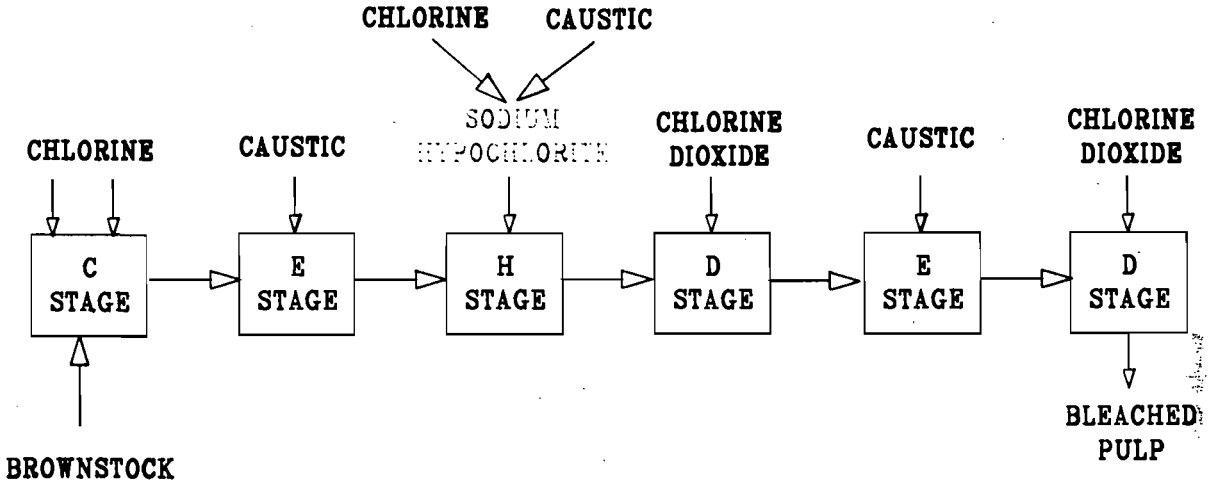
1 lb. ClO_2 = 2.83 lb. NaOCl

MAJOR EQUIPMENT CHANGES:

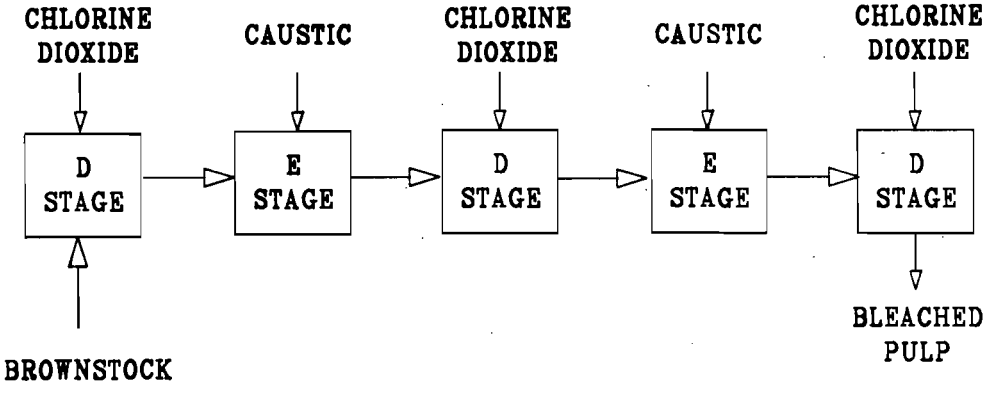
1. New ClO2 tower with scrubber
2. Eliminate existing chlorine towers
3. Bypass hypochlorite stage
4. New ClO2 plant – A&W R-8 process
5. Eliminate existing R-2 ClO2 plant

FOLEY #2 MILL BLEACH PLANT

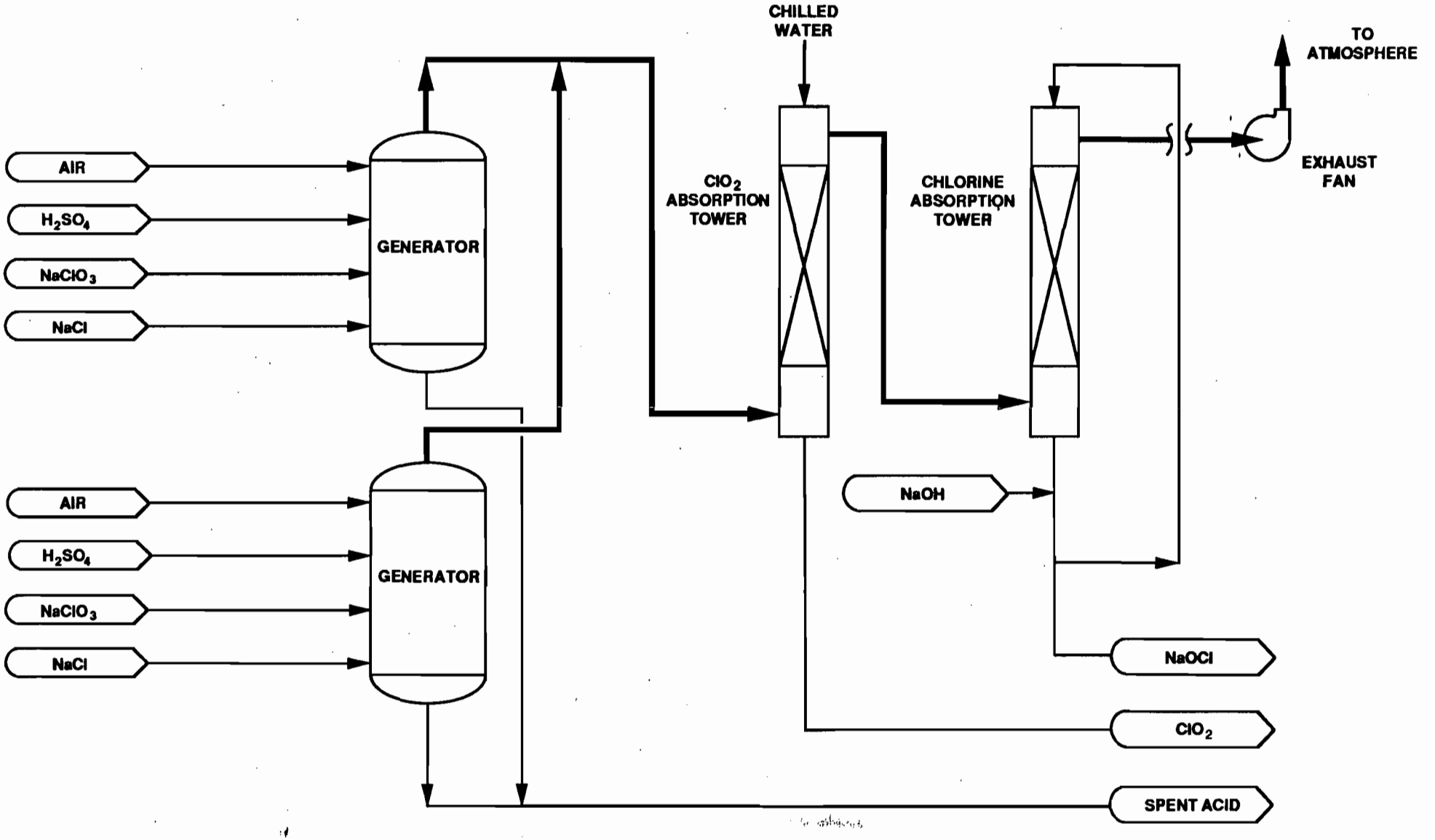
CURRENT BLEACH SEQUENCE - 6 STAGES



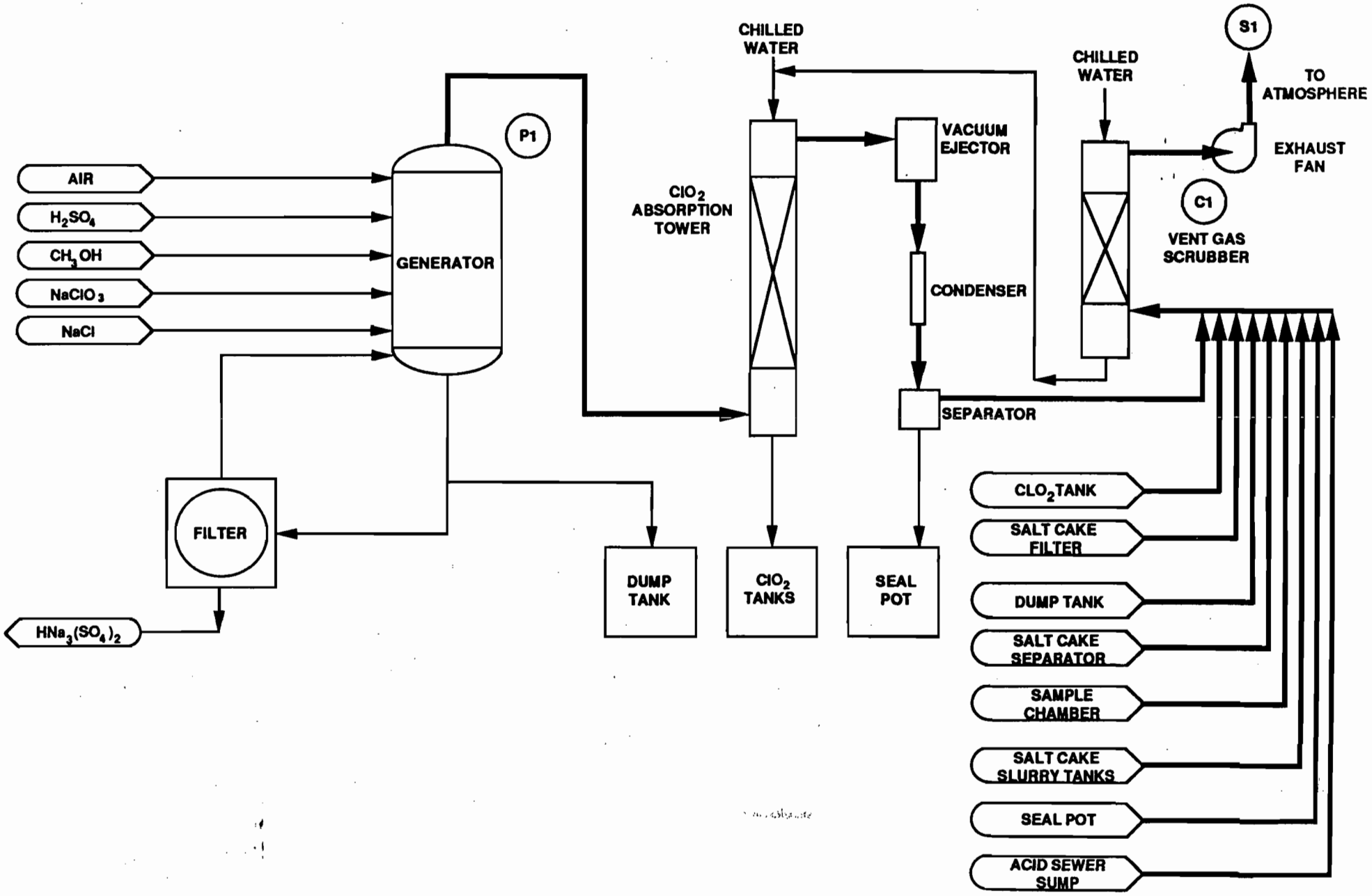
PROPOSED BLEACH SEQUENCE - 5 STAGES



R-2 PROCESS FLOW DIAGRAM



R-8 PROCESS FLOW DIAGRAM



EXPECTED IMPACTS:

Reduction in AOX formation

Net decrease in emissions:

Chlorine

Chlorine dioxide

Chloroform

Net increase in emissions:

Methanol

Construction Permitting Requirements
Interpretations

* The project consists of two major changes:
  -- #2 Bleach Plant Modifications
  -- Installation of a new chlorine dioxide generation facility.

* Rule 17-2.210(1), FAC, requires that an air construction permit shall be obtained by the owner or operator of any proposed new source or modified source prior to the beginning of construction or modification.

Interpretations

The new chlorine dioxide generator would be considered a new source and, as such, would require a construction permit.

The proposed changes to the #2 Bleach Plant, however, are considered to be a modification to an existing source. Under the definition of modification [Rule 17-2.100(122), FAC], for a change to be considered a permitted modification, it must result in an increase in actual emissions of any air pollutant regulated under Chapter 17-2.

As a result, there are two possible interpretations:

1. If the pollutants are not specifically regulated under Chapter 17-2, no permit is required for a modification; or

2. As long as there are no increases in emissions, no permit is required for a modification.

As a result, we believe that, if we conclude that there are no increases in emissions as a result of the proposed modifications to #2 Bleach Plant, no construction permit is necessary.

The Procter & Gamble Cellulose Company -- Foley Plant
Bleach Plant Modifications and Chemical Generator Project
Preliminary Emission Estimates (lb/day)

	Historical (Prior to TRS Control) (6)	Current (After TRS Control) (6)	Proposed Maximum (After R-8 & #2 Bleach Modification) (7)
Chemical Generator			
Chlorine	86 (1)	86 (1)	30 (2)
Chlorine Dioxide	377 (1)	377 (1)	125 (2)
Methanol	Not Used	Not Used	16 (3)
#2 Bleach Plant			
Chlorine	408 (1)	408 (1)	30 (1)
Chlorine Dioxide	35 (1)	35 (1)	60 (4)
Chloroform	850 (1)	850 (1)	250 (5)
Methanol Emissions From Other Sources			
Methanol	2306 (1)	1200 (1)	1400 (1)

(1) Based on NCASI emission rate data used by pulp and paper industry in 1987 and 1988 SARA 313 toxic chemical release reporting.

(2) Manufacturer's guarantee based on test data from similar facilities.

(3) AP-42 for storage tank working losses.

(4) ClO_2 emissions will not change appreciably -- the difference between the proposed maximum versus historical and current emission estimates is due to the pulp production basis.

(5) Chloroform emissions are based on zero hypochlorite use in the #2 Bleach Plant.

(6) Historical and current emissions are daily averages based on the actual pulp production.

(7) Proposed emissions are daily averages based on the present maximum permitted pulp production capacity.

RA:msw
Chart
9/20/89

Full Copy

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

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

TO: Clair Fancy

THROUGH: Ed Middleswart Edm 1/27

FROM: Jack Preece Jack

DATE: January 27, 1988

DER
JAN 28
BAQM

SUBJECT: Champion International Corporation,
Toxic Evaluation of Bleach Plant

Ref: 1) AC17-113551
2) Final Air Stripper Review Procedures

During review of applications submitted for operation permits for sources constructed by Champion International Corporation under reference 1, a check of allowed emissions against the guidelines of reference 2 was carried out. The worst case comparison was 3.7 pounds of ClO_2 per hour allowed from the tail gas of the ClO_2 generation system. The conservative estimate of maximum ambient concentration, using equation in reference 2 is:

$$MAC = ACH^B$$
$$= 327.84.37(100)^{-2.264}$$
$$= 0.0360 \text{ mg/meter}^3$$

H is 100 feet as reported in the emissions test report (test date November 20, 1987) this contrasts to H = 60 feet stated in original application for construction permit.

The acceptable ambient concentration proposed in reference 2 for ClO_2 is:

$$AAC = 0.238 (TLV/A)$$
where $A = 100 (CAT_3A)$
$TLV = 0.3 \text{ mg/m}^3$
$= 0.238 (0.3/100) = 0.000714 \text{ mg/m}^3$

This appraisal revealed the allowed emissions failed the screening test for acceptable toxic emissions by a ratio of:

$$\frac{0.0360}{0.000714} = 50.4$$

If the reference 2 guidance or some other toxic screening procedure had been in effect at the time the AC was under review, I am sure a more sophisticated modelling would have been required and probably reduced allowed emissions would have been specified.

Memo to Clair Fancy
Re: Champion Bleach Plant
January 27, 1988
Page two

I recommend that BAQM should take on the task of running more sophisticated modelling to determine what emissions will comply with the proposed AAC. The more sophisticated modelling should be less conservative than the reference 2 equation in the following:

1) Include plume rise due to exit velocity from the stack (ACFM 910, Stack diameter 10 inches)

2) Use 5 years of actual meterological data vs worst case meterological assumption of reference 2

3) Time average calculated ambient concentrations vs instantaneous maximum concentration, assumption of reference 2. I recommend time averaging should equal 168 hours.

4) Receptors should be located at plant property lines vs maximum location assumed by reference 2.

Additionally, the impact of four other sources of Cl_2 and ClO_2 emissions combined with the one worst case source discussed above should be evaluated.

In the meantime, I plan to recommend issuance of operation permits with allowed emissions as specified in the AC, but with the condition that more stringent allowed emissions forthcoming from toxics rulemaking shall be applied. Further, the permit shall contain surrogate parameter limits to assure actual emissions measured by test (0.35 pounds per hour) are continued.

JP/jpl

cc: Steve Smallwood

Copied: Bruce Mitchell
Barry Andrews
C H F / BT
1.28.88 mm