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

December 12, 1984

DER

DEC 18 1984

BAQM

Mr. Clair Fancy, P.E.
Central Permitting Section
Department of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301-8241

Re: Jacksonville Bulk Terminal

Dear Mr. Fancy:

Enclosed is a request from the captioned facility for permit revision. Under separate action Permits AO16-30977 (ship loading conveyor) and AO16-69333 (rail car unloading) have been revised accordingly.

Please take appropriate action on Permit AC16-58548. BESD supports the revision to allow the handling of monammonium phosphate and silica sand.

There is one point of concern which needs to be clarified. In previous discussions, JBT representatives have stated that the dust control system on the ship loading spout (ie: two baghouses) cannot be used with diammonium phosphate and super triple phosphate because of the hygroscopic nature of the material and the added oil to the product, which would cause the baghouse(s) to malfunction (blinded bags). However, the rail car unloading system (with baghouse) is required to be in operation when any of the above products are unloaded.

BESD supports the action of not requiring wetting agents to be used on the ship loading conveyor (Permit AO16-30977) when loading super triple phosphate, diammonium phosphate, or monammonium phosphate; however, the baghouse control system should be operating under all loading conditions. Should JBT have objections to this requirement, substantial justification of probable baghouse malfunction should be presented.

If you have any questions concerning this matter, please advise.

Very truly yours,

Jerry E. Woosley
Assistant Engineer

JEW/cb
Encl.
cc: BESD File/1660-I
Doug Dutton - DER
Al Csontos - Jacksonville Bulk Terminal

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

RECEIVED
NOV 27 1984
AIR & WATER POLLUTION CONTROL - CITY OF JACKSONVILLE

November 16, 1984

DER
DEC 18 1984
BAQM

Mr. Jerry Woosley
Department of Bio-environmental Services
515 West 6th Street
Jacksonville, FL 32206

Re: Jacksonville Bulk Terminal - Permit Modifications

Dear Mr. Woosley:

By this letter we are requesting modifications to the following Jacksonville Bulk Terminal air quality permits to provide for loading of two additional materials, ie. monammonium phosphate (MAP) and silica sand:

AO16--2459	Conveyor belt transfer points
AO16-69333	Railcar unloading
AC16-58548	Dust control system

The sand would be handled under contract approximately 12 - 14 times per year in shipments of about 5,000 tons each. Loading would require 8 - 12 hours and include operation of all dust control system appropriate to the loading system(s) being utilized. The material is pure silica sand product for use in the manufacture of glass.

Monammonium phosphate (MAP) is a similar formulation to diammonium phosphate (DAP) currently permitted at this facility. Due to its nature the baghouses and conveyor wetting systems will not be utilized on this material. It is however oiled prior to shipment and when loaded in conjunction with the new vessel loading spouts the minor resulting dust generation should not be more than that when loading DAP. Only one shipment of 15,000 tons is currently anticipated at this time. Loading rates for both products will not exceed 1,000 metric TPH.

It is anticipated that dust generation from loading these products will be substantially below that experienced with phosphate rock and that each will meet a 10% opacity level. Please advise if you require further information to implement these permit modifications. Your assistance is appreciated.

Sincerely,

A. L. Csontos

A. L. Csontos, P. E.
Environmental Engineer

psb

Enclosure

cc: M. P. McArthur
R. A. Bowman
W. W. Atwood
S. Broussard
R. King

W. Hanks

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

November 5, 1984

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. M. P. McArthur
Vice President
Jacksonville Bulk Terminal
1301 Wigmore Street
Jacksonville, Florida 32206

Dear Mr. McArthur:

Re: Modification of Conditions
Permit No. AC 16-58548

The departament is in receipt of Mr. A. L. Csontos's letter dated October 11, 1984, in which he requested the expiration date and compliance test schedule in the referenced construction permit be changed. This request is acceptable and the expiration date and specific condition are changed as follows:

Expiration Date

From: December 15, 1984
To: June 15, 1985

Specific Condition

From: 10. The Company will comply with the following increments of progress.

a) Order control equipment by 5/1/83.
b) Complete final engineering by 7/1/83.
c) Begin installation of control equipment by 9/16/83.
d) Complete installation of control equipment by 7/15/84.
e) Test facility for compliance by 9/15/84.

To: 10. The Company shall comply with the following schedule:

a) Report all shiploading operations to the Bio-Environmental Services 15 days prior to operating the facility.

b) Conduct the compliance tests required by the permit to construct as soon as possible but no later than February 15, 1985. Notify Bio-Environmental Services 15 days prior to the compliance test. Visible emissions tests by EPA Method 9 shall be for a minimum of 1 hour. Particulate matter and visible emissions test on the baghouse shall be conducted simultaneously.

c) Submit a complete application for permit to operate, that includes the compliance test report, to the Bio-Environmental Services by March 15, 1985.

Attachments to be Incorporated

Mr. A. L. Csontos's letter dated October 11, 1984.

This letter must be attached to construction permit No. AC 16-58548, and shall become a part of that permit.

Sincerely,

Victoria J. Tschinkel

Victoria J. Tschinkel
Secretary

VJT/ks

cc: J. Cole, NE District
J. Woosley, Bio-Environmental Services

attachment: 10/11/84 letter

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

DER
NOV 6 1984
BAQM

For Routing To District Offices And/Or To Other Than The Addressee

To: _____ Loctn.: _____
To: _____ Loctn.: _____
To: _____ Loctn.: _____
From: _____ Date: _____

Reply Optional [ ] Reply Required [ ] Info. Only [ ]
Date Due: _____ Date Due: _____

RECEIVED
NOV 5 1984
Office of the Secretary

TO: Victoria J. Tschinkel

FROM: Clair Fancy

DATE: November 5, 1984

SUBJ: Modification of Permit No. AC 16-58548
Jacksonville Bulk Terminal

Attached is a letter drafted for your signature that will change the expiration date and modify a specific condition in a construction permit that was issued to Jacksonville Bulk Terminal for a phosphate material ship loading facility.

The bureau recommends its approval.

CHF/WH/s

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

October 19, 1984

Mr. Clair Fancy, P.E.
Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32301

DER
OCT 22 1984
BAQM

Re: Jacksonville Bulk Terminal
Permit AC16-58548

Dear Mr. Fancy:

Bio-Environmental Services Division(BESD) supports the extension of the captioned permit as requested in Mr. A. L. Csontos' letter dated October 11, 1984 and as suggested in the BESD letter (copy enclosed) dated August 30, 1984.

It is also suggested that Specific Condition No. 3 and No. 4 of the captioned permit be revised to read:

3. Emissions from the loading equipment and control devices shall not exceed:

   (a) 5 percent opacity from the conveyor and associated equipment.

   (b) 10 percent opacity from the ship hold.

   (c) 0.03 grains (particulate) per dry standard cubic foot and 5 percent opacity from each baghouse exhaust.

4. EPA Reference Methods 1, 2, 5, and 9 (40 CFR 60, Appendix A) shall be used to determine the compliance status of the source. All visible emission tests shall be a minimum of one hour. Particulate and visible emission tests shall be conducted simultaneously on the baghouses.

Please direct any questions or comments to the undersigned.

Very truly yours,

Jerry E. Woosley

Jerry E. Woosley
Assistant Engineer

JEW/vj
Enclosure

cc: Mr. Doug Dutton - DER
cc: Mr. Al Csontos
cc: BESD/File 1660-I

DER
OCT 16 1984
BAQM

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

October 11, 1984

Mr. Willard Hanks
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, FL 32301

Re: Permit No. AC16-58548

Dear Mr. Hanks:

Compliance testing of loading tower No. 1 at our Jacksonville Bulk Terminal was conducted on September 15, 1984 in accordance with Specific Condition 10e of the above noted construction permit. The testing schedule was coordinated with the Jacksonville Department of Bio-environmental Services staff, various members of which inspected the facility prior to the test. None were able to be present during the test period.

Due to operational problems and high winds test results were inconclusive. Based upon this experience certain design improvements will be incorporated into the system. Completion of these improvements is anticipated during November, 1984. However, no additional rock shipments are scheduled during the coming months limiting further opportunities for testing. Therefore, an extension of the permit expiration date is hereby requested.

Further compliance tests will be conducted as soon as possible. However, to allow for uncertainties in ship scheduling we request that DER extend permit performance dates as follows:

a) Test facility for compliance by 2/15/85.

b) Submit operating permit applications by 3/15/85.

c) Extend construction permit date to 6/15/85.

Your timely consideration of this request is appreciated.

Sincerely,

A. L. Csontos

A. L. Csontos, P. E.
Environmental Engineer

cc: M. P. McArthur, Occidental
J. Woosley, Bio-environmental Services
R. King, Jacksonville Bulk Terminal

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

August 30, 1984

Mr. Clair Fancy, P.E.
Dept. of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301

DER
SEP 4 1984
BAQM

Re: Jacksonville Bulk Terminal
Permit AC16-58548

Dear Mr. Fancy:

Enclosed is a letter from Occidental Chemical Co. outlining problems with testing of the phosphate loading operation at the captioned facility. It is noted that the current permit expires October 1, 1984. Upon review of the current situation, the following items are suggested:

(1) Extend expiration of Permit AC16-58548 to June 15, 1985.

(2) Require compliance testing as soon as possible but no later than February 15, 1985 in accordance with Rule 17-2.650(2)(f)4.b., Florida Administrative Code. Note: Testing shall be a minimum of one hour.

(3) A complete application for an Operation Permit (including compliance tests and other applicable permit requirements) shall be submitted to Bio-Environmental Services Division on or before March 15, 1985.

Enforcement action for violation of any of the applicable rules or permit conditions shall be initiated.

Your prompt consideration of these items is appreciated.

Please direct all questions or comments to Wayne Tutt or the undersigned.

Very truly yours,

Jerry E. Woosley

Jerry E. Woosley
Assistant Engineer

JEW/vj
Enclosure

cc: Mr. Doug Dutton - DER, with enclosure
cc: Mr. W. W. Atwood, without enclosure

Pace
Mehta
Worsley
Zett
Respond if appropriate
C

OXY

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

RECEIVED
AUG 23 1984
AIR & WATER POLLUTION CONTROL • CITY OF JACKSONVILLE

August 22, 1984

Mr. Steve Pace
Department of Health, Welfare
and Bio-Environmental Services
515 West 6th Street
Jacksonville, FL 32206

Re: Dust Control System for Phosphate Rock
Shiploading Facility (Permit No. AC16-58548)

Dear Steve:

In accordance with the terms of reference permit compliance tests are to be run on this facility by September 15, 1984, subsequent to a final compliance date of March 15, 1985.

Based on the best sales information we now have, there will be no phosphate rock export sales (or loading at JBT) until early 1985.

Work to date includes a start-up test, which while promising, did not appear to meet our goal. Changes therefore are now being considered and several tests for the equipment itself are underway so that we can be as prepared as possible for compliance testing at the next opportunity.

In the meantime, we will keep you informed and would be pleased, at your convenience to have you inspect the in-place equipment.

Sincerely,

Wes Atwood

W. W. Atwood
Manager, Environmental Control

WWA/psb

cc: A. Csontos
J. Bliss
R. King

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

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

TO: Clair Fancy CBF-DF

THRU: Bill Thomas

FROM: Willard Hanks wmh

DATE: March 11, 1983

SUBJ: Jacksonville Bulk Terminals
Modification of Permit Conditions

Jacksonville Bulk Terminals operates a shiploading facility in Duval County's particulate matter nonattainment area. The source is subject to RACT regulations which require an application for permit which contains increments of progress with final compliance by a specified date. Paragraph 17-2.650(2)(f)5. of the RACT regulations authorizes the department to approve alternate increments of progress, other than the final compliance date, when increments of progress are justified by the nature of the specific work to be done and they are requested by the owner or operator on or before the latest applicable permit application filing date for the type source involved.

The source applied for and was issued a construction permit with alternate increments of progress, as authorized by the rule, because the nonattainment area was in the process of being redesignated at the time the application was due, and a question existed as to what rules would be applicable to the source. The source is now requesting that several increment dates (but not the final date of compliance) be changed. A summary of the increment schedule is shown on page two.

Item	Schedule in Application	Changes Requested *
Investigative Engineering	7/15/82	NC
Preliminary Engineering	10/1/82	NC
Final Engineering	6/1/83	7/1/83
Contract Award	3/1/83	5/1/83
Construction	7/15/84	NC
Test for Compliance	9/15/84	NC

*NC - No Change

BES initially objected to the extension of the interim dates in their February 23, 1983 letter because they are concerned with the applicant installing the control equipment by the date required in Chapter 17-2. Based on a March 2 phone conversation with Mr. Jerry Woosley, BES is still concerned about the Company complying with the RACT regulations but no longer objects to the extension of the increment dates for engineering and award of the contract for the control equipment.

The Bureau notes that the applicant stated that the extension of the two interim dates in the schedule will not delay the schedule completion of the project. The department's regulations, including paragraph 17-2.650(2)(f)5, authorize the department to extend increment dates as long as the final date of compliance is not extended.

BAQM recommends the specific conditions of permits AC 16-58548 be changed, the extension requested by the applicant be granted, and a more detailed project schedule be included in the permit to assure the county and the state that the applicant is proceeding on schedule to control the emissions from this source.

WH/ks

cc: Bio-Environmental Services
Northeast District

March 15, 1983

Mr. M. P. McArthur
Vice-President
Jacksonville Bulk Terminals
1301 Wigmore Street
Jacksonville, Florida 32206

Dear Mr. McArthur:

Modification of Conditions
Permit No. AC 16-58548

We are in receipt of your request for a modification of the permit conditions. The conditions are changed as follows:

Original Specific Condition

1. Final plans and specifications, including an operation and maintenance plan (17-2.650(2)(g)) of the control equipment selected for the phosphate rock shiploading facility, will be submitted to the Department for approval on or before March 1, 1983. These specifications will become a part of the permit to operate this source (17-2.650(2)(d)1.).

Revised Specific Condition

1. Final plans and specifications, including an operation and maintenance plan (17-2.650(2)(g)) of the control equipment selected for the phosphate rock shiploading facility, will be submitted to Bio-Environmental Services for approval on or before May 1, 1983. These specifications will become a part of the permit to operate this source (17-2.650(2)(d)1.).

Original Specific Condition

10. The Company will comply with the following increments of progress.

    a) Order control equipment by 3/1/83.

    b) Complete final engineering by 6/1/83.

c) Install control equipment by 7/15/84.

d) Test facility for compliance by 9/15/84.

Revised Specific Conditions

10. The Company will comply with the following increments of progress.

a) Order control equipment by 5/1/83.

b) Complete final engineering by 7/1/83.

c) Begin installation of control equipment by 9/16/83.

d) Complete installation of control equipment by 7/15/84.

e) Test facility for compliance by 9/15/84.

New Specific Conditions

11. Jacksonville Bulk Terminal shall submit quarterly progress reports giving the status and estimated dates of completion of construction and start of operation of this control system to: Bio-Environmental Services Division, 515 West 6th Street, Jacksonville, Florida 32206-4397.

12. Jacksonville Bulk Terminal will not operate after July 15, 1984, unless air pollution control equipment is installed on the shiploading equipment at the plant.

This letter must be attached to your permit and becomes a part of that permit.

Sincerely,

/s/Victoria J. Tschinkel

Victoria J. Tschinkel
Secretary

VTJ/ks

cc: Northeast District
Bio-Environmental Services

3/9

Willard

I made a few min changes. As long as rule says what it does & BES has no problem - proceed. Your memo to Bell's I should stay with package as it explains how & why we can do this.

Clare

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE 3-8-83

KAHEL		FANCY		STARNES	
BLOMMEL		THOMAS		MARTY HALL	
BARKER		GEORGE		MARSHALL MOTT-SMITH	
J. ROGERS		PALAGYI			

REMARKS

(1) Isn't this our decision to make?

(2) What do you think? Let's discuss. talked to Rece

(3) Have you ~~[illegible]~~ draft response

(4)

(5) file

INFORMATION
- REVIEW & RETURN
- REVIEW & FILE
- INITIAL & FORWARD

DISPOSITION
- [X] REVIEW & RESPOND
- PREPARE RESPONSE
- [X] FOR MY SIGNATURE
- FOR YOUR SIGNATURE
- [X] LET'S DISCUSS
- SET UP MEETING
- INVESTIGATE & REPT
- INITIAL & FORWARD
- DISTRIBUTE
- CONCURRENCE
- FOR PROCESSING
- INITIAL & RETURN

FROM

STEVE SMALLWOOD SJS

DATE 2-26-83

PHONE

Best Available Copy

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP
BAQM - Central Air Permitting

ACTION NO.

ACTION DUE DATE

TO (NAME, OFFICE LOCATION)				INITIAL / DATE
1 AMODIO	BOCK	GEORGE	HANKS	
2 HERON	HODGES	HOLLADAY	KING	
3 PALAGYI	POWELL	ROGERS	SVEC	
4 ~~THOMAS~~ VEGA	FILE		ALL	

REMARKS:

Attached is my recommendation re Jax. Bulk Terminal Request should S.G. 12 be added to permit?

Steve said a lot of people should be involved in the Dept. response to Jax. Bulk Tr. I don't think it is necessary.

If you or Clair think others should be involved, please circulate proposed response for their comments.

FROM: Linda

DATE: 3-4-87

INFORMATION
- REVIEW & RETURN
- REVIEW & FILE
- INITIAL & FORWARD

DISPOSITION
- REVIEW & RESPOND
- PREPARE RESPONSE
- FOR MY SIGNATURE
- FOR YOUR SIGNATURE
- LET'S DISCUSS
- SET UP MEETING
- INVESTIGATE & REPT
- INITIAL & FORWARD
- DISTRIBUTE
- CONCURRENCE
- FOR PROCESSING
- INITIAL & RETURN

2/28

Bill -

Please have review engineer for this permit, in conjunction with Watt & legal, draft response for Starnes sig by 3/8. Jid like to see draft response.

Clair

...AL REGULATION

...IP

ACTION NO 83-025

ACTION DUE DATE 3-8-83

STARNES	
MARTY HALL	
MARSHALL MOTT-SMITH	

REMARKS

OK / JK
Bulk Terminal

Request for Extension
- permit
- TSP Rule

PDCE?

INFORMATION
- REVIEW & RETURN
- REVIEW & FILE
- INITIAL & FORWARD

DISPOSITION
- REVIEW & RESPOND
- PREPARE RESPONSE
- FOR MY SIGNATURE
- FOR YOUR SIGNATURE
- LET'S DISCUSS
- SET UP MEETING
- INVESTIGATE & REPT
- INITIAL & FORWARD
- DISTRIBUTE
- CONCURRENCE
- FOR PROCESSING
- INITIAL & RETURN

FROM: STEVE SMALLWOOD

DATE: 2-26-87

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

February 23, 1983

Willard

Mr. Steve Smallwood, P.E.
Chief
Bureau of Air Quality Management
Dept. of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301

DER
FEB 25 1983
BAQM

Re: Jacksonville Bulk Terminals
Permit #AC16-58548

Dear Mr. Smallwood:

Enclosed is a copy of a letter from Occidental Chemical Company dated February 11, 1983 requesting extensions in the referenced permit compliance dates.

Upon review, Bio-Environmental Services Division (BESD) recommends that the requested extensions be denied for the following reasons:

(1) Extensions for compliance were previously granted and are already reflected in the existing permit.

(2) Engineering studies and corporate approval should have been completed prior to applying for a modification permit.

It is BESD's opinion that if the requested extensions were granted, a rule change would be required pursuant to Chapter 17-2.650(2)(f)5 FAC.

Should you have any questions concerning our comments, please advise.

Very truly yours,

Robert S. Pace, P.E.
Bio-Environmental Engineer

RSP/JEW/vj
Enclosure

cc: Mr. Doug Dutton - DER, without enclosure
cc: Mr. Clair Fancy - DER, Tall., with enclosure
cc: Mr. Wes Atwood - Occidental Chemical Co., without enclosure

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

February 23, 1983

FEB 25 1983
BAQM

Mr. Steve Smallwood, P.E.
Chief,
Bureau of Air Quality Management
Dept. of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301

Re: Jacksonville Bulk Terminals
Permit #AC16-58548

Dear Mr. Smallwood:

Enclosed is a copy of a letter from Occidental Chemical Company dated February 11, 1983 requesting extensions in the referenced permit compliance dates.

Upon review, Bio-Environmental Services Division (BESD) recommends that the requested extensions be denied for the following reasons:

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(2) Engineering studies and corporate approval should have been completed prior to applying for a modification permit.

It is BESD's opinion that if the requested extensions were granted, a rule change would be required pursuant to Chapter 17-2.650(2)(f)5 FAC.

Should you have any questions concerning our comments, please advise.

Very truly yours,

Robert S. Pace, P.E.
Bio-Environmental Engineer

RSP/JEW/vj
Enclosure

cc: Mr. Doug Dutton - DER, without enclosure
cc: Mr. Clair Fancy - DER, Tall., with enclosure
cc: Mr. Wes Atwood - Occidental Chemical Co., without enclosure

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

FEB 14 1983
AIR & WATER POLLUTION CONTROL - CITY OF JACKSONVILLE

February 11, 1983

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

Re: Dust Control System for Phosphate Rock Shiploading Facility, Permit No. AC16-58548; Request for Extension.

Dear Steve:

This will confirm my meeting with Jerry Woolsey on February 8, at which time we discussed our progress on the shiploading dust control system. We have respectfully requested an extension of the March 1 compliance date for the purchase of equipment until May 1. We also requested an extension of the final engineering plan date from June 1 to July 1, 1983.

During this period of time, we intend to:

(1) Further examine the need for a tilting spout that now appears to be necessary to accommodate some Phosphate Rock ships. We do not believe this will obviate the use of a Midwest type spout, but further time is desirable for engineering studies.

(2) Request and examine proposals modified for changes discussed above.

(3) Evaluate the overall economic impact of this expenditure on our operation.

(4) Prepare final recommendations to management and obtain corresponding approvals.

We assure you that the final date for this project will not change. The attached revised schedule reflects this commitment.

Sincerely yours,

W. W. Atwood, Environmental Manager

WWA/pab

cc: M. P. McArthur
Vice-President and General Manager

attachments: -Schedule
-Chronology of activities

ACTIVITIES SUMMARY

PHOSPHATE ROCK VESSEL LOADING, DUST CONTROL IMPROVEMENTS

PERSONNEL: JACKSONVILLE BULK TERMINALS, INC. (JBT)
OCCIDENTAL CHEMICAL COMPANY, WHITE SPRINGS, FLORIDA; HOUSTON, TEXAS

09/10/81 First visit to Ashland Coal, Huntington, West Virginia, re: DETER FOAM SYSTEM.

02/05/82 WEN-DON CORPORATION, Sales Engineering visit-review, propose modifications to Johnson-March System; physical and wetting agent changes.

02/18/82 Second visit to Ashland Coal- Conclusion: try alternative that should give equivalent results.

03/ /82 Visit to Tampa, Florida Port.

03/ /82 Designed, constructed, tested water spray ring in hold of ship; lowered chute into hold (04/07/82).

03/09/82 Johnson-March Engineering visit to JBT- Recommendations to improve spray dust control system.

03/24/82 Rock and water samples to Nalco Chemical for analysis to confirm proper spray rates and wetting agent concentrations in use at JBT. Conclusions received June 3. May switch to Nalco 8800.

04/05/82 Modified spray ring twice and tested on three more ships (04/23/82; 05/02/82; 05/05/82). Conclusion: combination of lowering chute and spraying wetting agent and water around spout reduced dust 30/50%.

04/17/82 Industrial Power Systems Labs Engineering visit and on 04/15 received automatic spout level control proposal to use in conjunction with ring water sprays.

05/03/82 Contacted Linder Industrial Machinery, Lakeland, Florida, re: Midwest spout dust control system.

05/11/82 Visit to Galveston, Texas, Farmer's export facility, re: Midwest loading spout.

05/20/82 Visit to St. Louis, Mo.; Cape Girardeaux, La., re: Midwest spout installation at Pillsbury Company, Consolidated Grain Company, Marquette Cement Company.

05/20/82 Contacted North Carolina Phosphate, re: their proposed design for shiploading. Suggested a DCL spout (outgrowth of Midwest).

05/26/82 Designed a test "free fall breaker" spout.

ACTIVITIES SUMMARY, page two

05/27/82 Visit to Linder Industrial Machinery, Lakeland, Florida. Discuss proposals for a Midwest spout dust control system.

06/01/82 Received Sales/Design information from DCL Company, Charlevoix, Michigan.

06/02/82 Contact with H. F. Mason, DCL Representative, truck loading, Col., Tennessee.

06/08/82 Constructed free fall breaker spout.

06/09/82 Visited DCL spout truck loading operation, Columbia, Tennessee, at Union Carbide loading carbon.

06/09/82 Received proposals from Linder, re: Midwest spout, with dust collector.

06/09/82 Reviewed preliminary installation requirements.

06/21/82 Plan to test "free fall breaker spout" in combination with water spray ring on scheduled shiploading (no other rock shiploading since May 5).

07/07/82 Baltimore - Midwest Installation visit.

07/08/82 Minnesota - Midwest Installation visit.

07/09/82 Midwest Factory visit.

07/27/82 Visited JBT to confirm structural design and integrity and to observe standard loading procedures by Longshore and Occidental Personnel.

08/10/82 Discussed options and controls for new loading spout with E. Mallard.

08/23/82 Observed dust generation during a dical loading with spout above hatch and spout at one foot from pile surface. Conceptual design data generated for 6000 cfm reverse jet type baghouse.

08/23/82 Initiated investigation into Metcalf's Alum-A-Lite dust suppressor.

09/16/82 Structural analysis of shiploading booms completed.

09/27/82 - 10/01/82 Tested stage one bullet and Alum-A-Lite dust suppressor with 45° angle transition section.

10/20/82 Tested Alum-A-Lite dust suppressor in vertical position and stage two bullet.

10/24/82 Employed R. S. Fling, Inc. to evaluate spout alternatives.

10/30/82 Tested stage three bullet type dust suppressor with aspiration while loading TSP at 1000 TPH maximum, R. Matye, Rep. of DCL attending.

11/08/82 Tested stage three bullet while loading phosphate rock at 3400 TPH with rubber skirt and aspiration.

12/21/82 Tested R. S. Fling designed dust suppressor and stage three bullet with aspiration at locations on the spout and suppressor. K. Lloyd, representative of R. S. Fling, attending.

01/12/83 Revised spout design recommendations with drawings received from R. S. Fling, Inc.

01/26/83 Tested stage three bullet using greater aspiration from top of shroud.

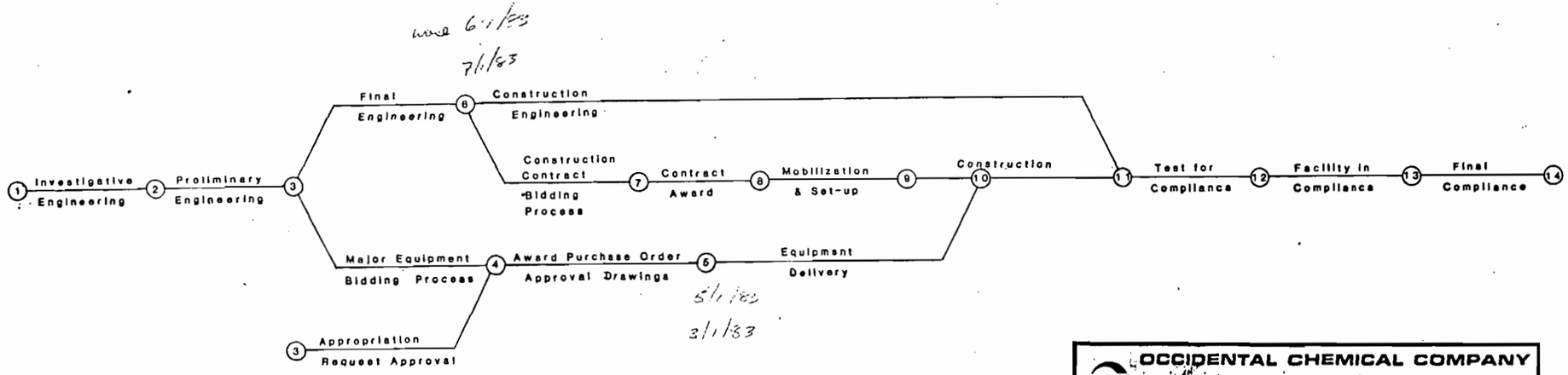
01/28/83 Meeting with R. Nolan, engineer for R. S. Fling, to discuss spout design, structural requirements, and spout articulation.

01/31/83 Tested improved aspirated bullet suppressor with higher velocity blower.

02/06/83 Tested double shrouded bullet and scavenger model using new blower.

REVISED 2/83

1- 3/15/82
2- 7/15/82
3- 10/1/82
4- 1/15/83
5- 5/1/83
6- 7/1/83
7- 7/15/83
8- 8/1/83
9- 8/15/83
10- 9/15/83
11- 7/15/84
12- 9/15/84
13- 1/15/85
14- 3/15/85



OCCIDENTAL CHEMICAL COMPANY
OXY
SUWANNEE RIVER PHOSPHATE DIVISION

TITLE
VESSEL LOADING DUST CONTROL
CPM PROJECT SCHEDULE REVISED

PLANT
JOB NO. 11J-87
CHARGE NO.

No. 0157898

RECEIPT FOR CERTIFIED MAIL

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

SENT TO: Mr. M. P. McArthur	
STREET AND NO.: 1301 Wigmore St.	
P.O., STATE AND ZIP CODE: Jacksonville, FL	
POSTAGE	$
CERTIFIED FEE	¢
SPECIAL DELIVERY	¢
RESTRICTED DELIVERY	¢
RETURN RECEIPT SERVICE: SHOW TO WHOM AND DATE DELIVERED	¢
RETURN RECEIPT SERVICE: SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
RETURN RECEIPT SERVICE: SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
RETURN RECEIPT SERVICE: SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES	$
POSTMARK OR DATE: 1/12/83	

CONSULT POSTMASTER FOR FEES
OPTIONAL SERVICES

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1979

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

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

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

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
Mr. M. P. McArthur
1301 Wigmore Street
Jacksonville, FL 32206

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0157898	

(Always obtain signature of addressee or agent)

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

DATE OF DELIVERY: 1-13-83

POSTMARK: JACKSONVILLE FLA JAN 14 1983

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

CLERK'S INITIALS

☆GPO : 1979-300-459

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

BOB GRAHAM
GOVERNOR

Victoria J. Tschinkel
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

January 11, 1983

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. M. P. McArthur
Vice President
Jacksonville Bulk Terminals
1301 Wigmore Street
Jacksonville, Florida 32206

Dear Mr. McArthur:

Enclosed is Permit Number AC 16-58548, dated January 6, 1983 to Jacksonville Bulk Terminals issued pursuant to Section 403, Florida Statutes.

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

Sincerely,

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

CHF/pa

Enclosure

cc: Dr. John B. Koogler
Mr. W. Atwood
Mr. Jerry Woosley
Mr. John Ketteringham

DER Form 17-1.122(65)

FINAL DETERMINATION

Jacksonville Bulk Terminals, Inc.
Duval County

Dust Control System for Phosphate Rock Shiploading Facility

Permit Number
AC 16-58548

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

January 4, 1982

FINAL DETERMINATION

Jacksonville Bulk Terminals, Inc.

AC 16-58548

The Technical Evaluation and Preliminary Determination for the proposed dust control system on the phosphate rock shiploading facility of Jacksonville Bulk Terminals, Inc. was made available for public review beginning the last week of October, 1982. A legal notice was published in The Florida Times Union on November 19, 1982 informing the public of the proposed project, the location of the evaluation and procedure for submitting comments on the department's intent to issue a construction permit.

No comments on its proposed intent were received by the department. The department recommends the applicant be issued a permit to construct the dust control system on the phosphate rock shiploading facility as proposed in the Technical Evaluation and Preliminary Determination.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

APPLICANT:

Jacksonville Bulk Terminals, Inc.
1301 Wigmore Street
Jacksonville, Florida 32206

PERMIT/CERTIFICATION
NO. AC 16-58548

COUNTY: Duval County

PROJECT: Dust Control System for Phosphate Rock Shiploading Facility

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

For the construction of a Midwest International or equivalent dust control system for the 3,000 TPH phosphate rock loading facility at Jacksonville Bulk Terminal. The facility is located on the St. Johns River in Jacksonville, Duval County, Florida.

The UTM coordinates of the source are 439.300 km E and 3359.800 km N.

Construction shall be in accordance with the permit application dated July 12, 1982 and the information submitted in Occidental Chemical Company's letter dated September 7, 1982.

PERMIT NO.: AC - 16-58548
APPLICANT: Jacksonville Bulk Terminals, Inc.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions:, and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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

3. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

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

6. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.

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

8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalities therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.

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

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

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

12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

13. This permit also constitutes:

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

PERMIT NO.: AC 16-58548
APPLICANT: Jacksonville Bulk Terminals, Inc.

SPECIFIC CONDITIONS:

1. Final plans and specifications including an operation and maintenance plan (17-2.650(2)(g)), of the control equipment selected for the phosphate rock shiploading facility will be submitted to the Department for approval on or before March 1, 1983. These specifications will become a part of the permit to operate this source (17-2.650(2)(d)1.).

2. Equipment will be sized to handle a minimum of 3,000 TPH phosphate rock.

3. Emissions from the loading equipment and control device will not exceed:

   a) 5 percent opacity from the conveyor and associated equipment.

   b) 10 percent opacity from the ship hold.

   c) 0.03 grains per dry standard cubic foot from the exhaust particulate matter laden gases.

4. EPA methods 1, 2, 5 and 9 (40 CFR 60, Appendix A) will be used to determine the compliance status of the source.

5. Maximum operation time of this equipment shall not exceed 370 hours per year nor shall the equipment load more than 1,000,000 tons of phosphate rock per year.

6. The applicant will demonstrate compliance with the conditions of this construction permit and submit a complete application for an operating permit to Jacksonville Bio-Environmental Service Divisions a minimum of 90 days prior to the expiration date of this construction permit. The permittee may then continue to operate in compliance with all terms of this permit until the expiration date or issuance of an operating permit.

7. All fugitive dust generated at this site shall be adequately controlled.

8. Submit for this facility, each year, on or before November 15, an emission report for the preceding year, October 1-September 30, containing the following information:

   a) Annual amount of material shipped.

   b) Annual emissions (note calculation basis).

c) Any changes in the information contained in the permit application.

9. Test the emissions from the facility for visible emissions annually and particulate matter on request of the Department.

10. The Company will comply with the following increments of progress.

a) Order control equipment by 3/1/83.

b) Complete final engineering by 6/1/83.

c) Install control equipment by 7/15/84.

d) Test facility for compliance by 9/15/84.

Expiration Date: December 15, 1984

Issued this 6 day of January, 1982.

_____ Pages Attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Victoria J. Tschinkel
Signature

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

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

TO: Victoria J. Tschinkel

FROM: Clair Fancy

DATE: January 4, 1982

SUBJ: Approval and Signature of Attached Air Construction Permit Described Below

Attached please find one Air Construction Permit for which the applicant is Jacksonville Bulk Terminals, Inc. The proposed construction is a dust control system for the applicant's phosphate rock shiploading facility in Jacksonville, Duval County, Florida.

Day 90, after which the permit would be issued by default, is January 18, 1983.

The Bureau recommends your approval and signature.

CF/pa

Attachment

The Florida Times-Union | Jacksonville Journal

FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }
COUNTY OF DUVAL }

Before the undersigned authority personally appeared _____

George A. Dan, who on oath says that he is

Retail Advertising Supervisor of The Florida Times-Union, and

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

Florida; that the attached copy of advertisement, being a _____

Legal Notice

in the matter of Notice of proposed agency action

in the _____ Court,

was published in The Florida Times Union

in the issues of Nov. 19, 1982

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

Sworn to and subscribed before me this 19th day of November A.D. 19 82

Notary Public,
State of Florida at Large.

My Commission Expires ...

Notary Public, State of Florida
My Commission Expires July 9, 1986
Bonded thru Troy Fain Insurance, Inc.

George A. Dan

DA 444

NOTICE OF PROPOSED AGENCY ACTION

The Department of Environmental Regulation gives notice of its intent to issue a permit to Jacksonville Bulk Terminals, Incorporated, for the installation of a dust control system for the phosphate rock shiploading facility located at 1301 Wigmore Street, Jacksonville, Duval County, Florida. This equipment will reduce particulate matter emissions when ships are being loaded with phosphate ore.

The control equipment will meet the RACT performance specification requiring emissions to be less than 0.03 grains per cubic foot, 10 percent opacity from the ship hold and 5 percent opacity from the conveyor. A BACT determination was not required. Reducing the emission will lower this source's impact on the Duval County Particulate Matter Nonattainment Area.

A person who is substantially affected by the Department's proposed permit revision may request a hearing in accordance with Section 120.57, Florida Statutes, and Chapter 17-2 and 28-5, Florida Administrative Code. The request for the hearing must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within 14 days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

The Company's request and proposed permit are available for public inspection during normal state business hours, 8:00 am to 5:00 pm, Monday through Friday, except on legal holidays at:

Department of Environmental Regulation
Northeast District Office
3426 Bills Road
Jacksonville, Florida 32207
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301
Department of Health, Welfare
Bio-Environmental Division
515 West 6th Street
Jacksonville, Florida 32206

Any person may send written comments on the proposed action to Mr. Clair Fancy at the Department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the Department's final determination.

11-29-82
Told Marvin Miller permit can't be issued until after Dec 19 - probably won't be issued until 1st half Jan '83

Jacksonville Bulk Terminal

OCCIDENTAL CHEMICAL COMPANY

DER
NOV 24 1982
BAQM

November 22, 1982

Mr. Willard Hanks
Florida Department of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301

Re: PROOF OF PUBLICATION

Dear Mr. Hanks:

Enclosed please find Proof of Publication of Notice of Proposed Agency Action in permitting Jacksonville Bulk Terminals for the installation of a dust control system for phosphate rock shiploading.

I trust this will satisfy your needs. If anything further is needed from us, please advise.

Sincerely yours,

JACKSONVILLE BULK TERMINALS

Raymond L. King

Raymond L. King,
Terminal Manager

RLK/sw
encls.

1301 WIGMORE STREET • JACKSONVILLE, FLORIDA 32206 • (904) 355-8112

The Florida Times-Union | Jacksonville Journal

FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }
COUNTY OF DUVAL }

Before the undersigned authority personally appeared _____

George A. Dan, who on oath says that he is

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was published in The Florida Times Union

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Sworn to and subscribed before me this 19th day of November A.D. 19 82

Notary Public
State of Florida at Large.

My Commission Expires ...

Notary Public, State of Florida
My Commission Expires July 9, 1986
Bonded Thru Troy Fain Insurance, Inc.

George A. Dan

DA 444

NOTICE OF PROPOSED AGENCY ACTION

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The Company's request and proposed permit are available for public inspection during normal state business hours, 8:00 am to 5:00 pm, Monday through Friday, except on legal holidays at:

Department of Environmental Regulation
Northeast District Office
3426 Bills Road
Jacksonville, Florida 32207
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301
Department of Health, Welfare
Bio-Environmental Division
515 West 6th Street
Jacksonville, Florida 32206

Any person may send written comments on the proposed action to Mr. Clair Fancy at the Department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the Department's final determination.

DEPARTMENT OF HEALTH, WELFARE
& BIO-ENVIRONMENTAL SERVICES
Bio-Environmental Services Division

November 9, 1982

Willard

Mr. Clair Fancy, P.E.
Manager/CAP
Bureau of Air Quality Management
Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32301

DER
NOV 12 1982
BAQM

Dear Mr. Fancy:

It is understood that a question arose regarding the compliance status of the material transfer points at the Jacksonville Bulk Terminal, pursuant to current RACT regulations. Since the installation of control devices at these points, i.e., spray systems, fugitive emissions have been minimal.

Enclosed is a copy of the visible emissions evaluation performed by this Agency on November 8, 1982 on the subject transfer points. These recordings are historically typical.

If any further information is required, please advise.

Very truly yours,

Robert Steven Pace

Robert S. Pace, P.E.
Bio-Environmental Engineer

RSP/vj
Enclosure

cc: Mr. W. Atwood, with enclosure

OBSERVERS READINGS									
	0	15	30	45		0	15	30	45
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28					58				
29					59				

Units X Equivalent Units

____ X 0 (0%) ____

____ X .25 (5%) ____

____ X .50 (10%) ____

____ X .75 (15%) ____

____ X 1.00 (20%) ____

____ X 1.25 (25%) ____

____ X 1.50 (30%) ____

____ X 1.75 (35%) ____

____ X 2.00 (40%) ____

____ X 2.25 (45%) ____

____ X 2.50 (50%) ____

____ X 2.75 (55%) ____

____ X 3.00 (60%) ____

____ X 3.25 (65%) ____

____ X 3.50 (70%) ____

____ X 3.75 (75%) ____

____ X 4.00 (80%) ____

____ X 4.25 (85%) ____

____ X 4.50 (90%) ____

____ X 4.75 (95%) ____

____ X 5.00 (100%) ____

VISIBLE EMISSION OBSERVATION FORM.

Name JAX BULK TERMINAL.

Address _____

Contact Mr MALAND.

Emission Source SHIPLOADING CONVEYER 1-4

Plume Color W

Plume Background W

Begin Time 9:20 End Time 9:35

Distance From Source ~125 FT

Direction from Source SOUTH

Dry Bulb NA Wet Bulb NA R.H. NA

Wind Speed 5-10 Direction NOTH.

% Cloud Cover 80%

Diagram on Back

Sum of Units _____

Sum of Equivalent Units _____

Equiv. Units / Units X 20% = ____ Avg. Opac.

NTC Issued ____ No NTC Issued ____

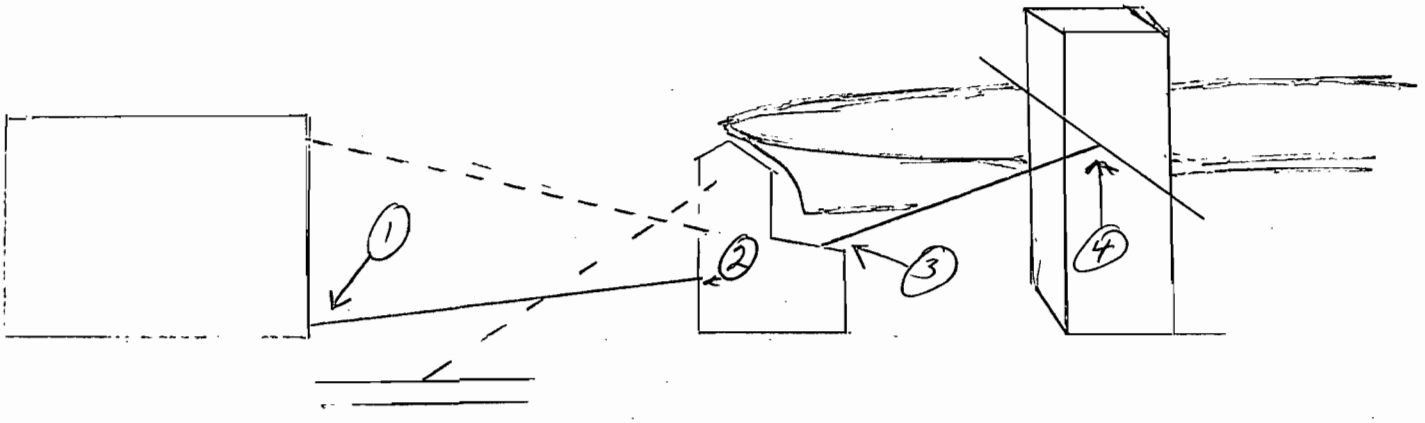
Comments: _____

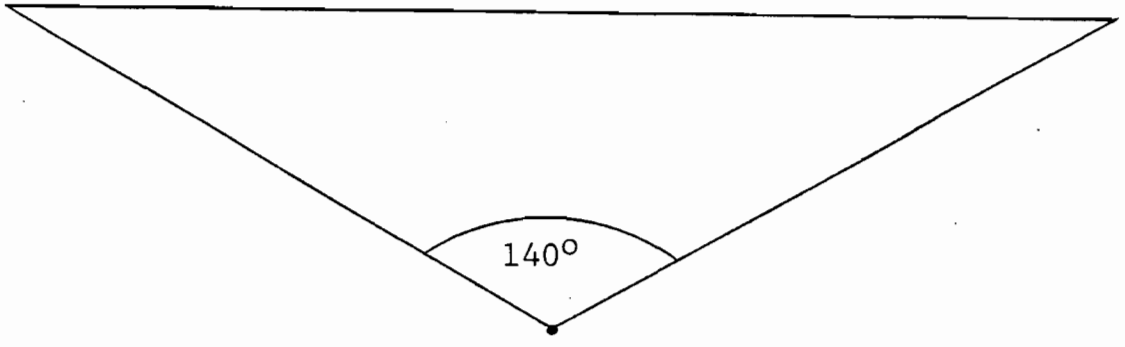
Observer

8 NOV 82
Date

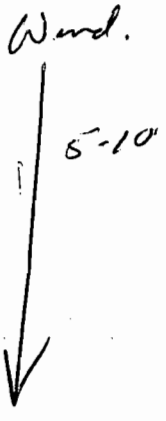
X

EMISSION POINT





OBSERVER



P167682430

RECEIPT FOR CERTIFIED MAIL

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

SENT TO
M. P. McArthur

STREET AND NO.
1301 Wigmore St.

P.O., STATE AND ZIP CODE
Jacksonville, FL 32206

POSTAGE		$
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	¢
OPTIONAL SERVICES	SPECIAL DELIVERY	¢
	RESTRICTED DELIVERY	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM AND DATE DELIVERED	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		$

POSTMARK OR DATE

10/22/82

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1979

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

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

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

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
Mr. M. P. McArthur
1301 Wigmore Street
Jacksonville, FL 32206

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	7682430	

(Always obtain signature of addressee or agent)

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

4. X Trudy Welch

5. DATE OF DELIVERY 10-25-82

POSTMARK

6. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

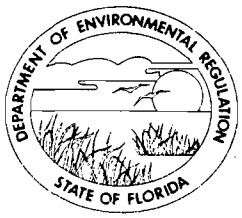
CLERK'S INITIALS

☆GPO : 1979-300-459

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

October 19, 1982

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. M. P. McArthur
Vice President
Jacksonville Bulk Terminals
1301 Wigmore Street
Jacksonville, Florida 32206

Dear Mr. McArthur:

Attached is one copy of the application, Technical Evaluation and Preliminary Determination, and proposed permit for the installation of a dust control system for the phosphate rock shiploading facility at 1301 Wigmore Street in Jacksonville, Duval County.

Pursuant to Section 403.815, Florida Statutes, and Florida Administrative Code Rule 17-1.62, you are required to publish (at your own expense) the attached notice. This notice should be published, one time only, as soon as possible and no later than November 3, 1982.

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

Please submit any comments which you wish to have considered concerning the department's proposed action, in writing, to Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

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

CHF/pa
cc: Dr. John B. Koogler
Mr. W. Atwood
Mr. Jerry Woosley
Mr. John Ketteringham

Notice of Proposed Agency Action

The Department of Environmental Regulation gives notice of its intent to issue a permit to Jacksonville Bulk Terminals, Incorporated, for the installation of a dust control system for the phosphate rock shiploading facility located at 1301 Wigmore Street, Jacksonville, Duval County, Florida. This equipment will reduce particulate matter emissions when ships are being loaded with phosphate ore.

The control equipment will meet the RACT performance specification requiring emissions to be less than 0.03 grains per cubic foot, 10 percent opacity from the ship hold and 5 percent opacity from the conveyor. A BACT determination was not required. Reducing the emission will lower this source's impact on the Duval County Particulate Matter Nonattainment Area.

A person who is substantially affected by the Department's proposed permit revision may request a hearing in accordance with Section 120.57, Florida Statutes, and Chapter 17-2 and 28-5, Florida Administrative Code. The request for the hearing must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within 14 days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

The Company's request and proposed permit are available for public inspection during normal state business hours, 8:00 am to 5:00 pm, Monday through Friday, except on legal holidays at:

Department of Environmental Regulation
Northeast District Office
3426 Bills Road
Jacksonville, Florida 32207

Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

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

Any person may send written comments on the proposed action to Mr. Clair Fancy at the Department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the Department's final determination.

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

28-5.15 Requests for Formal and Informal Proceedings

(1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.

(2) All petitions filed under these rules should contain:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners;

(c) All disputed issues of material fact. If there are none, the petition must so indicate;

(d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;

(e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;

(f) A demand for the relief to which the petitioner deems himself entitled; and

(g) Such other information which the petitioner contends is material.

Technical Evaluation

and

Preliminary Determination

Jacksonville Bulk Terminals, Inc.
Duval County

Dust Control System for Phosphate Rock
Shiploading Facility

Proposed Permit Number
AC 16-58548

Florida Department of Environmental Regulation

Bureau of Air Quality Management

Central Air Permitting

October 22, 1982

Evaluation and Preliminary Determination

Table of Contents

I. PROJECT DESCRIPTION

A. Applicant

Jacksonville Bulk Terminals, Inc.
1301 Wigmore Street
Jacksonville, Florida 32306

B. Project and Location

Jacksonville Bulk Terminals, Inc. operates a phosphate rock storage and 3,000 TPH shiploading facility on the St. Johns River in Jacksonville, Florida. The Company plans to install a dust control system on the phosphate rock shiploading facility to reduce the unconfined particulate matter emissions.

C. Process and Controls

The proposed system is a retractable bulk loading spout that is kept under vacuum by a fan. A filter removes the entrained particulate matter before discharging the air to the atmosphere. The captured particulate matter is returned to the ship hold.

The particulate matter emissions will be reduced to 10 percent opacity at the ship hold, 5 percent opacity from the conveying equipment and 0.03 grains per dry standard cubic foot from the control device. Less than 3 pounds per hour of particulate matter or, based on 370 hours per year operation, 0.56 TPY will be emitted from the control device. No other criteria pollutant is emitted from this source.

II. RULE APPLICABILITY

The plant site is in an area designated nonattainment (17-2.410) for ozone and particulate matter (PM), unclassified (17-2.430) for sulfur dioxide and attainment for the other criteria pollutants. Particulate matter is the only criteria pollutant emitted by this source.

The project is not subject to PSD review, 17-2.500, because it is in a nonattainment area for PM and is not a source of sulfur dioxide or other criteria pollutants.

The project is subject to 17-2.650, Reasonably Available Control Technology (RACT), because it is an existing source of PM emission in a PM nonattainment area. The proposed project, installation of a dust control system for the phosphate rock shiploading facility, requires a state permit to construct, Chapter 17-2.650(2)(f)4. This facility must comply with 17-2.650(2)(c)11, Material Handling which limits PM emissions from loading of

ships to:

1) 5 percent opacity except from the conveyor and associated equipment.

2) 10 percent opacity from the ship hold.

3) 0.03 gr/dscf for exhaust particulate matter laden gases.

III. SUMMARY OF EMISSIONS AND AIR QUALITY IMPACT

A. Emission Limitations

RACT regulation for this source, 17-2.650(2)(c)11, limits particulate matter emissions to a maximum of:

1) 5 percent opacity from the conveyor and associated equipment.

2) 10 percent opacity from the ship hold.

3) 0.03 gr/dscf for exhaust particulate matter laden gases.

The particulate matter emission from the existing source is estimated to be 125 lbs/hr and, based on 370 hrs/yr operation, 23 TPY. It is estimated that the Midwest International spout collection system under consideration by the Company will emit less than 3 lbs/hr or 0.56 TPY. The specific make and model of equipment chosen by the Company for their final design will require approval by the Department.

These emissions are in compliance with state and county air pollution control regulations.

B. Air Quality Impact

The proposed equipment is being installed to comply with RACT. The actual PM emission will be reduced from an estimated 125 lbs/hr to less than 3 lbs/hr. The lower emission will reduce the source's impact on the nonattainment area.

IV. CONCLUSION

Based on a review of the data submitted by Jacksonville Bulk Terminals, Inc., the installation of the proposed Midwest Spout Collection System or equal will bring the shiploading equipment into compliance with the RACT regulation. The Department proposes to issue a construction permit to allow the company to install the dust control system for the phosphate rock shiploading facility. As a condition of this approval, the Department will

require certain general and specific conditions be met by the company to assure compliance with the applicable regulations.

A copy of the draft permit, which includes general and specific conditions, is attached.

V. APPENDIX

Application
Draft State Permit

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

DER
SEP 20 1982
BAQM

September 15, 1982

Bill

C. H. Fancy
Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Subject: My letter of September 7, 1982
Regarding Phosphate Rock

Dear Mr. Fancy:

This will transmit attachment referred to in answer to questions #4 and #5.

Please make it part of your file.

Sincerely,

OCCIDENTAL CHEMICAL COMPANY

W. W. Atwood
Manager, Environmental Control

psb

Attachment

cc: R. E. McNeill
R. King, Jacksonville Bulk Terminal, Inc.
S. Pace, Bio-Environmental Services, Jacksonville FL

ATTACHMENT REGARDING QUESTIONS #3 AND #4

Proposed Vessel Loading Dust Control

- Δ P = 6" WC design - 3 to 5" operating
- Air/cloth ration = 8.1
- Operating temp. = ambient
- Reverse pulse air = 100 psig
- Cleaning cycle = adjustable duration, frequency and delay
- Stack velocity = 60 FPS
- Stack size = 1.5 ft. diam.
- Stack height = 65 ft. AGL
- Collection efficiency = 0.03 grains/SCF

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

September 7, 1982

Bill

Mr. C. H. Fancy
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

DER
SEP 09 1982
BAQM

Subject: Phosphate Rock

Dear Mr. Fancy:

This will respond to your letter of July 30, 1982. As you may understand from your conversation with Occidental's Consultant, Dr. John Koogler, we are in preliminary engineering and many details are yet to be determined. The following answers questions in order presented.

1. Fee - Submitted in August

2. As discussed in Item 10, the company has evaluated other possible methods which were found to be unacceptable. Although other types of technology may be currently in use at larger, high through-put facilities, the system we have proposed for JBT is site specific and takes into account efficiency and cost factors.

3. Attached schedule represents the best that we think we can do to insure meeting the end date requirement.

4 & 5. The attached represents the best technical information we have at this time. Emission data that is known has been submitted on the application. Additional information must await further detailed specifications.

6. The loading spout dust suppression systems do not require covering the hold. It has advantages in operation, maintenance and reliability. Vendors information is attached. Site visits have been made. The system relies on picking up dust at the source: spout discharge to the pile in the hold. To do this requires an instrumented spout positioning device to hold the spout close to the material as it is being delivered into the hold.

7. Phosphate rock in rates as specified in Section II F & III A & B. Since you have raised the question, I have checked Marketing relative to other products and find that we may load feedgrade Dicalcium Phosphate for a total of one or two days in 1982. The proposed system would be used on this product. The system will not be used on hygroscopic, TSP or DAP.

8. Same as #4 and #5.

9. Yes

10. As BES has witnessed, JBT has attempted to reduce dusting with the use of water sprays and wetting agent in a number of configurations. No method was effective in significantly reducing the dust.

We will keep you informed of our progress along with BES and trust that processing of our application can continue.

Sincerely yours,

OCCIDENTAL CHEMICAL COMPANY

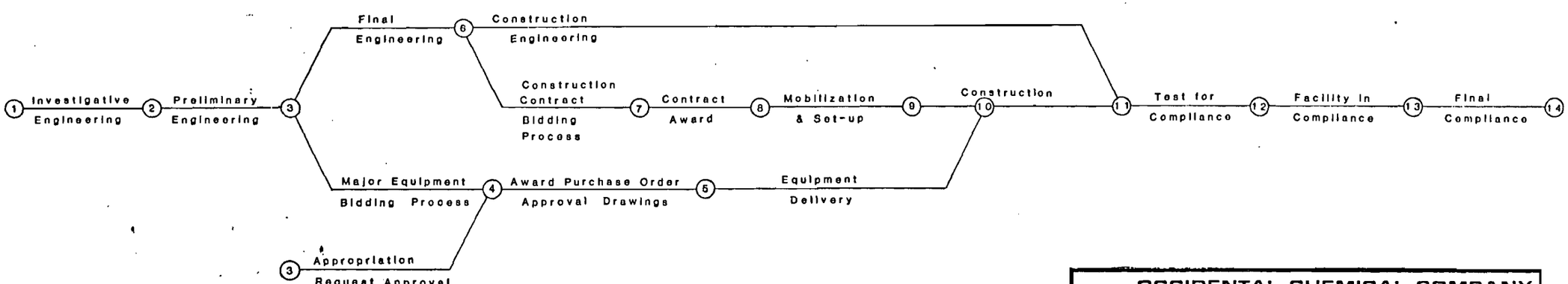
Wes Atwood

W. W. Atwood
Manager, Environmental Control

WWA/psb

cc: R. E. McNeill
R. King, Jacksonville Bulk Terminal, Inc.
S. Pace, Bio-Environmental Services, Jacksonville, FL

1- 3/15/82	5- 3/1/83	9- 8/15/83	13- 1/15/85
2- 7/15/82	6- 6/1/83	10- 9/15/83	14- 3/15/85
3- 10/1/82	7- 7/15/83	11- 7/15/84	
4- 1/15/83	8- 8/1/83	12- 9/15/84	

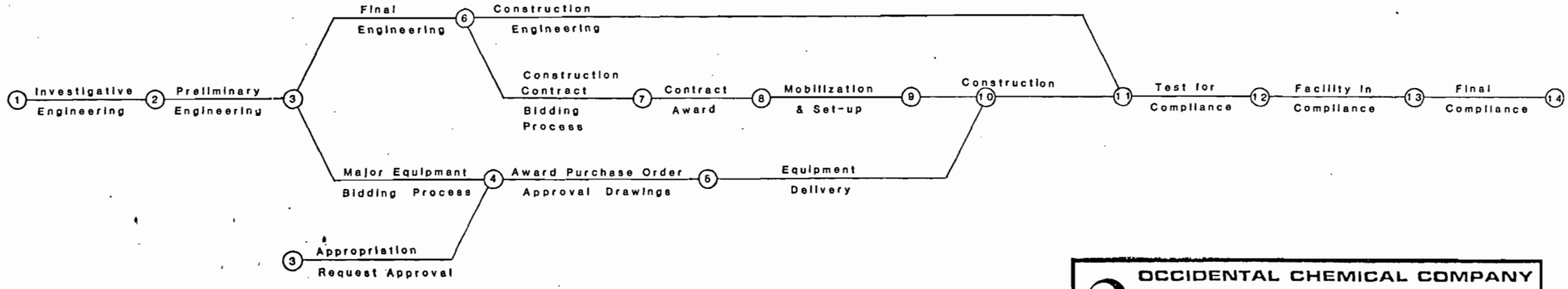


OCCIDENTAL CHEMICAL COMPANY

SUWANNEE RIVER PHOSPHATE DIVISION

TITLE	PLANT
VESSEL LOADING DUST CONTROL	JOB NO. 11J-87
CPM PROJECT SCHEDULE -PRELIMINARY-	CHARGE NO.

1- 3/15/82	5- 3/1/83	9- 8/15/83	13- 1/15/85
2- 7/15/82	6- 6/1/83	10- 9/15/83	14- 3/15/85
3- 10/1/82	7- 7/15/83	11- 7/15/84	
4- 1/15/83	8- 8/1/83	12- 9/15/84	



OCCIDENTAL CHEMICAL COMPANY

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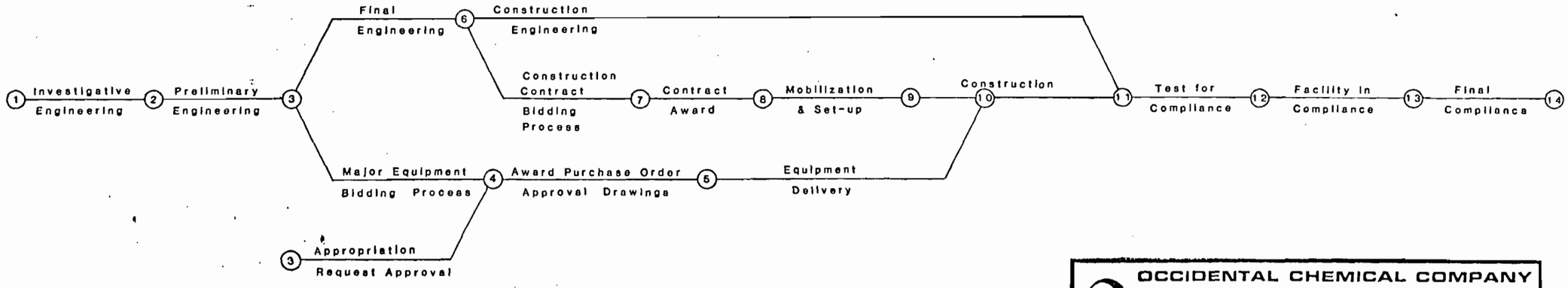
4- 1/15/83	8- 8/1/83	12- 9/15/84	



OCCIDENTAL CHEMICAL COMPANY

SUWANNEE RIVER PHOSPHATE DIVISION

TITLE

VESSEL LOADING DUST CONTROL

CPM PROJECT SCHEDULE -PRELIMINARY-

PLANT

JOB NO. 11J-87

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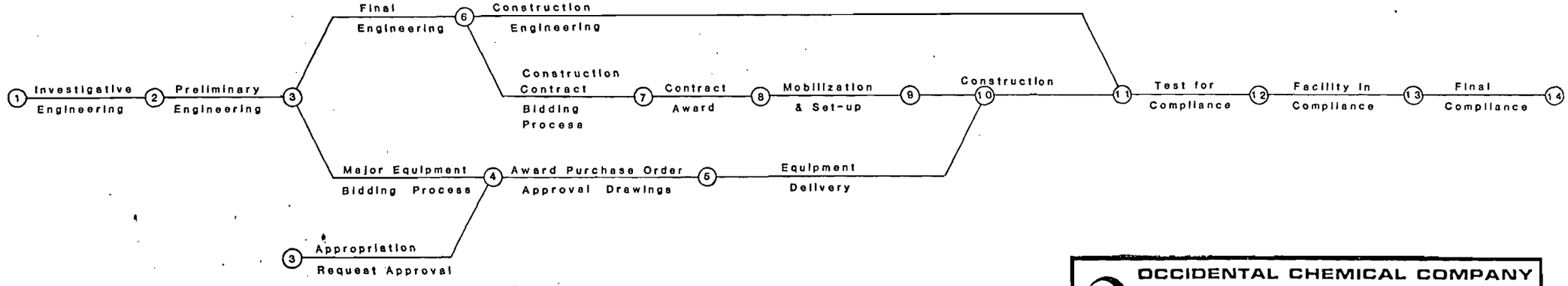

OCCIDENTAL CHEMICAL COMPANY

SUWANNEE RIVER PHOSPHATE DIVISION

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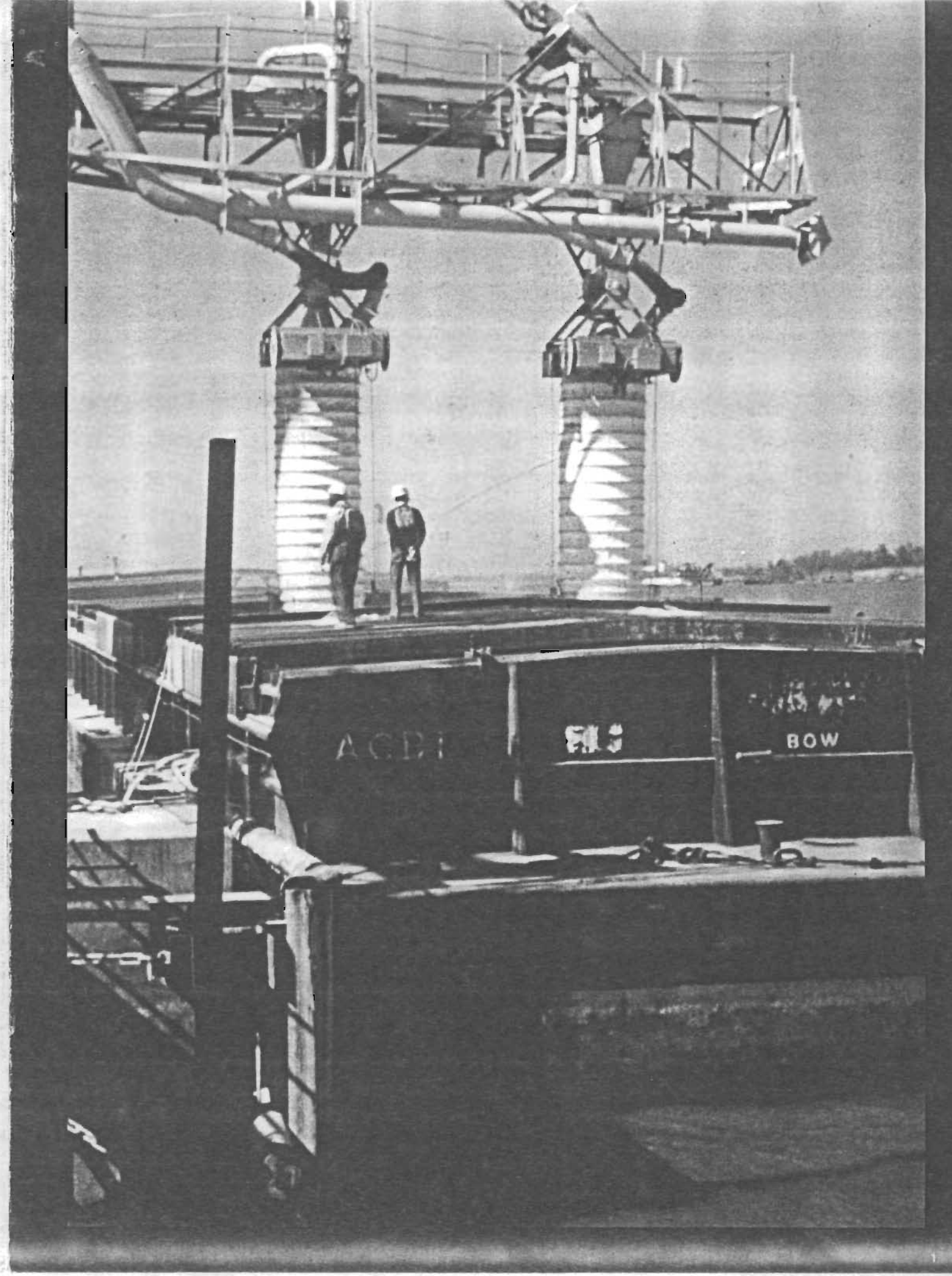
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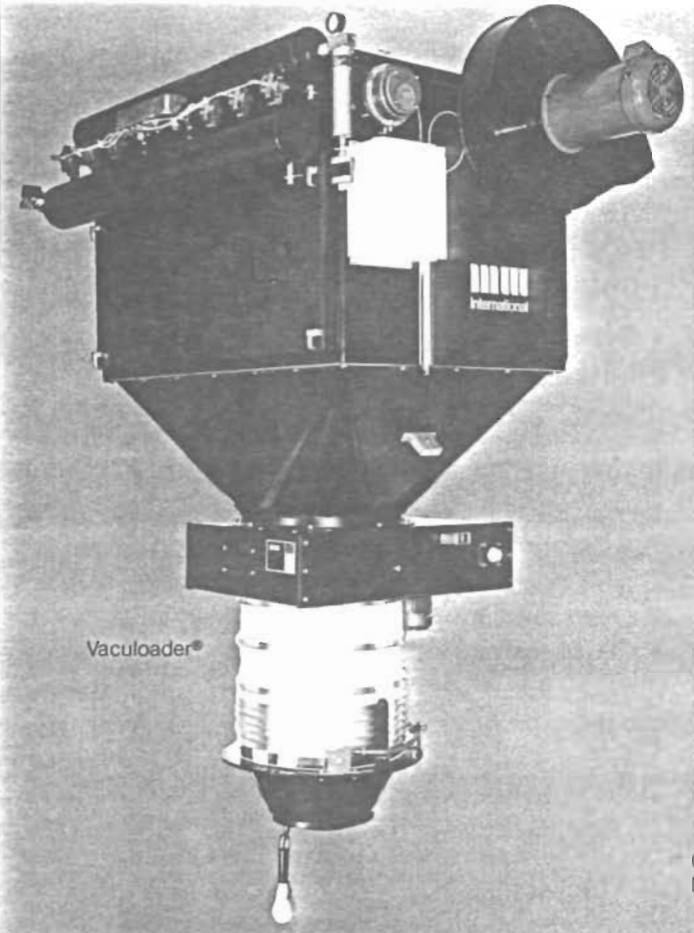
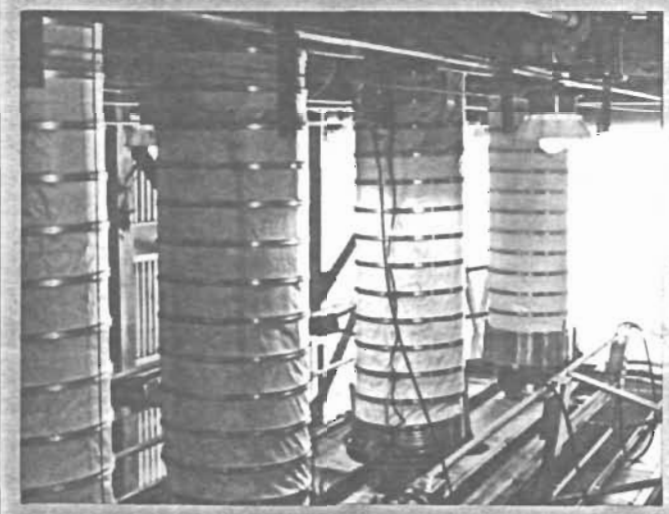


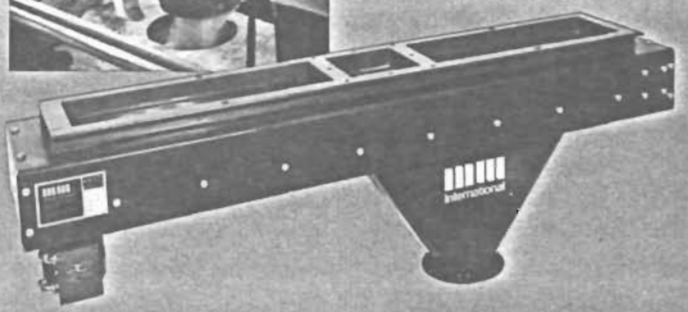
Vaculoader®

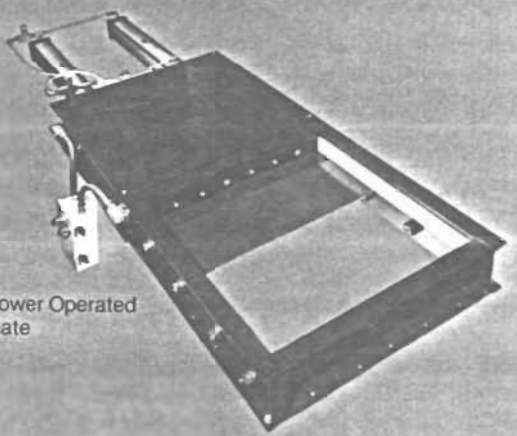
Heavy-Duty Mining Series

Open Truck and Railcar Loading Spout



Single Direction Spout Positioner

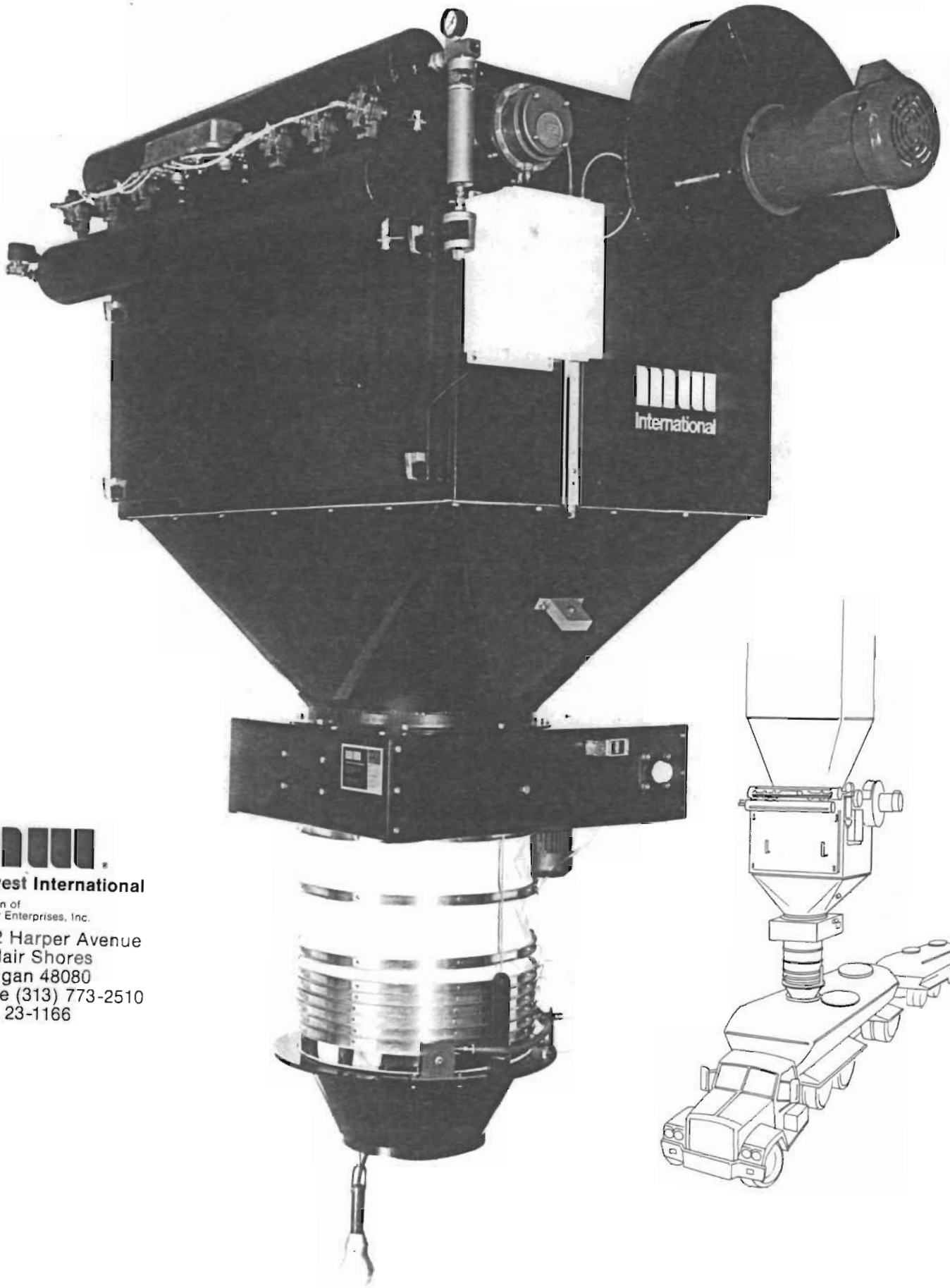




Power Operated Gate

Agriloader®

LINDER INDUSTRIAL MACHINERY CO
4330 S. FLA. AVE. -:- (P. O. BOX 5330)
LAKELAND, FLA. 33803 -:- PH. 646-5711



Midwest International
A division of
Ron Pair Enterprises, Inc.
24112 Harper Avenue
St. Clair Shores
Michigan 48080
Phone (313) 773-2510
Telex 23-1166

MV 22 VACULOADER ™

U.S. and International patent pending
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Ron Pair Enterprises, Inc.

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MIDWEST VACULOADER®

A new and unique method of controlling dust during the loading of drums, trucks, railcars, barges and ships has recently been announced by MIDWEST International, Division of Ron Pair Enterprises, Inc.

The new MIDWEST Vaculoader® is an integral dust filter and retractable bulk loading spout complete with fan and pulse air cleaning mechanism. This unit is designed to be attached directly to a silo hopper bottom, grain feed chute, screw conveyor, airslide or belt conveyor discharge chute.

The MIDWEST Vaculoader® does not collect dust, it places the vehicle, container or vessel being loaded under a negative pressure or vacuum during the loading process, eliminating airborn particulate emissions. Dust particles contained within the unit during the loading are desposited back into the container, vehicle or vessel.

Dust piping is not required due to the design of the equipment. A normal installation would include a separate dust collector, fan, rotary airlock dust collector valve, screw conveyor or other method of disposing of collected dust and a retractable bulk loading spout. This equipment can now be replaced by one inexpensive MIDWEST Vaculoader®.

The equipment is shipped semi-assembled and prewired and is available in the agricultural series, as well as the heavy duty industrial series.

Although the basic MIDWEST Venturi and Scavenger design is used, the Vaculoader® incorporates a new adjustable venturi designed to handle a wide variety of materials and flow rates.

U.S. and International
Patents Pending

MIDWEST International® 1980
a division of Ron Pair Enterprises, Inc.

Form No. 0131

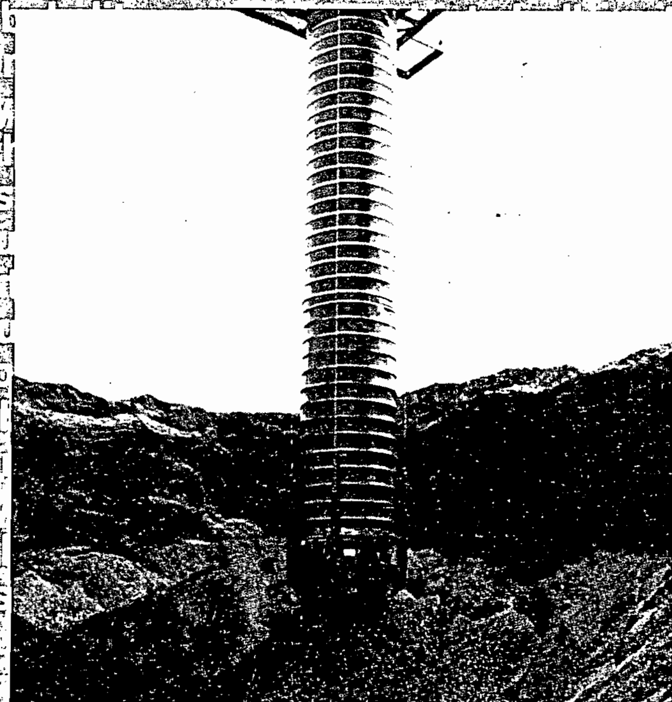
Best Available Copy

and stacking equipment
for bulk materials

LINDER INDUSTRIAL MACHINERY COMPANY

P. O. Box 5330 Lakeland, Fla. 33803 Phone: 813-646-5711

Coal, grain, sugar product, wheat, slag, limestone, cement, resins, dolomite, corn meal, milo, fertilizers, bauxite, gypsum, alumina, fly ash, phosphate, bakelite or any other dusty bulk materials. Coal, grain, sugar product, wheat, slag, limestone, cement, resins, dolomite, corn meal, milo, fertilizers, bauxite, gypsum, alumina, fly ash, phosphate, bakelite or any other dusty bulk materials.



Coal, grain, sugar product, wheat, slag, limestone, cement, resins, dolomite, corn meal, milo, fertilizers, bauxite, gypsum, alumina, fly ash, phosphate, bakelite or any other dusty bulk materials. Coal, grain, sugar product, wheat, slag, limestone, cement, resins, dolomite, corn meal, milo, fertilizers, bauxite, gypsum, alumina, fly ash, phosphate, bakelite or any other dusty bulk materials. Coal, grain, sugar product, wheat, slag, limestone, cement, resins, dolomite, corn meal, milo, fertilizers, bauxite, gypsum, alumina, fly ash, phosphate, bakelite or any other dusty bulk materials. Coal, grain, sugar product, wheat, slag, limestone, cement, resins, dolomite, corn meal, milo, fertilizers, bauxite, gypsum, alumina, fly ash, phosphate, bakelite or any other dusty bulk materials.

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clean, efficient, dust-free loading, stacking and transfer equipment, Midwest sets the standard.

But it wasn't always that way. Before Midwest came to be, it was rather difficult finding reliable dust control equipment. Then in 1970, we cleared the air by developing the first successful retractable spout with the venturi/scavenger design for loading dry, dusty material into enclosed trucks for the cement industry.

After that milestone, we developed an entire product line of quality, dust-free systems for every application imaginable. And before the dust settled, we found ourselves the world leader in this exciting and growing industry.

Today, we're filling the needs of thousands of companies in a variety of different industries. And as dust control standards keep getting stronger, we keep getting better. That's why, although our products are sometimes imitated, we are never equalled. Our quest for quality and customer back-up is as strong today as it was when we first started...if not stronger.

oped the revolutionary Vaculoader® and Agriloader®. They employ a unique system that combines dust filters and loading spouts which enable the application engineer to economically comply with demanding dust control standards.

As for tomorrow, our goal is to continue leading the way by developing total loading systems, to assist in controlling pollution and protecting the environment, and to help companies like yours breathe a little easier, knowing you're with the best dust control systems company in the world...Midwest.

Ron Pair
Chairman

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Midwest products and components such as the basic venturi/scavenger design spout shown on the right are often used by engineers to develop a complete system.

Airslides, bucket elevators and gates can be easily interfaced with standard bulk loading spouts and dust control components to provide total system design.

Complete bulk handling systems for practically any product or application can also be designed, detailed for construction and field erected by our engineering staff.

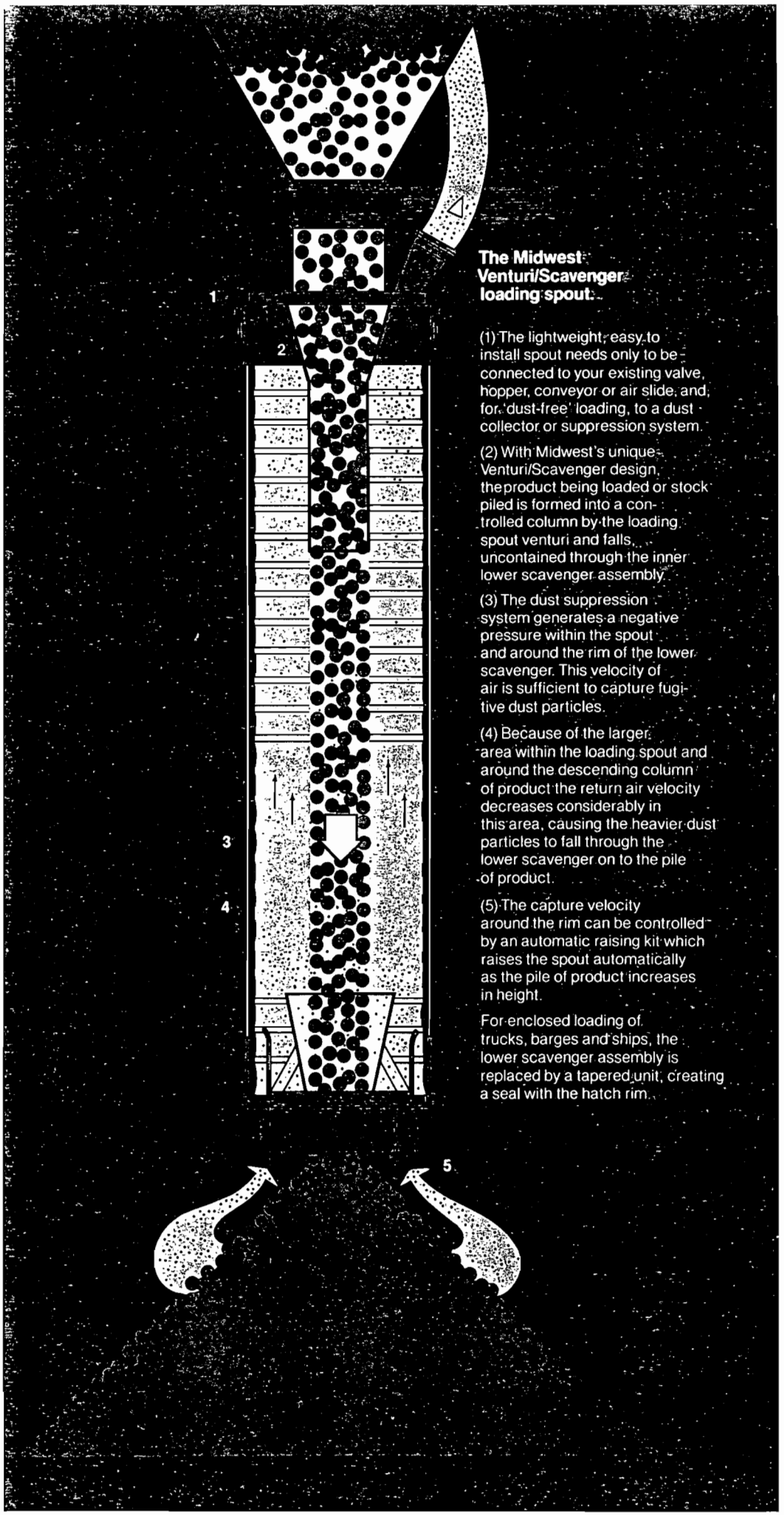
Ship and barge loading systems with integral dust control can be designed for port facilities which handle a wide variety of unmanageable products with different flow rates and product behavior.

Conventional dust free ship and barge loading systems can also be designed utilizing the latest technology.

Fully automatic, "hands free" railcar loading systems are available to load a railcar in less than one minute...dust free. Target sensitive positioners with attached loading spouts collectively and automatically locate each open railcar hatch. The loading sequence begins and continues through cycle completion. Programmable logic controllers reduce wiring costs, provide flexibility in adding future circuits and interlocks and allow wiring schematic display for maintenance trouble shooting.

Midwest's complete system design and controls provide our customers with single vendor responsibility reducing project costs and assuring successful results.

Our business is environmental...keeping the air clean and providing our customers with the most sophisticated, high speed loading and filling systems available.



The Midwest Venturi/Scavenger loading spout.

(1) The lightweight, easy to install spout needs only to be connected to your existing valve, hopper, conveyor or air slide, and, for 'dust-free' loading, to a dust collector or suppression system.

(2) With Midwest's unique Venturi/Scavenger design, the product being loaded or stock piled is formed into a controlled column by the loading spout venturi and falls, uncontained through the inner lower scavenger assembly.

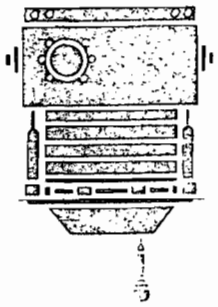
(3) The dust suppression system generates a negative pressure within the spout and around the rim of the lower scavenger. This velocity of air is sufficient to capture fugitive dust particles.

(4) Because of the larger area within the loading spout and around the descending column of product the return air velocity decreases considerably in this area, causing the heavier dust particles to fall through the lower scavenger on to the pile of product.

(5) The capture velocity around the rim can be controlled by an automatic raising kit which raises the spout automatically as the pile of product increases in height.

For enclosed loading of trucks, barges and ships, the lower scavenger assembly is replaced by a tapered unit, creating a seal with the hatch rim.

Best Available Copy



Bulk Filling Spout for Small Containers

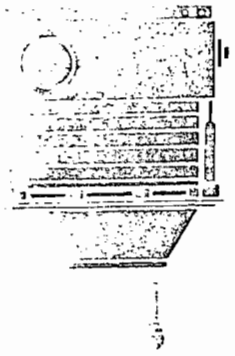
The box, drum, barrel and IBC filling spout is designed to fill small containers with dry, dusty material individually or as a part of an automated filling operation. The spout is designed to be connected to a bag type dust collector or extractor which places the filling spout and the container being filled under a negative pressure, removing displaced air and fugitive dust during the filling process.

Stock Travel Available
1220mm (48").

Maximum Capacity
215 MTPH (240 TPH).

Product Inlet
200mm (8") diameter.

Air Withdrawal Requirements
10 to 13 M³/min
(350 to 450 CFM).



Enclosed Truck Loading Spout

Designed to load dry, dusty products from a silo, hopper, storage bin, airslide or screw conveyor into enclosed vehicles with round or square hatches, the enclosed truck loading spout, when connected to a dust collector or extractor, provides excellent dust control.

Vertical travels are available to allow sufficient clearance under the spout. This unit can also be used for enclosed railcar loading where normal railroad clearances are not required.

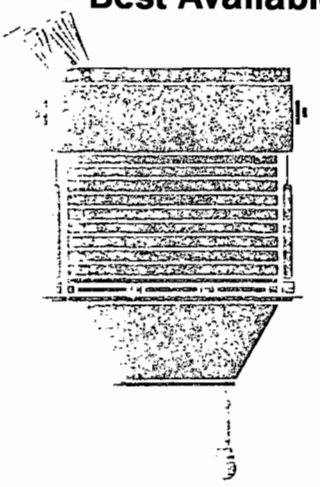
Stock Travel Available
1500mm (60").

Maximum Capacity
430 MTPH (540 TPH).

Product Inlet
355mm (14") diameter.

Air Withdrawal Requirements
24 to 30 M³/min
(800 to 1000 CFM).

Capacities are approximate and based on a weight of 960 kg/M³ (60 lb/ft³) product.



Enclosed Railcar Loading Spout

Enclosed railcar loading spouts are designed to load dusty products from a silo, hopper, storage bin, belt conveyor discharge, airslide or screw conveyor into enclosed railcars with round or square hatches. When connected to a dust collector or extractor this spout will provide excellent dust control.

Vertical travels are available to assure railroad clearance under the spout and to load the lowest railcars and most enclosed trucks if the loading station is dual purpose.

A trimmer can be added whenever a product has material characteristics which cause uneven distribution preventing full capacity. The trimmer actively distributes the product under the railcar roof in 360° distribution. Automatic controls start and stop the trimmer. Trajectory and power can be easily controlled by regulating the air supply.

Three point cable pick up allows adjustment of the lower scavenger discharge during installation and assures stability of the spout during positioning.

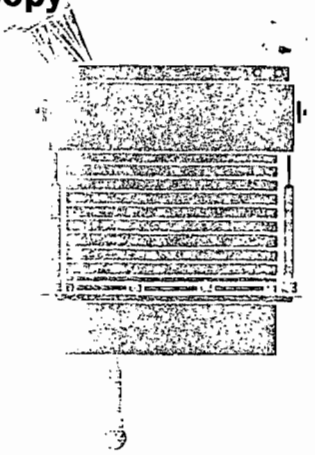
A variety of standard spout positioners are available in single or dual direction to allow the engineer to design more sophisticated, automatic or remote high speed loading stations.

Stock Travel Available
2500mm (96"), 3000mm (120"), 3600mm (144").

Maximum Capacity
655 MTPH (720 TPH).

Product Inlet
380mm (15") diameter.

Air Withdrawal Requirements
40 to 50 M³/min
(1400 to 1800 CFM).



Open Truck Loading Spout

Designed to load open trucks or railcars with dry, dusty products from a silo, hopper, storage bin, airslide, belt conveyor or screw conveyor, this spout is usually installed in the center of the loading station for loading trucks without ridgepoles or other obstructions.

When loading open trucks with center ridgepoles, a spout positioner must be used to allow the operator to position the spout on either side of the ridgepole and back and forth across the loading station.

This unit is designed to be connected to a dust collector or extractor, placing the rim of the spout and the top of the pile under a vacuum.

To stabilize the lower scavenger discharge, this unit has three point pick up with heavy cable and adjustable lifting tubes.

Automatic raising is standard. As the level of product increases within the truck, the spout raises automatically maintaining the vacuum or negative pressure around the pile reducing or eliminating dust.

Stock Travel Available
2500mm (96"), 3000mm (120"), 3600mm (144").

Maximum Capacity
655 MTPH (720 TPH).

Product Inlet
380mm (15") diameter.

Air Withdrawal Requirements
50 to 100 M³/min
(1800 to 3600 CFM).

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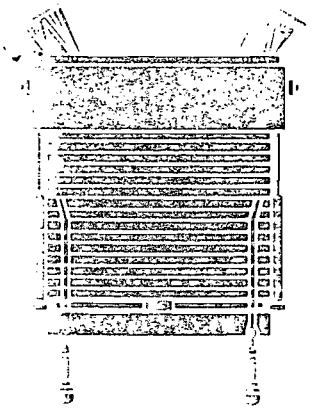


Slotted Railcar Loading Spouts

This series is ideal for railcars with long slotted hatches. The elongated configuration of the spout discharge conforms to the slotted opening, reducing the open area on either side of the spout.

Special hatch adaptors and roll up covers are available to partially or completely cover the opening depending upon the amount of withdrawal air available from the dust collector or extractor.

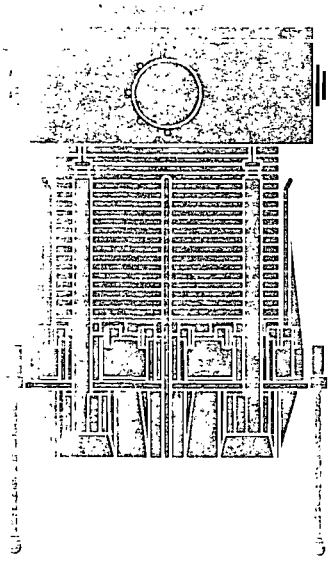
High speed unitrain loading can be easily accomplished using this series loading spout with automatic controls.

Stock Travel Available
2500mm to 5800mm
(8' to 19').

Maximum Capacity
815 MTPH to 5500 MTPH.
(900 TPH to 6000 TPH).

Product Inlet
200mm x 600mm (8" x 24") to
600mm x 1525mm (24" x 60").

Air Withdrawal Requirements
105 to 150 M³/min
(3500 to 5000 CFM).



Heavy Duty Mining Series and Open Vessel Loaders

Heavy duty open stacking and vessel loading spouts are designed to provide high capacity stockpiling or vessel loading for a variety of dusty products. Sizes are available depending upon capacity and vertical travel requirements. All units are equipped with heavy duty four point pick up.

This series is usually installed on a radial or fixed inclined belt conveyor for stockpiling of product or for open vessel loading at the discharge of a belt conveyor or grain chute.

Dust collection can be optional as desired with complete system design available including integral spout, dust collector, discharge chute and complete structural conveyor discharge section eliminating dust piping.

Adjustable venturis are standard to control product flow and automatic raising kits are used to regulate the height of the spout above the product pile.

Product relief doors around the rim of the discharge which eliminate spout plugging are also standard.

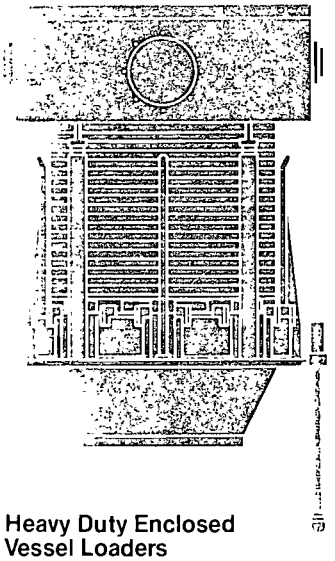
A trimmer or rotating spoon can be added whenever a product has material characteristics which cause uneven distribution and prevent full capacity.

Stock Travel Available
6 M to 30 M (20' to 100').

Maximum Capacity
900 MTPH to 5800 MTPH.
(1000 TPH to 6370 TPH).

Product Inlet
460mm to 1200mm
(18" sq to 48" sq).

Air Withdrawal Requirements
110 to 260 M³/min
(3800 to 8700 CFM).



Heavy Duty Enclosed Vessel Loaders

Enclosed vessels can be loaded dust free at high capacities using this heavy duty series. Products such as cement, lime, lignite, ore or coal that are transported exclusively by an enclosed self-unloading bulk carrier can be loaded through deck hatches.

Most applications of this type include an integral dust control system or Vaculoader® type design with the filter section or dust extractor located on the discharge end of the shuttle boom. Pivot gimbal assemblies are also available for conveyor booms that are designed to raise and lower.

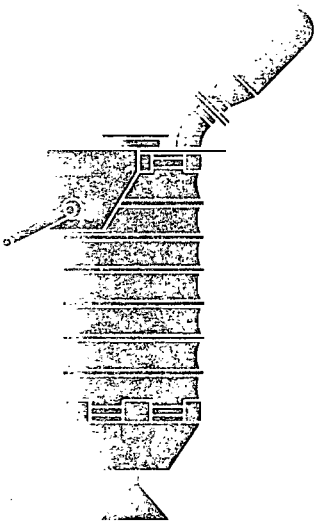
Options include automatic lowering and level sensing kits, air vibrators, product diverters and trimmers as well as a variety of construction materials in keeping with abrasive resistant conditions and marine standards.

Stock Travel Available
6 M to 18 M (20' to 60').

Maximum Capacity
900 MTPH to 2500 MTPH.
(1000 TPH to 2750 TPH).

Product Inlet
460mm to 915mm
(18" to 36") diameter.

Air Withdrawal Requirements
55 to 110 M³/min
(1800 to 3800 CFM).



Manually Operated Enclosed Vehicle Loading Spout

The Series 200 manually operated retractable bulk loading spout is an economical answer to controlling dust in applications where electric power is not available or desirable.

The lifting mechanism allows operation from the top of the enclosed truck or railcar. If remote operation is desired, an optional wall mounted hand crank assembly is available.

This unit includes a combination non-powered rotary product trimmer and self sealing cone which seals the tapered discharge when the unit is raised, preventing loose product accumulation from being deposited on the scale or loading area. Drive components including the lifting cables are concealed. The flanged dust outlet connection can be connected to a dust collector or, with the addition of an optional dust sock, displaced air can be relieved with dust particles trapped within the sock.

Stock Travel Available
3660mm (12'-0").

Maximum Capacity
200 MTPH (220 TPH).

Product Inlet
200mm (8") diameter.

Air Withdrawal Requirements
10 to 13 M³/min (350 to 450 CFM).

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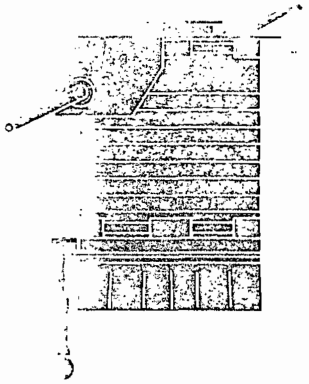


Manually Operated Open Vehicle Loading Spout

The Series 300 manually operated retractable bulk loading spout is an economical answer to controlling dust in applications where electric power is not available or desirable for the loading of fine or granular dusty material into open trucks or railcars.

The lifting mechanism allows operation from a platform above the vehicle. If remote operation is desired, an optional wall mounted hand crank assembly is available.

All raising and lowering components are concealed for safety purposes. The flanged dust outlet connection can be connected to a dust collector to withdraw dust from around the rim of the spout.

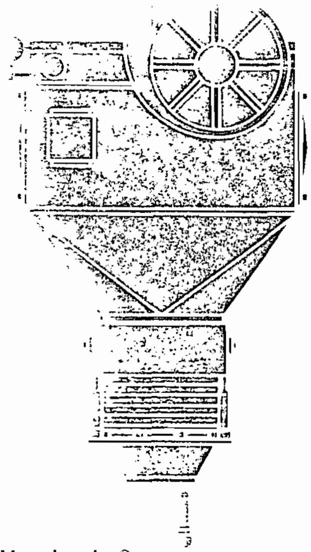
Available options are an automatic level sensing kit to signal the operator that the spout requires raising and a slitted rubber skirt to contain dust around the rim of the spout.

Stock Travel Available
5030mm (16'-6").

Maximum Capacity
300 MTPH (330 TPH).

Product Inlet
300mm (12") diameter.

Air Withdrawal Requirements
30 to 40 M³/min
(1050 to 1350 CFM).



Vaculoader®

This unit is designed to be attached directly to a silo hopper bottom, grain feed chute, screw conveyor, airslide or belt conveyor discharge chute. It is an integral dust filter and retractable bulk loading spout complete with fan and filter cleaning mechanism.

The Vaculoader® places the vehicle, container or vessel being loaded under a negative pressure or vacuum during the loading process, eliminating airborne particulate emissions. Dust particles contained within the unit during loading are deposited back into the container, vehicle or vessel.

Dust piping is not required and a separate dust collector, fan, rotary airlock dust collector valve, screw conveyor or other methods of disposing of collected dust are eliminated.

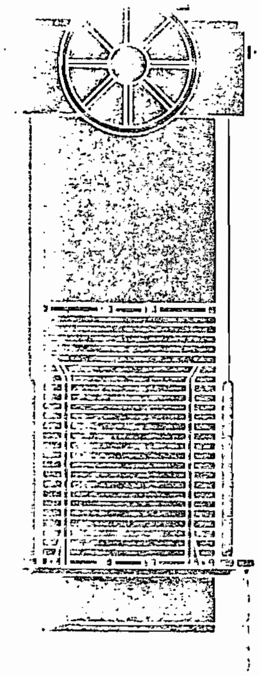
An adjustable venturi is designed into the system to handle a wide variety of materials and flow rates.

Stock Travel Available
1220mm to 3660mm (4' to 12').

Maximum Capacity
218 MTPH to 655 MTPH
(240 TPH to 720 TPH).

Product Inlet
200mm to 380mm
(8" to 15") diameter.

Air Withdrawal Requirements
13 to 110 M³/min
(450 to 3600 CFM).



Agriloader®

The Agriloader® is an integral dust filter and retractable bulk loading spout that functions similarly to that of the Vaculoader®. This model has been designed specifically to accommodate the agricultural industry in the dust-free loading of grain, feed and fertilizer into open and enclosed trucks or railcars, ships and barges.

The Agriloader® is an economical answer to grain loading from a storage elevator and can usually be suspended from existing grain telescoping chutes without major modifications.

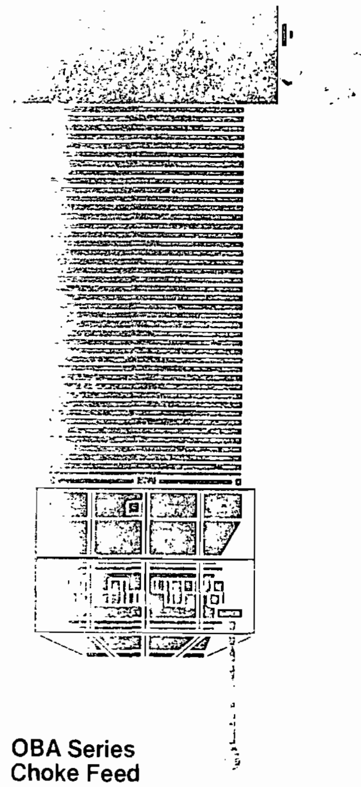
Complex dust piping is eliminated and pivot gimbals are available for chute raising or lowering to keep the Agriloader® vertical.

Stock Travel Available
3.6 M to 9 M (12' to 30').

Maximum Capacity
12,000 BU/HR to 35,000 BU/HR.

Product Inlet
380mm to 610mm
(15" to 24") diameter.

Air Withdrawal Requirements
48 to 132 M³/min
(1600 to 4400 CFM).



OBA Series Choke Feed Vessel Loader

The OBA Series vessel loading spouts are designed to provide dust control during high speed loading of grain, corn or meal without the use of aspiration.

Power actuated vanes in the lower discharge assembly allow accumulated product to discharge at a controlled velocity reducing or eliminating dust.

Level sensing devices are standard to avoid spout plugging.

This unit was developed by our Netherlands engineering office in association with OBA and has been well accepted in the European market where aspiration is often not available.

Stock Travel Available
6 M to 18 M (20' to 60').

Maximum Capacity
900 MTPH to 2180 MTPH
(1000 TPH to 2400 TPH).

Product Inlet
460mm to 915mm
(18" to 36") diameter.

[illegible] ...cities are [illegible] based on a [illegible] Kg/M [illegible] product

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and Options

Midwest loading and stacking spouts are manufactured to exceptionally high standards in both materials and construction.

The venturi and scavenger materials range from 3mm (11 ga.) carbon steel on the smaller models to 12mm (½") steel for the larger units. Abrasive resistant liners and coatings are available for special applications.

Optional construction materials include abrasive resistant steel, stainless steel, and aluminum in various thicknesses depending on the application.

Standard flexible outer spout construction includes half round steel inner rings compressed into a 360° cavity inside the special extruded aluminum outer rings providing full fabric to ring contract around each ring. Anti-static lines to dissipate static electricity are also standard. Available fabrics include heavy coated vinyls, PVC coated polyester or nylon. Heat resistant and cold weather outer spout material is optional.

All electrically operated spouts are equipped with limit switches for automatic stopping at 'full up' and 'full down' positions. Intermediate limit switch contacts are easily installed to provide automatic electrical interlocking.

Standard motor enclosures are totally enclosed and fan cooled. Chemical duty and explosion proof motors are available as options.

Standard electrical control enclosures are dust tight construction. Water tight and explosion proof construction are available.

and combination kits, as well as automatic lowering kits for vessel loading and stockpiling, are desirable options for many applications.

Railcar, ship and barge trimmers and rotating distribution spoons are available for many spouts where product must be distributed into hard to reach areas. Centrifugal air operated rotary trimmers are available for some models.

Gates include pneumatic, hydraulic or electric options, and can be shipped prewired and prepiped to reduce installation costs.

Optional pressure differential switches will sense a plugged spout or can be used to automatically clean the dust collector or Vaculoader® filter tubes.

Most equipment can be shipped completely assembled to further reduce installation time.

Consult factory for modifications to standard equipment, special equipment and fully engineered systems.

Midwest's limited (1) one year warranty applies to the entire product line.

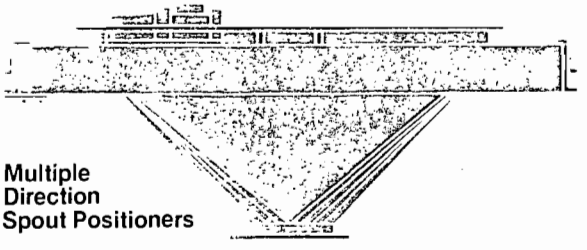
Single Direction Spout Positioners

Single direction spout positioners are designed to allow remote, manual or automatic positioning of a loading spout parallel to the loading station to facilitate railcar and truck spotting. They can also be installed across the tracks and operated back and forth across the station to allow the loading of railcars with side and center hatches, or for positioning a spout over open trucks with ridgepoles.

The center product inlet opening is fixed and will accept a standard power operated flow control gate.

Available Travel
610mm to 1830mm (24" to 72").

Product Inlet
300mm to 914mm
(12" to 36") square.



Multiple Direction Spout Positioners

Multiple direction spout positioners are hydraulically operated and designed to allow remote or automatic positioning of a loading spout parallel to the loading station as well as across the station.

The installation of a series of positioners in an automatic loading station provides high speed loading of any railcar or truck without moving the vehicle. Individual units also can be applied to single loading points, however, the vehicle must be moved or indexed through the station.

Available Travel
300mm to 1830mm (12" to 72").

Product Inlet
300mm to 610mm
(12" to 24") square.

Telescoping Shuttle Spout Positioners

Telescoping shuttle spout positioners are designed for loading enclosed railcars with center hatches and are usually designed in multiples into a high speed loading station.

This positioner has the ability to provide overlapping of the loading spout discharge points requiring less accuracy in railcar spotting.

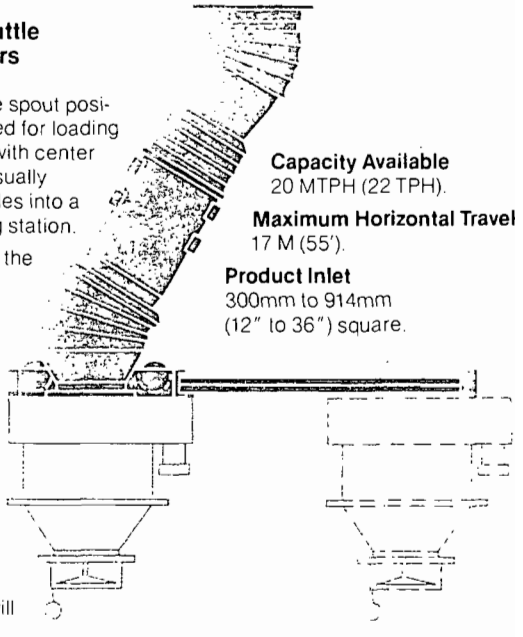
Hydraulic or electric power drive carriages are available, and if adequate height is accessible, one single positioner will provide horizontal movement of up to 17 meters (55'-0").

Target sensing devices will allow complete automatic positioning without the operator being required to identify the railcar or truck. Each shuttle positioner hunts for the open hatch, stops automatically and the loading sequence begins.

Capacity Available
20 MTPH (22 TPH).

Maximum Horizontal Travel
17 M (55').

Product Inlet
300mm to 914mm
(12" to 36") square.



Note: Illustration includes the trimmer for product distribution.

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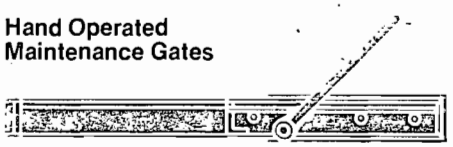
Hand Operated Maintenance Gates



Hand operated maintenance gates are designed to bolt to the bottom of a silo, hopper or storage bin flange and normally remain in the open position.

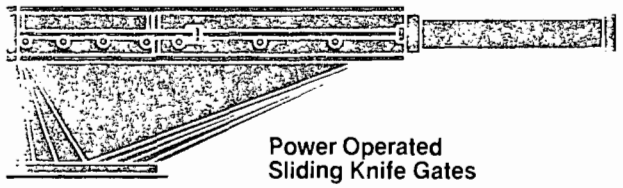
Should other equipment installed below the gate require attention or removal, the maintenance gate would be closed and the equipment below could be serviced without emptying the silo or bin.

This gate can also be used as a manually operated withdrawal gate where power is not available.

Length
610mm to 2660mm (24" to 105").

Width
305mm to 1345mm (12" to 53").

Product Inlet
200mm to 1220mm
(8" to 48") square.



Power Operated Sliding Knife Gates

Heavy duty, power operated sliding knife gates are designed to control or shut off the flow of product being withdrawn from the bottom of a silo, hopper or storage bin.

Recommended installations are for various lumpy, granular and fine products. A dust sealed enclosure option for aerated fines such as cement, lime and alumina is available.

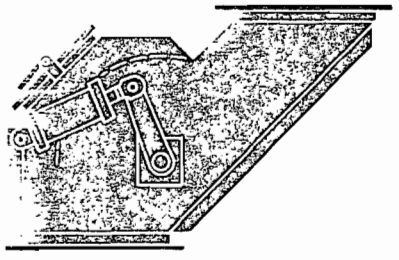
This gate series includes heavy machined and ground blades with undercut knife edge, replaceable urethane seals, special back seal and wiper. The machined blade rolls on hardened eccentric rollers that allow precision seal adjustment. Power operated sliding knife gates can be bolted to the top of a loading or stacking spout and/or a single or multiple direction spout positioner.

Special gates for dredge operations are available and for self-unloading coal and ore ships, including double opposing dredge gates for offshore mining.

Length
610mm to 2660mm (24" to 105").

Width
305mm to 1345mm (12" to 53").

Product Inlet
200mm to 1220mm
(8" to 48") square.

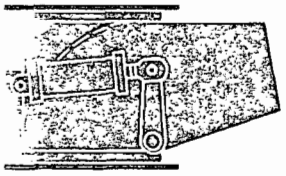


Rolling Blade Gates Design A

Design A Series rolling blade gates are designed with the inlet 45 degrees off center to allow a smooth flow of product onto a belt conveyor during withdrawal ot lumpy or fine products from a silo or storage hopper. Heavy duty construction includes wear resistant steel, stainless steel or ceramic components in contact with the product. Manual, air, electric or hydraulic power options are available.

Maximum Capacity
6000 MTPH (6600 TPH).

Maximum Product Inlet
1525mm (60") square.

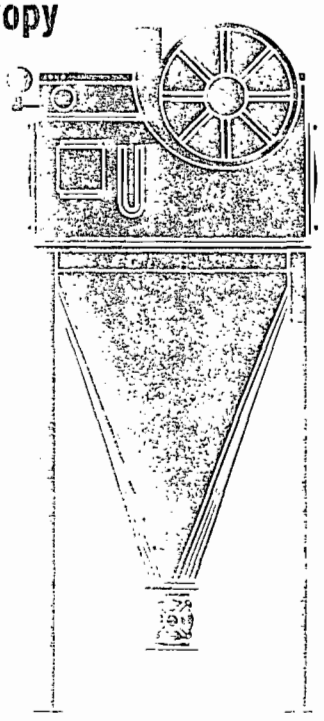


Rolling Blade Gates Design B

Design B Series rolling blade gates are designed for vertical withdrawal of various dry products from a storage hopper or silo into open trucks or railcars. Construction includes wear resistant steel, stainless steel or ceramic components in contact with the product. This gate portion will with heavy abrasive lumps and is available with manual, hydraulic, electric or air actuation.

Maximum Capacity
6000 MTPH (6600 TPH).

Maximum Product Inlet
[illegible] (60") square.



Filter Type Dust Collectors

These dust collectors are designed to connect to bulk loading or stacking spouts to maintain dust control when loading or stockpiling dry dusty products.

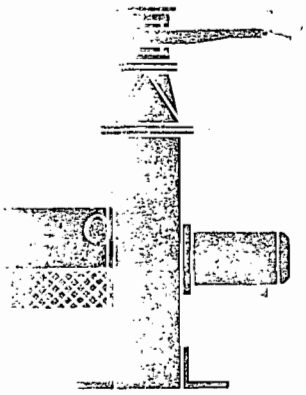
This series can also be used as dust collection devices where required, as bin vents without the hopper and support structure or as insertable dust control filters for conveyor transfer points and discharge chutes.

Standard pulse jet cleaning of filter tubes is accomplished using pressure differential signals compared to timers reducing air supply requirements.

Heavy galvanized steel construction with welded waterproof access doors assures weather tight integrity for continuous outdoor service. Filter tube cleaning options include reverse air and shaker design.

Other options include stainless steel, aluminum or epoxy coated construction, filter media for hygroscopic, high temperature or sticky products, quick change filter tubes with pull out racks, explosion proof motors, solenoid valves and access doors.

Maximum Capacities
3.0 M^3 to 300 M^3
(100 CFM to 10,000 CFM).



Centrifugal Blowers

Centrifugal blowers are designed to be connected directly to the dust outlet flange of a loading spout when the product being loaded is non or mildly abrasive. This places the spout and the vehicle being loaded under a negative pressure or vacuum and will provide dust free loading.

The discharge of the blower should terminate into the roof of the silo or hopper returning the product to the source.

A bin vent dust collector or other method of venting the positive pressure within the silo or bin must be used.

This series is available in higher pressures for aeration of airslide systems and will provide quiet, dependable, low maintenance, high volume aeration air for product conveying.

Direct motor drive or separate motor and belt sheave drive to allow variation of capacities and pressures are also available.

Maximum Capacities
3.0 M^3 to 300 M^3
(100 CFM to 10,000 CFM).

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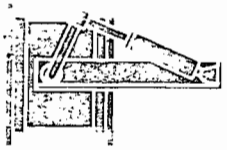


Air Withdrawal Butterfly Valves

This power operated valve is designed to be attached directly to the dust outlet of a bulk filling, loading or stacking spout.

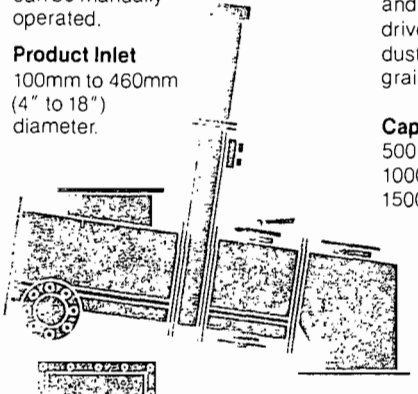
It can be used on multiple spout installations where less than all of the filling or loading spouts are being used simultaneously. For this type of application a butterfly valve is installed on each spout dust outlet flange. The dust collector or extractor capacity is sized to accommodate the maximum number of loading spouts to be operated at any one time.

Electrical interlocking allows the loading operator to select the loading spouts to be used, close the air withdrawal butterfly valves that will not be in use and open the ones that will be loading. This permits concentration of withdrawal air to be applied only to the spouts being used.

This series of valves can also be used to balance complex dust withdrawal systems or for other conventional air handling and control requirements.

They are available with air, hydraulic or electric actuation or can be manually operated.

Product Inlet
100mm to 460mm
(4" to 18")
diameter.



Airslide Components and Systems

Pre-engineered Aire-flo™ conveying system components can be used to build your own airslide system. Design and engineering of a complete system is also available.

Many bulk materials such as plastic resins, cement, flyash and lime can be economically conveyed at rates up to 2000 MTPH (2200 TPH), dust free.

Features include galvanized steel construction, full media support using walkway type bar grating, a patented air/product chamber seal which eliminates product entering the air chamber, heavy duty trackless gates and all necessary curves, converging sections and blowers.

System design using standard Aire-flo™ components includes powered articulating loading arms complete with powered swivels, air slide conveyors and optional Vaculoader® at the discharge end to eliminate dust piping.

Truck and railcar loading stations can also be easily designed by applying standard Aire-flo™ conveyors feeding the Vaculoader®.

Capacities Available
100 MTPH to 2000 MTPH
(110 TPH to 2200 TPH).

Sizes
200mm to 914mm
(8" to 36") wide.

Belt Driven High Speed Bucket Elevators

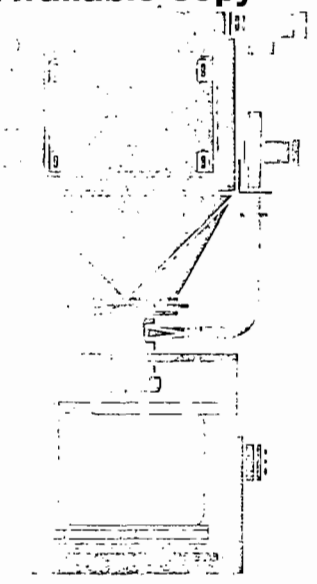
This series will provide high capacity elevating of fine or granular products and is a quiet and economical method of elevating product in confined areas.

This is a digging type elevator assuring full capacity ratings as every bucket travels full.

Standard sizes are available up to 1500 MTPH (1650 TPH) capacity and special automatic boot end clean out is available to avoid product contamination.

Heavy duty construction includes special plastic or metal buckets and dual or single multi-stage drives. This series is ideal for fine dusty products such as cement, grain, alumina, lime and fertilizer.

Capacities Available
500 MTPH (550 TPH),
1000 MTPH (1100 TPH),
1500 MTPH (1650 TPH).



IBC Flexible Container Filling Station Series A

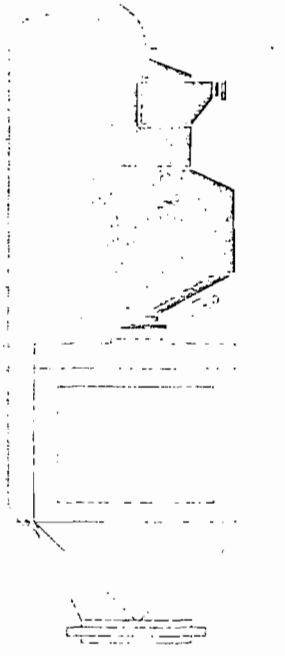
Dust control during flexible container filling is easily obtained. Two models are available depending upon product feed to the station.

When a product is being withdrawn directly from a silo or storage hopper, the Series A filling station should be used to allow the product to flow directly into the flexible container.

A pneumatically operated slide gate is used to start and stop the flow of product into the flexible container.

The filling station contains a compact section of filter tubes that vent the system including displaced air from the container. These filters are automatically cleaned using a pressure differential switch. The IBC container inlet filling sleeve is sealed to the filling spout by an inflatable rubber bladder that completely seals the flexible container from the atmosphere.

The IBC container is also supported during filling by pneumatically operated lifting forks, which can be periodically jogged up and down during the filling cycle to settle and de-aerate the product and increase container capacity. The product can be continuously weighed during the filling cycle. When the weight of the product reaches a preset level, the slide gate is automatically closed.



IBC Flexible Container Filling Station Series B

The Series B filling station should be used when a product is being conveyed pneumatically. A cyclone separator and product accumulator will separate the incoming product from the conveying air and deposit the product into the aerated storage and accumulation bin to be released into the flexible container upon operator command.

An integral blower automatically supplies air to fluidize the product in the storage accumulator and is also used to inflate the container before filling begins.

This accumulator feature allows the build up and immediate storage of product which is pneumatically conveyed during the time the operator is removing a filled container and replacing it with an empty container. The operator then opens the gate to repeat the filling process, and within seconds the container is filled, significantly improving the number of containers filled daily.

Container Sizes Available
(Series A and B)

Size A: 1117mm x 1016mm
(44" Dia. x 40" High)
Size B: 1117mm x 1168mm
(44" Dia. x 46" High)
Size C: 1117mm x 1320mm
(44" Dia. x 52" High)
Size D: 1117mm x 1447mm
(44" Dia. x 57" High)

1.0 M^3 (35 Cu. Ft.)
1.2 M^3 (40 Cu. Ft.)
1.4 M^3 (45 Cu. Ft.)
1.5 M^3 (50 Cu. Ft.)

Loading Rates
From 1 MTPH (1.1 TPH).

Midwest International

Midwest Plaza
105 Stover Road
Charlevoix, MI 49720
Telephone:
(616) 547-4073
Telex: 231119

24112 Harper Ave.
St. Clair Shores, MI 48080
Telephone: (313) 773-2510
Telex: 231166

Best Available Copy

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and International patents and/or patents pending apply to most [illegible]
Copyright 1981, Ron Pair Enterprises, Inc., Midwest Division
Form No. M0197 (10-81)—[illegible] in U.S.A.

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

August 26, 1982

Mr. Clair Fancy, Manager
Central Air Permitting Section
Dept. of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301

AUG 30 1982
BAQM

Dear Mr. Fancy:

Enclosed is the $100 processing fee (check no. 77533) for Jacksonville Bulk Terminal phosphate ship loading modification permit.

If I can be of further assistance, please contact me.

Very truly yours,

Jerry E. Woosley
Assistant Engineer

JEW/vj
Enclosure

cc: Mr. W. Atwood - Occidental
cc: Mr. Doug Dutton - DER

BEST AVAILABLE COPY

WACHOV[illegible]K AND TRUST N.A.
P.O. BOX [illegible] WINSTON-SALEM, N.C. 27102

OCCIDENTAL CHEMICAL COMPANY
SUWANNEE RIVER PHOSPHATE DIVISION

CHECK NUMBER 77533
66-49
531

P.O. BOX 1185 • HOUSTON, TEXAS 77001

DATE	AMOUNT
08-19-82	$100.00

PAY TO THE ORDER OF
FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION
TWIN TOWERS BUILDING
2600 BLAIR STONE RD.
TALLAHASSEE, FLA. 32301

GENERAL ACCOUNT

BY Ivan H. Cook
AS DISBURSING AGENTS
FOR THE COMPANY

[redacted]

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No. 33624

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Occidental Chemical Co. Date August 30 19[illegible]

Address P.O. Box 1185 Houston, Texas 77001 Dollars $ 100.00

Applicant Name & Address Jacksonville Bulk Terminal 1301 Normandy Blvd. Jacksonville, FL

Source of Revenue _____

Revenue Code 5101 Application Number AC 16-58545

By [illegible]

Subject

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

July 30, 1982

Mr. M. P. McArthur, Vice President
Jacksonville Bulk Terminal, Inc.
1301 Wigmore Street
Jacksonville, Florida 32206

Dear Mr. McArthur:

Additional information is required before the Department can process your application for permit to construct a dust control system for the phosphate rock shiploading facility. The additional information needed is listed below.

1. Application fee. A new fee schedule is in effect.

2. What optional control equipment is being considered for the shiploading facility and what is the preliminary estimate of the time required to place the optional equipment in operation.

3. Detail schedule of the engineering and construction of the control equipment to justify the additional time needed above the increments of progress listed in 17-2.650(2)(f)4.b., FAC.

4. Emission data, equipment specification, test methods, etc. required by Section V; Supplemental Requirements, needs to be submitted.

5. Stack parameters for the proposed control devices required in III H need to be furnished.

6. Are the holes in the ship covered during loading? If not, what precautions will be taken to prevent

fugitive dust from escaping with the displaced air while the ship is being loaded?

7. What types of material (phosphate rock, TSP, DAP, etc.) will be handled by the loading facilities and what is the maximum rate (TPH, TPY) and hours of operation (hrs/yr) that the shipping facilities will be used?

8. What will be the maximum emissions of criteria pollutants in lbs/hr and TPY from this facility (III H)?

9. Do other sources of unconfined and fugitive emission from this terminal, such as silos and cells, have controls that comply with the state regulations?

10. What intern action is being taken to reduce emissions from the terminal until the permanent control equipment is in operation?

The Bureau will resume processing your application as soon as we have the information requested above. Please contact this office at 904/488-1344 if you have any questions on this matter.

Sincerely,

for W. H. Thomas

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

CHF/WH/bjm

cc: BES
District Offices
Dr. John Koogler

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

CITY OF JACKSONVILLE, FLORIDA

July 19, 1982

JUL 22 1982

BAQM

Mr. Clair Fancy, Director
Central Air Permitting Section
Dept. of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301

Dear Mr. Fancy:

Enclosed is the Construction Permit application for the Jacksonville Bulk Terminals phosphate rock shiploading operation which is submitted to comply with RACT requirements. This application is being forwarded to you for processing pursuant to the guidelines available to this Agency.

Bio-Environmental Services Division offers the following comments:

(1) Page 2(D) - Current permit on shiploading operation is A016-30977. It is noted that the permit does not address emissions from the actual loading of the product into the ship. (copy of permit enclosed).

(2) Application fee not received.

Please contact me if I can be of further assistance in this matter.

Very truly yours,

Jerry E. Woosley
Assistant Engineer

JEW/vj
Enclosure

cc: Mr. J. Koogler, without enclosure
cc: Mr. W. Atwood, without enclosure

ALL-AMERICA CITY
AREA CODE 904 / AIR POLLUTION – 633-3033 OR 633-3303 / WATER POLLUTION – 633-3415
515 WEST 6TH STREET / JACKSONVILLE, FLORIDA 32206

AC 16-58548

DER

JUL 22 1982

BAQM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

JUL 13 1982

SOURCE TYPE: Materials Handling-Shiploading [ ] New[1] [X] Existing[1]

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

COMPANY NAME: Jacksonville Bulk Terminals, Inc. COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Dust control system for phosphate rock shiploading facility.

SOURCE LOCATION: Street 1301 Wigmore Street City Jacksonville

UTM: East 439.300 km North 3359.800 km

Latitude ____ ° ____ ' ____ "N Longitude ____ ° ____ ' ____ "W

APPLICANT NAME AND TITLE: Jacksonville Bulk Terminals, Incorporated

APPLICANT ADDRESS: 1301 Wigmore Street, Jacksonville, Florida

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Jacksonville Bulk Terminals, Inc.

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

*Attach letter of authorization

Signed: _____

M. P. McArthur, Vice President

Name and Title (Please Type)

Date: 7/12/82 Telephone No. 904/397-8101

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

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

Signed: _____

John B. Koogler, P.E.

Name (Please Type)

(Affix Seal)

SHOLTES & KOOGLER, ENVIRONMENTAL

Company Name (Please Type) CONSULTANTS,

1213 NW 6th Street, Gainesville, FL 32601

Mailing Address (Please Type)

Florida Registration No. 12925 Date: 7/12/82 Telephone No. (904) 377-5822

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

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

Action is being taken to control fugitive particulate matter emissions generated during the loading of phosphate rock onto ships. This project results from a recent requiremen for installation of RACT. Various options are still being considered. These details wil be worked out within the time schedule shown in Attachment 1.

B. Schedule of project covered in this application (Construction Permit Application Only) SEE ATTACHMENT 1

Start of Construction January 15, 1983 Completion of Construction January 15, 1984

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.)

Order of magnitude -- $1,000,000.

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

Control measures undertaken to comply with RACT; no previous permit for facility.

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

F. Normal equipment operating time: hrs/day ____ ; days/wk ____ ; wks/yr 2.5 ; if power plant, hrs/yr ____ ; if seasonal, describe: During maximum year active loading of 1,000,000 tons of phosphate rock on 30 ships takes 370 hours or an annual operating factor of four (4) percent.

G. If this is a new source or major modification, answer the following questions. (Yes or No) EXISTING SOURCE NOT APPLICABLE

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

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

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		
Dry Phosphate Rock	Fug. Part.	---	6,000,000*	3
*Source operates approximately 370 hours per year.				

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

1. Total Process Input Rate (lbs/hr): 6,000,000

2. Product Weight (lbs/hr): 6,000,000

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Fug. Part. Matter	NOT APPLICABLE		Ch. 17-2.650(2)(c)(11)	10% Opac.	125	23	1
Part. Matter	UNKNOWN **		"	0.03 gr/scf			2
** Engineering Incomplete on Air Handling							

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)		Basis for Efficiency (Sec. V, It[5]
Midwest Spout Collection	Part. Matter	UNKNOWN	0-10μ	0.7%	
System or Equal			10-20μ	4.5%	
			20-40μ	22.8%	
			40-75μ	72.0%	
			Total	100.0%	

[1] See Section V, Item 2.

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

[3] Calculated from operating rate and applicable standard

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

[5] If Applicable

E. Fuels NOT APPLICABLE

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

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

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

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

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

G. Indicate liquid or solid wastes generated and method of disposal.
NONE

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

Stack Height: UNKNOWN ft. Stack Diameter: UNKNOWN ft.

Gas Flow Rate: UNKNOWN ACFM Gas Exit Temperature: AMBIENT °F.

Water Vapor Content: 2 % Velocity: 40 FPS

SECTION IV: INCINERATOR INFORMATION

(NOT APPLICABLE)

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

Description of Waste _____

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

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

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

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

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

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

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

Brief description of operating characteristics of control devices: _____

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

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight — show derivation. SEE SECTION IIIB
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. NOT AVAILABLE AT THIS TIME.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test). ATTACHMENT 2.
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.). NOT AVAILABLE.
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). NOT AVAILABLE
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained. ATTACHMENT 3.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map). ATTACHMENT 4.
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. ATTACHMENT 5.

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

(NOT APPLICABLE)

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

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration

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

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

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

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*:

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy*:

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*:

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy**:

h. Maintenance Costs:

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:

*Explain method of determining efficiency.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

*Explain method of determining efficiency above.

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*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:
2. Efficiency*:
3. Capital Cost:
4. Life:
5. Operating Cost:
6. Energy:
7. Maintenance Cost:
8. Manufacturer:
9. Other locations where employed on similar processes:

a.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

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

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION
(NOT APPLICABLE)

A. Company Monitored Data

1. _____ no sites _____ TSP _____( )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.

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 on 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.

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

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.

ATTACHMENT 1

PROJECT TIME SCHEDULE
FUGITIVE PARTICULATE MATTER CONTROL SYSTEM
JACKSONVILLE BULK TERMINALS, INC.

Activity	Date
File Construction Permit Application	July 15, 1982
Project Engineering, Request for Funds, Let Contract	July 15, 1983
Complete Construction	July 15, 1984
Test for Compliance	September 15, 1984
Facility in Compliance	January 15, 1985
Final Compliance Date per 17-2.650(2)(f)	March 15, 1985

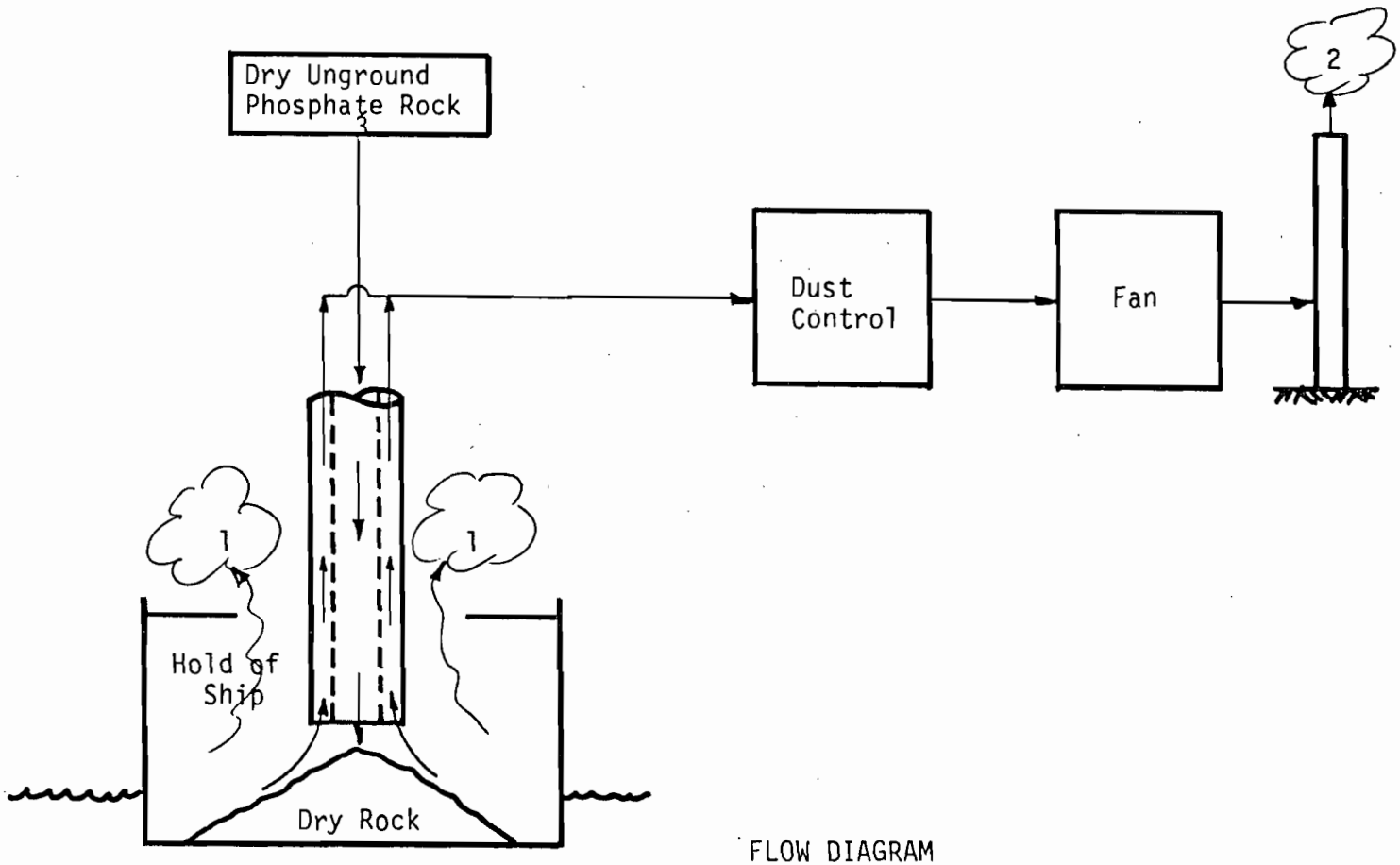
ATTACHMENT 2

POTENTIAL FUGITIVE PARTICULATE MATTER EMISSIONS
JACKSONVILLE BULK TERMINALS, INC.

Silt fraction (< 75μ) of dry ground[1] phosphate rock by sieve analysis	9.00%
Silt handled per hour at dry ground rock loading rate of 3,000 tons/hour = 3,000 x 2,000 lbs/ton x 0.09 =	540,000 lbs/hr
Fugitive Particulate Matter emission rate from dry ground rock assuming an emission factor of 1.5 lbs/ton (EPA 450/3-77-010) = 3,000 tons/hr x 1.5 lbs/ton =	4,500 lbs/hr
Ratio of fugitive emissions/silt handled = 4,500/540,000 =	0.0083
Silt fraction dry unground phosphate rock (as loaded at JBT) by sieve analysis	0.25%
Silt handled per hour at a dry unground rock loading rate of 3,000 tons/hour = 3,000 x 2,000 lbs/ton x 0.0025=	15,000 lbs/hr

Potential fugitive emissions from dry unground rock loading
= Silt handling rate x ratio of fugitive emissions/silt handled
= 15,000 x 0.0083
= 125.0 lbs/hr.

[1] Reference made to dry ground rock since EPA 450/3-77-010 emission factor is based on dry ground rock. The ground rock emission factor is related to unground rock by a ratio of the silt content of the two rocks.

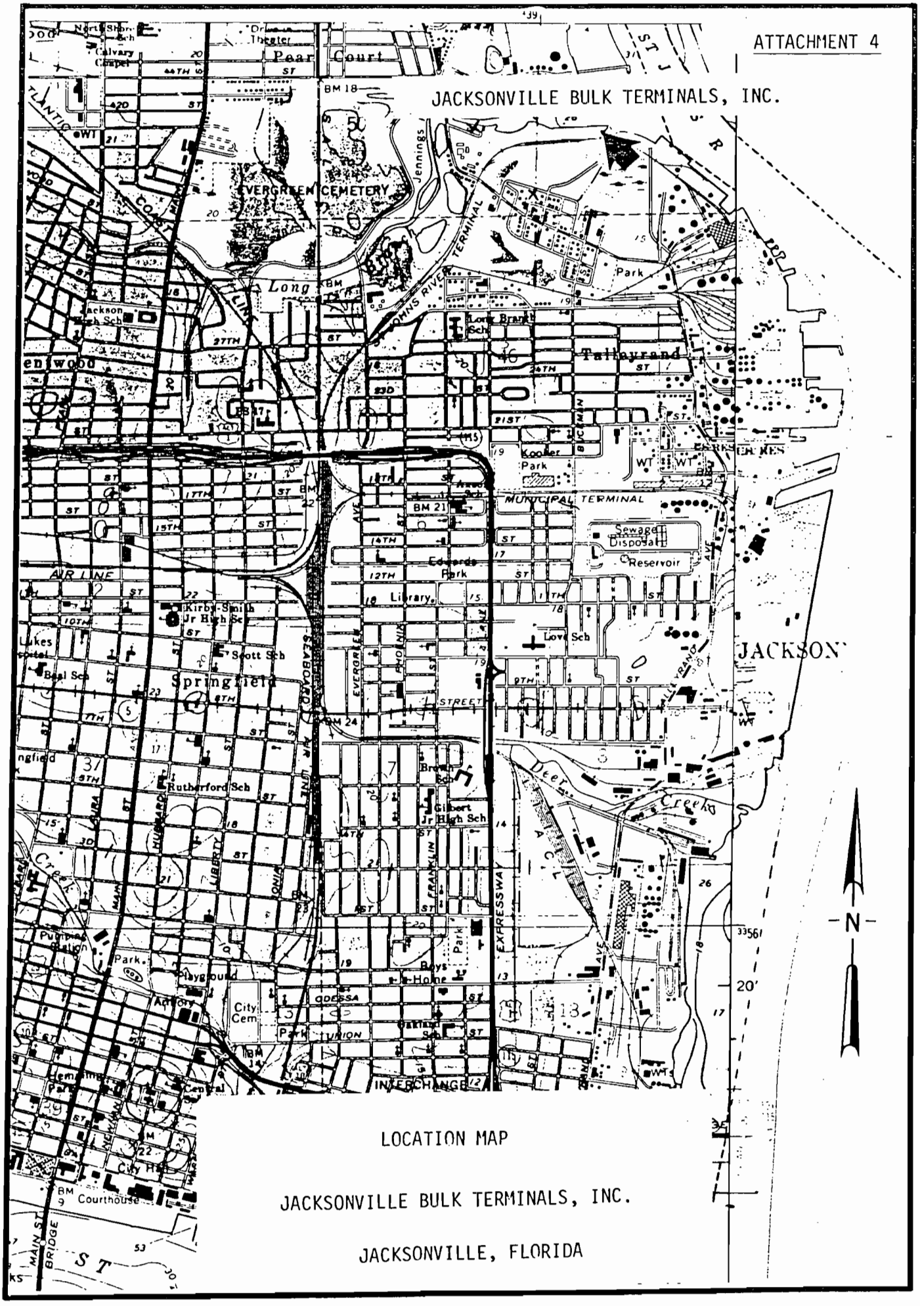


FLOW DIAGRAM
FUGITIVE PARTICULATE MATTER CONTROL SYSTEM
JACKSONVILLE BULK TERMINALS, INC.

ATTACHMENT 3

Best Available Copy

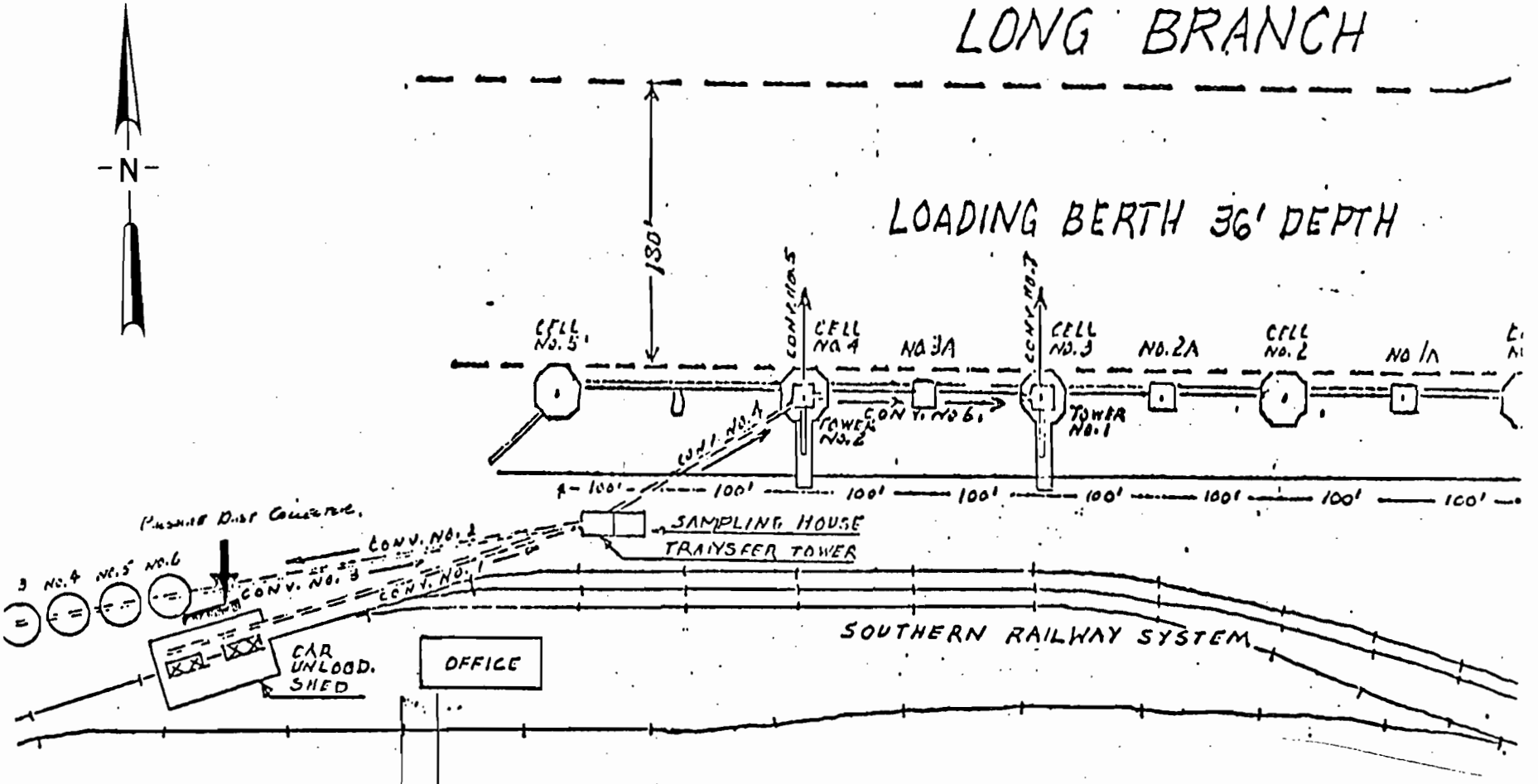
ATTACHMENT 4



LOCATION MAP

JACKSONVILLE BULK TERMINALS, INC.

JACKSONVILLE, FLORIDA



JACKSONVILLE BULK TERMINALS, INC.

SITE PLAN

ATTACHMENT 5

SHOLTES & KOOGLER

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

DER
JUN 3 1985
BAQM

May 24, 1985

Mr. Al Csontos, P.E.
Occidental Chemical Company
Florida Operations
P.O. Box 300
White Springs, Florida 32096

Dear Mr. Csontos:

Receipt of the permit application for the captioned source is acknowledged. The application has been determined to be incomplete pending clarification of the loading materials which Occidental Chemical Company desires to be included in the operating permit application. Please include with the clarification supporting documents such as stack tests, visible emission observations, etc.

In order to expedite processing of the permit please respond as soon as possible.

Please direct all questions to the undersigned.

Very truly yours,

Jerry E. Woosley
Associate Engineer

JEW/cb

cc: BESD File/1660-I
Mr. John Brown, P.E.
Mr. Willard Hanks

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

DER
APR 15 1985
BAQM

April 10, 1985

Mr. W. W. Atwood
Occidental Chemical Company
Florida Operations
P.O. Box 300
White Springs, Florida 32096

Re: Jacksonville Bulk Terminals
Bulk Shiploading
Permit AC16-58548

Dear Mr. Atwood:

Receipt of your letter dated April 1, 1985 concerning testing requirements for the captioned permit is acknowledged. The actions proposed are reasonable and satisfactory to this Agency.

If you have any questions concerning this matter, please contact the undersigned.

Very truly yours,

Jerry E. Woosley
Assistant Engineer

JEW/vj

cc: BESD/File 1660-I
cc: Mr. John Brown
cc: Mr. Willard Hanks

DER
APR 4 1985
BAQM

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

April 1, 1985

Mr. Jerry Woosley
Dept. of Bio-Environmental Services
515 West 6th Street
Jacksonville, Fl. 32206-4397

Subject: Construction Permit No. AC16-58548

Dear Mr. Woosley:

In the March 15 letter from Secretary Tschinkel condition number 106 was modified to require compliance testing of all dry products to be shipped at our Jacksonville Bulk Terminal facility by April 15, 1985. Because our testing is necessarily limited to product sales and ship scheduling, it will not be possible to perform the required tests on these products within the remaining time period.

However, we assure you that a compliance test will be performed on the next shipment of each product and you will be advised beforehand. Test reports will be compiled for each product and submitted to you within 45 days of testing.

We hope this is satisfactory and will meet the intent of the Department's letter. Should you have any questions, please call either me or Al Csontos.

Sincerely,

W. W. Atwood
Environmental Control Manager

WWA/jm

cc: Mr. Willard Hanks,DER, Tallahassee
Mr. Ray King, JBT
Mr. Al Csontos, Oxy

No. 0155816

RECEIPT FOR CERTIFIED MAIL

**NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL**

(See Reverse)

SENT TO
Mr. W.W. Atwood
STREET AND NO. Natal Chem. Co.
P.O. Box 300
P.O., STATE AND ZIP CODE
White Springs, Fl 32096

POSTAGE				$
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE			¢
	OPTIONAL SERVICES	SPECIAL DELIVERY		¢
		RESTRICTED DELIVERY		¢
		RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	¢
			SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
			SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
			SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES				$

POSTMARK OR DATE

3/22/45

PS Form 3800, Apr. 1976

File Copy

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

March 15, 1985

Mr. W. W. Atwood, Manager
Occidental Chemical Company
Florida Operations
Post Office Box 300
White Springs, Florida 32096

Dear Mr. Atwood:

Re: Modification of Conditions
Jacksonville Bulk Terminal

The department acknowledges receipt of your February 4, 1985, letter that requested the date for the compliance tests required by construction permit No. AC 16-58548 be extended from February 15, 1985, to April 15, 1985, and the expiration date of the permit be extended accordingly. This request is acceptable, with conditions, and the specific conditions and expiration date are changed as follows:

Expiration Date

From: June 15, 1985

To: August 15, 1985

Original Specific Condition

10. The Company shall comply with the following schedule:

a) Report all shiploading operations to the Bio-Environmental Services 15 days prior to operating the facility.

b) Conduct the compliance tests required by the permit to construct as soon as possible but no later than February 15, 1985. Notify Bio-Environmental Services 15 days prior to the

compliance test. Visible emissions tests by EPA Method 9 shall be for a minimum of 1 hour. Particulate matter and visible emission tests on the baghouse shall be conducted simultaneously.

c) Submit a complete application for permit to operate, that includes the compliance test report, to the Bio-Environmental Services by March 15, 1985.

Revised Specific Condition

10. The Company shall comply with the following conditions.

a) Report all shiploading activity (phosphate rock and other materials that this facility is permitted to handle) to the Bio-Environmental Service 15 days prior to loading of any ship.

b) Conduct visible emissions and particulate matter compliance tests on the shiploading facility on all materials that Jacksonville Bulk Terminal is permitted to handle as soon as possible but no later than April 15, 1985. Particulate matter and visible emission tests are to be conducted simultaneously when a baghouse is used to control particulate matter emissions at the shiploading facility. Test methods shall be EPA Method 5 and EPA Method 9 (minimum of 1 hour test period) as described in 40 CFR 60, Appendix A.

c) Submit a complete application for permit to operate, that includes the compliance test report, to the Bio-Environmental Services by May 15, 1985.

Attachments to be Incorporated

Mr. W. W. Atwood's letter dated February 4, 1985.

This letter must be attached to construction permit No. AC 16-58548 and shall become a part of that permit.

Sincerely,

Victoria J. Tschinkel
Secretary

VJT/ks

cc: J. Cole
J. Woosley
R. King

attachment: February 4, 1985, letter

DER
FEB 8 1985
BAQM

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

February 4, 1985

Mr. Willard Hanks
Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

RE: Jacksonville Bulk Terminal Permit AC16-58548

Dear Mr. Hanks:

As outlined in our letter of October 11, 1985, the initial compliance tests for the new loading towers at the Jacksonville Bulk Terminals were inconclusive. Therefore, a time extension for testing this facility for phosphate rock loading was requested and subsequently granted.

At the time of our request for permit extension and in the absence of a scheduled shipment it was assumed, based upon past performance, that additional opportunities for compliance testing would occur before the new permit expiration date. Such has not been the case. An additional permit extension is hereby requested which extends the compliance test date until 4/15/85. This date should be sufficiently flexible to accommodate at least the one phosphate rock ship tentatively scheduled for mid-March.

Compliance testing will occur with the first phosphate rock ship arriving at the Jacksonville Bulk Terminal this year. The Jacksonville Department of Bio-Environmental Services will be notified as to the actual test date. The operation permit submission date will be contingent upon the compliance date but will not exceed 30 days after that date.

Your consideration of this matter is appreciated.

Sincerely,

W. W. Atwood
Manager, Environmental Control

WWA/psb

cc: J. Woosley, Bio-Environmental Services, Jacksonville
Ray King, Jacksonville Bulk Terminal

Best Available Copy

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee

To: _____ Loctn.: _____
To: _____ Loctn.: _____
To: _____ Loctn.: _____
From: _____ Date: _____

Reply Optional [ ] Reply Required [ ] Info. Only [ ]
Date Due: _____ Date Due: _____

RECEIVED
MAR 15 19
Office of the Secretary

TO: Victoria J. Tschinkel

FROM: Clair Fancy Clair Fancy

DATE: March 14, 1985

SUBJ: Modification of Air Construction Permit

Attached is a letter drafted for your signature that will extend the expiration date of air construction permit No. AC 16-58548 that was issued to Jacksonville Bulk Terminal for a shiploading facility.

The bureau recommends that the extension be approved.

CHF/WH/s

DER
MAR 18 1985
BAQM

SHOLTES & KOOGLER, ENVIRONMENTAL CONSULTANTS
1213 N.W. 6th Street Gainesville, Florida 32601 (904) 377-5822

SKEC 102-75-06

March 6, 1985

DER
MAR 7 1985
BAQM

Mr. Bill Thomas
Florida Department of
Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Subj: Occidental Chemical Agricultural Products, Inc.
Jacksonville Bulk Terminals Air Pollution Source
Operating Permits

Dear Bill:

I would like to follow up on the meeting that Wes Atwood and I had with you and Willard Hanks on January 29, 1985 regarding the air pollution source operating permits for the Jacksonville Bulk Terminal (JBT); the seaport terminal in Jacksonville through which Occidental ships various fertilizer products. The specific purpose of the meeting was to discuss the activities that are presently permitted at JBT and the letter from Clair Fancy to Al Csontos of Occidental dated January 10, 1985.

In Mr. Fancy's January 10, 1985 letter, it is stated that Occidental must submit a complete application to show that the loadout of DAP, MAP and silica sand will comply with applicable regulations. We explained that Occidental is presently permitted to load DAP and GTSP through the terminal (in addition to phosphate rock) and that the loadout of MAP and silica sand will represent the loadout of materials that are similar to materials presently addressed in the operating permits for the terminal.

It is my understanding that it was agreed that the existing permits probably cover the loading of MAP and silica sand but that Occidental was to provide the Department with information in letter form that would describe each dry bulk material that would be loaded through the terminal; the loadout rate of each material; the measures

that will be taken to control particulate matter emissions from both point sources and unconfined sources; and the particulate matter emission and/or opacity standard that would apply during the loadout of each material. Occidental is presently in the process of compiling this information and will forward all of the information to you as soon as possible.

The information that Occidental is compiling will include compliance tests (both particulate matter emission measurements and visible emission observations) during the loadout of phosphate rock on March 2-4, 1985 and observations during the loadout of DAP which will occur during March 7-8, 1985.

If I have misrepresented the agreement that we reached during our January 29 meeting or if there are any questions or comments regarding other aspects of this matter, please give me a call.

Very truly yours,

SHOLTES & KOOGLER,
ENVIRONMENTAL CONSULTANTS

John B. Koogler, Ph.D., P.E.

JBK:net
cc: Mr. Willard Hanks
Mr. Wes Atwood

Copy to BES on 3/8/85

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

DER
FEB 27 1985
BAQM

February 25, 1985

Mr. Willard Hanks
Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32301

Re: Permit AC16-58548
Jacksonville Bulk Terminal
Shiploading operation

Dear Mr. Hanks:

Bio-Environmental Services has no objections concerning a delayed test date for the captioned source.

Your prompt action is appreciated.

Very truly yours,

Dan Summerfield
for Jerry E. Woosley
Assistant Engineer

JEW/vj

cc: Mr. John Brown
cc: BESD/File 1660-I

file

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

January 10, 1985

Mr. A. L. Csontos
Environmental Engineer
Occidental Chemical Company
P. O. Box 300
White Springs, Florida 32096

Dear Mr. Csontos:

Re: November 16, 1984 request to modify AC 16-58548

On January 4, 1982, the department issued a permit to construct a dust control system for a phosphate shiploading facility to Jacksonville Bulk Terminals, Inc. This permit authorized loading of phosphate rock with the use of the Midwest International spout collection system.

If Jacksonville Bulk Terminals, Inc. plans to load ships with other materials (DAP, MAP, and silica sand) with this equipment, then the Company must to submit a complete application for permit to show that the modified operation will comply with the applicable regulations. The new application for this facility must include all materials to be handled by the system, the maximum hours of operation of the system along with particulate matter, fluoride, and visible emissions (lb/hr, TPY, gr/dscf, and opacity). Your November 16 letter implied that the baghouses would not be used when hygroscopic material was being loaded. If so, please provide technical support that the system will comply with the RACT regulations while handling DAP and MAP.

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

Sincerely,

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

CHF/WH/s

cc: J. Woosley
J. Cole
W. Atwood

Check Sheet

Company Name: JACKSONVILLE BULK TERMINALS, INC
Permit Number: AC16-306311
PSD Number:
Permit Engineer:

Application:

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

Cross References:

- [x] ~~[illegible]~~
- [ ]
- [ ]

Intent:

- [x] Intent to Issue
- [x] Notice of Intent to Issue
- [x] Technical Evaluation
- [x] BACT Determination signed
- [x] Unsigned Permit

Correspondence with:

- [ ] EPA
- [ ] Park Services
- [ ] Other

- [x] Proof of Publication
  - [ ] Petitions - (Related to extensions, hearings, etc.)
  - [ ] Waiver of Department Action
  - [ ] Other

Final Determination:

- [x] Final Determination
- [x] Signed Permit
- [ ] BACT Determination
  - [ ] Other

Post Permit Correspondence:

- [x] Extensions/Amendments/Modifications
- [ ] Other

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

October 10, 1983

Mr. A. L. Csontos, P. E.
Environmental Engineer
Occidental Chemical Company
Post Office Box 300
White Springs, Florida 32096

Dear Mr. Csontos:

Jacksonville Bulk Terminal, Inc.
Modification of Conditions
Permit No. AC 16-36311

We are in receipt of your request for a modification of the permit conditions. The conditions are changed as follows:

Condition	From	To
Expiration Date	September 30, 1983	October 1, 1984

This letter must be attached to your permit and becomes a part of that permit.

Sincerely,

Victoria J. Tschinkel
Secretary

VJT/CHF/bm

cc: John Ketteringham, FDER,
Northeast District

Jerry E. Woosley, Duval County Dept. of Health,
Welfare & Bio-Environmental Services

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

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

RECEIVED
OCT 7 1983
Office of the Secretary

TO: Victoria J. Tschinkel

FROM: for C. H. Fancy, Deputy Chief, Bureau of Air Quality Management

DATE: October 10, 1983

SUBJ: Jacksonville Bulk Terminals, Inc., AC 16-36311
Request for Time Extension

Attached is a letter authorizing a time extension to Jacksonville Bulk Terminals, Inc. (Permit No. AC 16-36311) to construct two 18 MMBtu boilers to be located at the applicant's existing facility on Wigmore Street in Jacksonville.

The permit expires on September 30, 1983, and the applicant requests the expiration date be extended until October 1, 1984.

The Bureau recommends your approval and signature.

CHF:ks

Attachment

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

DER

AUG 22 1983

BAQM

August 18, 1983

Mr. Clair Fancy
Central Air Permitting Section
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, FL 32311

Re: Jacksonville Bulk Terminal, Inc.;
Modification of Permit No. AC16-36311

Dear Mr. Fancy:

Due to the continued depressed condition of the fertilizer industry we remain unable to resolve our situation with respect to proposed auxiliary boilers 3 & 4 for the Jacksonville Bulk Terminal. Therefore, a further extension of our construction permit is requested for one additional year, ie. September 30, 1983 to October 1, 1984.

Your consideration of this matter would be appreciated.

Sincerely,

A. L. Csontos

A. L. Csontos, P.E.
Environmental Engineer

psb

cc: W. W. Atwood
Ray King, Jacksonville Bulk Terminal
Jerry Woosley, Bio-environmental Services, Jacksonville, FL

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

Mr. W.W. Atwood, Manager
Environmental Control
Occidental Chemical Company
Jacksonville Bulk Terminal
1301 Wigmore Street
Jacksonville, Florida 32206

Dear Mr. Atwood:

This confirms the extension of time to July 15, 1982, for submission of a revised operation permit for the Jacksonville Bulk Terminal. The extension of time was included in Robert S. Pace's letter of June 11, 1982, and as noted in his letter and as a requirement of the Florida Administrative Code Rule 17-2, the Department of Environmental Regulation must approve such extensions.

If you have any questions, please call me or Clair Fancy, at (904) 488-1344.

Sincerely,

Steve Smallwood, P.E.
Chief
Bureau of Air Quality Management

SS/ni

cc: D. Dutton
M. Hall
J. Svec
C. Fancy
S. Pace

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

June 11, 1982

Mr. W. W. Atwood, Manager
Environmental Control
Occidental Chemical Company
Jax. Bulk Terminal
1301 Wigmore Street
Jacksonville, Florida 32206

Re: Air Pollution RACT Rule

Dear Mr. Atwood:

Receipt of the Jacksonville Bulk Terminal's (JBT) request of June 10, 1982 for additional time for submission of a revised Operation Permit, pursuant to the requirements of Chapter 17-2.650 Florida Administrative Code, is acknowledged. In view of the efforts by JBT to identify a practical solution to their particulate emission problem, and the economics associated with the various solutions being reviewed, the Bio-Environmental Services Division (BESD) agrees that an extension of time for submission of a revised permit, until July 15, 1982, is in order. However, it must be clearly understood that on July 15, 1982 JBT must submit a revised permit which will specifically detail how JBT will achieve compliance with the applicable RACT emission limitations.

A copy of this letter will be forwarded to the Florida Department of Environmental Regulation for their concurrence on this matter. Should no formal response (in writing) be received by June 17, 1982, it will be assumed that FDER does concur with BESD in this matter.

It is understood that a demonstration of a proposed control technique will be performed on June 21, 1982. The BESD appreciated your offer to be present, and will attend. The staff plans to have at least three persons on site to evaluate and discuss the particulate problem.

If there are any questions in this matter, please advise.

Very truly yours,

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

RSP/vj

cc: Mr. Steve Smallwood, with enclosure
cc: Mr. Doug Dutton, with enclosure

Based on the rule, facilities should be in operation 36 months from March 15, 1982. Based on the Midwest spout system proposal, longest delivery of equipment is estimated at five months,

If we give six months for engineering and approval of funds, six months for equipment delivery , and another six for installation, it will leave 14 months safety factor, with an extension to July 15.

The attached chronology illustrates our recent activities on this project and includes a number of trips to other loading terminals.

We would be glad to answer any questions you may have, or review any of these activities with you in detail.

Sincerely yours,

OCCIDENTAL CHEMICAL COMPANY

Wes Atwood

W. W. Atwood,
Manager, Environmental Control

cc: R. L. King, Manager, JBT
R. E. McNeill , OXY, White Springs

Best Available Copy

Jacksonville Bulk Terminal

OCCIDENTAL CHEMICAL COMPANY

OXY

June 10, 1982

Mr. Robert S. Pace
Bio-Environmental Services Division
515 West 6th Street
Jacksonville, Florida 32206

Subject: JACKSONVILLE BULK TERMINALS
REQUEST FOR ONE MONTH EXTENSION

Dear Mr. Pace:

This will confirm our conversation on June 9, and our request for an additional one month extension until July 15 to file for a permit modification in connection with RACT.

During this period of time we plan to:

1. Test a newly constructed reduced velocity loading spout, combined with a spray ring using water and wetting agent. In this operation the spout will be lowered into the hold of the vessel to reduce the distance to the product pile.

   We expect to show a significant reduction in dust generation and improvement in dust suppression. At the least, this trial should give an indication of how well the Midwest spout proposal will work. (vessel scheduled June 21)

2. Estimate cost of installation, operation and maintenance of the three options we discussed, viz:

   (a) Midwest or other reduced velocity spout with Occidental's spray ring;

   (b) Midwest spout dust control system, with collector;

   (c) Tarpaulins and collector.

3. Further discuss options with your Agency.

4. Decide on option; prepare and submit application.

Best Available Copy

06/21/82 Visit to Linder Industrial Machinery, Lakeland, Florida. Discuss proposals for a Midwest spout dust control system.

06/01/82 Received Sales/Design information from DCL Company, Charlevoix, Michigan.

06/02/82 Contact with H. F. Mason, DCL representative, truck loading, Col., Tennessee.

06/08/82 Constructed free fall breaker spout.

06/09/82 Visited DCL spout truck loading oepration, Columbia, Tennessee, at Union Carbide loading carbon.

06/09/82 Received proposals from Linder, re: Midwest spout, with dust collector.

06/09/82 Reviewed preliminary installation requirements.

06/21/82 Plan to test "free fall breaker spout" in combination with water spray ring on scheduled shiploading (no other rock shiploading since May 5).

ACTIVITIES SUMMARY

PHOSPHATE ROCK VESSEL LOADING, DUST CONTROL IMPROVEMENTS

PERSONNEL: JACKSONVILLE BULK TERMINALS, INC. (JBT)
OCCIDENTAL CHEMICAL COMPANY, WHITE SPRINGS, FLORIDA; HOUSTON, TEXAS

09/10/81 First visit to Ashland Coal, Huntington, West Virginia, re: DETER FOAM SYSTEM.

02/05/82 WEN-DON CORPORATION, Sales Engineering visit- Review, propose modifications to Johnson-March system; physical and wetting agent changes.

02/18/82 Second visit to Ashland Coal- Conclusion: try alternative that should give equivalent results.

03/ 82 Visit to Tampa, Florida Port.

03/ 82 Designed, constructed, tested water spray ring in hold of ship; lowered chute into hold (4/07/82).

03/09/82 Johnson-March Engineering visit to JBT- Recommendations to improve spray dust control system.

03/24/82 Rock and water samples to Nalco Chemical for analysis to confirm proper spray rates and wetting agent concentrations in use at JBT. Conclusions received June 3. May switch to Nalco 8800.

04/05/82 Modified spray ring twice and tested on three more ships (4/23/82; 5/02/82; 5/05/82). Conclusion: combination of lowering chute and spraying wetting agent and water around spout reduced dust 30/50%.

04/17/82 Industrial Power Systems Labs Engineering visit and on 4/15 received automatic spout level control proposal to use in conjunction with ring water sprays.

05/03/82 Contacted Linder Industrial Machinery, Lakeland, Florida, re: Midwest spout dust control system.

05/11/82 Visit to Galveston, Texas, Farmer's Export facility, re: Midwest loading spout.

05/20/82 Visit to St. Louis, Mo.; Cape Girardeaux, La., re: Midwest spout installation at Pillsbury Company, Consolidated Grain Company, Marguette Cement Company.

05/20/82 Contacted North Carolina Phosphate, re: their proposed design for ship-loading. Suggested a DCL spout (outgrowth of Midwest).

05/26/82 Designed a test "free fall breaker" spout.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

March 25, 1982

W. W. Atwood
Manager of Environmental Control
Occidental Chemical Company
P. O. Box 300
White Springs, Florida 32096

Dear Mr. Atwood:

Jacksonville Bulk Terminal, Inc.
Modification of Conditions
Permit No. AC 16-36311

We are in receipt of your request for a modification of the permit conditions. The conditions are changed as follows:

Condition	From	To
Expiration Date	March 31, 1982	September 30, 1983

This letter must be attached to your permit and becomes a part of that permit.

Sincerely,

Victoria J. Tschinkel
Secretary

VJT/CHF/bjm

cc: John Ketteringham, FDER,
St. Johns River Subdistrict Office

Jerry E. Woosley, Duval County Dept. of Health,
Welfare & Bio-Environmental Services

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee

To: _____ Loctn.: _____
To: _____ Loctn.: _____
To: _____ Loctn.: _____
From: _____ Date: _____

Reply Optional [ ] Reply Required [ ] Info. Only [ ]
Date Due: _____ Date Due: _____

RECEIVED
MAR 25 1982
Office of the Secretary

TO: Victoria J. Tschinkel

FROM: C. H. Fancy, Deputy Chief, Bureau of Air Quality Management

DATE: March 25, 1982

SUBJ: Jacksonville Bulk Terminals, Inc., AC 16-36311
Request for Time Extension

Attached is a letter authorizing a time extension to Jacksonville Bulk Terminals, Inc. (Permit No. AC 16-36311) to construct two 18 MMBTU boilers to be located at the applicant's existing facility on Wigmore Street in Jacksonville.

The permit expires on March 31, 1982, and the applicant requests the expiration date be extended until September 30, 1983.

The Bureau recommends your approval and signature.

CHF:pa

Attachment

DER
MAR 22 1982
BAQM

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

March 17, 1982

Mr. Clair Fancy
Central Air Permitting Section
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Fancy:

Pursuant to your conversation with Mr. Csontos of our staff on March 16, 1982, I am requesting an extension of time to September 30, 1982, for construction permit No. AC16-36311 for Jacksonville Bulk Terminals Auxiliary Boilers 3 & 4. This permit was issued March 17, 1981 and currently expires March 31, 1982.

I understand that 18 months is the longest extension possible at this time, however a further extension may be requested near the end of this period should the situation remain unresolved. To date approval of this project has been held up pending business negotiations. Therefore, this time extension will allow greater administrative flexibility in developing a management decision.

Sincerely,

OCCIDENTAL CHEMICAL COMPANY

A. L. Csontos

W. W. Atwood for
Manager of Environmental Control

pb

cc: Jerry E. Woosley, Jacksonville, Florida

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

DER

MAR 15 1982

BAQM

March 9, 1982

File

Mr. W. W. Atwood
Manager of Environmental Control
Occidental Chemical Co.
P.O. Box 300
White Springs, Florida 32096

Re: Jacksonville Bulk Terminal - Permit AC16-36311

Dear Mr. Atwood:

Receipt of your letter dated February 11, 1982 is acknowledged. I have been in contact with Mr. Clair Fancy of the Department of Environmental Regulation (Central Air Permitting Section (904)488-1344) concerning your request to extend the expiration date on the subject permit. Mr. Fancy concurred with this Agency's decision that an extension of the expiration date to March 1, 1985 would be inappropriate. However, a request for an extension for a shorter period of time would be seriously considered.

In order to resolve this issue, please contact Mr. Fancy at the above number or write him at the following address:

Mr. Clair Fancy
Central Air Permitting Section
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

If I can be of further assistance in this matter, please contact me at (904)633-3318.

Very truly yours,

Jerry E. Woosley
Assistant Engineer

JEW/vj

cc: Mr. Clair Fancy - DER Tallahassee

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices
And/Or To Other Than The Addressee

To: _____ Loctn.: _____
To: _____ Loctn.: _____
To: _____ Loctn.: _____
From: _____ Date: _____

Reply Optional [ ] Reply Required [ ] Info. Only [ ]
Date Due: _____ Date Due: _____

TO: Victoria J. Tschinkel

FROM: Steve Smallwood

DATE: March 17, 1981

SUBJ: Air Construction Permit - Jacksonville Bulk Terminals, Inc.

Attached please find one air construction permit for which the applicant is Jacksonville Bulk Terminals, Inc. The proposed construction is for two 18 MMBTU boilers to be located at the applicant's existing facility on Wigmore Street in Jacksonville, Duval County, Florida.

Day 90, after which the permit would be issued by default is March 17, 1981.

The Bureau recommends your approval and signature.

SS:dav

RECEIVED
MAR 17 1981
Office of the Secretary

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

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

March 17, 1981

M. P. McArthur
Vice President and General Manager
Jacksonville Bulk Terminals, Incorporated
1301 Wigmore Street
Jacksonville, Florida 32206

Dear Mr. McArthur:

Enclosed is Permit Number AC 16-36311, dated March 17, 1981 to Jacksonville Bulk Terminals, Incorporated issued pursuant to Section 403, Florida Statutes.

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

Sincerely,

Lawrence A. George

for

Steve Smallwood, Chief
Bureau of Air Quality Management

DER Form 17-1.122(65)

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL REGULATION

CONSTRUCTION
PERMIT

NO. AC 16-36311

JACKSONVILLE BULK TERMINALS, INC.
DUVAL COUNTY, FLORIDA

DATE OF ISSUANCE

MARCH 17, 1981

DATE OF EXPIRATION

MARCH 31, 1982

VICTORIA J. TSCHINKEL,
SECRETARY

DER FORM PERM 11-42

Final Determination

Jacksonville Bulk Terminals, Incorporated

Application Number:

AC 16-36311

Florida Department of Environmental Regulation

Bureau of Air Quality Management

Central Air Permitting

March 17, 1981

Jacksonville Bulk Terminals, Incorporated

Jacksonville Bulk Terminals' application for a permit to construct two 18 MMBTU steam boilers at their existing facility on Wigmore Street in Jacksonville has been reviewed by the Department. Public notice of the Bureau's intent to issue the construction permit was published in the Florida Times-Union on February 10, 1981. Copies of the preliminary determination have been made available for public inspection and comment at offices of the Department's St. Johns River Subdistrict in Jacksonville, the Duval County Division of Bio-Environmental Services in Jacksonville, and the Bureau of Air Quality Management in Tallahassee.

A comment was received from Mr. E. P. Balducci of Duval County's Department of Health, Welfare, and Bio-Environmental Services. This was a request to require a fuel sampling port in the permit conditions of those new sources which are limited by the permit to burn fuel oil of a specific sulfur content. This sampling port would provide easy access to field inspectors for testing of the fuel oil. The Bureau feels this is a reasonable requirement that should not involve undue inconvenience or expense on the applicant's part.

No other comments were received, so the Department will issue the permit with the requested additional condition and as otherwise proposed in the preliminary determination.

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

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICANT: Jacksonville Bulk Terminals, Inc.
1301 Wigmore Street
Jacksonville, Florida 32206

PERMIT/CERTIFICATION
NO. AC 16-36311

COUNTY: Duval

PROJECT: Two 18 MMBTU
steam boilers

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

For the construction of two 18 MMBTU/hr. steam boilers to provide heat for molten sulfur receiving, storage and handling facilities at Jacksonville Bulk Terminals, Inc.'s existing facility on Wigmore St., Jacksonville, Florida. Fuel oil containing 0.8% sulfur will fire the two units. The UTM coordinates are 439.3E, 3359.8N.

Construction shall be in accordance with the attached permit application, attached plans, documents and drawings except as otherwise noted on Page 3, "Specific Conditions".

Attachments are as follows:

1. "Application to Construct Air Pollution Sources" DER from 17-1.122(16).

2. Air Quality Review Analysis, dated December 15, 1980, in response to request for additional information from DER, BAQM, dated November 20, 1980.

PERMIT NO.: AC 16-36311
APPLICANT: Jacksonville Bulk Terminals, Inc.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions:, and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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

3. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

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

6. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.

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

8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalities therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.

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

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

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

12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

13. This permit also constitutes:

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

PERMIT NO.: AC 16-36311
APPLICANT: Jacksonville Bulk Terminals, Inc.

SPECIFIC CONDITIONS:

1. Maximum allowable emissions from each boiler shall be:

SO_2	15.3 lb/hr (67.0 ton/yr)
Particulate matter	1.4 lb/hr (6.1 ton/yr)

2. Maximum sulfur content of the fuel oil used to fire the boilers shall be 0.8%, by weight. Compliance testing for SO_2 emission limit will be waived if the applicant furnishes proof that the fuel oil sulfur content will not exceed 0.8%. Records shall be maintained for every new shipment of fuel oil, recording the sulfur content, by weight, and shall be submitted to the Department upon request.

3. Compliance testing for particulate emissions may be waived if the applicant chooses to demonstrate no visible emissions (less than 5% opacity) using EPA Reference Method 9, Appendix A, in 40 CFR 60. If the opacity exceeds 5%, or if the applicant wishes to forgo the visible emissions test, EPA Reference Method 5, Appendix A, 40 CFR 60, shall be used to demonstrate compliance with the particulate emission limit specified in Condition No. 1.

4. NO_2 emissions shall be controlled by following recommended operational and maintenance procedures.

5. The applicant will demonstrate compliance with the conditions of the Construction Permit and submit a complete application for an operating permit to the DER St. Johns River Subdistrict Office, a minimum of 90 days prior to the expiration date of the Construction Permit. The permittee may then continue to operate in compliance with all terms of this permit until the expiration date or issuance of an operating permit.

PERMIT NO.: AC 53-36311
APPLICANT: Jacksonville Bulk Terminals, Incorporated

6. The applicant shall install a fuel oil sampling port for testing sulfur content of fuel oil to be used in the boilers. This port shall be installed in such a manner as to permit easy access for sampling by Department representatives.

Expiration Date: March 31, 1982

Issued this 17 day of March, 19 81.

_____ Pages Attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Signature

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

CITY OF JACKSONVILLE, FLORIDA

March 3, 1981

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

Dear Mr. Svec:

At the request of our field inspection personnel, I am requesting that you require a fuel sampling port as a proviso on permits for new sources which burn a fuel oil with a specific percent of sulfur. This sampling port would provide easy access for testing the fuel oil just prior to its entering the combustion unit.

Your consideration of this request will be appreciated.

Very truly yours,

E. P. Balducci

E. P. Balducci
Assistant Air Engineer

EPB/sg

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

February 23, 1981

FEB 1981
RECEIVED
BUREAU
AQM

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

RE: Jacksonville Bulk Terminal, Inc.

Dear Mr. Svec:

Receipt of the proposed DER permit to construct relating to Jacksonville Bulk Terminals two 18MBTU steam boiler is acknowledged. The proposed construction permit appears well designed and quite equitable.

This agency appreciated being forwarded a copy of the proposed permit for comment purposes.

Very truly yours,

R. Steven Pace, P. E.
Air Pollution Engineer

RSP/sg

Best Available Copy

Florida Times-Union · Jacksonville Journal

ONE RIVERSIDE AVENUE / POST OFFICE BOX 1949 / JACKSONVILLE, FLORIDA 32201 / AREA CODE 904 791-4111

Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

DER DER

FEB 16 1981 16 1981

PURCHASING PURCHASING

218630 Dep

Receipts given and advertising copy received subject to review, revision and approval by Florida Publishing Company and other conditions on rate card.

347746

DATE		LINES	INCHES	TIMES	RATE	AMOUNT		TOTAL AMOUNT	
Febuary 10, 1981	TU Legal		1 3/4	1	11.05	19	34		

Tina Powell

DA437

PLEASE RETURN THIS STATEMENT WITH REMITTANCE TO ASSURE PROPER CREDIT

Best Available Copy

Jacksonville Journal

FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA
COUNTY OF DUVAL

Before the undersigned authority personally appeared .....

John R. Mayo , who on oath says that he is

Retail Advertising Manager of The Florida Times-Union, and

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

Florida; that the attached copy of advertisement, being a.....

Legal Notice

in the matter of Construction Permit to Jacksonville Bulk

Terminals, Inc..

in the ..... Court,

was published in The Florida Times - Union ,

in the issues of Febuary 10, 1981

The Florida Department of Environmental Regulation (DER) has received an Application from and intends to issue a Construction Permit to Jacksonville Bulk Terminals, Inc. for the construction of two oil-fired boilers to be located at 1301 Wigmore Street, Jacksonville, Duval County. A Determination of Best Available Control Technology was required. Copies of the Applications BACT Determination, Technical Evaluation, and DER Intent are available for inspection at the following offices: Duval County Bio-Environmental Services, Division of Bio-Env. Services 515 West 6th Street, Jacksonville; DER, Bureau of Air Quality Mgt., 2600 Blair Stone Rd., Tallahassee, Fl 32301; St. Johns River Subdistrict, 3426 Bills Road, Jacksonville. Comments on this action shall be submitted in writing to: John Svec of the Tallahassee Office, within 30 days of this notice.

FEB 18

PURCHA...

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

Sworn to and subscribed before me
this 10th day of
Febuary A.D. 19 81

John R Mayo

Notary Public,
State of Florida at Large

Notary Public, State of Florida at Large
My Commission Expires July 9, 1982
Bonded by American Fire & Casualty Company

My Commission Expires .....

DA 444

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

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

M E M O R A N D U M

CERTIFIED MAIL

TO: M.P. McArthur, Jacksonville Bulk Terminals, Inc.
Johnny Cole, St. Johns River Subdistrict, FDER
Ed Balducci, Duval County Bio-Environmental Services
John B. Koogler, Scholtes and Koogler Environmental Consultants
Kent Williams, EPA, Region IV

FROM: for Steve Smallwood, Chief
Bureau of Air Quality Management

DATE: February 6, 1981

SUBJ: Proposed Department Action on Jacksonville Bulk Terminals, Inc. Application for Air Construction Permit

Attached is one copy of the proposed Construction permit, BACT Determination, and Technical Evaluation for Jacksonville Bulk Terminals, Inc. proposed two new 18 MMBTU boilers at their facility at 1301 Wigmore Street in Jacksonville, Duval County, Florida.

Pursuant of 17-2.091 and 40 CFR 51.18 this information is to be maintained on file for public review for 30 days.

Comments are to be submitted to the Bureau of Air Quality Management.

SS:dav

The Florida Department of Environmental Regulation (DER) has received an Application from and intends to issue a Construction Permit to Jacksonville Bulk Terminals, Inc. for the construction of two oil-fired boilers to be located at 1301 Wigmore Street, Jacksonville, Duval County. A Determination of Best Available Control Technology was required. Copies of the Applications BACT Determination, Technical Evaluation, and DER Intent are available for inspection at the following offices: Duval County Bio-Environmental Services, Division of Bio-Env. Services 515 West 6th Street, Jacksonville; DER, Bureau of Air Quality Mgt., 2600 Blair Stone Rd., Tallahassee, Fl 32301; St. Johns River Subdistrict, 3426 Bills Road, Jacksonville. Comments on this action shall be submitted in writing to: John Svec of the Tallahassee Office, within 30 days of this notice.

Technical Evaluation
and
Preliminary Determination

Jacksonville Bulk Terminals, Inc.

Jacksonville

Duval County, Florida

Construction Permit

Application Number:

AC 16-36311

Florida Department of Environmental Regulation

Bureau of Air Quality Management

Central Air Permitting

February 10, 1981

I. PROPOSED DEPARTMENT ACTION:

The Department intends to issue the requested permit to Jacksonville Bulk Terminals, Inc., for the construction of two oil-fired 18 million BTU steam boilers at their facility located at 1301 Wigmore Street in Jacksonville, Duval County, Florida, subject to public comment received as a result of this notice.

Any person wishing to file comments on this proposed action may do so by submitting such comments in writing to:

John Svec
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Any comments received within thirty days after publication of this notice will be considered and noted in the Department's final determination.

Any person whose substantial interest would be affected by the issuance or denial of this permit may request an administrative hearing by filing a petition for hearing as set forth in Section 28-5.15, F.A.C. (copy attached). Such petition must be filed within 14 days of the date of this notice with:

Mary Clark
Office of General Council
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

II. SUMMARY OF EMISSIONS AND AIR QUALITY ANALYSIS:

The proposed project will be located in the Jacksonville nonattainment area for particulate matter, as well as the Duval County nonattainment area for Volatile Organic Compounds (VOC).

The applicant has proposed the use of 0.8% sulfur fuel oil to fire the boilers, resulting in the following estimated emissions for both combined:

SO_2	30.6 lb/hr (133.8 TPY)
Particulate Matter	2.6 lb/hr (11.6 TPY)
NO_x	14.6 lb/hr (63.8 TPY)

With proper operation and maintenance, carbon monoxide and VOC emissions are insignificant for this size boiler.

These will be the only sources of emissions from the project.

III. SYNOPSIS OF APPLICATION:

a. Name and Address of Applicant:

Jacksonville Bulk Terminals, Inc.
1301 Wigmore Street
Jacksonville, Florida 32206

b. Description of Project and Controls:

The proposed project consists of constructing two 16,000 pounds/hour boilers to provide steam in molten sulfur receiving, storage and handling facilities which are to be constructed at the Bulk Terminal.

The two boilers are intended to operate one at a time with one on standby in the event of an out age of the operating boiler. The two will share a common stack.

Although the two units are not intended to operate at the same time, the emissions proposed reflect 100% firing of each on a yearly basis. The impact analysis was also determined assuming 100% firing of each unit.

Low sulfur fuel oil (0.8% maximum) to fire the boilers is the proposed control technology.

IV. RULE APPLICABILITY:

The proposed project is potentially subject to New Source Review for Nonattainment Areas, 17-2.17, F.A.C. since it will be located inside the Jacksonville nonattainment area for particulates as well as the Duval County nonattainment area for ozone.

Concerning SO_2, the project will be permitted in accordance with the State prevention of significant deterioration (PSD) provisions in 17-2.04.

According to Table II in 17-2.05, boilers with less than 250 MMBTU/hr. heat input are subject to BACT for particulates, sulfur dioxide and nitrogen oxides, as well as a visible emission standard.

BACT for these pollutants is determined under 17-2.03.

V. FINDINGS:

1. Based on the data given in the application and emission factors for boilers given in AP-42, the total maximum emissions are projected in the following table:

Pollutant	Emissions, lb./hr. (TPY)
Particulate Matter	2.68 (11.74)
SO_2	30.60 (134.03)
Hydrocarbons (VOC)	0.24 (1.05)
NO_2	14.62 (64.04)
CO	1.22 (5.34)

These emissions were calculated assuming 100% firing of both boilers on a year-round basis.

2. Particulate and VOC emissions are considered de minimis by the Department and are exempted from Nonattainment New Source Review according to 17-2.17(3)(a) 1.a.(i).

3. BACT for SO_2 was determined to be use of 0.8% sulfur fuel. BACT for NO_2 is to follow the design firing procedures. An opacity of less than 20% is also recommended as BACT.

4. Air modeling of the proposed source predicts no violations of any Ambient Air Quality Standard or PSD increment for SO_2.

VI. PROPOSED ALLOWABLE EMISSIONS AND PERMIT CONDITIONS:

See Draft Permit Attachment: Rule 28-5

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

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICANT: Jacksonville Bulk Terminals, Inc.
1301 Wigmore Street
Jacksonville, Florida 32206

PERMIT/CERTIFICATION
NO. AC 16-36311

COUNTY: Duval

PROJECT: Two 18 MMBTU
steam boilers

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

For the construction of two 18 MMBTU/hr. steam boilers to provide heat for molten sulfur receiving, storage and handling facilities at Jacksonville Bulk Terminals, Inc.'s existing facility on Wigmore St., Jacksonville, Florida. Fuel oil containing 0.8% sulfur will fire the two units. The UTM coordinates are 439.3E, 3359.8N.

Construction shall be in accordance with the attached permit application, attached plans, documents and drawings except as otherwise noted on Page 3, "Specific Conditions".

Attachments are as follows:

1. "Application to Construct Air Pollution Sources" DER from 17-1.122(16).

2. Air Quality Review Analysis, dated December 15, 1980, in response to request for additional information from DER, BAQM, dated November 20, 1980.

PERMIT NO.: AC 16-36311
APPLICANT: Jacksonville Bulk Terminals, Inc.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions:, and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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

3. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

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

6. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.

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

8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalities therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.

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

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

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

12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

13. This permit also constitutes:

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

PERMIT NO.: AC 16-36311
APPLICANT: Jacksonville Bulk Terminals, Inc.

SPECIFIC CONDITIONS:

1. Maximum allowable emissions from each boiler shall be:

SO_2	15.3 lb/hr (67.0 ton/yr)
Particulate matter	1.4 lb/hr (6.1 ton/yr)

2. Maximum sulfur content of the fuel oil used to fire the boilers shall be 0.8%, by weight. Compliance testing for SO_2 emission limit will be waived if the applicant furnishes proof that the fuel oil sulfur content will not exceed 0.8%. Records shall be maintained for every new shipment of fuel oil, recording the sulfur content, by weight, and shall be submitted to the Department upon request.

3. Compliance testing for particulate emissions may be waived if the applicant chooses to demonstrate no visible emissions (less than 5% opacity) using EPA Reference Method 9, Appendix A, in 40 CFR 60. If the opacity exceeds 5%, or if the applicant wishes to forgo the visible emissions test, EPA Reference Method 5, Appendix A, 40 CFR 60, shall be used to demonstrate compliance with the particulate emission limit specified in Condition No. 1.

4. NO_2 emissions shall be controlled by following recommended operational and maintenance procedures.

5. The applicant will demonstrate compliance with the conditions of the Construction Permit and submit a complete application for an operating permit to the DER St. Johns River Subdistrict Office, a minimum of 90 days prior to the expiration date of the Construction Permit. The permittee may then continue to operate in compliance with all terms of this permit until the expiration date or issuance of an operating permit.

PERMIT NO.: AC 16-36311
APPLICANT: Jacksonville Bulk Terminals, Inc.

Expiration Date: February 28, 1982

Issued this _____ day of _____, 19_____.

_____ Pages Attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

_____
Signature

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee

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Date Due: _____ Date Due: _____

TO: District, Subdistrict and Local Program Air Engineers

FROM: Edward Palagyi, BACT Coordinator

DATE: Janaury 23, 1981

SUBJ: BACT as determined for Utility Boilers, Jacksonville Bulk Terminals, Inc., Jacksonville, Florida.

Attached please find one copy of the BACT as determined by the Florida Department of Environmental Regulation for the subject applicant.

Should you have any questions regarding this BACT, please contact me at (904) 488-1344 or Suncom 278-1344.

EP:dav

Best Available Control Technology (BACT) Determination

Jacksonville Bulk Terminals, Inc.

Duval County, Florida

The facility is the proposed installation of two 18 million BTU input fossil-fuel steam generators, No.'s 3 and 4. The steam will be used to maintain elemental sulfur in the molten state during storage and handling. When one unit is operating the other will be maintained on a stand-by basis. The fuel is No. 6 oil with a maximum sulfur content of 0.8%.

BACT Determination Requested by The Applicant:

Pollutant	Emission Limit Per Unit
Particulates	1.3 lb./hr. (5.8 TPY)
Sulfur Dioxide	15.3 lb./hr. (66.9 TPY)
NO_x	7.3 lb./hr. (31.9 TPY)

The use of low sulfur fuel is proposed as BACT to control emissions.

Date of Receipt of a Complete BACT Application:

December 17, 1980

Date of Publication in the Florida Administrative Weekly:

December 7, 1980

Study Group Members:

John Svec, FDER-BAQM
Tim Powell, FDER-BAQM
Ed Balducci, Jacksonville Bio-Environmental Services
Johnny Cole, FDER St. Johns River Subdistrict

Study Group Recommendations:

The study group concurs with the applicant's proposal to use low sulfur fuel as BACT. Air modeling of the proposed source predicts no violation of any Ambient Air Quality Standard or Prevention of Significant Deterioration (PSD) increment resulting from the proposed emissions.

Pollutant	Maximum Emission Limit Per Unit
Sulfur Dioxide	0.9 lb./10^6 BTU input 15.2 lb./hr. (31.9 TPY)
NO_x	Follow design firing procedures
Visible Emissions	Less than 20% opacity

Emissions are to be measured by EPA Reference Methods 1,2,3,4, 5,6, and 9.

Justification of DER Determination:

BACT was determined as required per 17-2.05(6)E(2) F.A.C. The use of low sulfur fuel as BACT to control SO_2 emissions from this size boiler is consistent with previous DER determinations. Flue gas treatment has not yet been demonstrated to be a via ble control technique for NO_x emissions. BACT to control NO_x emissions is to use fuel with low-nitrogen content and follow design firing procedures.

The proposed source is located in an area classified as nonattainment for particulate matter (17-2.13(b) F.A.C.); therefore, a BACT determination for particulate emissions is not required.

Details of the Analysis May be Obtained by Contacting:

Edward Palagyi, BACT Coordinator
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Recommended by: Lawrence George
for Steve Smallwood, Chief, BAQM

Date: January 20, 1981

Approved by: Jacob D. Varn
Jacob D. Varn, Secretary

Date: 22 JANUARY 1981

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

FILE C4

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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2/3/81

Dear Sir:

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William H. Wallace
Purchasing Office

Enclosure: (1)

AIR QUALITY REVIEW

OCCIDENTAL CHEMICAL COMPANY
JACKSONVILLE BULK TERMINALS
JACKSONVILLE, FLORIDA

DECEMBER 15, 1980

SHOLTES & KOOGLER
ENVIRONMENTAL CONSULTANTS
1213 NW 6TH STREET
GAINESVILLE, FLORIDA 32601
(904) 377-5822

SHOLTES & KOOGLER

TABLE OF CONTENTS

1.0 SUMMARY OF RESULTS

Air quality modeling has been conducted, pursuant to the requirements of Chapter 17-2.04, Florida Administrative Code, to support a construction permit application submitted by the Occidental Chemical Company for the installation of two auxiliary boilers at the Jacksonville Bulk Terminal. The Jacksonville Bulk Terminal is located in Jacksonville just south of the juncture of the Trout River and St. Johns River (Figure 1). The terminal is in the Duval County particulate matter non-attainment area. The source is not subject to federal PSD review.

Air quality modeling with the CRSTER air quality model has shown the 24-hour and annual average impacts of particulate matter emissions from the proposed boilers to be not significant; that is the annual average impact is less than one microgram per cubic meter and the 24-hour average impact is less than five micrograms per cubic meter.

Air quality modeling with the CRSTER, PTMTPW and AQDM was conducted to determine the short-term and long-term impacts of sulfur dioxide from the proposed boilers. With the proposed boilers burning fuel oil with 0.8 percent sulfur, the maximum incremental impacts from the boilers alone are 81 micrograms per cubic meter and 27 micrograms per cubic meter for the 3-hour and 24-hour periods respectively. These incremental impacts are less than the 512 micrograms per cubic meter and 91 micrograms per cubic meter impacts allowed in Class II areas for 3-hour and 24-hour sulfur dioxide impacts.

The modeling also showed the maximum 3-hour sulfur dioxide impact resulting from the proposed boilers and other sources within the area to be 243 micrograms per cubic meter compared with an air quality standard of 1300 micrograms per cubic meter. The maximum 24-hour sulfur dioxide impact resulting from the proposed boilers and all other sources was determined to be 91 micrograms per cubic meter compared with air quality standards of 260 micrograms per cubic meter.

The annual average impact of sulfur dioxide emissions from the proposed boilers alone is two micrograms per cubic meter compared with an allowable incremental impact of 20 micrograms per cubic meter for Class II areas and the annual impact of the proposed boilers plus other sulfur dioxide emitting sources in the area is 26 micrograms per cubic meter compared with air quality standards of 60 micrograms per cubic meter.

The results of air quality modeling indicate that the proposed boilers can be constructed without threatening air quality standards or incremental increases permitted by the state PSD regulations.

2.0 DESCRIPTION OF FACILITY

Two 16,000 pound per hour (steam) boilers are proposed by the Occidental Chemical Company for the Jacksonville Bulk Terminal. The boilers will be used to provide steam to heating coils in molten sulfur receiving, storage and handling facilities which are to be constructed at the Bulk Terminal.

The two boilers will be located adjacent to one another and will share a common stack. The boilers are designed to operate one at a time with the second boiler being used as a stand-by unit in the event of an outage of the operating boiler. Each boiler will be fired with fuel oil with a 0.8 percent sulfur content. The fuel firing rate for each boiler will be 2.9 barrels of oil per hour.

The common stack shared by the two boilers is 60 feet in height and three feet in diameter. The stack gas flow rate from each boiler is 7,050 actual cubic feet per minute at a temperature of 310°F and a moisture content of approximately three percent.

The particulate matter emissions rate from each boiler is 1.3 pounds per hour and the sulfur dioxide emission rate is 15.3 pounds per hour.

3.0 SOURCE EMISSION DATA

The sulfur dioxide emission data for the sources located in the Duval County area were obtained from the Duval County Bio-Environmental Services Division and from the Florida Department of Environmental Regulation office in Tallahassee. These data are summarized in Table 1.

The emission data contained in Table 1 represent the short-term maximum sulfur dioxide emission rates. The annual average sulfur dioxide emission rates were calculated by assuming these short-term emission rates would persist 100 percent of the time for the annual average period.

4.0 AIR QUALITY MODELING METHODOLOGY

The impact of the proposed boilers on ambient air quality was determined by air quality modeling. The air quality models used were the CRSTER, the PTMTPW and the AQDM. The CRSTER was used for determining the significance of the impact of the boilers, the CRSTER and PTMTPW models were used jointly to determine the maximum 3-hour and 24-hour impacts of the boilers and the AQDM was used to determine the annual average impact of the boilers.

It was determined, using the CRSTER air quality model, that the particulate matter emissions from the proposed boilers were not significant for either a 24-hour or annual average period. Because of this no further modeling was done to assess the impact of particulate matter emissions from the two boilers.

The CRSTER model indicated that the 3-hour, 24-hour and annual average impacts of sulfur dioxide impacts from the boiler would be significant; that is these emissions would be greater than 25 micrograms per cubic meter, five micrograms per cubic meter and one microgram per cubic meter, respectively. Because each of these impacts were significant further modeling was conducted to determine the maximum incremental impact of the two boilers for each of these three time periods as well as the maximum impact resulting from sulfur dioxide emissions from the boilers and other sources for the three time periods.

The CRSTER model was run first utilizing meteorological data from Jacksonville for the period from 1970-1974 and emission data from the proposed boilers. These model runs were used to determine the meteorology resulting in the maximum 3-hour and 24-hour impacts from the proposed boilers. The meteorological data and emission data from the proposed boilers were then input to the PTMTPW model to determine the maximum incremental impact resulting for a 3-hour and 24-hour period from the proposed boilers (PTMTPW Runs 51 and 53).

The same meteorological conditions that resulted in the maximum incremental impact from the proposed boilers were also input to the PTMTPW along with emissions from the proposed boilers and other sources which would fall upwind of the proposed boilers. These model runs (Runs 50 and 52) were used to evaluate sets of conditions which might result in the maximum impact from all sulfur dioxide emitting sources for 3-hour and 24-hour periods in the vicinity of the proposed boilers.

In addition to these model runs the CRSTER model was run to determine meteorology that would result in the maximum impacts of other major sources near the proposed bulk terminal boilers. These meteorological data were then input to the PTMTPW model along with sulfur dioxide emission data for the bulk terminal and sources falling upwind of the bulk terminal to assess other conditions which might result in the maximum 3-hour and 24-hour sulfur dioxide emissions in the vicinity of the proposed boilers. These model runs are represented by CRSTER model runs 6-25 and PTMTPW model runs 54-72.

Table 2 summarizes the various conditions evaluated, the model runs representing the evaluations, the meteorological data developed by the CRSTER model and included in the PTMTPW, the sources included in the model runs and the 3-hour and 24-hour sulfur dioxide impact resulting from the conditions evaluated. The metedrological data used for the various PTMTPW model runs are summarized in Figures 2 and 3. Figure 2 respresents the 3-hour meteorological conditions evaluated and Figure 3 represents the 24-hour meteorological conditions evaluated. The location of the receptors at which the 3-hour and 24-hour impacts were calculated are shown in Figures 4 and 5, respectively.

The annual average impact of the proposed boilers was determined with the AQDM using sulfur dioxide emissions from the proposed boilers and meteorological data from Jacksonville for the period from 1970-1974. The incremental impact of the sulfur dioxide emissions from the proposed boilers is shown in Figure 6. The impact of sulfur dioxide emissions from all Jacksonville air pollution sources was also determined with the AQDM utilizing meteorological data for the period 1970-1974. This impact is represented in Figure 7.

5.0 AIR QUALITY MODELING RESULTS

The meteorological data and source alignments used in the short-term impact evaluations are summarized in Figure 2 for the 3-hour impact evaluations and Figure 3 for the 24-hour impact evaluations. Also included in these figures are the receptor numbers at which the impacts will occur.

The receptor locations at which the 3-hour impacts will occur are shown in detail in Figure 4. The receptor locations at which the 24-hour impacts will occur are shown in Figure 5. The impacts occurring at all of these receptors, the meteorological conditions input to the models and the sources included in each model run are summarized in Table 2. Also included in Table 2 are the numbers of the model runs used in generating the meteorology for the sulfur dioxide impacts.

The annual average sulfur dioxide impact from the proposed boilers is summarized in Figure 6. This figure shows the maximum annual average impact from the proposed boilers to be two micrograms per cubic meter. The annual average impact of all sulfur dioxide emitting sources in the Jacksonville area is shown in Figure 7. The maximum impact, as shown in this figure, is 26 micrograms per cubic meter.

The results of all of the modeling are summarized in Table 3. In reviewing these results it should be recognized that the background level for sulfur dioxide was assumed to be zero.

TABLE 1

SULFUR DIOXIDE EMISSION INVENTORY
JACKSONVILLE, FLORIDA

OCCIDENTAL CHEMICAL COMPANY
JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

Source No.	Name	SO_2 Emission Rate (g/sec.)	Stack Ht. (m)	Stack Temp (°K)	Stack Vel. (m/s)	Stack Dia. (m)	Stack Vol. (m^3/s)	Coordinates X (km)	Coordinates Y (km)
0000	CONTAINER CORP	259.60	75.5	485.0	14.4	3.05	0.0	55.10	86.70
0001	FLORIDA STEEL	15.10	48.8	589.0	2.4	2.10	0.0	6.30	50.50
0002	NAS	3.00	13.1	505.0	6.1	1.07	0.0	34.30	43.50
0003	ALTON BOX	37.90	76.2	477.0	9.2	3.78	0.0	39.90	59.30
0004	ALTON BOX	14.00	56.7	424.0	10.0	3.20	0.0	39.90	59.30
0005	ALTON BOX CONTAINER	2.50	9.8	491.0	9.1	1.00	0.0	39.70	58.10
0006	ANCHOR HOCKING	5.60	14.6	573.0	15.6	0.91	0.0	31.50	57.50
0007	CELOTEX	4.70	22.9	700.0	3.5	0.91	0.0	46.40	62.60
0008	CELOTEX	7.30	9.1	422.0	7.8	0.91	0.0	46.40	62.60
0009	CELOTEX	5.00	13.7	339.0	14.6	1.20	0.0	46.40	62.60
0010	CELOTEX	3.10	15.2	436.0	7.7	0.94	0.0	46.40	62.60
0011	DICKERSON	1.80	9.2	340.0	26.0	1.07	0.0	38.80	61.30
0012	HOUDAILLE	9.30	11.6	376.0	31.1	0.98	0.0	42.70	45.70
0013	HOUDAILLE	8.40	11.6	380.0	31.9	0.98	0.0	29.00	61.40
0014	JAX BULK TERMINAL	3.60	12.2	355.0	9.5	0.91	0.0	39.20	59.70
0015	JEA KENNEDY TURBINES 1&2	35.60	6.3	767.0	48.0	1.55	0.0	40.08	59.15
0016	JEA KENNEDY TURBINES 3-6	243.70	13.7	714.0	35.0	2.93	0.0	40.08	59.15
0017	JEA KENNEDY 8&9 (1.10LBS)	147.40	45.7	414.0	7.8	3.20	0.0	40.08	59.15
0018	JEA KENNEDY 10 (1.10LBS)	181.40	41.5	405.0	15.5	2.74	0.0	40.08	59.15
0019	JEA NORTHSIDE TURBINES 1&2	34.70	7.0	755.0	31.9	1.71	0.0	46.90	64.90
0020	JEA NORTHSIDE TURBINES 3-6	233.60	10.1	780.0	72.7	3.29	0.0	46.70	65.50
0021	JEA NORTHSIDE 1	705.80	76.2	414.0	19.0	4.88	0.0	46.90	64.90
0022	JEA NORTHSIDE 2	640.90	91.4	408.0	8.5	5.33	0.0	46.90	64.90
0023	JEA NORTHSIDE 3	1225.60	107.	407.0	17.4	7.01	0.0	46.90	64.90
0024	JEA SOUTHSIDE 1&2	116.70	40.7	433.0	11.7	2.44	0.0	37.67	53.90
0025	JEA SOUTHSIDE 3	80.30	40.7	407.0	10.3	3.05	0.0	37.67	53.90
0026	JEA SOUTHSIDE 4	110.90	43.7	422.0	11.8	3.35	0.0	37.67	53.90
0027	JEA SOUTHSIDE 5	185.80	44.2	417.0	13.7	3.05	0.0	37.67	53.90
0028	JEA SOUTHSIDE TURBINES 1&2	35.60	6.3	767.0	48.0	1.55	0.0	37.67	53.90
0029	NAS MAYPORT	3.50	12.2	544.0	4.0	0.91	0.0	60.40	62.80
0030	REFINED METALS	5.00	31.1	355.0	18.7	0.77	0.0	31.80	58.30
0031	GLIDDEN	17.80	12.2	658.0	9.8	1.12	0.0	36.10	60.70
0032	GLIDDEN	21.20	15.2	514.0	18.2	1.22	0.0	36.10	60.70
0033	ST REGIS CONTAINER	3.10	18.3	505.0	4.0	0.91	0.0	40.20	68.30
0034	ST REGIS 1&2	146.70	32.3	433.0	16.1	2.13	0.0	41.80	65.60
0035	ST REGIS	22.80	40.5	500.0	11.4	2.44	0.0	41.80	65.60
0036	ST REGIS	35.90	38.1	389.0	14.9	2.59	0.0	41.80	65.60
0037	ST REGIS	3.00	22.9	350.0	9.5	1.42	0.0	41.80	65.60
0038	ANHEUSER BUSCH	60.90	15.9	505.0	8.6	1.37	0.0	37.90	66.80
0039	ANHEUSER BUSCH	12.30	21.3	333.0	11.4	2.06	0.0	37.90	66.80
0040	ANHEUSER BUSCH	9.00	21.3	333.0	8.3	1.68	0.0	37.90	66.80
0041	UNION CAMP	7.30	15.5	586.0	11.7	1.22	0.0	27.60	57.30
0042	OXY BOILERS 3 & 4*	3.86	18.3	427.0	10.2	0.91	0.0	39.20	59.60

*Proposed sources; both boilers at 100%.

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TABLE 2

SUMMARY OF AIR QUALITY REVIEW
3-HOUR AND 24-HOUR SULFUR DIOXIDE IMPACTS

OCCIDENTAL CHEMICAL COMPANY
JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

Conditions	Model Runs(1)	Meteorology(2)	Maximum Impact (ug/m^3)	Receptor(3)	Sources Included (See Table 1)
Max. 3-hr, Proposed Boilers	1/50/JBT	166(4), 1971	203	1	3, 4, 6, 13, 14, 30-32, 41, 42
Max. 3-hr, Proposed Boilers	1/51/JBT	166(4), 1971	81	1	42
Max. 24-hr,Proposed Boilers	2/52/JBT	079, 1970	58	2	14, 42
Max. 24-hr,Proposed Boilers	2/53/JBT	079, 1970	27	2	42
Max. 3-hr at 300°	25/54/D	181(4), 1974	141	3	3, 4, 14-18, 42
Max. 3-hr at 300°	19/55/C	178(5), 1973	243*	4	3, 4, 14-18, 42
Max. 24-hr at 300°	25/56/D	240, 1974	42	5	3, 4, 14-18, 42
Max. 24-hr at 300°	19/57/C	178, 1973	104	6	3, 4, 14-18, 42
Max. 3-hr at 250°	5/58/E	253(3), 1974	115	8	0, 3, 4, 7-10, 14, 19-23, 34-37, 42
Max. 24-hr at 250°	1/59/E	102, 1970	49	9	0, 3, 4, 7-10, 14, 19-23, 34-37, 42
Max. 3-hr at 240°	18/60/C	157(4), 1972	160	10	0, 3, 4, 7-10, 14, 19-23, 34-37, 42
Max. 3-hr at 240°	7/61/A	278(4), 1971	199	11	0, 3, 4, 7-10, 14, 19-23, 34-37, 42
Max. 24-hr at 240°	19/62/C	238, 1973	56	12	0, 3, 4, 7-10, 14, 19-23, 34-37, 42
Max. 3-hr at 200°	12/63/B	339(4), 1971	223	14	0, 11, 14, 33-40, 42
Max. 3-hr at 170°	3/64/E	038(8), 1972	223	15	0, 11, 14, 33-40, 42
Max. 24-hr at 200°	12/65/B	339, 1971	91*	16	0, 11, 14, 33-40, 42
Max. 24-hr at 170°	3/66/E	031, 1972	76	17	0, 11, 14, 33-40, 42
Max. 3-hr at 110°	4/67/E	258(3), 1973	160	18	3, 4, 14-18, 31, 32, 42
Max. 24-hr at 110°	1/68/E	008, 1970	63	19	3, 4, 14-18, 31, 32, 34
Max. 3-hr at 10°	17/69/C	232(4), 1971	222	20	2-5, 14-18, 24-28, 42
Max. 3-hr at 10°	15/70/B	318(5), 1974	146	21	2-5, 14-18, 24-28, 42
Max. 24-hr at 10°	19/71/C	062, 1974	42	22	2-5, 14-18, 24-28, 42
Max. 24-hr at 10°	11/72/B	350, 1970	85	23	2-5, 14-18, 24-28, 42

(1) a/b/c
- a - CRSTER Model Run for Determining Meteorology.
- b - PTMTPW Model Run for Determining Maximum Impact.
- c - Source Group used in CRSTER for Determining Meteorology

  Group A - Typical of JEA Northside
  Group B - Typical of JEA Southside & Kennedy & St. Regis
  Group C - Typical of JEA Turbines
  Group D - Typical of Alton Box
  Group E - Typical of Cellotex, Glidden & Anheuser-Busch

(2) See Figures 2 and 3 for Meteorological Summary and Source Alignment.

(3) See Figures 4 and 5 for Receptor Locations.

* Max. 3-hour and 24-hour Impacts.

TABLE 3

AIR QUALITY MODELING RESULTS

OCCIDENTAL CHEMICAL COMPANY
JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

Pollutant	AAQS (ug/m^3)	Class II PSD Increment (ug/m^3)	Incremental Impact of Proposed Boilers (ug/m^3)	Maximum Impact of All Sources (ug/m^3)
Particulate Matter				
Annual	60	19	0.2	N/A
24-Hour	150	37	2.1	N/A
Sulfur Dioxide				
Annual	60	20	81.0	243
24-Hour	260	91	27.0	91
3-Hour	1300	512	2.0	26

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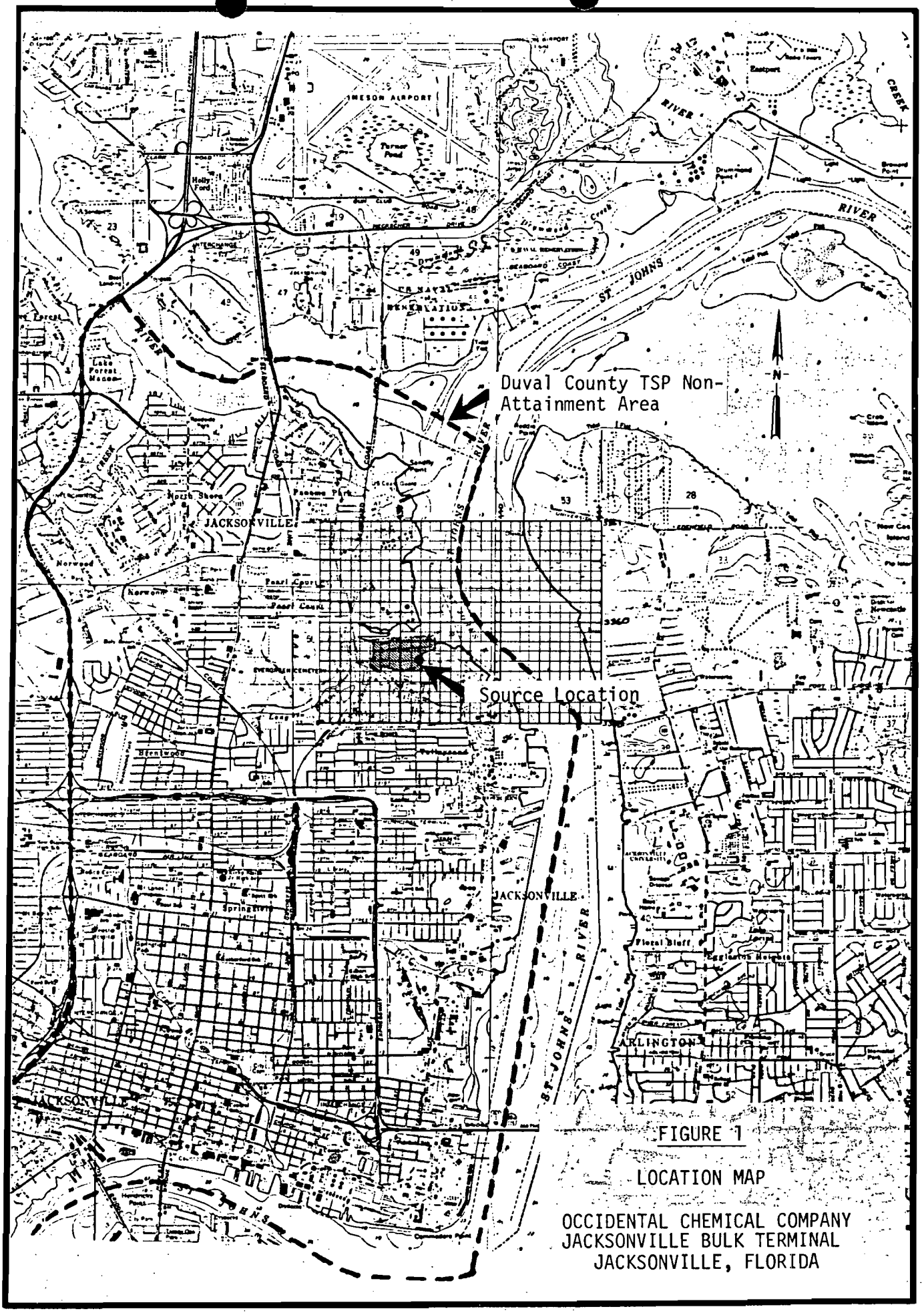


FIGURE 1

LOCATION MAP

OCCIDENTAL CHEMICAL COMPANY
JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

Best Available Copy

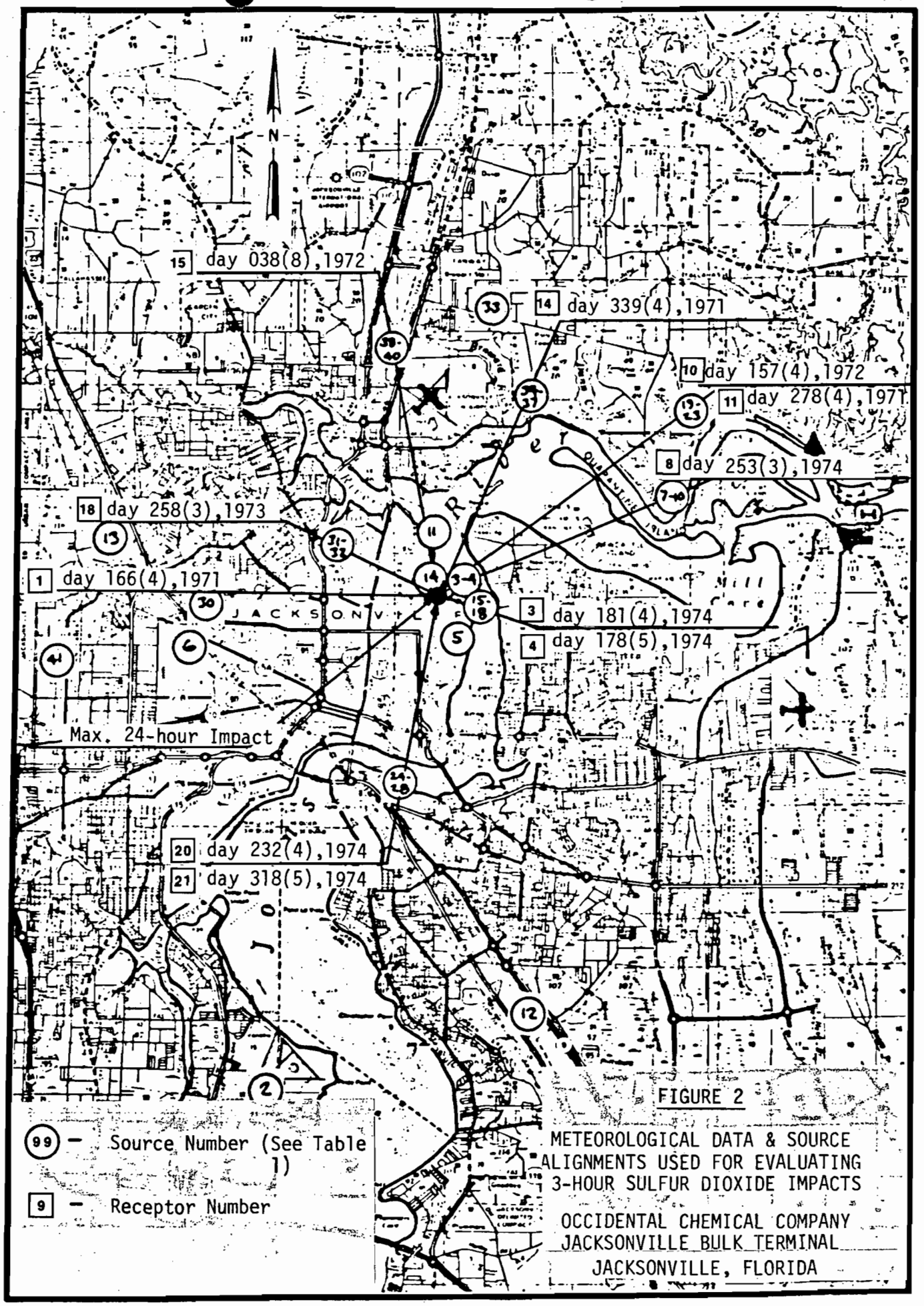


FIGURE 2

METEOROLOGICAL DATA & SOURCE ALIGNMENTS USED FOR EVALUATING 3-HOUR SULFUR DIOXIDE IMPACTS

OCCIDENTAL CHEMICAL COMPANY
JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

Best Available Copy

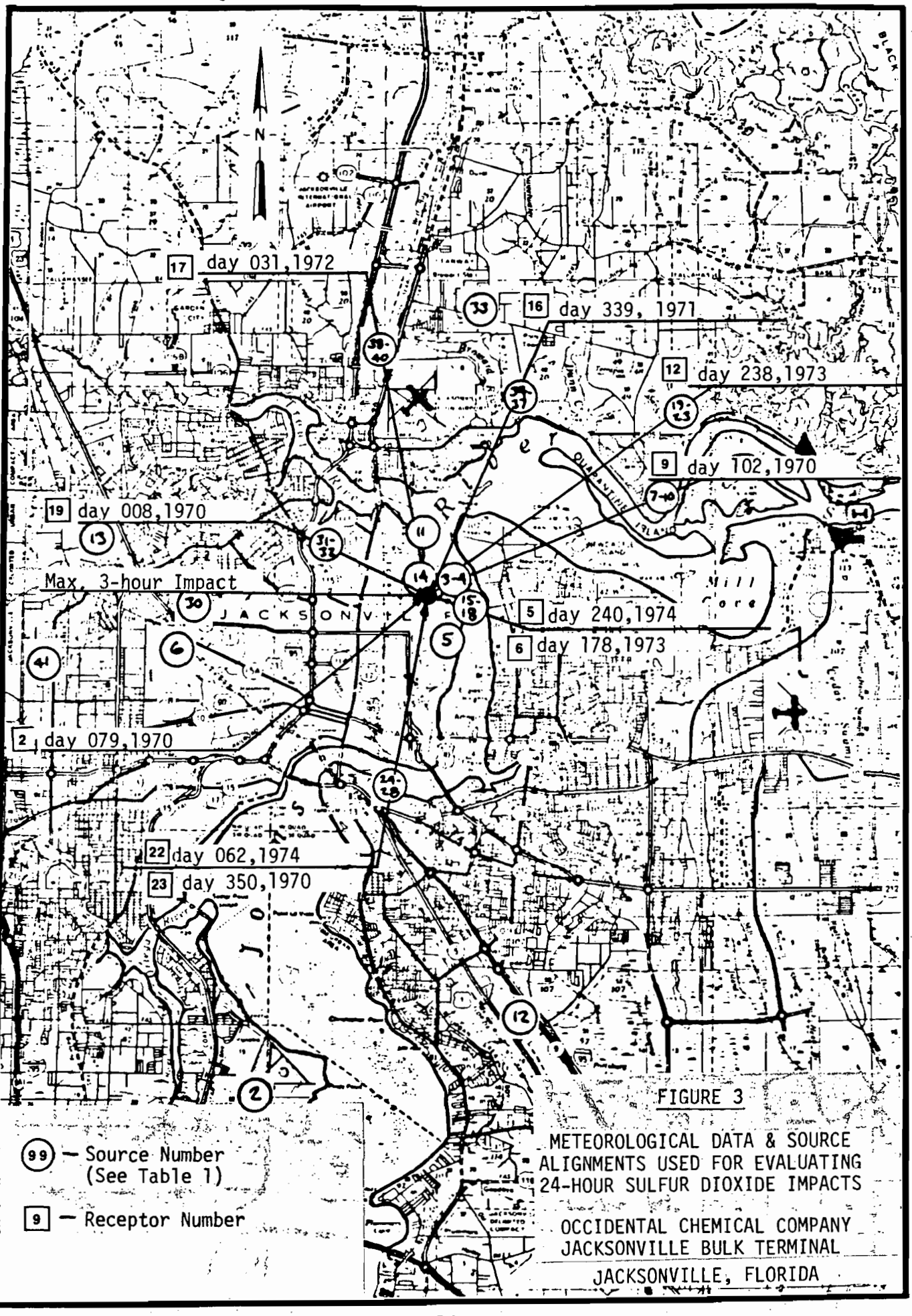


FIGURE 3

METEOROLOGICAL DATA & SOURCE ALIGNMENTS USED FOR EVALUATING 24-HOUR SULFUR DIOXIDE IMPACTS

OCCIDENTAL CHEMICAL COMPANY
JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

SHOLTES & KOOGLER

Best Available Copy

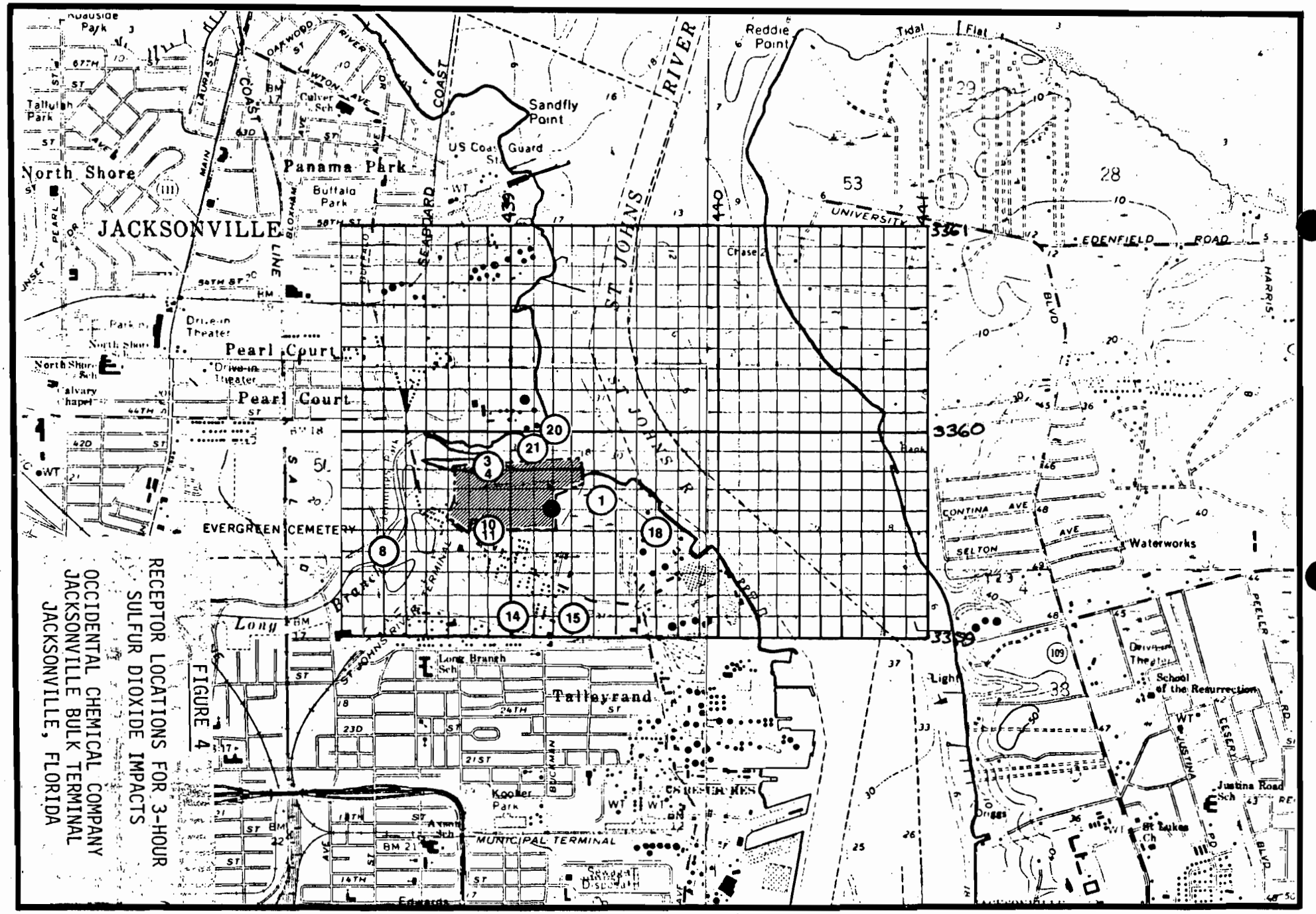
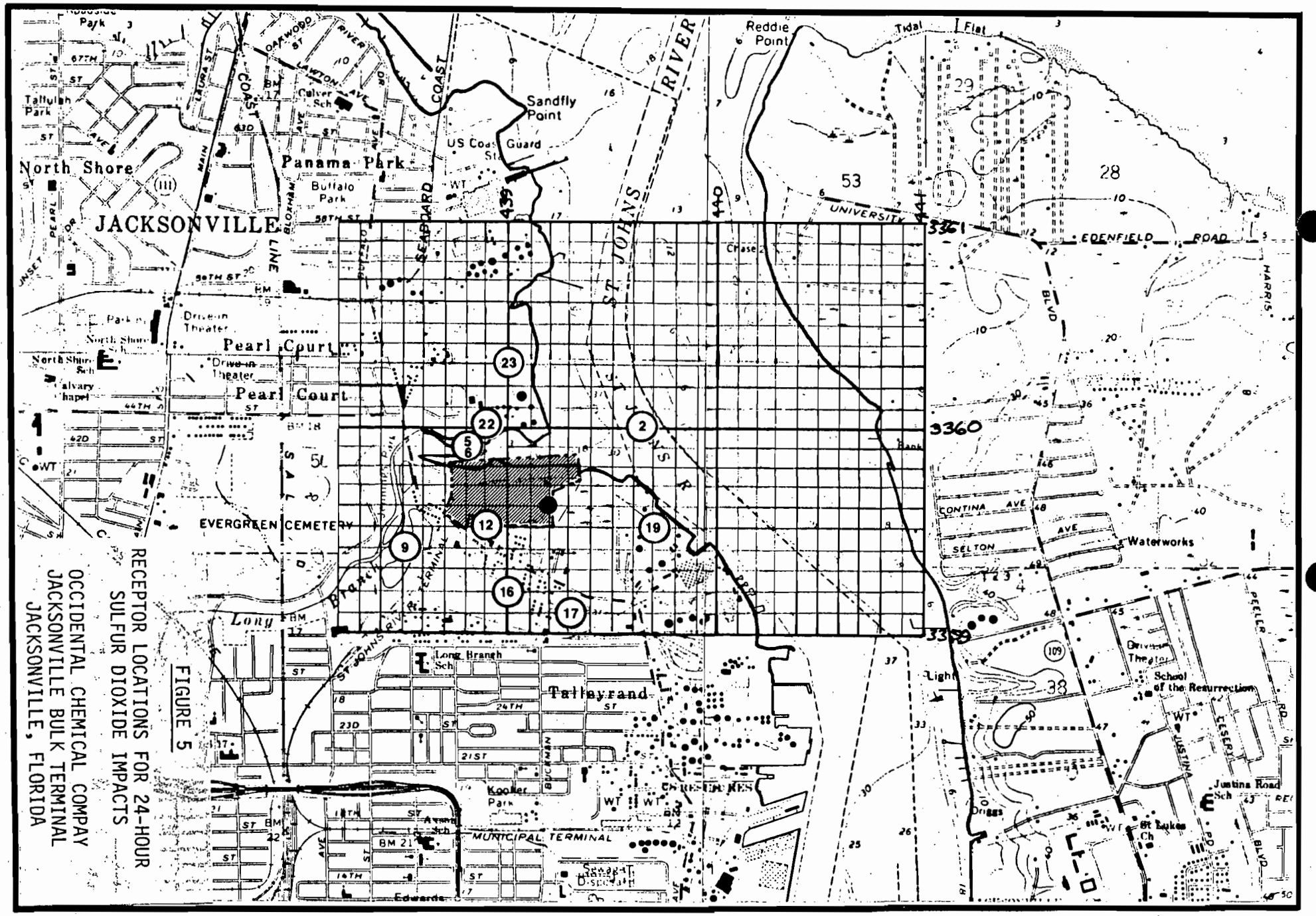


FIGURE 4
RECEPTOR LOCATIONS FOR 3-HOUR SULFUR DIOXIDE IMPACTS
OCCIDENTAL CHEMICAL COMPANY
JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

SHOLTES & KOOGLER

Best Available Copy



RECEPTOR LOCATIONS FOR 24-HOUR SULFUR DIOXIDE IMPACTS

OCCIDENTAL CHEMICAL COMPAY
JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

FIGURE 5

SHOLTES & KOOGLER

Best Available Copy

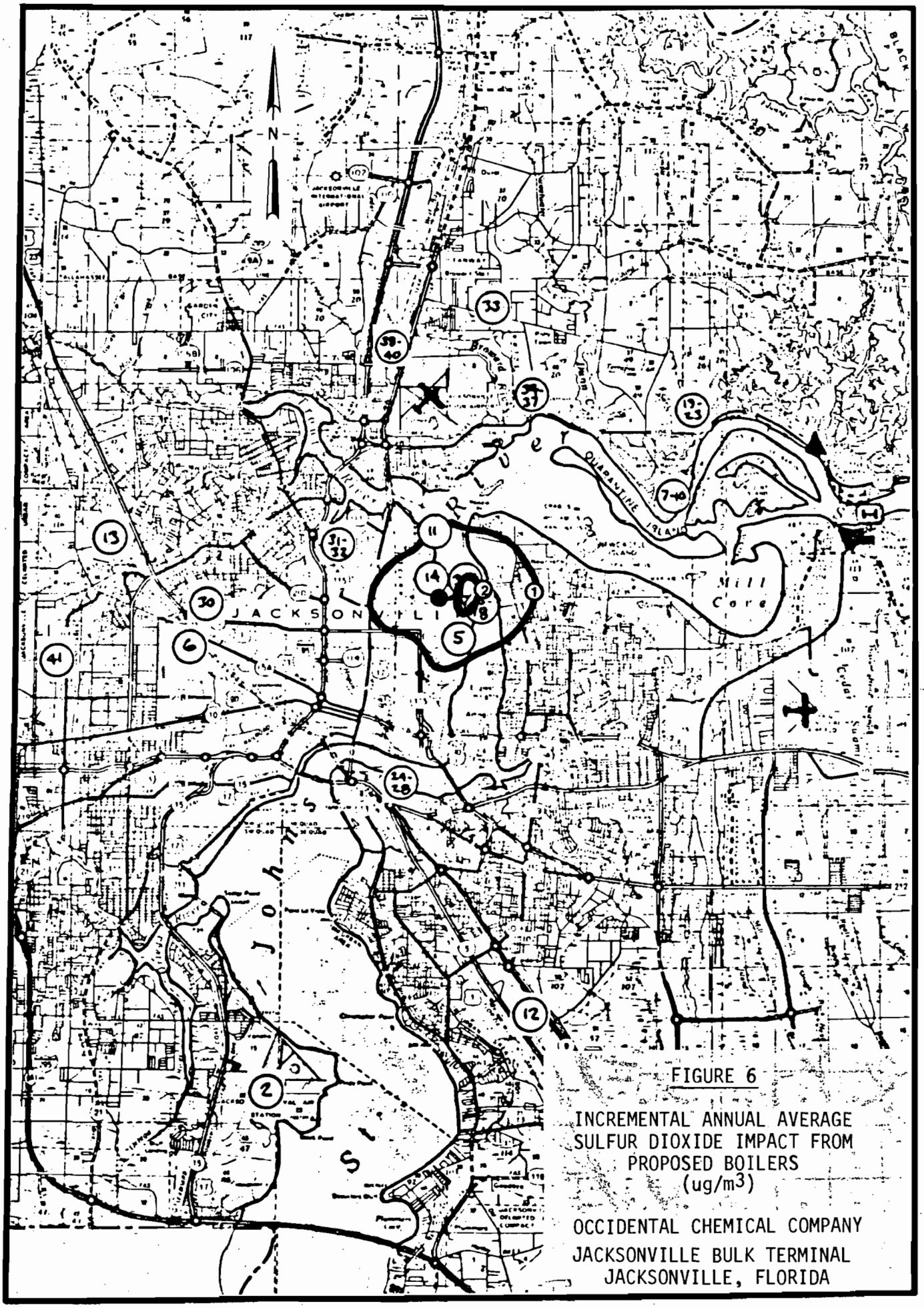


FIGURE 6

INCREMENTAL ANNUAL AVERAGE SULFUR DIOXIDE IMPACT FROM PROPOSED BOILERS (ug/m^3)

OCCIDENTAL CHEMICAL COMPANY

JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

Best Available Copy

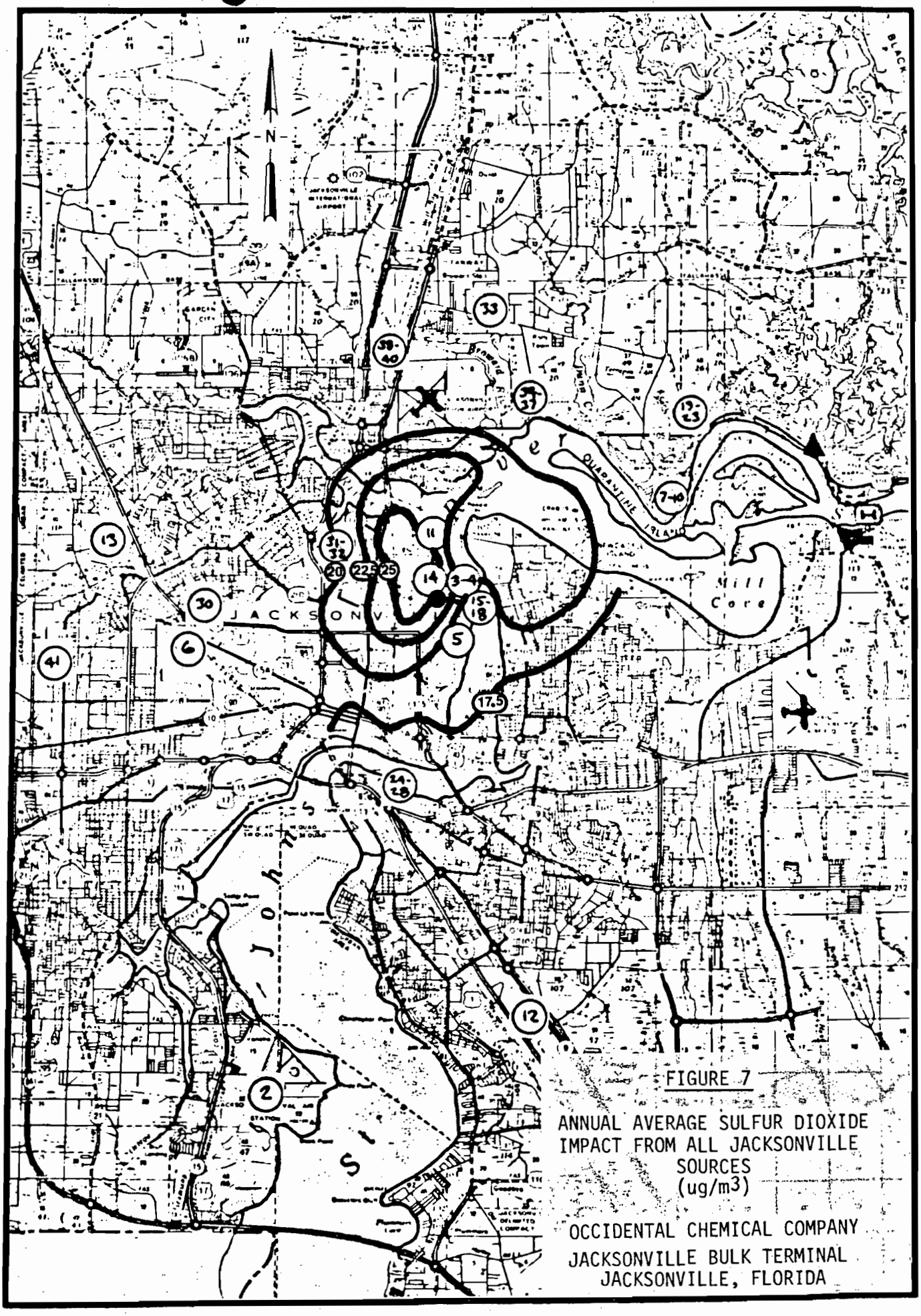


FIGURE 7

ANNUAL AVERAGE SULFUR DIOXIDE IMPACT FROM ALL JACKSONVILLE SOURCES (ug/m^3)

OCCIDENTAL CHEMICAL COMPANY
JACKSONVILLE BULK TERMINAL
JACKSONVILLE, FLORIDA

TO APPROPRIATE APPLICATION FILE

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

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

November 20, 1980

Mr. M. P. McArthur, V.P. & General Manager
Jacksonville Bulk Terminals, Inc.
1301 Wigmore Street
Jacksonville, Florida 32206

Dear Mr. McArthur:

The Department has received your application for the construction of two boilers to be used at Jacksonville Bulk Terminals for providing steam to handle molten sulfur. The application has been found to be incomplete; the following information is needed before processing can be continued.

1. With the addition of auxiliary boilers 3 and 4, the facility will become a major emitting facility for SO_2 and therefore require a Prevention of Significant Deterioration (PSD) review (17-2.04(6) FAC). The application indicated that a PSD study had been conducted. The results of this study including the predictive modeling output are required.

2. In Section E. of the application, fuel consumption is specified for one boiler to be on standby, or are both boilers to be in service at the same time?

3. The flow diagram of the new construction indicates boilers 1 and 2, but the application is for boilers 3 and 4. An accurate flow diagram of the proposed project is required.

4. Will the fuel for existing boilers 1 and 2 be the same as that used in the new boilers? An analysis of the fuel indicating the type, % sulfur, ash content and density is required.

Processing of the application will be resumed upon receipt of the above information.

Sincerely,

Steve Smallwood, Chief
Bureau of Air Quality Management

SS:dav

original typed on 100% recycled paper

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

November 11, 1980

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

Dear Mr. Powell:

Please find enclosed a check for $20.00 covering the application fee for a construction permit for auxiliary boilers at Jacksonville Bulk Terminals.

If you have any further questions, please do not hesitate to call.

Sincerely,

OCCIDENTAL CHEMICAL COMPANY

W. W. Atwood
Environmental Control Coordinator

plb

Enclosure

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

№ 33559

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from OCCIDENTAL CHEMICAL Co. (HOOKER CHEM. CORP.) Date 11/14/80

Address P.O. BOX 300 WHITE SPRINGS, FLA 32096 Dollars $ 20.00

Applicant Name & Address M.P. McARTHUR 1301 WIGMORE ST. JACKSONVILLE FLA 32206

Source of Revenue

Revenue Code 0101 Application Number AC 16-36311

By Tim Powell

```
          DER PERMIT  ICATION TRACKING SYSTEM  ER RECORD
FILE#000000036311 COE#          DER PROCESSOR:SV                 DER OFFICE:TL
FILE NAME:JAX BULK TERMINALS, INC  DATE FIRST REC: 10/23/80  APPLICATION TYPE:A
APPL NAME:MCARTHUR, M. P.          APPL PHONE:(904)397-8101   PROJECT COUNTY:1
ADDR:1301WIGMORE ST.                    CITY:JACKSONVILLE       ST:FLZIP:3220
AGNT NAME:KOOGLER, J. B.           AGNT PHONE:(904)377-5822
ADDR:1213 NW 6TH ST.                    CITY:GAINESVILLE        ST:FLZIP:3260

ADDITIONAL INFO REQ:  / /     / /     / /   REC:  / /     / /      / /
APPL COMPLETE DATE:   / /   COMMENTS NEC:Y DATE REQ:  / /    DATE REC:  / /
LETTER OF INTENT NEC:Y   DATE WHEN INTENT ISSUED:  / /     WAIVER DATE:  / /

HEARING REQUEST DATES:                    / /            / /            / /
HEARING WITHDRAWN/DENIED/ORDER -- DATES:  / /            / /            / /
HEARING ORDER OR FINAL ACTION DUE DATE:   / /       MANUAL TRACKING DESIRED:
       *** RECORD HAS BEEN SUCCESSFULLY UPDATED ***     11/14/80     15:10:36
FEE PD DATE#1:11/14/80 $      RECEIPT#00033559 REFUND DATE:  / /   REFUND $
FEE PD DATE#2:  / /    $      RECEIPT#         REFUND DATE:  / /   REFUND $
APPL:ACTIVE/INACTIVE/DENIED/WITHDRAWN/TRANSFERRED/EXEMPT/ISSUED:AC DATE:10/23/8
REMARKS:AUXILIARY BOILERS NO. 3 AND 4.   UTM 439.3E / 3359.8N
```

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

October 23, 1980

Ms. Marion DeGrove
Department of Health, Welfare
and Bio-Environmental Services
Bio-Environmental Services
Air and Water Pollution Control
515 West 6th Street
Jacksonville, Florida 32206

Dear Ms. DeGrove:

The attached construction permit application is to cover two 16 MM BTU/Hr. steam boilers for use with proposed molten sulfur storage tanks. A computer model will follow.

For reference a copy of your letter March 25, 1980 concerning the project is enclosed.

Thank you for your cooperation.

Sincerely,

OCCIDENTAL CHEMICAL COMPANY

Wes Atwood

W. W. Atwood
Environmental Control Coordinator

plb

Attachment

cc: R. E. McNeill

OXY-18 **Best Available Copy**

REM
J Koeller WH 4/11/80

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

RECEIVED MAR 28 1980
WES ATWOOD

CITY OF JACKSONVILLE, FLORIDA

March 25, 1980

RECEIVED
GENE McNEILL

Mr. Wes Attwood
Environmental Control Coordinator
Occidental Chemical
P. O. Box 300
White Springs, Florida 32096

Dear Mr. Attwood:

This letter is in response to your inquiry regarding construction of two 15 MBTU boilers and 4 storage tanks at Jacksonville Bulk Terminal.

No permits will be required for construction of the storage tanks.

Construction of the boilers will require a PSD permit since the total emissions of sulfur dioxide from the existing boilers plus those from the new boilers will exceed 250 tons/year. To obtain a PSD permit, computer modeling will be required to predict the amount of incremental SO_2 (additional concentration in the ambient air) the 4 boilers will produce over the 1974 baseline. In addition, a Best Available Control Technology (BACT) determination will be required. This determination will most likely consist of a limitation on the sulfur content of the fuel to be used in the new boilers.

Offsets, LAER, and other requirements related to the fact that this facility is in a Non-Attainment area for particulates (TSP) do not apply because of the small size of the proposed boilers. Potential TSP emissions, however, cannot be determined with much accuracy prior to the BACT determination, since they are dependent upon the sulfur content of the fuel.

The application for a construction permit should be sent to the Florida Department of Environmental Regulation (DER) in Tallahassee. Permitting of sources in Non-Attainment (NA) areas is now being handled by the DER if potential emissions of the pollutant for which the area is NA exceed 15 tons/year, and there is a possibility that such could be the case (depending on BACT).

If you have additional questions on this matter they should be directed to DER, although this office will be glad to provide what information we can.

Yours very truly,

Marion DeGrove

(Mrs.) Marion DeGrove
Associate Engineer

MDeG/sg

AREA CODE 904 / AIR POLLUTION -633-3303 / WATER POLLUTION -633-3415
515 WEST 6TH STREET / JACKSONVILLE, FLORIDA 32206

10/16/80

AC 16-36311

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

SOURCE TYPE: Auxiliary Boiler [X] New[1] [ ] Existing[1]

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

COMPANY NAME: Jacksonville Bulk Terminals, Inc. COUNTY: Duval

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

SOURCE LOCATION: Street 1301 Wigmore Street City Jacksonville

UTM: East 4393 North 33598

Latitude ____ ° ____ ' ____ "N Longitude ____ ° ____ ' ____ "W

APPLICANT NAME AND TITLE: Jacksonville Bulk Terminals, Inc.

APPLICANT ADDRESS: 1301 Wigmore Street, Jacksonville, FL 32206

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Jacksonville Bulk Terminals, Inc.

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

*Attach letter of authorization

Signed: M. P. McArthur

M. P. McArthur, V.P. & General Manager
Name and Title (Please Type)

Date: 10/21/80 Telephone No. (904) 397-8101

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

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

CERTIFICATE NO. 12925 (Affix Seal) STATE OF FLORIDA REGISTERED ENGINEER

Signed: J. B. Koogler

John B. Koogler, P.E.
Name (Please Type)

SHOLTES & KOOGLER ENVIRONMENTAL CONSULTANTS
Company Name (Please Type)

1213 NW 6th Street, Gainesville, FL 32601
Mailing Address (Please Type)

Florida Registration No. 12925 Date: _____ Telephone No. (904) 377-5822

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

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

Oil fired auxiliary steam boiler will be used to provide steam to heating coils in a molten sulfur receiving, storage and handling facility.

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

Start of Construction February 1981 Completion of Construction October 1981

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.)

NOT APPLICABLE (See Page 4)

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

NONE

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

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr ____ ; if seasonal, describe: It is expected that one unit will be stand-by.

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

1. Is this source in a non-attainment area for a particular pollutant?	YES
a. If yes, has "offset" been applied?	NO
b. If yes, has "Lowest Achievable Emission Rate" been applied?	*
c. If yes, list non-attainment pollutants. Particulate Matter	
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.	YES
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII.	YES
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

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

*Source is not a significant emitter of particulate matter. Annual emissions are 11.0 tons per year and maximum hourly emissions are 2.5 pounds per hour; both with two boilers operating at 100% capacity.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable: NOT APPLICABLE (See Section III,E)

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): NOT APPLICABLE (See Sect. III,E)

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: See Attachment 1

Name of * Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Sulfur Dioxide	15.3x2	66.9x2	17-2.03	15.3x2	15.3x2	66.9x2	1
Part. Matter	1.3x2	5.8x2	N/A	1.3x2	1.3x2	5.8x2	1
NO_x	7.3x2	31.9x2	17-2.03	7.3x2	7.3x2	31.9x2	1

* Emission rate for each boiler; x 2 for two boilers

D. Control Devices: (See Section V, Item 4) NOT APPLICABLE (See Section III,E)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5])

[1] See Section V, Item 2.

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

[3] Calculated from operating rate and applicable standard

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

[5] If Applicable

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr *	max./hr **	
Oil	2.9	5.8	17.8 (each of 2 units)
* One boiler at 100%; one boiler on stand-by			

** Two boilers at 100%

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

Fuel Analysis: Oil

Percent Sulfur: 0.8 Percent Ash: 0.09

Density: 8 lbs/gal Typical Percent Nitrogen: Nil

Heat Capacity: 18,300 BTU/lb 146,400 BTU/gal

Other Fuel Contaminants (which may cause air pollution): NONE

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

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

NONE

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

Stack Height: 60 ft. Stack Diameter: 3 ft.

Gas Flow Rate: 14,100 ACFM Gas Exit Temperature: 310 °F.

Water Vapor Content: 3 % Velocity: 33.3 FPS

*Single stack is shared by boilers 3 and 4.

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

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

Description of Waste

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

Approximate Number of Hours of Operation per day days/week

Manufacturer

Date Constructed Model No.

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

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

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

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

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

Brief description of operating characteristics of control devices: _____

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

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation. NOT APPLICABLE

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. ATTACHMENT 1

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test). ATTACHMENT 1

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.). NOT APPLICABLE

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). NOT APPLICABLE

6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained. ATTACHMENT 2

7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map). ATTACHMENT 3

8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. ATTACHMENT 4

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

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

Contaminant	Rate or Concentration	
SO_2	0.86 lb/10^6 Btu	Resulting from fuel
Particulate Matter	0.07 lb/10^6 Btu	oil with 0.8%
NO_x	0.41 lb/10^6 Btu	sulfur content.

D. Describe the existing control and treatment technology (if any). NOT APPLICABLE; New Source

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

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

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. The only feasible control for boilers in this size range is the use of low sulfur fuel. Occidental proposes to use fuel oil with 0.8% sulfur content.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy*: 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*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

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:

*Explain method of determining efficiency.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

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*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device: Fuel with 0.8% sulfur content
2. Efficiency*: Not Applicable
3. Capital Cost: Not Applicable
4. Life: 20 years
5. Operating Cost: $43,000/year over cost of 1.5% sulfur oil.
6. Energy: Not Applicable
7. Maintenance Cost: Not Applicable
8. Manufacturer: Not Applicable
9. Other locations where employed on similar processes:

a.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

Low sulfur fuel (0.8% sulfur content) was selected to control emissions from the proposed boiler. The use of this fuel will result in the proposed boiler being an insignificant source of particulate matter and will result in sulfur dioxide and nitrogen oxides emissions that do not threaten ambient standrads or PSD increments.

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

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION
(ATTACHMENT 5)

A. Company Monitored Data NOT APPLICABLE

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.

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. 5 Year(s) of data from 1 / 1 / 70 to 12 / 31 / 74
month day year month day year

2. Surface data obtained from (location) Jacksonville, Florida

3. Upper air (mixing height) data obtained from (location) Waycross, Georgia

4. Stability wind rose (STAR) data obtained from (location) Not Applicable

C. Computer Models Used

1. CRSTER, unmodified Modified? If yes, attach description.
2. PTMTPW, unmodified 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	0.33 grams/sec	both boilers
SO^2	3.85 grams/sec	both boilers

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description on 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.

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

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.

ATTACHMENT 1

CALCULATION FOR SECTION III-C & E (For each boiler #3 & #4)

FUEL: Oil at 0.8% sulfur

CONTAMINANTS: Sulfur Dioxide, Particulate Matter, Nitrogen Oxides

PRODUCT: 16,000 lbs/hr steam at 1,000 Btu/lb.

EFFICIENCY: 90%

HEAT INPUT: 17.8 MM BTU/hr for each boiler
(16,000 ÷ 0.9 x 1000)

FUEL INPUT: Oil: 2.9 BBLS/hr (17.8 MM ÷ 146,400 ÷ 42)

EMISSION FOR EACH BOILER:

Sulfur Dioxide

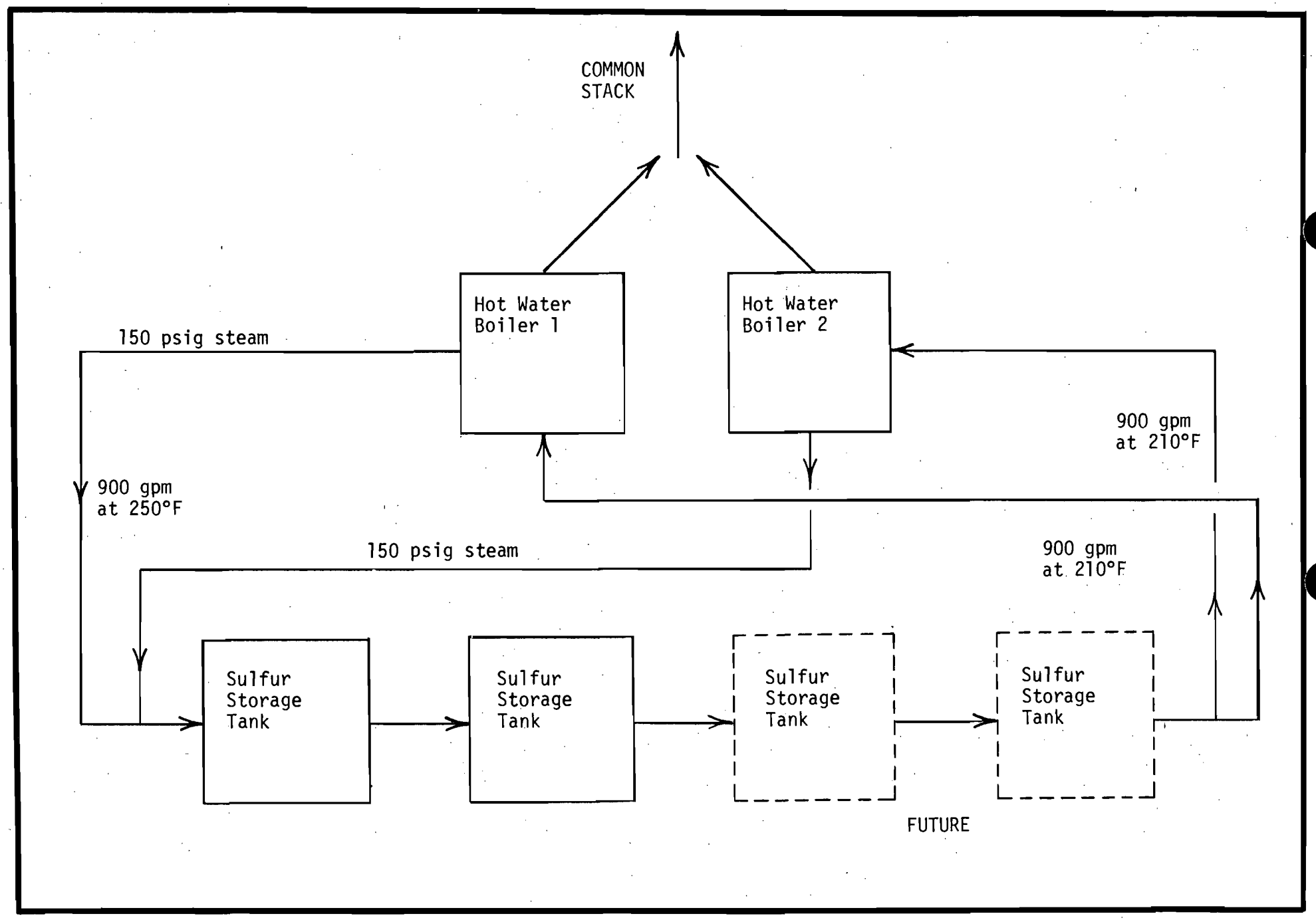
[157 x 0.8/1000 lb SO_2/gal] x [17.8 x 10^6/146,400] gal/hr.
= 15.3 lb/hr
x 8760/2000
= 66.9 tons/year

Particulate Matter

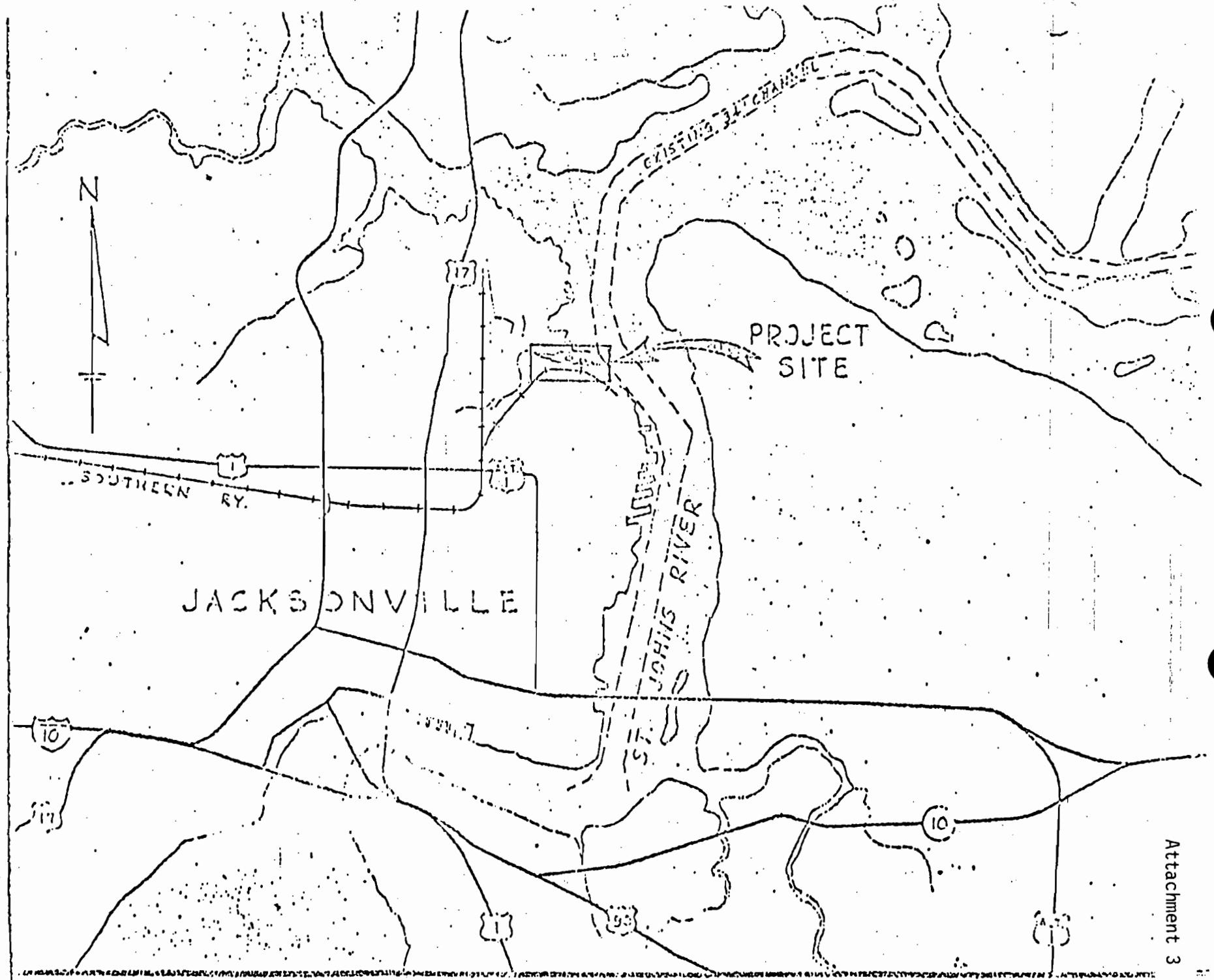
[(10(0.8)+3)/1000 lb/gal] x [17.8 x 10^6/146,400]
= 1.3 lb/hr
x 8760/2000
= 5.8 tons/year

Nitrogen Oxides

60/1000 lb/gal x [17.8 x 10^6/146,400]
= 7.3 lb/hr
x 8760/2000
= 31.9 tons/year

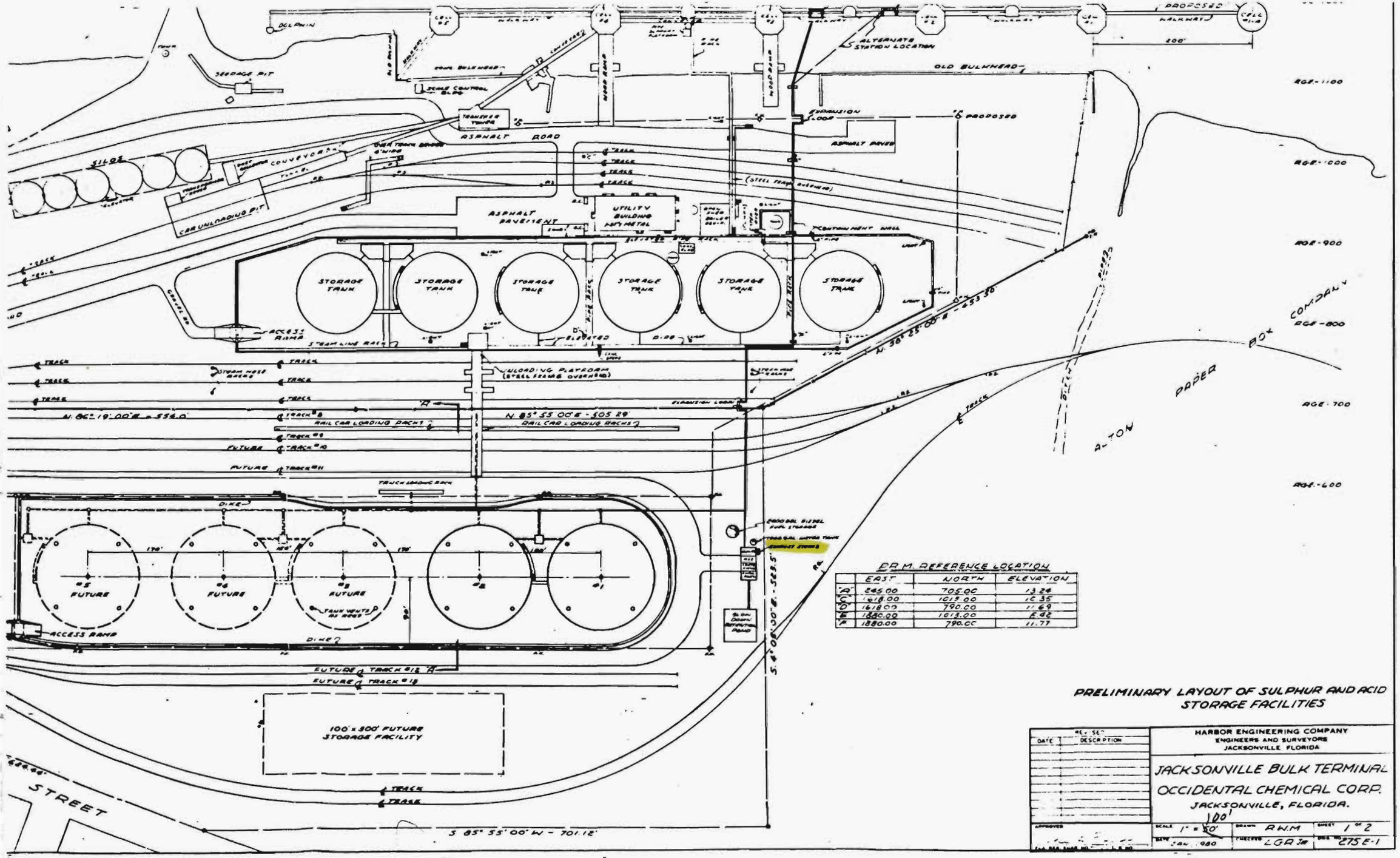


ATTACHMENT 2



VICINITY MAP

Attachment 3



P.R.M. REFERENCE LOCATION

	EAST	NORTH	ELEVATION
'A'	545.00	705.00	13.24
'C'	1618.00	1015.00	10.35
'D'	1618.00	790.00	11.69
'E'	1880.00	1013.00	5.42
'F'	1880.00	790.00	11.77

PRELIMINARY LAYOUT OF SULPHUR AND ACID STORAGE FACILITIES

NO.	DATE	DESCRIPTION

HARBOR ENGINEERING COMPANY
ENGINEERS AND SURVEYORS
JACKSONVILLE FLORIDA

JACKSONVILLE BULK TERMINAL
OCCIDENTAL CHEMICAL CORP.
JACKSONVILLE, FLORIDA.

APPROVED	SCALE 1" = 50' (100')	DRAWN RWM	SHEET 1 of 2
	DATE JAN 1980	CHECKED LGR Jr	DRG. NO. 275E-1

Attachment 4