AC 29-86615

DER

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

MAY 07 1984

BAQM

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Pollution [X] New[1] [ ] Existing[1]

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

COMPANY NAME: Gardinier, Inc. COUNTY: Hillsborough

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) 68 BPL Rock Unloading Facility with Bag Filter

SOURCE LOCATION: Street U.S. H'way 41 So. & Riverview Drive City South of Tampa

UTM: East 362.6 North 3082.4

Latitude 27 ° 51 ' 30 "N Longitude 82 ° 23 ' 15 "W

APPLICANT NAME AND TITLE: Rudy J. Cabina, Vice President

APPLICANT ADDRESS: P.O. Box 3269, Tampa, Florida 33601

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Gardinier, 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: By: Rudy J Cabina

Rudy J. Cabina, Vice President
Name and Title (Please Type)

Date: 5/4/84 Telephone No. 813 677 9111

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.

REGISTERED ENGINEER STATE OF FLORIDA (Affix Seal)

Signed: R. B. Melreit

R. B. Melreit
Name (Please Type)

Gardinier, Inc.
Company Name (Please Type)

P.O. Box 3269, Tampa, Florida 33601
Mailing Address (Please Type)

Florida Registration No. 20408 Date: 5/4/84 Telephone No. 813-677-9111

[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.

To unload and store 68 BPL phosphate rock. Emissions will meet Hillsborough County and State of Florida Regulations.

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

Start of Construction May 21, 1984 Completion of Construction May 1, 1985

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.)

Install collector and ducts - $25,000.00

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

Permit No.	AO29-22142	AC29- 14858	AO29-4523
Issued	10/3/79	12/1/78	9/2/77
Expire	7/1/83	11/1/79	8/31/78

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 ____ No X

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr N/A ; if seasonal, describe: not seasonal

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? No
   c. If yes, list non-attainment pollutants.
      Particulate
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. No
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII. No
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? No
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

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		
Phosphate Rock (68BPL)	Particulate	100	546,000	A

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

1. Total Process Input Rate (lbs/hr): 546,000

2. Product Weight (lbs/hr): 546,000

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	
Particulate	1.6	6.9	0.03 gr/dscf	3.2	1.6	6.9	B
Opacity	0%		5%				B

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]
Flex-Kleen Model 84-WUDC-	Particulate	99+	2 micron or larger	Design
128XL-DWg G-71C-43				

[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 No fuels are used.

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.

There are no solid wastes generated. Air compressor cooling water is discharged through plant Outfall 001.

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

Stack Height: 30 ft. Stack Diameter: 1.67 ft.

Gas Flow Rate: 12,800 ACFM Gas Exit Temperature: 99 °F.

Water Vapor Content: 2.4 % Velocity: 9 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
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: _____

NOT APPLICABLE

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.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 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.
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).
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.

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.

Supplemental Requirements (68 BPL Rock Unloading)

1. Total process input rate and product weight will be determined from railcar weights.

2. Emissions are estimated as follows:

   Stack Flow Rate - 9990 dscf/min

   Expected grain loading - 0.019 gr/dscf

   $$\frac{9990 \times 0.019 \times 60}{7000} = 1.6 \text{ lb/hr}$$

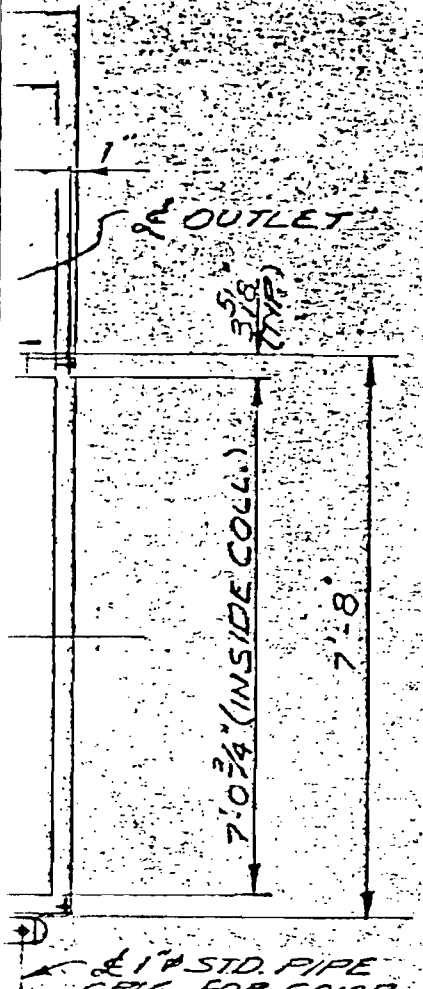
   Emissions will be determined using EPA Test Method 5, found in 40 CFR 60, Appendix A.

3. Potential to discharge is the actual emission rate.

4. See attached

5. Design is for 99+% efficiency.

6, 7, 8, See attached



OPERATING DATA

VOLUME 8,000 TO 10,000 ACFM	CLOTH AREA 1280 SQ. FT.
RATIO 6.25/1	
DUST RAW PHOSPHATE	
DUST SIZE	
DUST DENSITY ——— LBS/CU. FT.	DUST LOADING CUST. SPECIFY GR/CU. FT.
TEMPERATURE 70°F	DEW POINT
(COLLECTOR TEMPERATURE MUST BE KEPT WELL ABOVE DEW POINT)	
END USE CUST. SPECIFY	
WEIGHT 1650 LBS. (COLL. DEAD LOAD ONLY)	LOCATION OUTDOORS
DESIGN PRESSURE 17" W.G.	OPERATING PRESSURE 12" W.G. (NEG.)
COMPRESSED AIR REQRMTS 18.7 SCFM @90-100 PSIG	CLEAN, DRY & OIL FREE

EQUIPMENT DATA

TIMER(S) (T15000) NEMA-4 (M14507)	110 V 50/60 CYC. 1 PHASE 50 W. EA.
DIAPHRAGM VALVES GOYEN "RCA-20M (M14909)	BAG CAGES EPOXY COATED (C1040)
SOLENOID VALVES EENCO "01B0386 (E-4104)	BAG CLAMPS S.S. (M12108)
VENTURIS ALUM. (M11038)	BAG CUPS GALV. (M10725)
FILTER BAGS ~~BY CUSTOMER~~ POLYESTER FELT	

CONSTRUCTION DATA

CLEAN AIR PLENUM	ROOF	12 GA. M.S. (ALL-WELDED) "7 STIFF.
	SIDES	12 GA. M.S. (ALL-WELDED) "7 STIFF.

DUSTY AIR PLENUM N/R

TUBE SHEET 12 GA. DOUBLE-BREAK "I" BEAM PNLS. (EXTLY. FLGD.)

HOPPER N/R

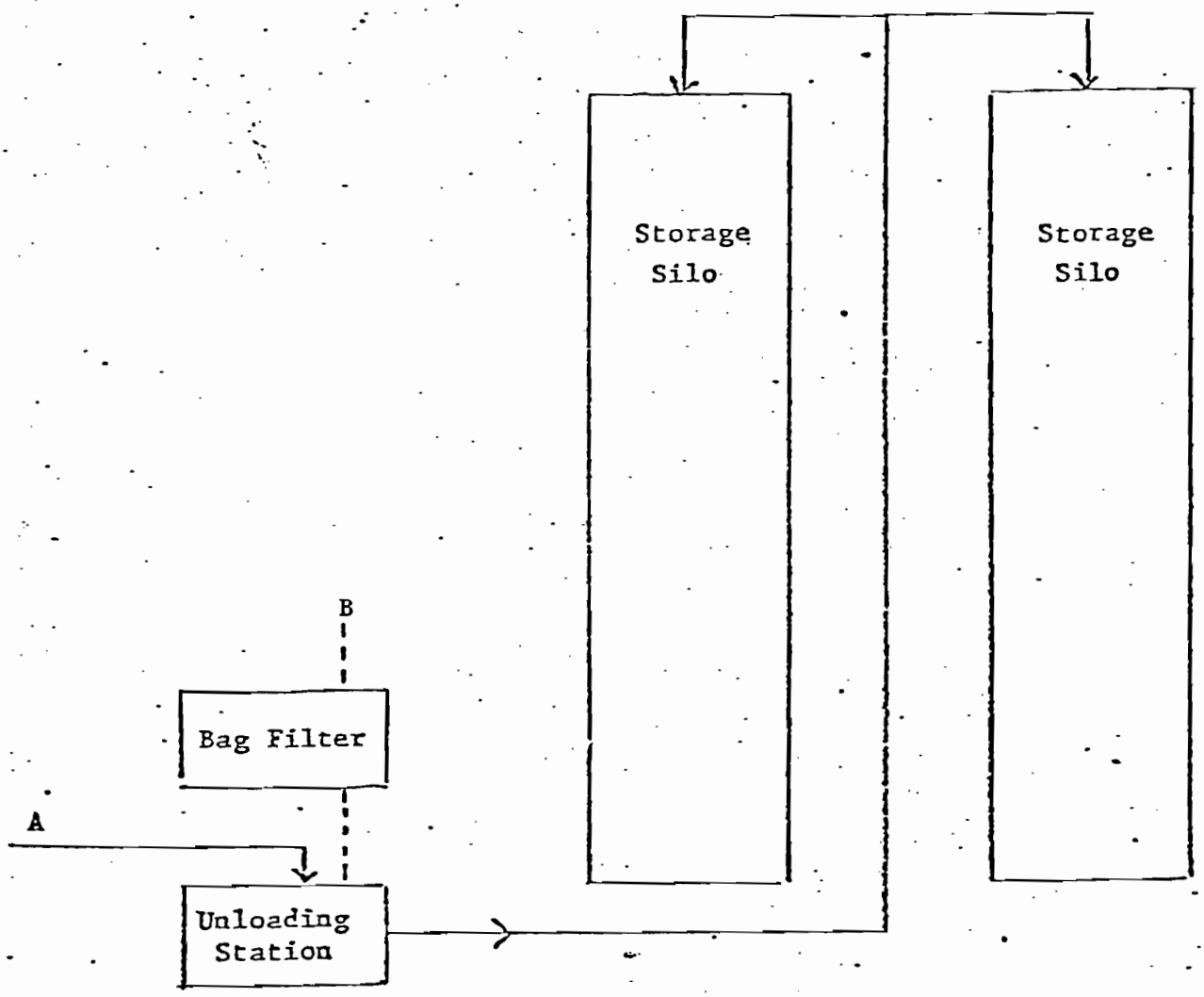
BRACING ON CLEAN AIR PLENUM AS SHOWN

GASKET MATERIAL
a) R.T.V.-732 FOR BAG CUP/VENTURI ASSY.

GENERAL NOTES

SHOP NOTES

1) UNIT TO BE SHIPPED IN ONE (1) PIECE.
2) APPLY ONE (1) COAT OF SHERWIN WILLIAMS "ECL A45 GRAY PRIMER TO ALL EXTERIOR M.S. SURFACES ONLY.
3) USE AIR PIPING KIT M'C'D APK-14-7 3/8" LG. THIN WALL CONDUIT (16-REQ'D)
4) USE 3/4" SCH. 40 M.S. PIPE FOR INTERNAL COMP. AIR PIPING
5) TUBE SHEET PANELS TO BE SEAL WELDED PER REF. C-7LF-20.



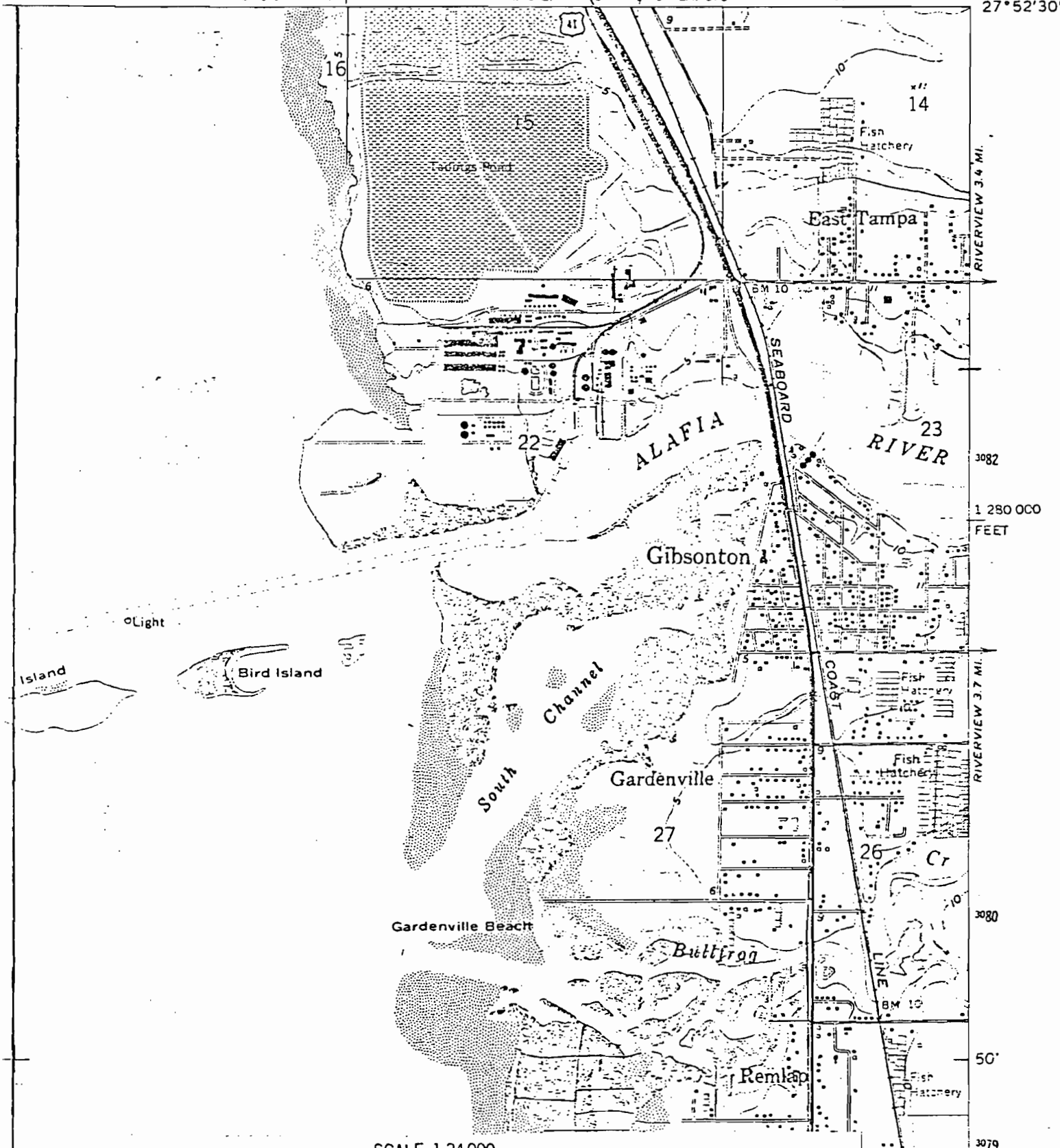
Flow Sheet

68 BPL Rock Unloading

FLORIDA—HILLSBOROUGH CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

25' 361 370 000 FEET 362 R. 19 E. 364 82°22'30"
27°52'30"

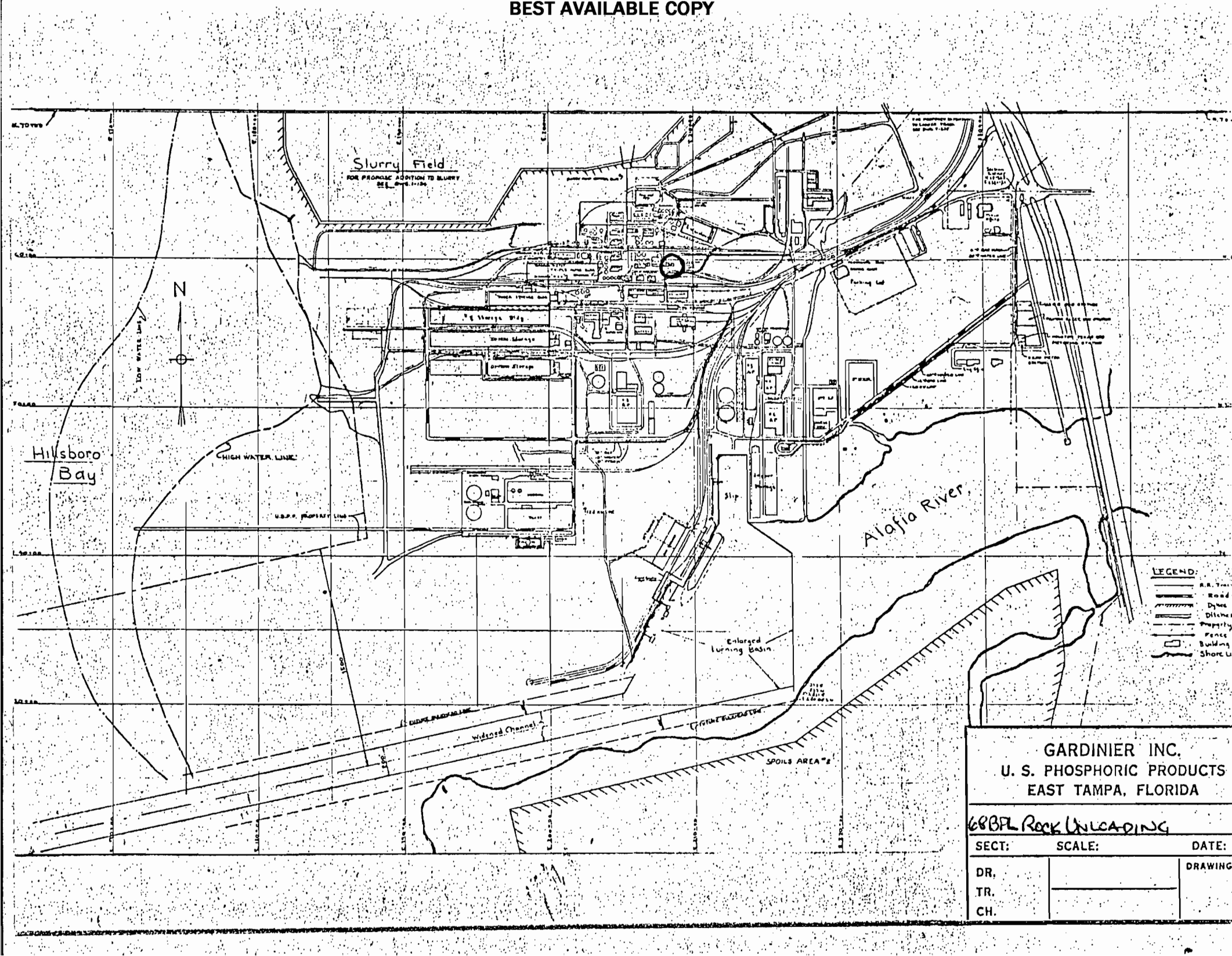
TAMPA (COURTHOUSE) 9 MI.
3.4 MI. TO FLA. 676



SCALE 1:24 000

1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER

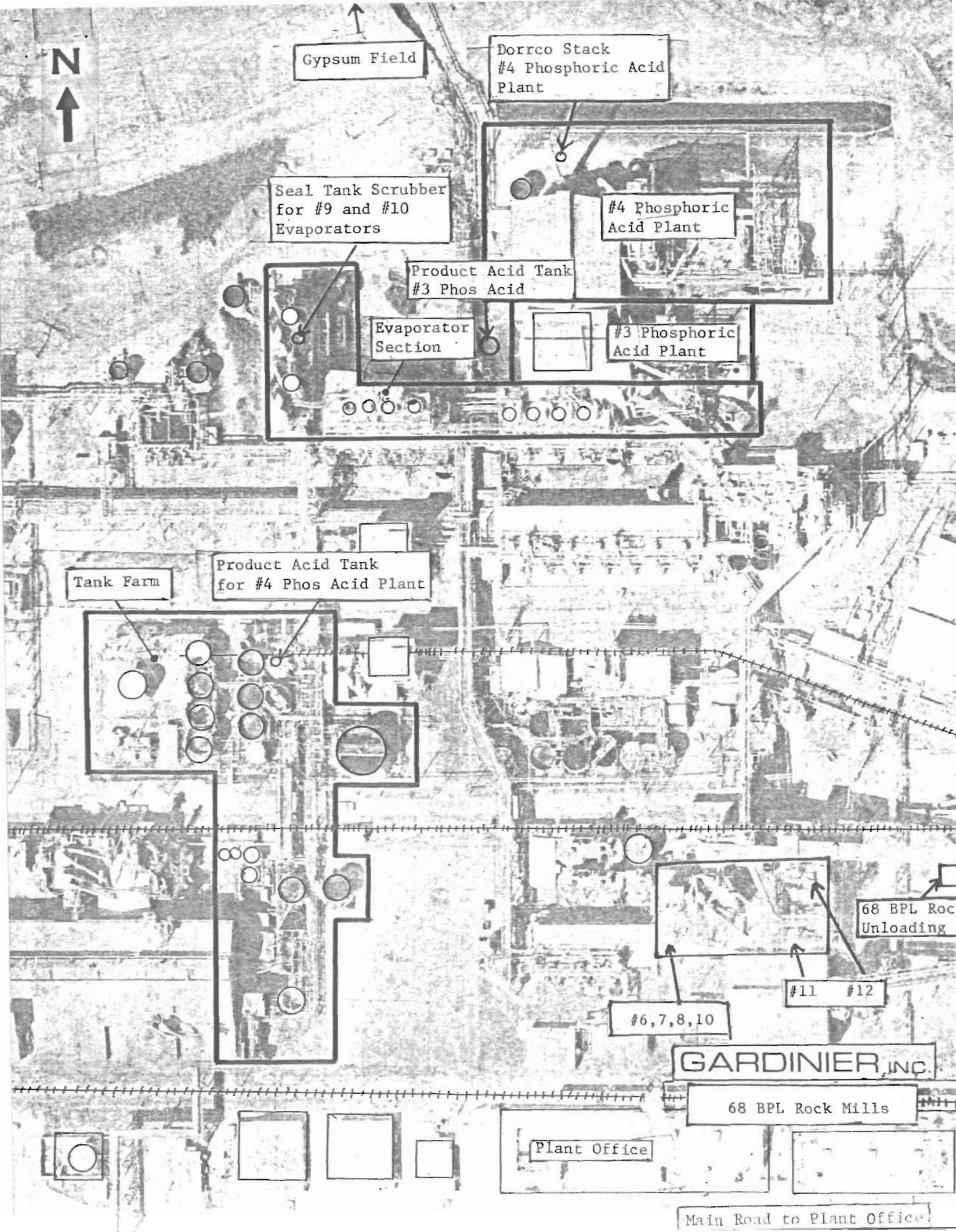
CONTOUR INTERVAL 5 FEET
DATUM IS MEAN SEA LEVEL
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 2 FEET



GARDINIER INC.
U. S. PHOSPHORIC PRODUCTS
EAST TAMPA, FLORIDA

68BPL Rock Unloading

SECT:	SCALE:	DATE:
DR.		DRAWING
TR.		
CH.		


N
Gypsum Field
Dorrco Stack
#4 Phosphoric Acid
Plant
Seal Tank Scrubber
for #9 and #10
Evaporators
#4 Phosphoric
Acid Plant
Product Acid Tank
#3 Phos Acid
Evaporator
Section
#3 Phosphoric
Acid Plant
Tank Farm
Product Acid Tank
for #4 Phos Acid Plant
68 BPL Roc
Unloading
#11 #12
#6,7,8,10
GARDINIER, INC.
68 BPL Rock Mills
Plant Office
Main Road to Plant Office

GARDINIER INC.

Post Office Box 3269 • Tampa, Florida 33601 • Telephone 813-677-9711 • TWX 810-876-0648 • Telex-52666 • Cable-Gardinphos

-C-E-R-T-I-F-I-C-A-T-E-

I, Robert C. Guthrie, Secretary of GARDINIER, INC. a Delaware Corporation (hereinafter called the "Corporation"), DO HEREBY CERTIFY that attached hereto is a correct and complete copy of a resolution duly adopted by the Board of Directors of the Corporation at the Regular Meeting thereof held on July 13, 1982, duly convened and held pursuant to notice, at which meeting a quorum was present and acting throughout, and such resolution has not been amended or revoked and such resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this day of January 4, 1983.

Robert C. Guthrie

Robert C. Guthrie
Secretary

RESOLVED THAT Mr. Pearce A. Nelson and/or Mr. Rudy J. Cabina, or either of them be and each hereby is, appointed as the authorized representative of GARDINIER, INC. to execute the applications for permits to operate/construct pollution sources.

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069381

66-798
531

DATE		
MO.	DAY	YR.
05	03	84

PAY EXACTLY **********170 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********170	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Hillsborough County Environmental Protection Commission

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

John W. Pearce

⑈069381⑈ ⑆053107989⑆ 4800133821⑈

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069382

66-798
531

DATE		
MO.	DAY	YR.
05	03	84

PAY EXACTLY **********100 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********100	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Florida Department of Environmental Regulation

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

John W. Pearce

⑈069382⑈ ⑆053107989⑆ 4800133821⑈

AC 29-86646

DER

MAY 07 1984

BAQM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Pollution [X] New[1] [ ] Existing[1]

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

COMPANY NAME: Gardinier, Inc. COUNTY: Hillsborough

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) No. 12 KVS Rock Mill with Flex-Kleen Bag Filter

SOURCE LOCATION: Street U.S. H'way 41 So. & Riverview Drive City South of Tampa

UTM: East 362.6 North 3082.4

Latitude 27 ° 51 ' 30 "N Longitude 82 ° 23 ' 15 "W

APPLICANT NAME AND TITLE: Rudy J. Cabina, Vice President

APPLICANT ADDRESS: P.O. Box 3269, Tampa, Florida 33601

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Gardinier, 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: By: Rudy J. Cabina

Rudy J. Cabina, Vice President
Name and Title (Please Type)

Date: 5/4/84 Telephone No. 813 677 9111

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.

(Affix Seal)

Signed: R.B. Melreit

R. B. Melreit
Name (Please Type)

Gardinier, Inc.
Company Name (Please Type)

P.O. Box 3269, Tampa, FL 33601
Mailing Address (Please Type)

Florida Registration No. 20408 Date: 5/4/84 Telephone No. 813 677 9111

[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.

This is a phosphate rock grinding operation. Emissions will be controlled by use of a Flex-Kleen Bag Filter. Emissions will comply with all applicable Hillsborough County and State of Florida Regulations.

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

Start of Construction May 21, 1984 Completion of Construction May 1, 1985

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.)

Bag Filter - $40,000.00

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

Permit No.	A029-22141	A029-4521	A029-2425
Issued	9/13/79	9/2/77	7/1/75
Expire	(Surrendered) 7/1/83	8/31/79	6/30/77

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 n/a ; if seasonal, describe: not seasonal

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? No
   c. If yes, list non-attainment pollutants.
      Particulate
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. No
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII. No
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? No
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

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		
Phosphate Rock	Particulate	98.5	120,000	A

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

1. Total Process Input Rate (lbs/hr): 120,000

2. Product Weight (lbs/hr): 120,000

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	
Particulate	1.0	4.4	0.03 gr/dscf	1.7	1.0	4.4	B
Sulfur Dioxide	0.17	0.75	No limit	No limit	0.17	0.75	B
Opacity	0%		5%				B

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]
Flex-Kleen, Model No. WUDC-152	Particulate	99+	2 microns or larger	Design

[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	
No. 2 Fuel Oil	0.08	-	0.45

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

Fuel Analysis:

Percent Sulfur: 0.35 Percent Ash: -

Density: 7.5 lbs/gal Typical Percent Nitrogen: -

Heat Capacity: - BTU/lb 138,000 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 N/A

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

There are no solid wastes generated. Rock mill bearing cooling water and air compressor cooling water is discharged through plant Outfall 001.

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

Stack Height: 71 ft. Stack Diameter: 1.6 ft.

Gas Flow Rate: 8500 ACFM Gas Exit Temperature: 148 °F.

Water Vapor Content: 5 % Velocity: 70.4 FPS

SECTION IV: INCINERATOR INFORMATION

Not Applicable

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
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 (^oF)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber		NOT APPLICABLE			

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

See attachment

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 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.
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).
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.

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.

Supplemental Requirements (KVS 12)

1. Total process input rate and product weight will be determined by direct weighing.

2. Emissions are estimated as follows:

   Stack Flow Rate - 6650

   Expected grains/scf loading - 0.018

   $$\frac{6650 \times 0.018 \times 60}{7000} = 1.0 \text{ lb/hr}$$

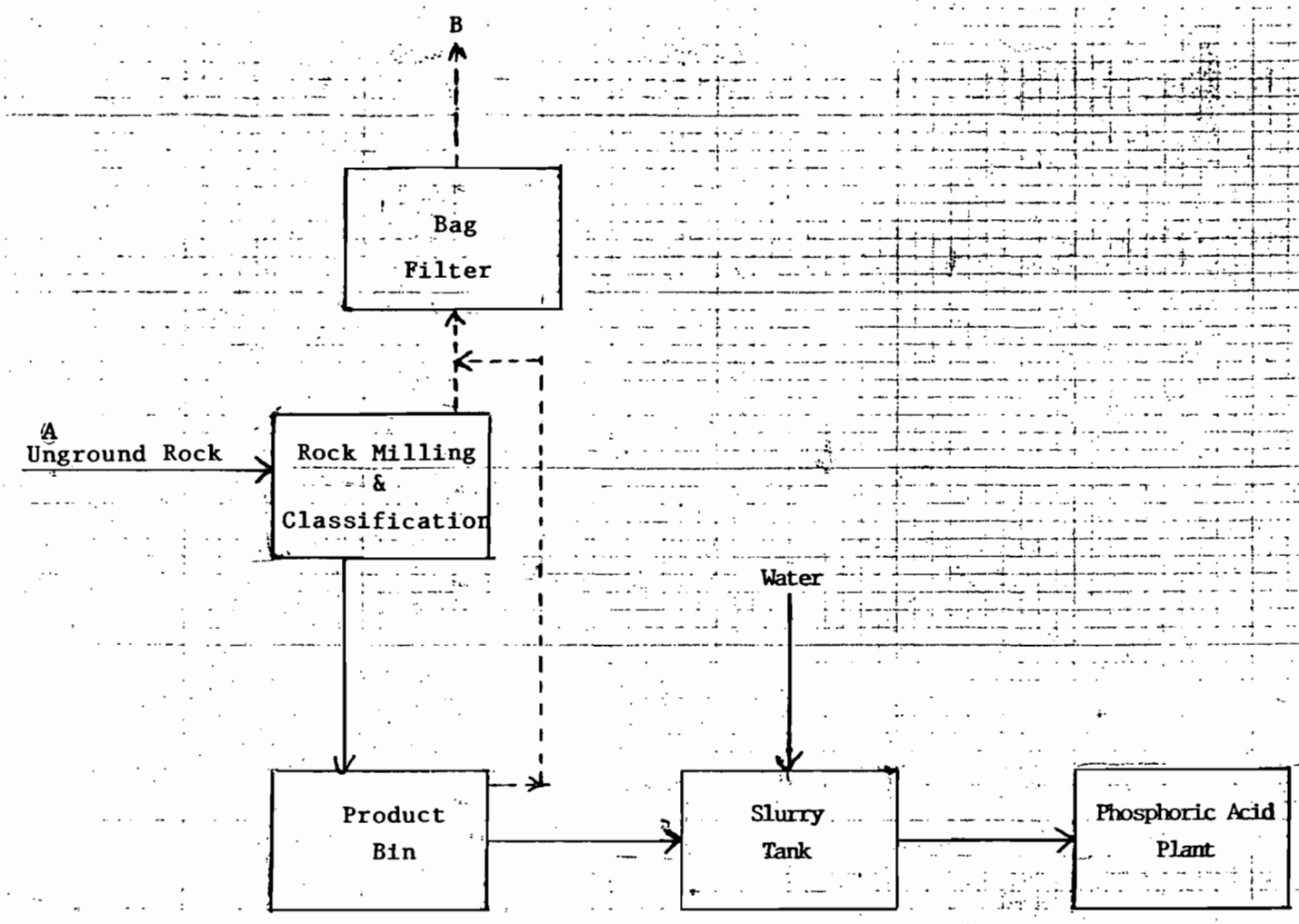
   Emissions will be determined using EPA Test Method 5, found in 40 CFR 60, Appendix A

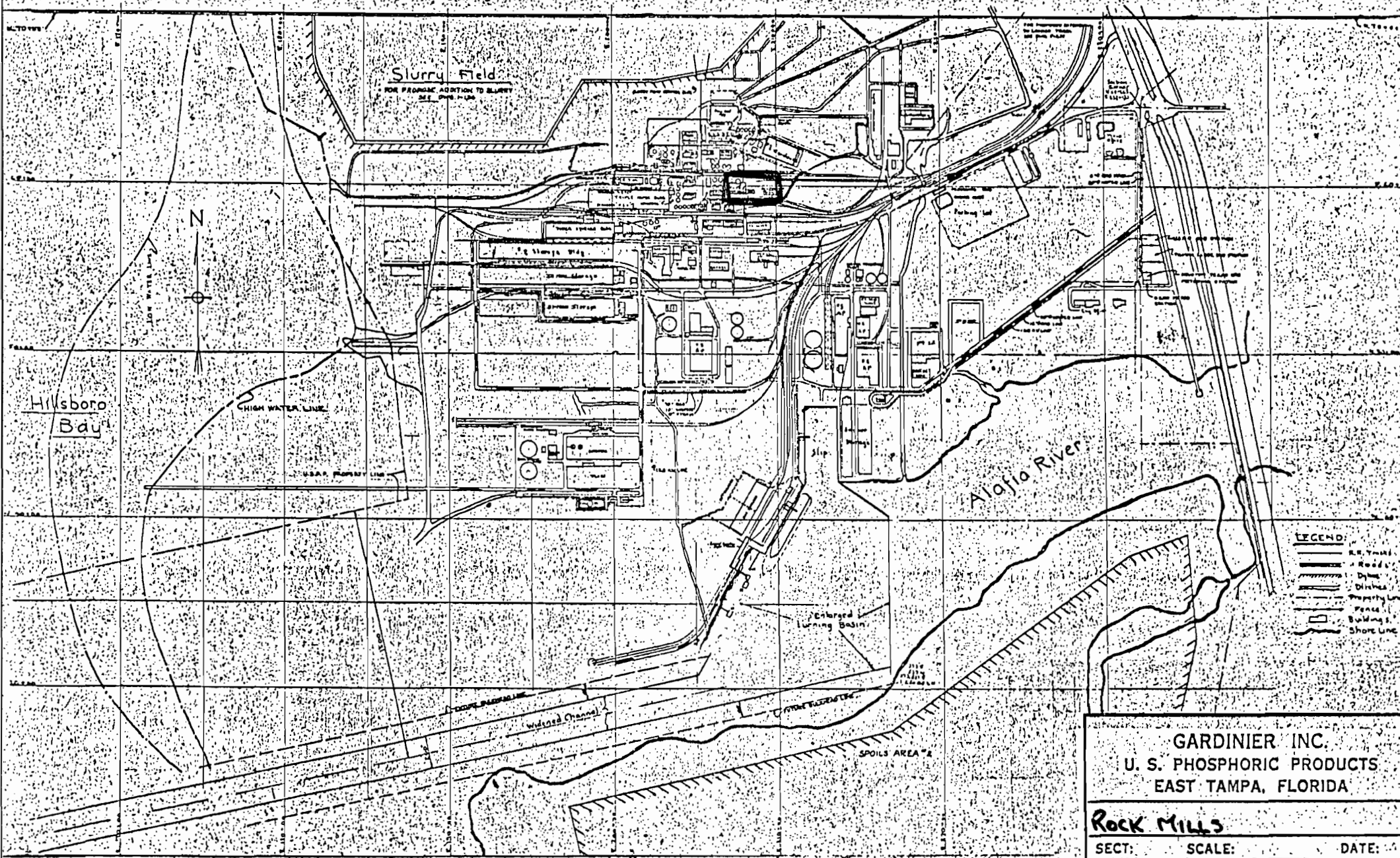
3. Potential to discharge is the actual emissions rate.

4. See attached

5. Design is for 99+% efficiency.

6. 6, 7, 8, See attached


B
Bag
Filter
A
Unground Rock
Rock Milling
&
Classification
Water
Product
Bin
Slurry
Tank
Phosphoric Acid
Plant



GARDINIER INC.
U. S. PHOSPHORIC PRODUCTS
EAST TAMPA, FLORIDA

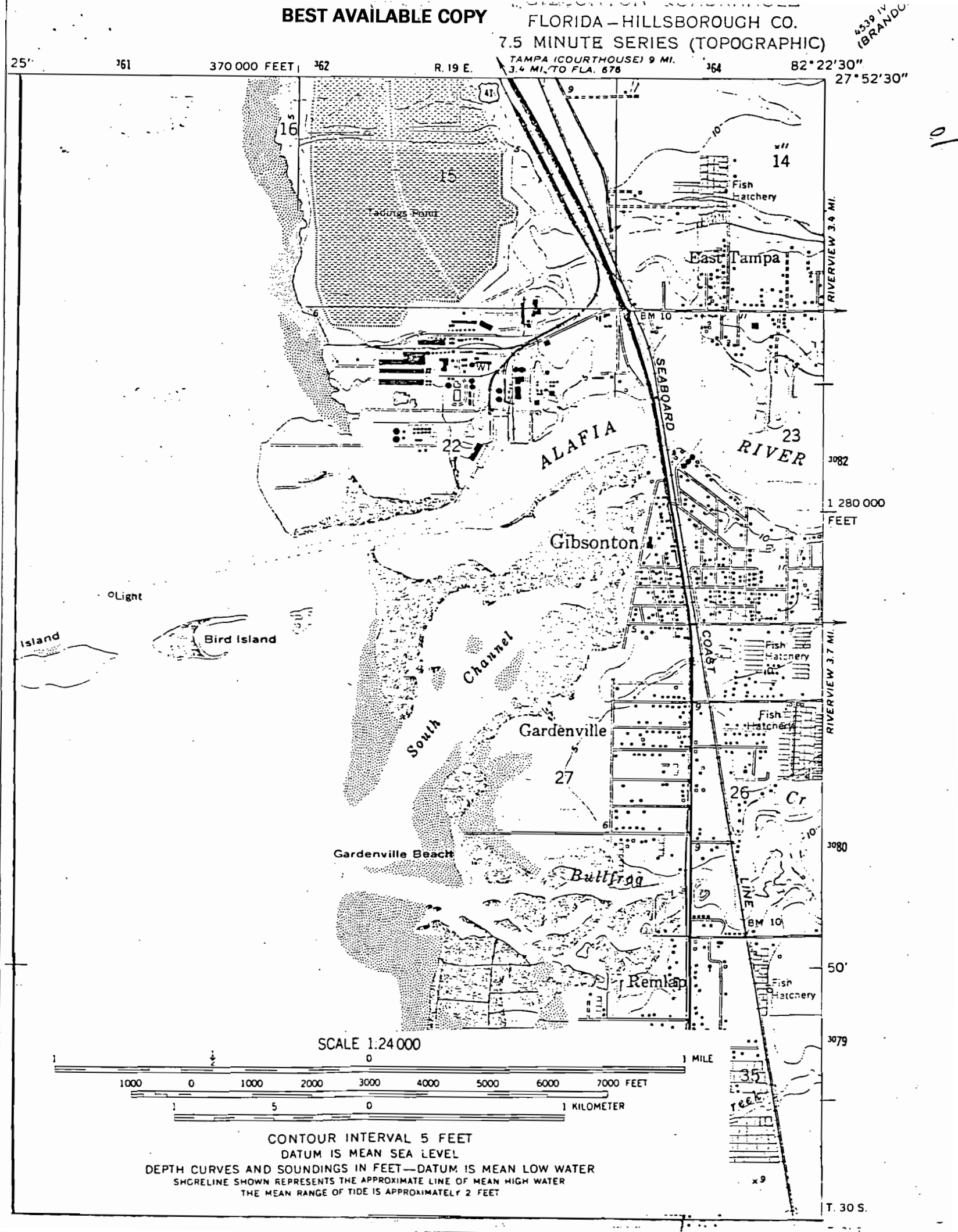
ROCK MILLS

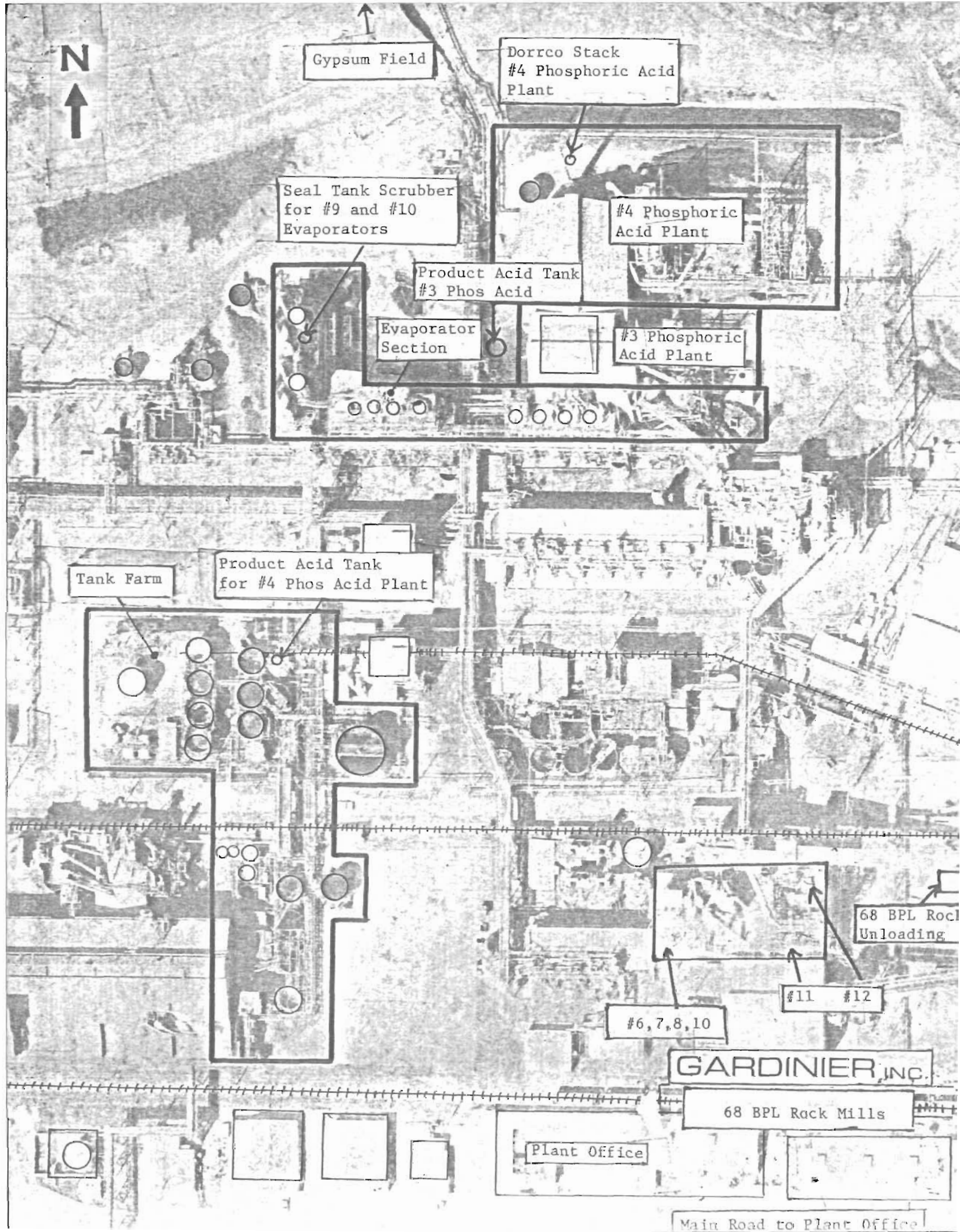
SECT: SCALE: DATE:

DR.
TR.
CH.

DRAWING N

FLORIDA—HILLSBOROUGH CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)




N
Gypsum Field
Dorrco Stack
#4 Phosphoric Acid Plant
Seal Tank Scrubber for #9 and #10 Evaporators
#4 Phosphoric Acid Plant
Product Acid Tank #3 Phos Acid
Evaporator Section
#3 Phosphoric Acid Plant
Tank Farm
Product Acid Tank for #4 Phos Acid Plant
68 BPL Rock Unloading
#11 #12
#6,7,8,10
GARDINIER, INC.
68 BPL Rock Mills
Plant Office
Main Road to Plant Office

OPERATING DATA

VOLUME 9200 CFM	CLOTH AREA 1520 SQ. FT.	RATIO 6.05/1
DUST PHOSPHATE ROCK	SIZE —	LOADING UNKN.
DUST DENSITY UNKN. lbs/cu ft	MOISTURE IN DUST —	
TEMPERATURE 160° F	DEW POINT —	
(collector temperature must be kept well above dew point)		
END USE VENT BALL MILL	— hrs/day	
LOCATION OUTDOORS. (A)	NET WEIGHT 13,500 lbs	(A)

EQUIPMENT DATA

TIMER EMIII-10 (SHIP LOOSE DUST TIGHT)	50W. 110v. 60 cyc. 1 phase
DIAPHRAGM VALVE 535333 STD	BAG CAGES 64" M.S.
SOLENOID VALVE 52 62 B2	BAG CLAMPS [illegible] SS
FILTER BAGS 11 oz. DACRON	VENTURIS ALUM.

CONSTRUCTION DATA

CLEAN AIR PLENUM	12 GA. M.S.
DIRTY AIR PLENUM	12 GA. M.S.
TUBE SHEET	12 GA. M.S.
HOPPER	12 GA. M.S.
BRACING	3"L 4.1# AS INDICATED.
GASKET MATERIAL	FOAM RUBBER

GENERAL NOTES

DESIGN PRESSURE: ±20" W.G.

OPERATING PRESSURE:

EFFICIENCY: 99.9% 2μ & LARGER W/ PROPER MAINTENANCE AFTER ONE TO TWO WKS OF OPERATION

GARDINIER INC.

Post Office Box 3269 • Tampa, Florida 33601 • Telephone 813-677-9111 • TWX 810-876 0648 • Telex-52666 • Cable-Gardinphos

-C-E-R-T-I-F-I-C-A-T-E-

I, Robert C. Guthrie, Secretary of GARDINIER, INC. a Delaware Corporation (hereinafter called the "Corporation"), DO HEREBY CERTIFY that attached hereto is a correct and complete copy of a resolution duly adopted by the Board of Directors of the Corporation at the Regular Meeting thereof held on July 13, 1982, duly convened and held pursuant to notice, at which meeting a quorum was present and acting throughout, and such resolution has not been amended or revoked and such resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this day of January 4, 1983.

Robert C. Guthrie

Robert C. Guthrie
Secretary

RESOLVED THAT Mr. Pearce A. Nelson and/or Mr. Rudy J. Cabina, or either of them be and each hereby is, appointed as the authorized representative of GARDINIER, INC. to execute the applications for permits to operate/construct pollution sources.

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069383

66-798
531

DATE MO.	DAY	YR.
05	03	84

PAY EXACTLY **********100 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********100	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Florida Department of Environmental Regulation

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

J. W. Pearce

⑈069383⑈ ⑆053107989⑆ 4800133821⑈

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069375

66-798
531

DATE MO.	DAY	YR.
05	03	84

PAY EXACTLY **********170 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********170	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Hillsborough County Environmental Protection Commission

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

J. W. Pearce

⑈069375⑈ ⑆053107989⑆ 4800133821⑈

AC 29-86648

DER

MAY 07 1984

BAQM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Pollution [X] New[1] [ ] Existing[1]

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

COMPANY NAME: Gardinier, Inc. COUNTY: Hillsborough

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) No. 11 KVS Rock Mill with Bag Filter

SOURCE LOCATION: Street U.S. H'way 41 So. & Riverview Drive City South of Tampa

UTM: East 362.6 North 3082.4

Latitude 27 ° 51 ' 30 "N Longitude 82 ° 23 ' 15 "W

APPLICANT NAME AND TITLE: Rudy J. Cabina, Vice President

APPLICANT ADDRESS: P.O. Box 3269, Tampa, Florida 33601

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Gardinier, 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: By: Rudy J Cabina

Rudy J. Cabina, Vice President
Name and Title (Please Type)

Date: 5/4/84 Telephone No. 813-677-9111

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.

REGISTERED ENGINEER STATE OF FLORIDA (Affix Seal)

Signed: R.B. Melreit

R. B. Melreit
Name (Please Type)

Gardinier, Inc.
Company Name (Please Type)

P.O. Box 3269, Tampa, Florida 33601
Mailing Address (Please Type)

Florida Registration No. 20408 Date: 5/4/84 Telephone No. 813 677 9111

[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.

To grind 68 BPL Phosphate Rock. Emissions will meet Hillsborough County and State of Florida Regulations.

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

Start of Construction May 21, 1984 Completion of Construction May 1, 1985

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.)

Bag Filter - $40,000.00

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

Permit No.	A029-22140	A029-4520	A029-2425	A029-2180
Issued	9/13/79	9/2/77	7/1/75	5/23/73
Expire	7/1/83	8/31/79	6/30/77	7/11/75

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 N/A; if seasonal, describe: not seasonal

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? No
   c. If yes, list non-attainment pollutants.
      Particulate
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. No
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII. No
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? No
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

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		
Phosphate Rock	Particulate	100	70,000	A

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

1. Total Process Input Rate (lbs/hr): 70,000

2. Product Weight (lbs/hr): 70,000

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	
Particulate	0.7	3.1	0.03gr/dscf	1.3	0.7	3.1	B
Opacity	0%	–	5%				B

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]
Flex-Kleen, Model 100 WRTR	Particulate	99+	2 microns or larger	Design
96 XL III				

[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 NO FUELS ARE USED

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.

No solid wastes are generated. Rock Mill bearing cooling water and air compressor cooling water is discharged from plant Outfall 001.

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

Stack Height: 70 ft. Stack Diameter: 1.6 ft.

Gas Flow Rate: 5300 ACFM Gas Exit Temperature: 145 °F.

Water Vapor Content: 5 % Velocity: 44 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: _____

NOT APPLICABLE

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.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 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.
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).
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.

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.

Supplemental Requirements (KVS 11)

1. Total process input rate and product weight will be determined by direct weighing.

2. Emissions are estimated as follows:

   Stack Flow Rate - 4170 dscf/min

   Expected grain/scf loading - 0.019 gr/dscf

   $$\frac{4170 \times 0.019 \times 60}{7000} = 0.7 \text{ lb/hr}$$

   Emissions will be determined using EPA Test Method 5, found in 40 CFR 60, Appendix A.

3. Potential to discharge is the actual emissions rate.

4. See attached

5. Design is for 99+% efficiency.

6., 7, 8, See attached

OPERATING DATA

VOLUME 5000 ACFM	CLOTH AREA 1152 SQ. FT.	RATIO 4.34 / 1	
DUST PHOSPHATE ROCK			
DUST SIZE 90% < 10 MICRON	DUST LOADING 40 GR./CU. FT.		
DUST DENSITY ——— LBS/CU. FT.	MOISTURE IN DUST ———		
TEMPERATURE 200° F. (MAX.)	DEW POINT ———		
(COLLECTOR TEMPERATURE MUST BE KEPT WELL ABOVE DEW POINT)			
END USE CUSTOMER SPECIFY			
LOCATION OUTDOORS	OPERATION ——— HRS/DAY		
WEIGHT 4500 lbs. (COLL. DEAD LOAD ONLY)			
DESIGN PRESSURE 17" W.G.	OPERATING PRESSURE 14" W.G. (NEG.)		
COMPRESSED AIR REQRMTS 15.0 SCFM @ 90-100 PSIG	CLEAN, DRY & OIL FREE		

EQUIPMENT DATA

TIMER(S) EM-1200-6 (SHIPPED LOOSE / NEMA-4)	110 V 50/60 CYC. 1 PHASE 50 W. EA.
DIAPHRAGM VALVES 8353 C33 (STD.)	BAG CAGES 100* M.S. (EPOXY COATED)
SOLENOID VALVES V19116 (P.W.)	BAG CLAMPS N/R
VENTURIS VIICAL (ALUM.)	ADAPTOR PLATES TRAP-4-304 (304 S.S.) **
FILTER BAGS 16 OZ. POLYESTER FELT	

CONSTRUCTION DATA

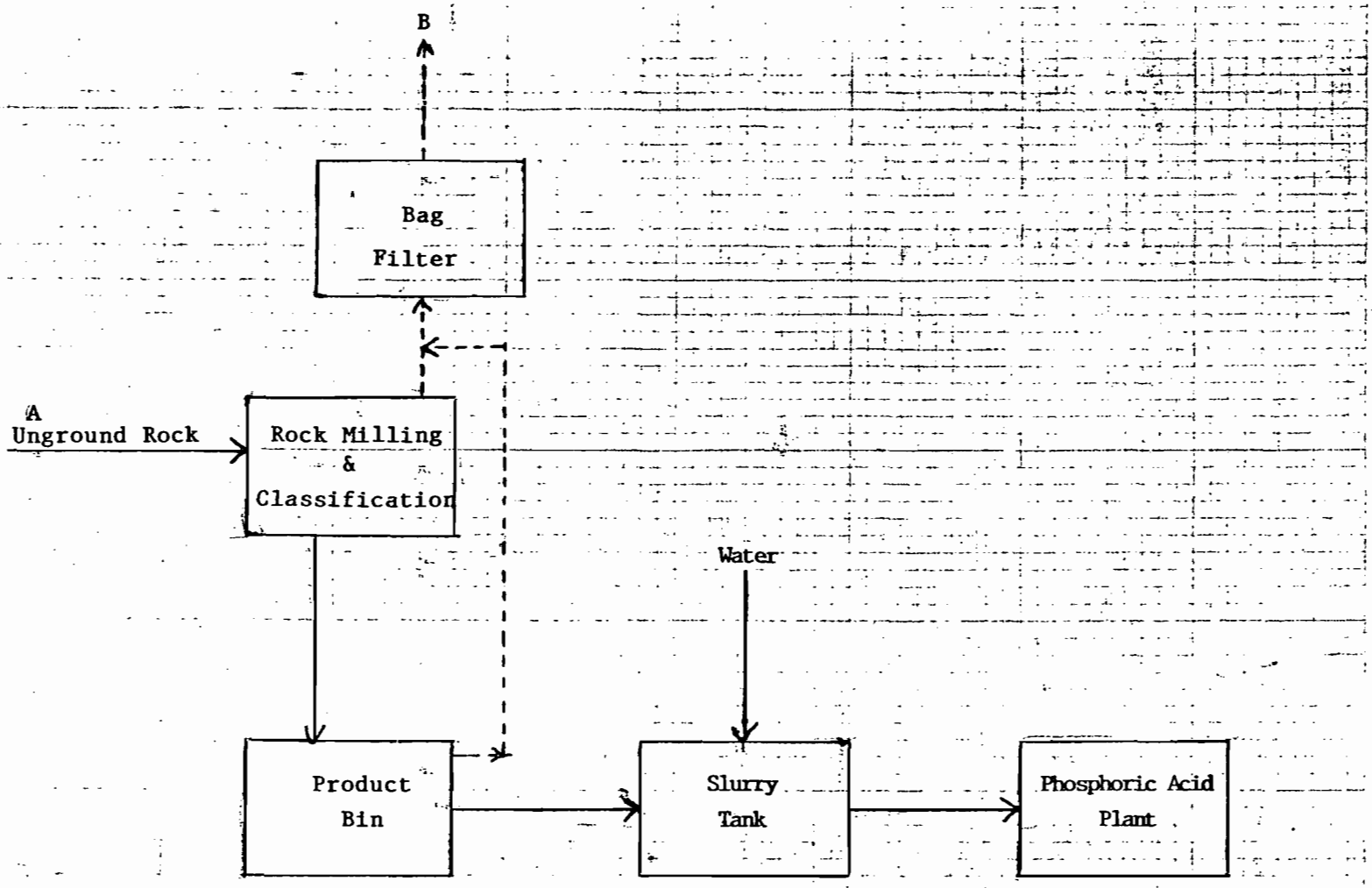
CLEAN AIR PLENUM 12 GA. M.S. (ALL WELDED) w/ 0.125" TYPE 5052-H32 ALUM. ROOF PNLS.
DUSTY AIR PLENUM 12 GA. M.S. (ALL WELDED) w/ STIFFENERS
TUBE SHEET 10 GA M.S. (EXT'L. FLG'D.)
HOPPER (60°) 12 GA. M.S. (ALL WELDED) w/ STIFFENERS
BRACING ON ROOF, SHELL & HOPPER AS SHOWN
GASKET MATERIAL a) 582 PRESTITE @ TUBE SHEET & BIN LINE FLG. CONN'S (3/8" x 1/8") b) TRAP-4 G5KTG. FELT RING (DACRON FELT) c) SPONGE NEOPRENE @ REMOVABLE ROOF PANELS (1" x 3/8")

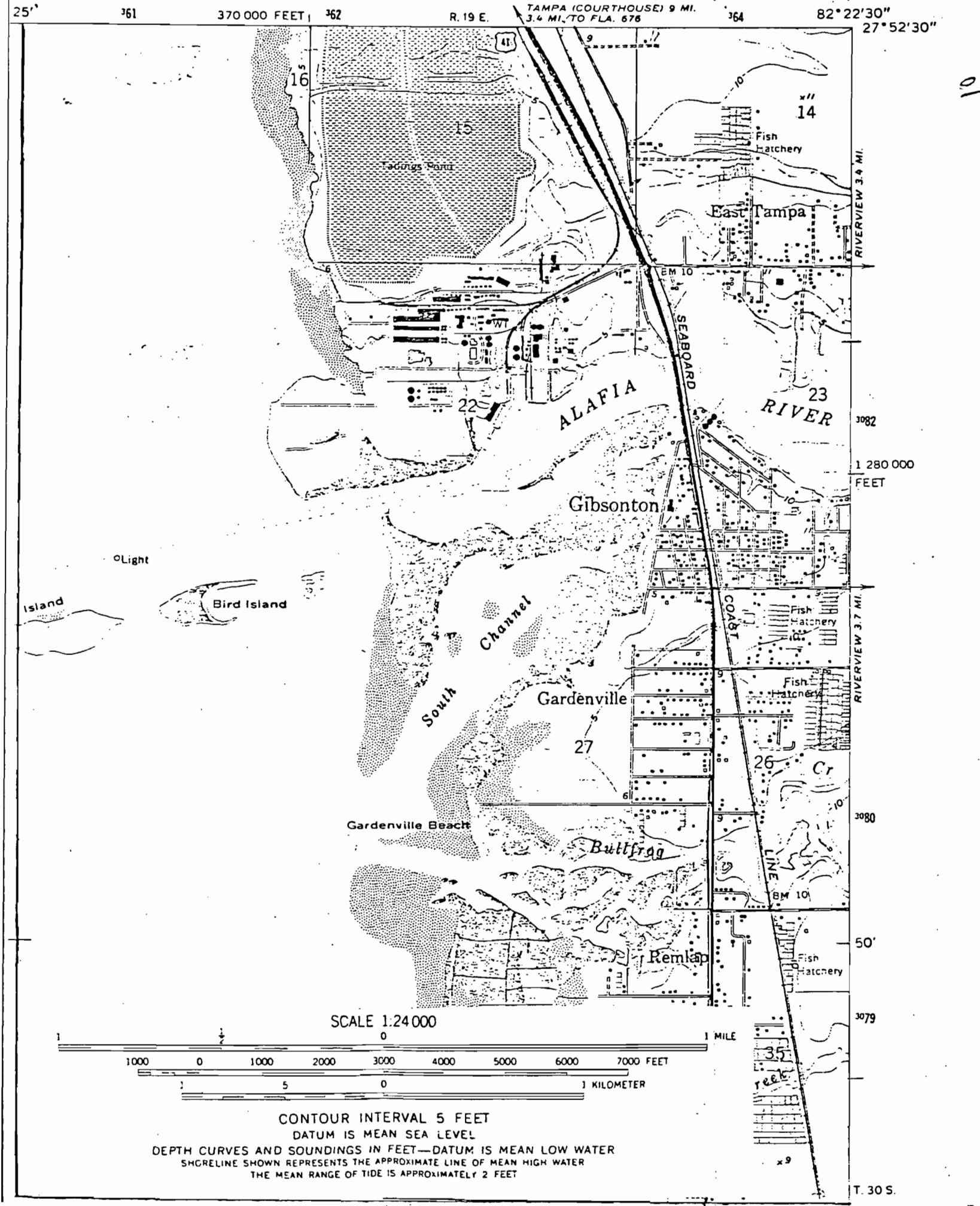
GENERAL NOTES

* MODEL-3 SPIRAL BAG CAGES.
** ADAPTOR PLATES - (SOCKET TYPE)

SHOP NOTES

1. ALL EXTERNAL SURFACES TO HAVE 1" THERMO FIBER WALL INSULATION w/ THERMAL CONDUCTIVITY OF .230 @ 75° F. & DENSITY OF 7 lbs./ft.³ INSULATION TO BE SUPPORTED IN PLACE BY 16 GA CORTEN SHEET TACK WELDED & PROTECTED @ CREVICES w/ CAULKING. (ROOF PNLS. TO HAVE 0.100" THK. ALUM. INSULATION COVER SHEETS.)
2. APPLY ONE (1) COAT OF SHERWIN-WILLIAMS "EGIA" GRAY PRIMER TO ALL EXTERIOR M.S. SURFACES ONLY.


B
Bag
Filter
A
Unground Rock
Rock Milling
&
Classification
Water
Product
Bin
Slurry
Tank
Phosphoric Acid
Plant



SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

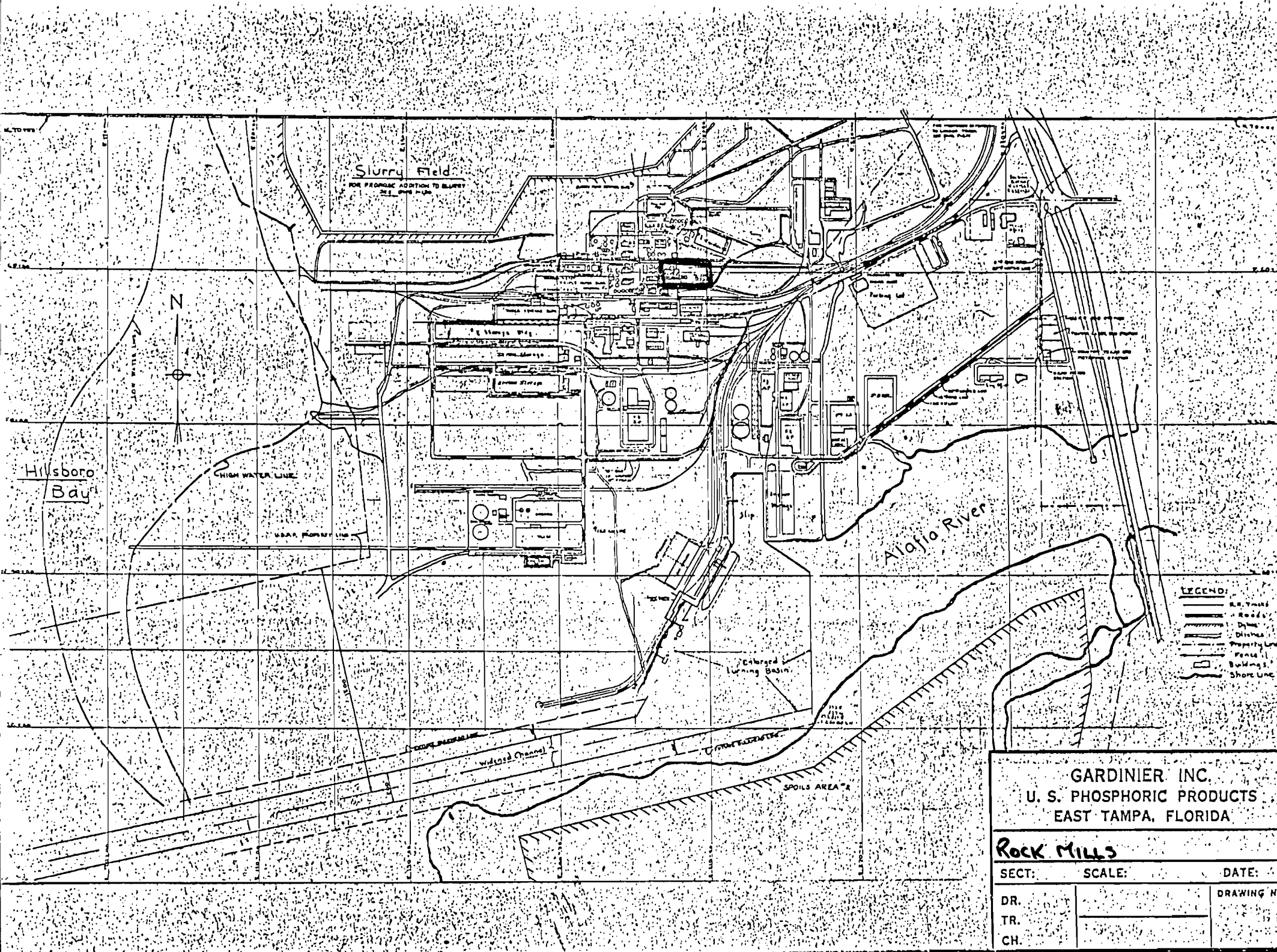
CONTOUR INTERVAL 5 FEET

DATUM IS MEAN SEA LEVEL

DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER

SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER

THE MEAN RANGE OF TIDE IS APPROXIMATELY 2 FEET



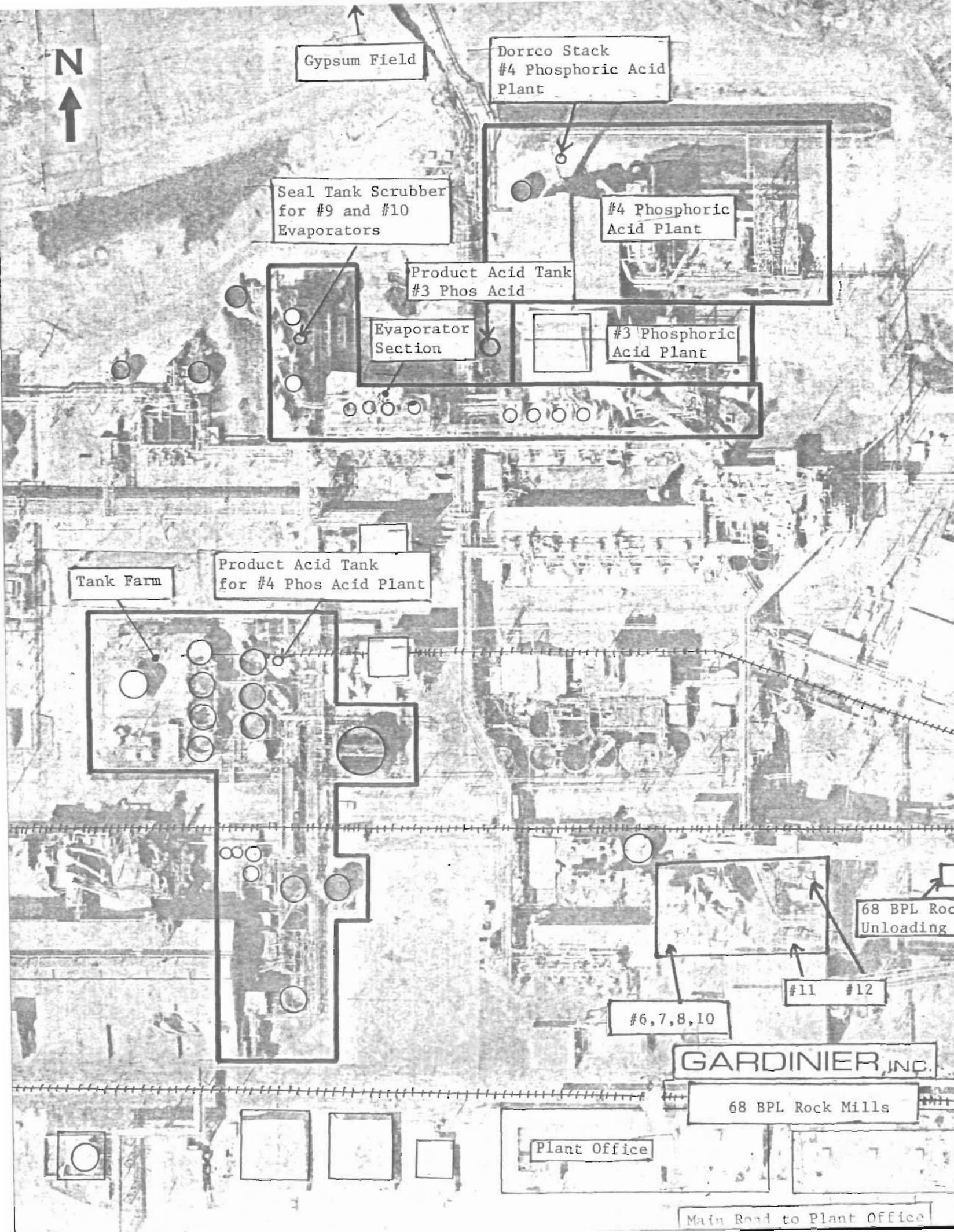
GARDINIER INC.
U. S. PHOSPHORIC PRODUCTS
EAST TAMPA, FLORIDA

ROCK MILLS

SECT: SCALE: DATE:

DR.
TR.
CH.

DRAWING N


N
Gypsum Field
Dorrco Stack
#4 Phosphoric Acid
Plant
Seal Tank Scrubber
for #9 and #10
Evaporators
#4 Phosphoric
Acid Plant
Product Acid Tank
#3 Phos Acid
Evaporator
Section
#3 Phosphoric
Acid Plant
Tank Farm
Product Acid Tank
for #4 Phos Acid Plant
68 BPL Roc
Unloading
#11
#12
#6,7,8,10
GARDINIER, INC.
68 BPL Rock Mills
Plant Office
Main Road to Plant Office

GARDINIER INC.

Post Office Box 3269 • Tampa, Florida 33601 • Telephone 813-677-9111 • TWX 810-876-0648 • Telex-52666 • Cable-Gardinphos

-C-E-R-T-I-F-I-C-A-T-E-

I, Robert C. Guthrie, Secretary of GARDINIER, INC. a Delaware Corporation (hereinafter called the "Corporation"), DO HEREBY CERTIFY that attached hereto is a correct and complete copy of a resolution duly adopted by the Board of Directors of the Corporation at the Regular Meeting thereof held on July 13, 1982, duly convened and held pursuant to notice, at which meeting a quorum was present and acting throughout, and such resolution has not been amended or revoked and such resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this day of January 4, 1983.

Robert C. Guthrie

Robert C. Guthrie
Secretary

RESOLVED THAT Mr. Pearce A. Nelson and/or Mr. Rudy J. Cabina, or either of them be and each hereby is, appointed as the authorized representative of GARDINIER, INC. to execute the applications for permits to operate/construct pollution sources.

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069379

66-798
531

DATE MO.	DAY	YR.
05	03	84

PAY EXACTLY **********170 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********170	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Hillsborough County Environmental Protection Commission

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

J. L. W. Pearce

⑈069379⑈ ⑆053107989⑆ 4800133821⑈

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069384

66-798
531

DATE MO.	DAY	YR.
05	03	84

PAY EXACTLY **********100 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********100	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Florida Department of Environmental Regulation

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

J. L. W. Pearce

⑈069384⑈ ⑆053107989⑆ 4800133821⑈

AC 29-86649

DER

MAY 07 1984

BAQM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Air Pollution [X] New[1] [ ] Existing[1]

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

COMPANY NAME: Gardinier, Inc. COUNTY: Hillsborough

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) No. 6,7,8 or 10 BPL Rock Grinding Mills with Flex-Kleen Bag Filter

SOURCE LOCATION: Street U.S. Highway 41 South & Riverview Drive City South of Tampa

UTM: East 362.6 North 3082.4

Latitude 27 ° 51 ' 30 "N Longitude 82 ° 23 ' 15 "W

APPLICANT NAME AND TITLE: Rudy J. Cabina, Vice President

APPLICANT ADDRESS: P.O. Box 3269, Tampa, Florida 33601

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Gardinier, 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: By: Rudy J Cabina

Rudy J. Cabina, Vice President
Name and Title (Please Type)

Date: 5/4/84 Telephone No. 813 677 9111

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.

REGISTERED ENGINEER STATE OF FLORIDA (Affix Seal) No. 20408 CERTIFICATE

Signed: R. B. Melreit

R. B. Melreit
Name (Please Type)

Gardinier, Inc.
Company Name (Please Type)

P.O. Box 3269, Tampa, Florida 33601
Mailing Address (Please Type)

Florida Registration No. 20408 Date: 5/4/84 Telephone No. 813 677 9111

[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.

This is a phosphate rock grinding operation. Emissions will be controlled by use of a Flex-Kleen Bag Filter. Emissions will comply with all applicable Hillsborough County and State of Florida regulations.

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

Start of Construction May 21, 1984 Completion of Construction May 1, 1985

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.)

Bag Filter - $105,000.00

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

Permit No.	A029-22139	A029-4522
Issued	9/13/79	9/2/77
Expire (Surrendered)	7/1/83	8/31/79

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 N/A ; if seasonal, describe: not seasonal

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? No
   c. If yes, list non-attainment pollutants.
      Total Suspended Particulate
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. No
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII. No
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? No
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

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		
Phosphate Rock	Particulate	98.5	336,000	A

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

1. Total Process Input Rate (lbs/hr): 336,000 lb/hr

2. Product Weight (lbs/hr): 336,000 lb/hr

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	
Particulate	2.2	9.7	0.03gr/dsef	3.6	2.2	9.7	B
Sulfur Dioxide	0.05	0.2	No limit	No limit	0.05	0.2	B
Opacity	0%		5%	-	-	-	B

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]
Flex-Kleen Model 100-WRTR-96 XL III	Particulate	99+	2 microns and larger	Design

[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	
No. 2 Fuel Oil	0.02	-	0.13

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

Fuel Analysis:

Percent Sulfur: 0.35 Percent Ash: -

Density: 7.5 lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: - BTU/lb 138,000 BTU/gal

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

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

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

There are no solid wastes. Rock Mill bearing cooling water and air compressor cooling water will be discharged through plant Outfall 001.

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

Stack Height: 95 ft. Stack Diameter: 2.5 ft.

Gas Flow Rate: 18,000 ACFM Gas Exit Temperature: 150 °F.

Water Vapor Content: 5 % Velocity: 61.1 FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
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: _____

NOT APPLICABLE

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.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 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.
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).
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.

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.

Supplemental Requirements

1. Input rate and product weight will be determined by direct weighing.

2. Emissions are estimated as follows:

   Stack Flow Rate - 14,050 SCFM

   Expected grain/scf loading - 0.019

   $$\frac{14040 \times 0.02 \times 60}{7000} = 2.2 \text{ lbs/hr}$$

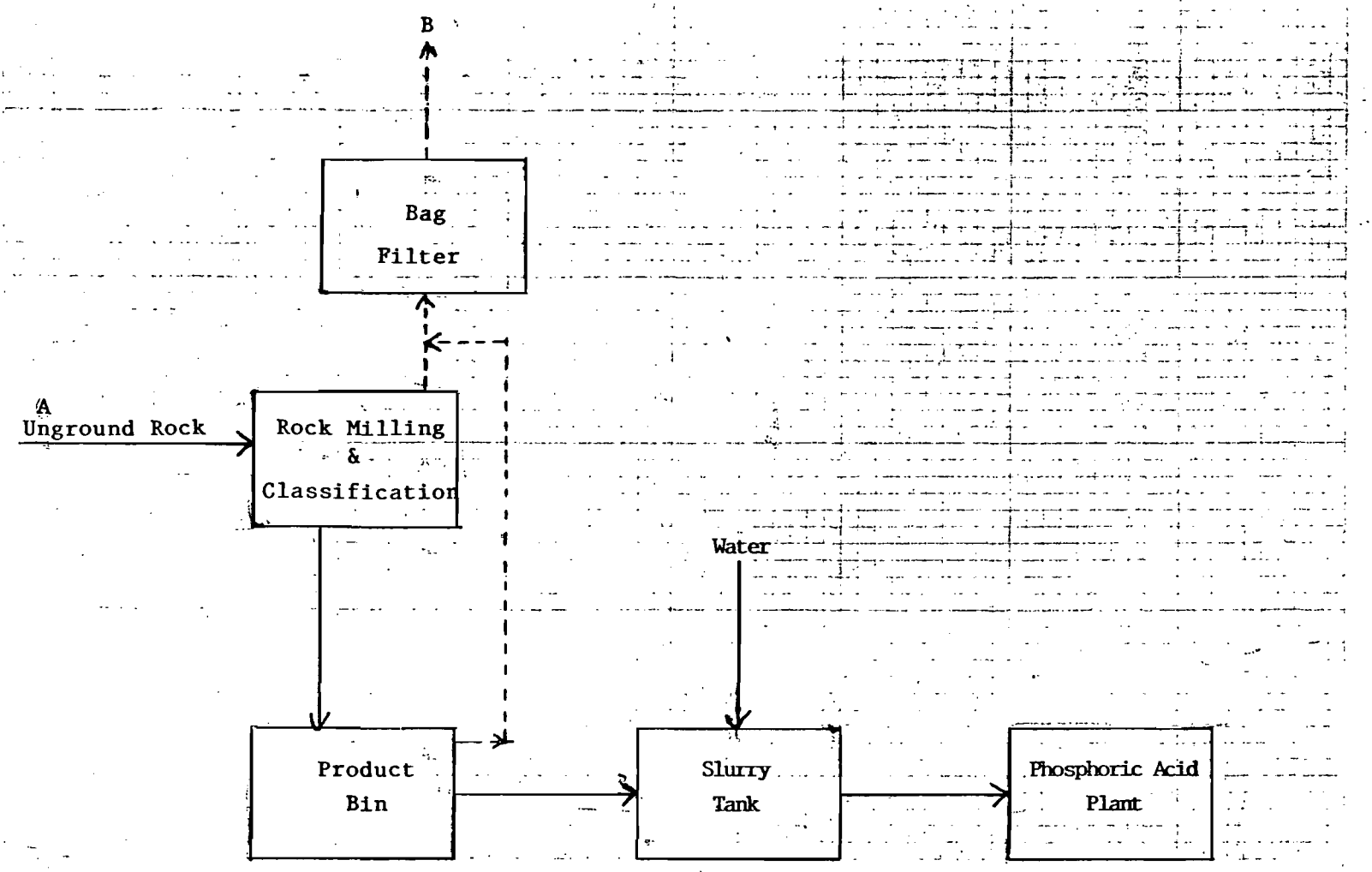
   Emissions will be determined using EPA Test Method 5, found in 40 CFR 60, Appendix A.

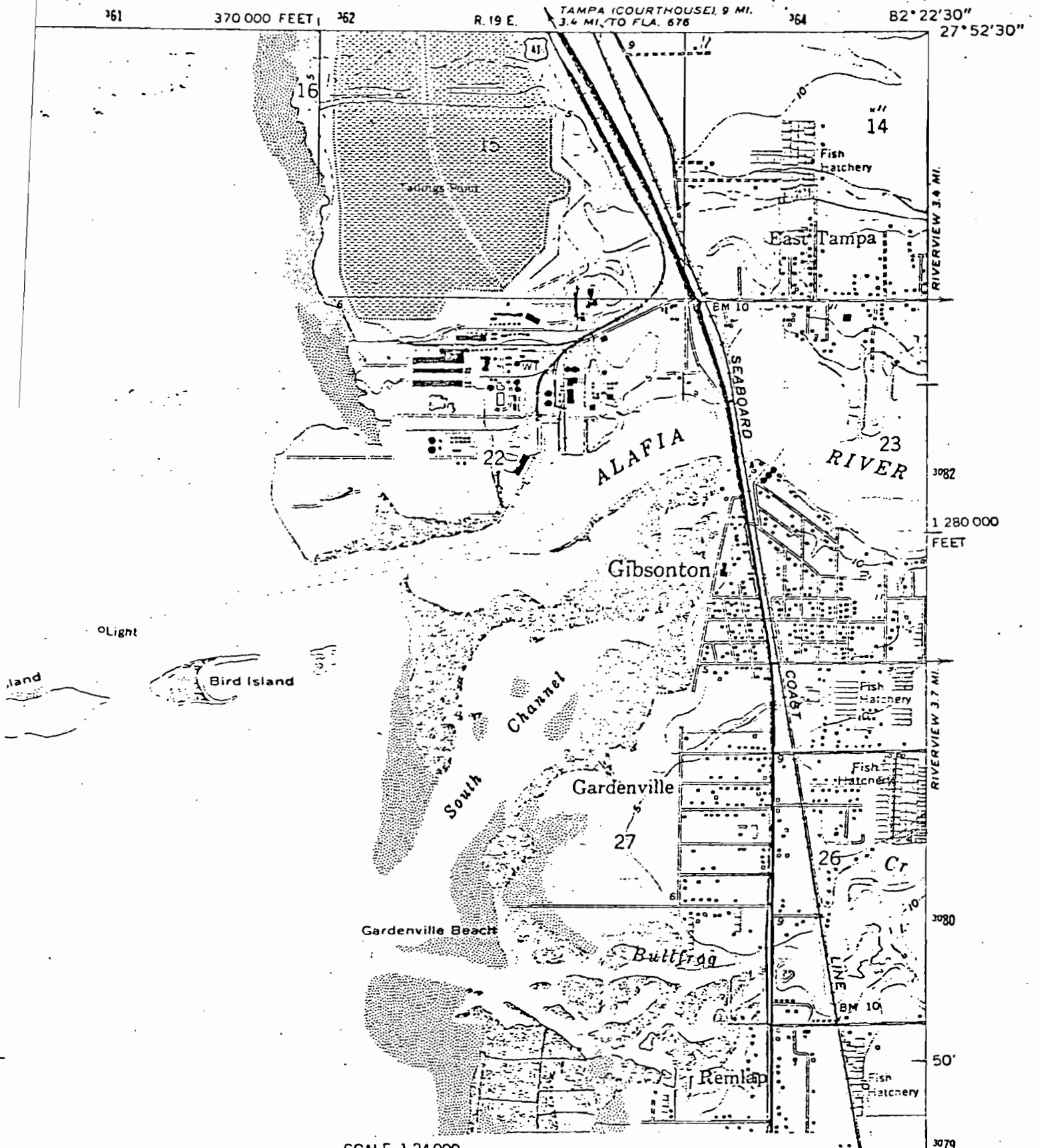
3. Potential to discharge is the actual emissions rate.

4. See attached

5. Design is for 99+% efficiency.

6.,7.,8. See attached


B
Bag
Filter
A
Unground Rock
Rock Milling
&
Classification
Water
Product
Bin
Slurry
Tank
Phosphoric Acid
Plant



SCALE 1:24 000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

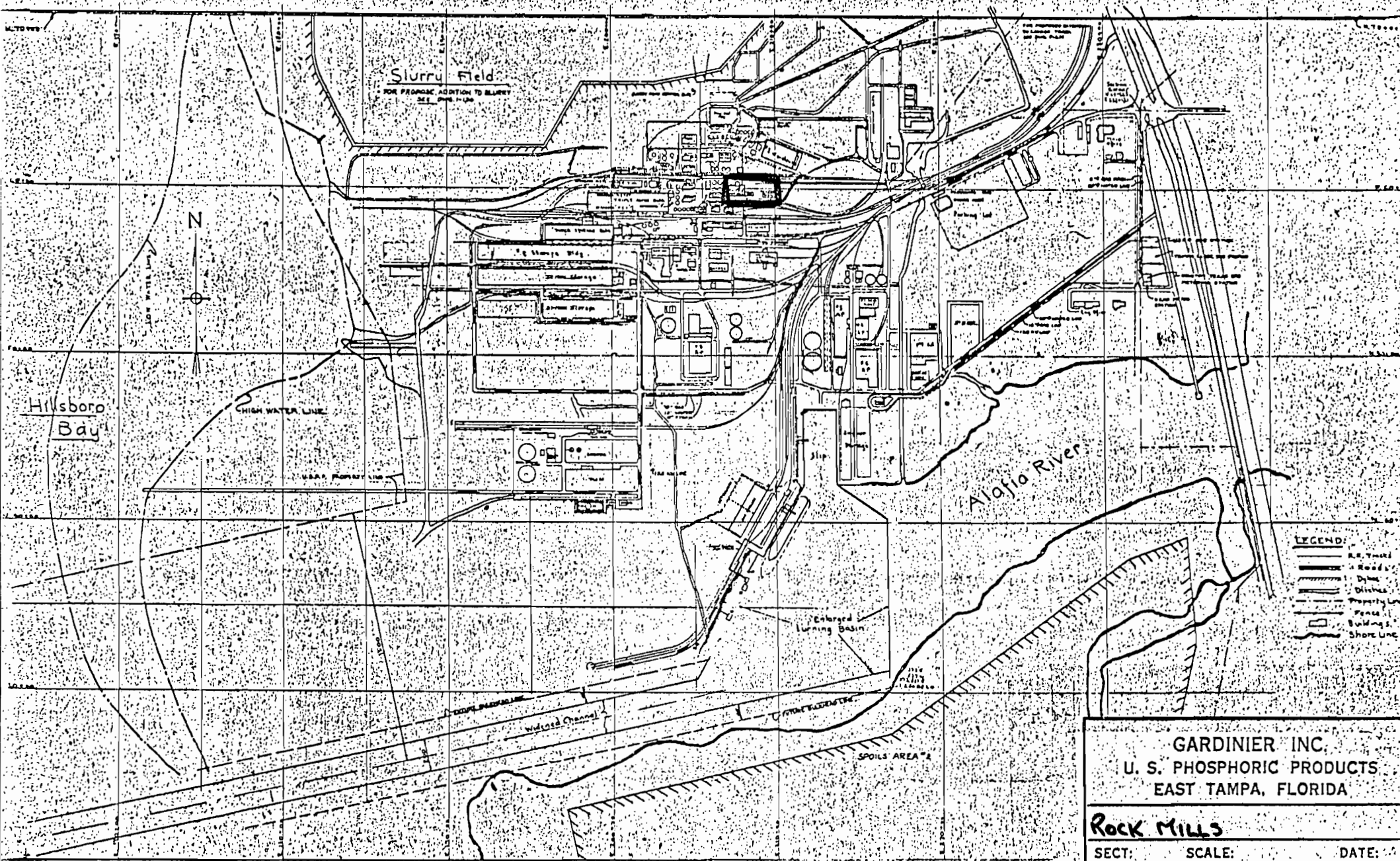
CONTOUR INTERVAL 5 FEET

DATUM IS MEAN SEA LEVEL

DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER

SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER

THE MEAN RANGE OF TIDE IS APPROXIMATELY 2 FEET



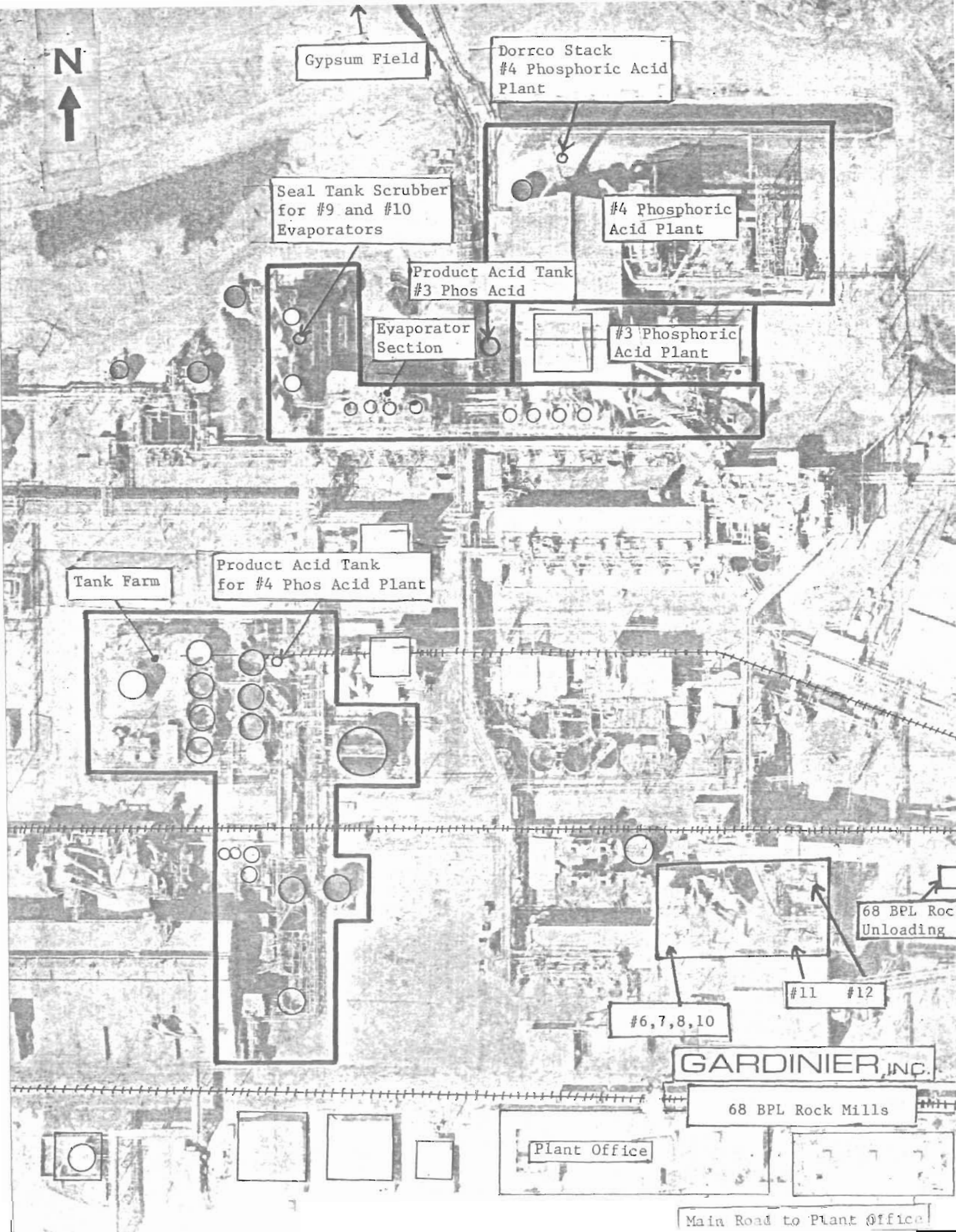
GARDINIER INC.
U. S. PHOSPHORIC PRODUCTS
EAST TAMPA, FLORIDA

ROCK MILLS

SECT: SCALE: DATE:

DR.
TR.
CH.

DRAWING N


N
Gypsum Field
Dorrco Stack
#4 Phosphoric Acid
Plant
Seal Tank Scrubber
for #9 and #10
Evaporators
#4 Phosphoric
Acid Plant
Product Acid Tank
#3 Phos Acid
Evaporator
Section
#3 Phosphoric
Acid Plant
Tank Farm
Product Acid Tank
for #4 Phos Acid Plant
68 BPL Roc
Unloading
#11 #12
#6,7,8,10
GARDINIER, INC.
68 BPL Rock Mills
Plant Office
Main Road to Plant Office

OPERATING DATA

VOLUME 5000 ACFM	CLOTH AREA 1152 SQ. FT.	RATIO 4.34 / 1	
DUST T.S.P.			
DUST SIZE 90% < 10 MICRON	DUST LOADING 40 GR./CU. FT.		
DUST DENSITY ——— LBS/CU. FT.	MOISTURE IN DUST ———		
TEMPERATURE 200° F. (MAX.)	DEW POINT ———		

(COLLECTOR TEMPERATURE MUST BE KEPT WELL ABOVE DEW POINT)

END USE VENT FERTILIZER PROCESS MILLS

LOCATION OUTDOORS.	OPERATION ——— HRS/DAY
WEIGHT 4500 lbs. (COLL. DEAD LOAD ONLY)	
DESIGN PRESSURE 17" W.G.	OPERATING PRESSURE 10" W.G. (NEG.)
COMPRESSED AIR REQRMTS 15.0 SCFM @ 90-100 PSIG	CLEAN, DRY & OIL FREE

EQUIPMENT DATA

TIMER(S) EM-1200-5 (SHIPPED LOOSE / NEMA-4)	110 V 50/60 CYC. 1 PHASE 50 W. EA.
DIAPHRAGM VALVES 8353 C33 (STD.)	BAG CAGES * 100" M.S. (EPOXY COATED)
SOLENOID VALVES V19116 (P.W.)	BAG CLAMPS N/R
VENTURIS VII CAL (CAST ALUMINUM)	ADAPTOR PLATES TRAP-4-304 (304 S.S.) **
FILTER BAGS 16 OZ. POLYESTER FELT	

CONSTRUCTION DATA

CLEAN AIR PLENUM 12 GA. M.S. (ALL WELDED) w/ 0.125" TYPE 5052-H32 ALUM. ROOF PNLS.

DUSTY AIR PLENUM 12 GA. M.S. (ALL WELDED) w/ STIFFENERS

TUBE SHEET 10 GA M.S. (EXT'L. FLG'D.)

HOPPER (60°) 12 GA. M.S. (ALL WELDED) w/ STIFFENERS

BRACING ON ROOF, SHELL & HOPPER AS SHOWN

GASKET MATERIAL
a) 582 PRESTITE @ TUBE SHEET & BIN LINE FLG. CONN'S (3/8" x 1/8")
b) TRAP-4 GSKTG. FELT RING (DACRON FELT)
c) SPONGE NEOPRENE @ REMOVABLE ROOF PANELS (1" x 3/8").

GENERAL NOTES

* MODEL-3 SPIRAL BAG CAGES.
** ADAPTOR PLATES - (SOCKET TYPE)

SHOP NOTES

1. ALL EXTERNAL SURFACES TO HAVE 1" THERMO FIBER WALL INSULATION w/ THERMAL CONDUCTIVITY OF .230 @ 75° F. & DENSITY OF 7 lbs./ft.³ INSULATION TO BE SUPPORTED IN PLACE BY 16 GA CORTEN SHEET TACK WELDED & PROTECTED @ CREVICES w/ CAULKING. (ROOF PNLS. TO HAVE 0.100" THK. ALUM. INSULATION COVER SHEETS.
2. ALL EXTERIOR M.S. SURFACES OF THE COLLECTOR PANELS ARE TO BE COATED w/ SHERWIN-WILLIAMS E61-A1 GRAY PRIMER BEFORE APPLYING INSULATION AND CORTEN COVER SHEET (DO NOT PAINT CORTEN) ALL OTHER EXTERIOR M.S. SURFACES ALSO TO RECEIVE THIS PRIMER.

GARDINIER INC.

Post Office Box 3269 • Tampa, Florida 33601 • Telephone 813-677-9111 • TWX 810-876-0648 • Telex-52666 • Cable-Gardinphos

-C-E-R-T-I-F-I-C-A-T-E-

I, Robert C. Guthrie, Secretary of GARDINIER, INC. a Delaware Corporation (hereinafter called the "Corporation"), DO HEREBY CERTIFY that attached hereto is a correct and complete copy of a resolution duly adopted by the Board of Directors of the Corporation at the Regular Meeting thereof held on July 13, 1982, duly convened and held pursuant to notice, at which meeting a quorum was present and acting throughout, and such resolution has not been amended or revoked and such resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this day of January 4, 1983.

Robert C. Guthrie

Robert C. Guthrie
Secretary

RESOLVED THAT Mr. Pearce A. Nelson and/or Mr. Rudy J. Cabina, or either of them be and each hereby is, appointed as the authorized representative of GARDINIER, INC. to execute the applications for permits to operate/construct pollution sources.

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069378

66-798
531

DATE		
MO.	DAY	YR.
05	03	84

PAY EXACTLY **********100 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********100	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Florida Department of Environmental Regulation

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

J. L. W. Pearce

⑈069378⑈ ⑆053107989⑆ 4800133821⑈

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069377

66-798
531

DATE		
MO.	DAY	YR.
05	03	84

PAY EXACTLY **********170 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********170	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Hillsborough County Environmental Protection Commission

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

J. L. W. Pearce

⑈069377⑈ ⑆053107989⑆ 4800133821⑈

NO. 069378

REMITTANCE STATEMENT

GARDINIER, INC.

BOX 3269, TAMPA, FLORIDA 33601

VENDOR NUMBER	INVOICE NUMBER	INVOICE DATE	GROSS AMOUNT	DISCOUNT	NET AMOUNT
03351			100 00	00	100 00
.00			100 00	00	100 00

To pay filing fee for Construction Permit for the
#6, 7, 8, & 10 68 BPL Rock Mills
Account No. 063
AC 29-86649

IF CORRECT, DETACH AND RETAIN STATEMENT. IF NOT CORRECT, RETURN STATEMENT AND CHECK.

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069378

66-798
531

DATE MO.	DAY	YR.
05	03	84

PAY EXACTLY**********100 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********100	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF
Florida Department of Environmental
Regulation

J. W. Pearce

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

"069378" :053107989: 48001338 2"

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No. 76026

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Gardinier, Inc. Date May 18, 1994

Address Tampa, FL Dollars $ 400.00

Applicant Name & Address same as above

Source of Revenue

Revenue Code 001001 Application Number AC 29-860648, AC 29-860646, AC 29-860615, AC 29-860649

By Patricia G. Adams

NO. 069382

REMITTANCE STATEMENT
GARDINIER, INC.

BOX 3269, TAMPA, FLORIDA 33601

VENDOR NUMBER	INVOICE NUMBER	INVOICE DATE	GROSS AMOUNT	DISCOUNT	NET AMOUNT
03351			100.00	.00	100.00
To pay filing fee for Construction Permit for 68 BPL Rock Unloading & Storage Account No. 063 AC 29-86615					
.00			100.00	.00	100.00

IF CORRECT, DETACH AND RETAIN STATEMENT. IF NOT CORRECT, RETURN STATEMENT AND CHECK.

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069382

66-798
531

DATE MO. DAY YR.		DOLLARS	CENTS
05/03/84	PAY EXACTLY*************100 DOLLARS AND 00 CENTS	$*********100	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF
Florida Department of Environmental Regulation

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

[signature]

⑈069382⑈ ⑆053107989⑆ 4800133820⑈

NO. 069383

REMITTANCE STATEMENT
GARDINIER, INC.

BOX 3269, TAMPA, FLORIDA 33601

VENDOR NUMBER	INVOICE NUMBER	INVOICE DATE	GROSS AMOUNT	DISCOUNT	NET AMOUNT
03351			100 00	00	100 00
			To pay filing fee for Construction Permit for No. 12 KVS Mill Account No. 063 AC 29-866646		
.00			100 00	00	100 00

IF CORRECT, DETACH AND RETAIN STATEMENT. IF NOT CORRECT, RETURN STATEMENT AND CHECK.

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069383

66-798
531

DATE MO.	DAY	YR.	PAY EXACTLY	DOLLARS AND	CENTS	DOLLARS	CENTS
05	03	84	**********100	00		$*********100	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Florida Department of Environmental Regulation

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

J. L. W. Poarch

⑈069383⑈ ⑆053107989⑆ 4800133821⑈

NO. 069384

REMITTANCE STATEMENT
GARDINIER, INC.

BOX 3269, TAMPA, FLORIDA 33601

VENDOR NUMBER	INVOICE NUMBER	INVOICE DATE	GROSS AMOUNT	DISCOUNT	NET AMOUNT
03351			100 00	00	100 00
.00			100 00	00	100 00

To pay filing fee for Construction Permit for
No. 11 KVS Mill
Account No. 063
AC 29-86648

IF CORRECT, DETACH AND RETAIN STATEMENT. IF NOT CORRECT, RETURN STATEMENT AND CHECK.

GARDINIER, INC. TAMPA, FLORIDA

CHECK NO. 069384

66-798
531

DATE MO.	DAY	YR.
05	03	84

PAY EXACTLY**********100 DOLLARS AND 00 CENTS

DOLLARS	CENTS
$*********100	00

"VOID 90 DAYS AFTER CHECK DATE"

TO THE ORDER OF Florida Department of Environmental Regulation

J. W. Pearce

PAYABLE AT
NCNB NATIONAL BANK OF FLORIDA
TAMPA, FLORIDA
OR PAYABLE AT
NCNB NATIONAL BANK OF NORTH CAROLINA
ASHEVILLE, N.C.

⑈069384⑈ ⑆053107989⑆ 4800133821⑈