General Portland Inc.
Corporate Offices

October 8, 1984

DER

OCT 9 1984

BAQM

Mr. Bill Thomas
Permits Division
Florida Department of Environmental Regulation
2200 Blair Stone Road
Tallahassee, FL

Dear Mr. Thomas:

This will serve to transmit copies of General Portland's application for a construction permit for a cement clinker unloading modification at our plant in Tampa, Florida. We have, in the past several months, discussed this project with you, Mr. Claire Fancy, Mr. Dan Williams and Mr. Roger Stewart of the Hillsborough County Environmental Protection Commission. The application has been completed following your suggestions and includes all best available control technologies.

General Portland intends to construct two large cement clinker storage silos having a combined capacity of 60,000 tons; with dustless unloading and conveying systems. General Portland proposes that upon receipt of the construction permit, we will construct the ship unloading facilities and dustless transport systems to move the clinker from dockside to existing small clinker silos. Upon completion, this will be tested and an operation permit applied for, in order that we may use this portion of the system while the construction of the two large new storage silos continues. At the completion of the construction of the two large storage silos and their associated handling and dust control equipment, this second portion of the system will be tested and application made for an operation permit. Upon receipt of this operation permit, larger sized ships will be employed to deliver larger cargoes to General Portland's Tampa plant. Three 20,000-ton shipments per month will be received in Tampa and unloaded at a 1000-ton per hour maximum rate through the modification.

The cargo vessels being reviewed for contract employment will utilize specially-engineered totally enclosed dust-free unloading

12700 Park Central Place ○ Suite 2100 ○ Mailing Address: P. O. Box 324, Dallas, Texas 75221 ○ (214) 387-9000

systems. In addition, General Portland will have dockside dust control equipment available to supplement the vessels equipment, should it be needed. Additional information for two acceptable shipboard unloading systems being sought by General Portland will be available at a later date should your review require them.

General Portland sincerely appreciates the efforts of the DER staff in this environmental permitting effort. If at any time you require additional information or if I may answer questions or be of any additional service or assistance, please do not hesitate to contact me at (214) 387-9000.

Yours truly,

William H. Winders

William H. Winders
Environmental Manager

WHW:lse
attachments

cc: K. D. Simmons
R. D. Auten

AC 29-094093

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT
7601 HIGHWAY 301 NORTH
TAMPA, FLORIDA 33610

DER
OCT 9 1984
BAQM

BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
WILLIAM K. HENNESSEY
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Portland Cement Plant [ ] New[1] [X] Existing[1]

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

COMPANY NAME: General Portland Inc. COUNTY: Hillsborough

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Clinker unloading, storage & transfer

SOURCE LOCATION: Street 2001 Maritime Blvd. City Tampa

UTM: East 17-358.0 E North 3090.7 N

Latitude 27° 56' 02"N Longitude 82° 26' 44"W

APPLICANT NAME AND TITLE: Kenneth D. Simmons, Vice President & General Manager

APPLICANT ADDRESS: 1111 North West Shore Blvd., Tampa, FL 33622

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of General Portland Inc.

I certify that the statements made in this application for a Construction/Modificatic 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: William K. Windsor Jr.

K. D. Simmons, Vice President & Gen. Mgr.
Name and Title (Please Type)

Date: 10-8-84 Telephone No. (813) 872-7777

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

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

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

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

Signed Robert D. Dubois

Robert D. Dubois
Name (Please Type)

General Portland Inc.
Company Name (Please Type)

P.O. Box 324, Dallas, TX 75221
Mailing Address (Please Type)

Florida Registration No. 17834 Date: 10-8-84 Telephone No. (214) 387-9000

SECTION II: GENERAL PROJECT INFORMATION

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

See attached sheet for description of proposed facility. Air emission sources will comply with FAC Chapter 17-2 regulations.

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

Start of Construction Nov. 1984 Completion of Construction May 1986

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.)

See attached sheet for costs

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

See attached sheet for DER permits

E. Requested permitted equipment operating time: hrs/day_____; days/wk_____; wks/yr_____; if power plant, hrs/yr_____; if seasonal, describe: During ship unloading, 1000 TPH, 20 hours/day, 3 times per month; 12 months/year or 720 hours per year.

F. If this is a new source or major modification, answer the following questions. (Yes or No) NO--Minor modification to major facility.*

1. Is this source in a non-attainment area for a particular pollutant?	Yes
a. If yes, has "offset" been applied?	N/A*
b. If yes, has "Lowest Achievable Emission Rate" been applied?	N/A*
c. If yes, list non-attainment pollutants.	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) requirement apply to this source? If yes, see Sections VI and VII.	No
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?	No
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?	No
H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source?	N/A
a. If yes, for what pollutants?	
b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.	

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

* "N/A" per Mr. Bill Thomas DER Tallahassee 8/15/84.

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		
				See attachments and
				drawings

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

1. Total Process Input Rate (lbs/hr): 2,000,000

2. Product Weight (lbs/hr): Same as item I

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

Name of Contaminant	Emission[1]*		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulate	19.22	7.244	17-2.610(2)	**	19,221	7,244	[5]see below
Fugitive Particulate			17-2.610(3)				

[1]See Section V, Item 2. *See attached "Emission Calculations"

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

[3]Calculated from operating rate and applicable standard.
** See attached "Emission Calculations"

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

5. See attachments and drawings.
* 74,500 x .03 x 1/7000 x 60 = 19.22 #/hr

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Industrial Filter	Particulate	99.9%		Purchase
Fabric Filters,				Specification, Sheets Attached
See attached sheets				

E. Fuels

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

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

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

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

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

Annual Average _____ Maximum _____

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

Dust Collected by control devices will be returned to system.

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

Stack Height: * ft. Stack Diameter: * ft.

Gas Flow Rate: * ACFM * DSCFM Gas Exit Temperature: * °F.

Water Vapor Content: * % Velocity: * FPS

* To be supplied with Operating Permit Application

SECTION IV: INCINERATOR INFORMATION

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

Description of Waste

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

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

Manufacturer

Date Constructed Model No.

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

Stack Height: ft. Stack Diamter: Stack Temp.

Gas Flow Rate: ACFM DSCFM* Velocity: FPS

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

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify)

Brief description of operating characteristics of control devices: _____

_____

_____

_____

_____

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

_____

_____

_____

_____

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

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

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

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

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

[ ] Yes [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
Particulate Emissions	See attachments

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

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

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

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

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

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

3.

a. Control Device: b. Operating Principles:

c. Efficiency:[1] d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy:[2] h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

4.

a. Control Device: b. Operating Principles:

c. Efficiency:[1] d. Capital Costs:

e. Useful Life: f. Operating Cost:

g. Energy:[2] h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

F. Describe the control technology selected:

1. Control Device: Fabric Filters 2. Efficiency:[1] 99.9%

3. Capital Cost: $976,000 4. Useful Life: Not Available

5. Operating Cost: Unknown 6. Energy:[2] Not Available

7. Maintenance Cost: Unknown 8. Manufacturer: Mikropul

9. Other locations where employed on similar processes:

a. (1) Company: General Portland Inc.

(2) Mailing Address:

(3) City: (4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager: William H. Winders

(6) Telephone No.: (214) 387-9000

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

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

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____no. sites _____ TSP _____( ) SO^2* _____ Wind spd/dir

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

Other data recorded _____

Attach all data or statistical summaries to this application.

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

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from _____/_____/_____ to _____/_____/_____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

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

D. Applicants Maximum Allowable Emission Data

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

E. Emission Data Used in Modeling

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

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

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

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

General Portland Inc. Florida Division

December 7, 1982

TO WHOM IT MAY CONCERN:

This is to advise that Mr. William H. Winders, Environmental Manager, is the authorized representative of General Portland Inc. and responsible for preparing permit applications and related correspondence as required by the Florida Department of Environmental Regulation for the Tampa Plant.

Kenneth D. Simmons

Kenneth D. Simmons
Vice President & General Manager
GENERAL PORTLAND INC.
Florida Division

1111 North West Shore Boulevard • P. O. Box 22346, Tampa, Florida 33622 • 813/872-7777

DESCRIPTION OF THE PROPOSED PROJECT
TAMPA CLINKER UNLOADING OPERATION

This permit application is intended to cover the ship unloading of bulk imported portland cement clinker at the Tampa plant; the shore ward receipt and the transport of the clinker by a series of belts and elevators; the storage in two new storage silos which are connected by elevators and drags to the present clinker storage silos and grinding mills. This application as submitted is intended to include all particulate and fugitive particulate emission sources in categories of clinker unloading, transport, handling and storage at the Tampa plant. In the event one of more of the individual sources within this category exceeds the allowable particulate or fugitive particulate emission standard as set forth in chapter 17-2. 650 FAC, General Portland requests that the permit state that, that individual source and only that source will violate the allowable emission standards of the permit. The remaining sources covered by this permit will not be in violation and will remain permitted.

General Portland Inc. will continue to submit upset reports on a regularly scheduled basis to the Hillsborough County Environmental Protection Commission as has been the practice in the past. The upset report includes discharge events which occur due to mechanical failure of control equipment and any other event which involves abnormal discharges of particulate or fugitive particulate matter. Immediate abatement action is taken by plant personnel whenever such an event occurs.

Attachment III is a process schematic of the proposed project, three existing dust collectors already permitted for full-time operation are included in this design as are seven additional new dust collectors which will be purchased and installed. The dust collector on the no. 7 tower, General Portland's location no. 20, is permitted under AO29-47653 while the dust collector on top of the clinker silos, General Portland's location no. 22, is permitted under AO29-47659. The dust collector for use on finish mill no. 7, General Portland's location no. 7A, which has been converted to a raw mill, is permitted under AO29-47654. The use of this existing dust collector in this clinker unloading project will be made by converting it from its 34,000 CFM capacity to 6,100 CFM with the addition of a new fan.

Section II. C.

COSTS OF POLLUTION CONTROL SYSTEMS
TAMPA CLINKER PROJECT

	Purchase	Installation	Total
Dock Area Dust Collectors, ductwork, etc.	$153,000	$ 35,000	$188,000
Clinker Storage Dust Collectors	128,000	62,000	190,000
Clinker Reclaim Dust Collectors	86,000	50,000	136,000
Compressors 2 Locations	24,000	10,000	34,000
Power & Wiring 26 Motors, 513 HP	63,000	132,000	195,000
Building Modifications, Prorated for above	-----	21,000	21,000
TOTAL	$454,000	$310,000	$764,000
ENGINEERING			120,000
CONTINGENCY			92,000
	TOTAL		$976,000

Section II. D.

OUTSTANDING DER OPERATING PERMITS

DER Number	Source	Expiration Date
AO29-51703	Kiln #6	April, 1987
AO29-51704	#6 Clinker Cooler	April, 1987
AO29-47658	#6 Precip Dust Handling	January, 1987
AO29-47651	Stor/Load White (III)	January, 1987
AO29-47652	Bulk Cem Stor Load	January, 1987
AO29-47653	Mat. Handling	January, 1987
AO29-47654 ← Mod CFM	Finish Mills	January, 1987
AO29-47655	Stor/Load, Grat (III)	January, 1987
AO29-47656	Cement Stor/Pkg	January, 1987
AO29-47657	Truck-Track Scale	January, 1987
AO29-47659	Finish Grind Storage	January, 1987
AO29-55964	Finish Mill DC 8c & 10c	July, 1987
AO29-47661	White Cem Stor/ Pkg	January, 1987
AO29-47662	Mason Cem Stor/ Pkg	January, 1987
AO29-56064	Masonry Dust Collector	July, 1987

In addition, FAC, 17-2.650 (2)(c)1.c.(ii) contains a specific Alternate Emission Limitation for General Portland Inc.'s, Tampa plant.

Section III. C.

PROPOSED TAMPA CLINKER PROJECT

DUST COLLECTOR EMISSION CALCULATIONS:

Assumptions:
1. All dust collectors will be of the pulse jet type
2. All collectors will meet .02 gr/CFM grain loading at the outlet. Calculations based on worse case 0.03 gr/CFM.
3. Existing dust collectors permitted for full time operation are not included in the calculations of emissions, i.e. locations #20, #22, and #7A.
4. Dust collector operating hours are based on unloading 1000 ton/hr; 20,000 ton/trip; unloading time of 20 hours; 3 trips/month or 20 x 3 x 12 = 720 hr/yr.
5. Collector No. 32 will operate 1800 hr/yr based on 400 TPH reclaim rate. (720,000 TPY ÷ 400 TPH = 1800 hr/yr)

Dust Collector #26

10,000 CFM x 0.03 gr/ft^3 x 1/7000 gr/# = 0.043 #/min

1,851 #/yr
0.042 #/min x 60 min/hr x 720 hr/yr x 1/2000 #/ton = 0.926 ton/yr

Dust Collector #27

3,333 #/yr
18,000 x .03 x 1/7000 x 60 x 720 x 1/2000 = 1.666 ton/yr

Dust Collector #28

1111 #/yr
6,000 x .03 x 1/7000 x 60 x 720 x 1/2000 = 0.555 ton/yr

Dust Collector #29

2,962 #/yr
16,000 x .03 x 1/7000 x 60 x 720 x 1/2000 = 1.481 ton/yr

Dust Collector #30

2,777 #/yr
15,000 x .03 x 1/7000 x 60 x 720 x 1/2000 = 1.389 ton/yr

Dust Collector #31

12,96 #/yr
7,000 x .03 x 1/7000 x 60 x 720 x 1/2000 = 0.648 ton/yr

Dust Collector #32

1157 #/yr
2,500 x .03 x 1/7000 x 60 x 1800 x 1/2000 = 0.579 ton/yr

EMISSION SUMMARY

14,487 #/yr
Sum of particulate emissions from new dust collectors 7.244 ton/yr

OPERATION AND MAINTENANCE PROCEDURES

General Portland's operation of its dust collectors follows best management practices. Operational procedures which are routinely followed include: recording the operating parameters of the mills and dust control equipment during operation. This includes fan amperages and some differential pressures; the continuing observation for discharge; maintenance of records; maintenance of spare parts inventory; timely correction of mechanical failures and repairs when needed.

General Portland has developed and uses a computer system that provides the maintenance and repair foreman with a weekly printed preventative maintenance (PM) checklist for each operating dust collector and a daily PM schedule. Daily observations for proper operation of the dust collectors by the operations and maintenance personnel are backed up by the weekly formal, computer generated, 20 point checklist for each dust collector. These are completed during the scheduled PM cycle and most deficiencies are corrected. The review of these checklists by the maintenance foreman, is the daily basis for work orders for needed larger maintenance tasks and repair, e.g. rebagging, during the next mill or equipment outage. The computer system also assures that spare parts are reordered and in stock when needed.

General Portland also utilizes a computer generated listing by job of the material and labor to maintain plant environmental equipment. These records are used to establish a data base for planning, improving operation, design, reliability, replacement and needs and replacement scheduling of environmental equipment.

GENERAL PORTLAND INC.
TAMPA PLANT
FABRIC FILTERS

Point Number (from Flow Diagram)	Manufacturer & Model No. (if available)
Location No. 26	Industrial Filter Model AA 1015 or equal
Name of Abatement Device	**Type of Particulate Controlled**
Dust Collector	Cement Clinker Dust

GAS STREAM CHARACTERISTICS

Flow Rate (acfm)		Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)	
Design Maximum	Average Expected		Inlet	Outlet
10,000	10,000	Ambient	8	.02

Pressure Drop (in. H_2O)	Water Vapor Content of Effluent Stream (lb water/lb dry air)	Fan Requirements (hp)	Fan Requirements (ft^3/min)
11	Ambient	30	10,000

PARTICULATE DISTRIBUTION
(By Weight)

Micron Range	Inlet	Outlet
0.0-0.5	%	%
0.5-1.0	%	%
1.0-5.0	%	%
5-10	%	%
10-20	%	%
over 20	%	%

FILTER CHARACTERISTICS

Filtering Velocity (acfm/ft^2 of Cloth)	Bag Diameter (in.)	Bag Length (ft)	Number of Bags	Number of Compartments in Baghouse
5.33	5	10	150	one (6 2/3 extra bags)

Bag rows will be:		Walkways will be provided between banks of bags:	
Staggered	(Straight)	Yes	(No)

Filtering Material: Polyester

Describe Bag Cleaning Method and Cycle: Reverse pulse jets of high pressure air with adjustable cycle.

ADDITIONAL INFORMATION

GENERAL PORTLAND INC.
TAMPA PLANT
FABRIC FILTERS

Point Number (from Flow Diagram)	Manufacturer & Model No. (if available)
Location No. 27	Industrial Filter Model AA 1517 or equal
Name of Abatement Device	**Type of Particulate Controlled**
Dust Collector	Cement Clinker Dust

GAS STREAM CHARACTERISTICS

Flow Rate (acfm)		Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)	
Design Maximum	Average Expected		Inlet	Outlet
18,000	18,000	Ambient	8	.02

Pressure Drop (in. H_2O)	Water Vapor Content of Effluent Stream (lb water/lb dry air)	Fan Requirements (hp)	Fan Requirements (ft^3/min)
11	Ambient	60	18,000

PARTICULATE DISTRIBUTION
(By Weight)

Micron Range	Inlet	Outlet
0.0-0.5	%	%
0.5-1.0	%	%
1.0-5.0	%	%
5-10	%	%
10-20	%	%
over 20	%	%

FILTER CHARACTERISTICS

Filtering Velocity (acfm/ft^2 of Cloth)	Bag Diameter (in.)	Bag Length (ft)	Number of Bags	Number of Compartments in Baghouse
5.65	5	10	255	One

Bag rows will be:		Walkways will be provided between banks of bags:	
Staggered	(Straight)	Yes	(No)

Filtering Material: Polyester

Describe Bag Cleaning Method and Cycle: Reverse pulse jets of high pressure air with adjustable cycle.

ADDITIONAL INFORMATION

GENERAL PORTLAND INC.
TAMPA PLANT
FABRIC FILTERS

Point Number (from Flow Diagram)	Manufacturer & Model No. (if available)
Location No. 28	Industrial Filter Model AA 1010 or equal
Name of Abatement Device	**Type of Particulate Controlled**
Dust Collector	Cement Clinker Dust

GAS STREAM CHARACTERISTICS

Flow Rate (acfm)		Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)	
Design Maximum	Average Expected		Inlet	Outlet
6,000	6,000	Ambient	8	.02

Pressure Drop (in. H_2O)	Water Vapor Content of Effluent Stream (lb water/lb dry air)	Fan Requirements (hp)	Fan Requirements (ft^3/min)
11	Ambient	20	6,000

PARTICULATE DISTRIBUTION
(By Weight)

Micron Range	Inlet	Outlet
0.0-0.5	%	%
0.5-1.0	%	%
1.0-5.0	%	%
5-10	%	%
10-20	%	%
over 20	%	%

FILTER CHARACTERISTICS

Filtering Velocity (acfm/ft^2 of Cloth)	Bag Diameter (in.)	Bag Length (ft)	Number of Bags	Number of Compartments in Baghouse
4.8	5	10	100	One

Bag rows will be:		Walkways will be provided between banks of bags:	
Staggered	(Straight)	Yes	(No)

Filtering Material: Polyester

Describe Bag Cleaning Method and Cycle: Reverse pulse jets of high pressure air with adjustable cycle.

ADDITIONAL INFORMATION

GENERAL PORTLAND INC.
TAMPA PLANT
FABRIC FILTERS

Point Number (from Flow Diagram)	Manufacturer & Model No. (if available)
Location No. 29	Industrial Filter Model AA 1517 or equal
Name of Abatement Device	**Type of Particulate Controlled**
Dust Collector	Cement Clinker Dust

GAS STREAM CHARACTERISTICS

Flow Rate (acfm)		Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)	
Design Maximum	Average Expected		Inlet	Outlet
16,000	16,000	Ambient	5	.02

Pressure Drop (in. H_2O)	Water Vapor Content of Effluent Stream (lb water/lb dry air)	Fan Requirements (hp)	Fan Requirements (ft^3/min)
11	Ambient	50	16,000

PARTICULATE DISTRIBUTION
(By Weight)

Micron Range	Inlet	Outlet
0.0-0.5	%	%
0.5-1.0	%	%
1.0-5.0	%	%
5-10	%	%
10-20	%	%
over 20	%	%

FILTER CHARACTERISTICS

Filtering Velocity (acfm/ft^2 of Cloth)	Bag Diameter (in.)	Bag Length (ft)	Number of Bags	Number of Compartments in Baghouse
5	5	10	255	One

Bag rows will be:		Walkways will be provided between banks of bags:	
Staggered	(Straight)	Yes	(No)

Filtering Material: Polyester

Describe Bag Cleaning Method and Cycle: Reverse pulse jets of high pressure air with adjustable cycle.

ADDITIONAL INFORMATION

GENERAL PORTLAND INC.
TAMPA PLANT
FABRIC FILTERS

Point Number (from Flow Diagram)	Manufacturer & Model No. (if available)
Location No. 30	Industrial Filter Model AA 1517 or equal
Name of Abatement Device	**Type of Particulate Controlled**
Dust Collector	Cement Clinker Dust

GAS STREAM CHARACTERISTICS

Flow Rate (acfm)		Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)	
Design Maximum	Average Expected		Inlet	Outlet
15,000	15,000	Ambient	5	.02

Pressure Drop (in. H_2O)	Water Vapor Content of Effluent Stream (lb water/lb dry air)	Fan Requirements (hp)	Fan Requirements (ft^3/min)
7	Ambient	30	15,000

PARTICULATE DISTRIBUTION
(By Weight)

Micron Range	Inlet	Outlet
0.0-0.5	%	%
0.5-1.0	%	%
1.0-5.0	%	%
5-10	%	%
10-20	%	%
over 20	%	%

FILTER CHARACTERISTICS

Filtering Velocity (acfm/ft^2 of Cloth)	Bag Diameter (in.)	Bag Length (ft)	Number of Bags	Number of Compartments in Baghouse
4.7	5	10	255	One

Bag rows will be:		Walkways will be provided between banks of bags:	
Staggered	(Straight)	Yes	(No)

Filtering Material: Polyester

Describe Bag Cleaning Method and Cycle: Reverse pulse jets of high pressure air with adjustable cycle.

ADDITIONAL INFORMATION

GENERAL PORTLAND INC.
TAMPA PLANT
FABRIC FILTERS

Point Number (from Flow Diagram)	Manufacturer & Model No. (if available)
Location No. 31	Industrial Filter Model AA 1250 or equal
Name of Abatement Device	**Type of Particulate Controlled**
Dust Collector	Cement Clinker Dust

GAS STREAM CHARACTERISTICS

Flow Rate (acfm)		Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)	
Design Maximum	Average Expected		Inlet	Outlet
7,000	7,000	Ambient	8	.02

Pressure Drop (in. H_2O)	Water Vapor Content of Effluent Stream (lb water/lb dry air)	Fan Requirements (hp)	Fan Requirements (ft^3/min)
11	Ambient	25	7,000

PARTICULATE DISTRIBUTION
(By Weight)

Micron Range	Inlet	Outlet
0.0-0.5	%	%
0.5-1.0	%	%
1.0-5.0	%	%
5-10	%	%
10-20	%	%
over 20	%	%

FILTER CHARACTERISTICS

Filtering Velocity (acfm/ft^2 of Cloth)	Bag Diameter (in.)	Bag Length (ft)	Number of Bags	Number of Compartments in Baghouse
5.6	5	10	100	One

Bag rows will be:		Walkways will be provided between banks of bags:	
Staggered	(Straight)	Yes	(No)

Filtering Material: Polyester

Describe Bag Cleaning Method and Cycle: Reverse pulse jets of high pressure air with adjustable cycle.

ADDITIONAL INFORMATION

GENERAL PORTLAND INC.
TAMPA PLANT
FABRIC FILTERS

Point Number (from Flow Diagram)	Manufacturer & Model No. (if available)
Location No. 32	Micropul Model 64-6 or equal
Name of Abatement Device	**Type of Particulate Controlled**
Dust Collector	Cement Clinker Dust

GAS STREAM CHARACTERISTICS

Flow Rate (acfm)		Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)	
Design Maximum	Average Expected		Inlet	Outlet
2,500	2,500	Ambient	8	.02

Pressure Drop (in. H_2O)	Water Vapor Content of Effluent Stream (lb water/lb dry air)	Fan Requirements (hp)	Fan Requirements (ft^3/min)
7	Ambient	7½	2,500

PARTICULATE DISTRIBUTION
(By Weight)

Micron Range	Inlet	Outlet
0.0-0.5	%	%
0.5-1.0	%	%
1.0-5.0	%	%
5-10	%	%
10-20	%	%
over 20	%	%

FILTER CHARACTERISTICS

Filtering Velocity (acfm/ft^2 of Cloth)	Bag Diameter (in.)	Bag Length (ft)	Number of Bags	Number of Compartments in Baghouse
5.5	4.5	6	64	One

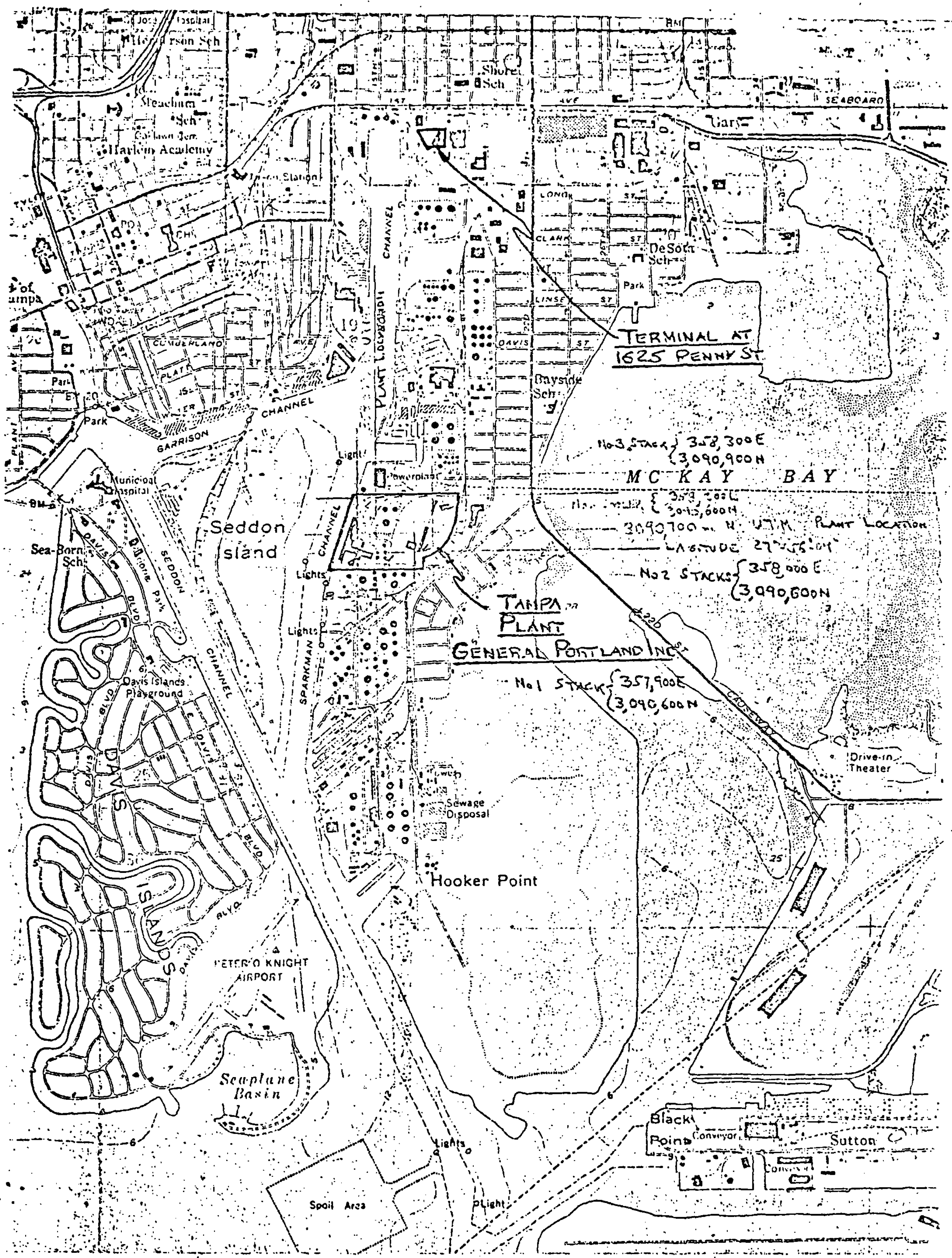
9953

Bag rows will be:		Walkways will be provided between banks of bags:	
Staggered	(Straight)	(Yes)	No

Filtering Material: Polyester

Describe Bag Cleaning Method and Cycle: Reverse pulse jets of high pressure air with adjustable cycle.

ADDITIONAL INFORMATION

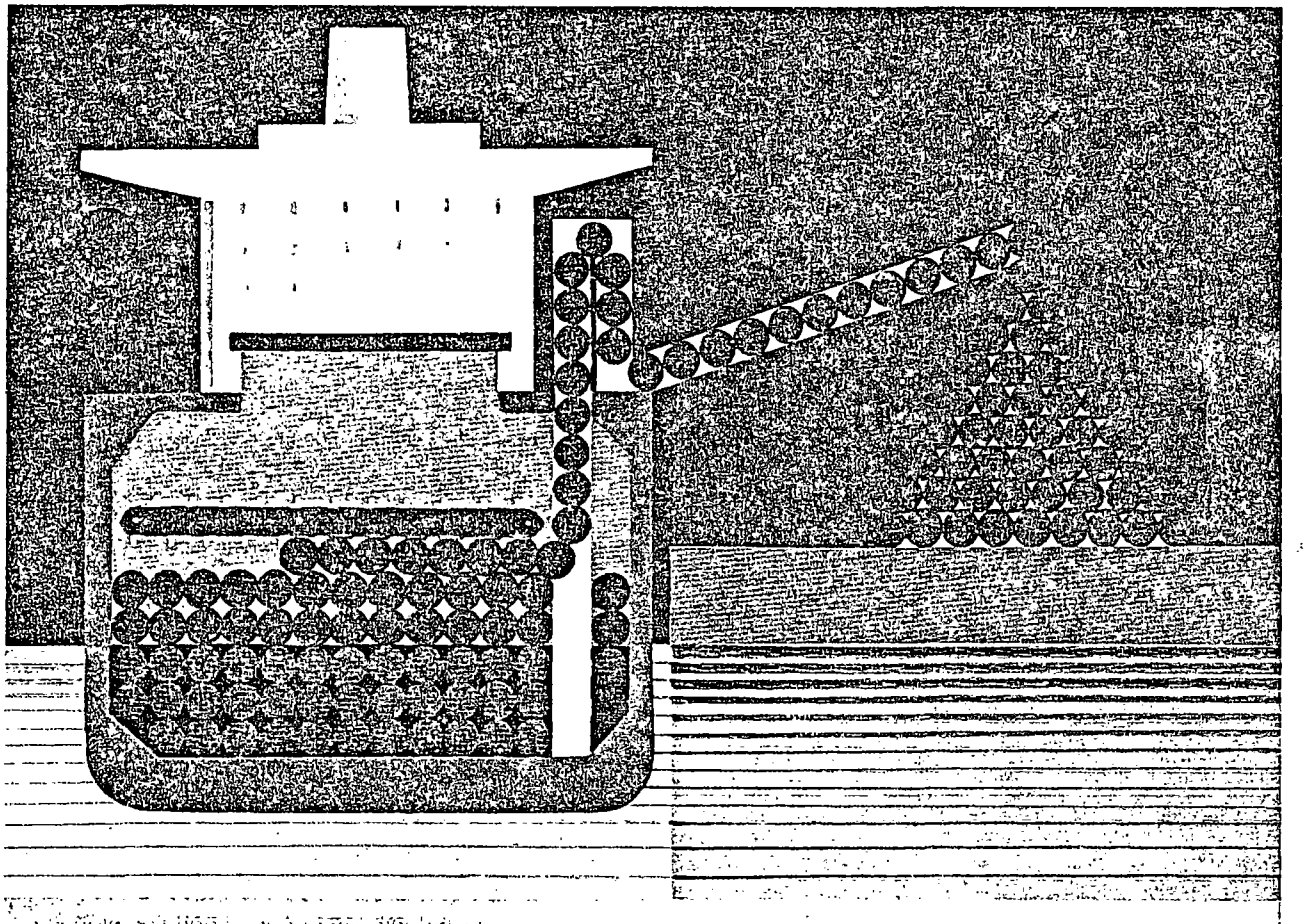

TERMINAL AT
1625 PENNY ST.
No 3 STACK 358,300E
3,090,900N
MC KAY BAY
PLANT LOCATION
No 2 STACKS 358,000E
3,090,600N
TAMPA
PLANT
GENERAL PORTLAND INC.
No 1 STACK 357,900E
3,090,600N
Seddon
Island
Hooker Point
Sewage
Disposal
Davis Islands
Playground
Seaplane
Basin
Spoil Area
Black
Point
Conveyor
Sutton
Drive-in
Theater
Municipal
Hospital
Sea-Born
Sch
Harlem Academy
DeSoto
Sch
Bayside
Sch
Powerplant
CAUSEWAY
GARRISON
CHANNEL
SEDDON
SPARKMAN
SEABOARD

Kværner "Cargo-Scooper"

a self-unloading and trimming system for bulk cargoes

KVÆRNER

Kværner Brug A/S
P.O.Box 3610 Gb, Oslo 1, Norway
Tel. (47 2) 67 69 70 – Telex 11650 kbn



Kværner "Cargo-Scooper"

The Kværner "Cargo-Scooper" system is basically built on the following components for each hold.

- One or more Scraper Conveyors working in the longitudinal direction.
- A Scraper Conveyor working in the athwartships direction.
- A Bucket Elevator working vertically in an enclosed shaft fitted with feeder flaps.
- A chute or hopper above deck level.
- A longitudinal collecting belt conveyor above deck level if there are three or more hatches.
- A slewing boom-type belt conveyor discharging over the side of the ship.

How does the Kværner "Cargo-Scooper" operate?
The longitudinal scraper conveyor shifts the cargo from its top level in a direction to feed the athwartships scraper conveyor.

The longitudinal scraper conveyor is supported on two athwartships telescoping beams on which the scraper conveyor automatically will travel from side to side of the hold. The setting of the scraping depth is adjustable.

The athwartships scraper conveyor is usually supported to the bulkhead in vertical sliding guides.

Its operation is similar to the longitudinal one.

It receives the cargo from the longitudinal scraper conveyor and delivers to the bucket elevator situated in the corner of the hold.

The bucket elevator is enclosed in a vertical shaft, the front side of which is fitted with a number of inlet doors or flaps acting as chutes which serve to feed the elevator. Below the cargo these flaps are closed and open automatically as the cargo level sinks.

Above deck level the bucket elevator discharge the cargo into a chute or a hopper which in turn will charge either a slewing boom type belt conveyor or fore and aft working belt conveyor.

Having brought the cargo above deck there are numerous possibilities for varying arrangements regarding the discharge over the side of the ship.

For example:

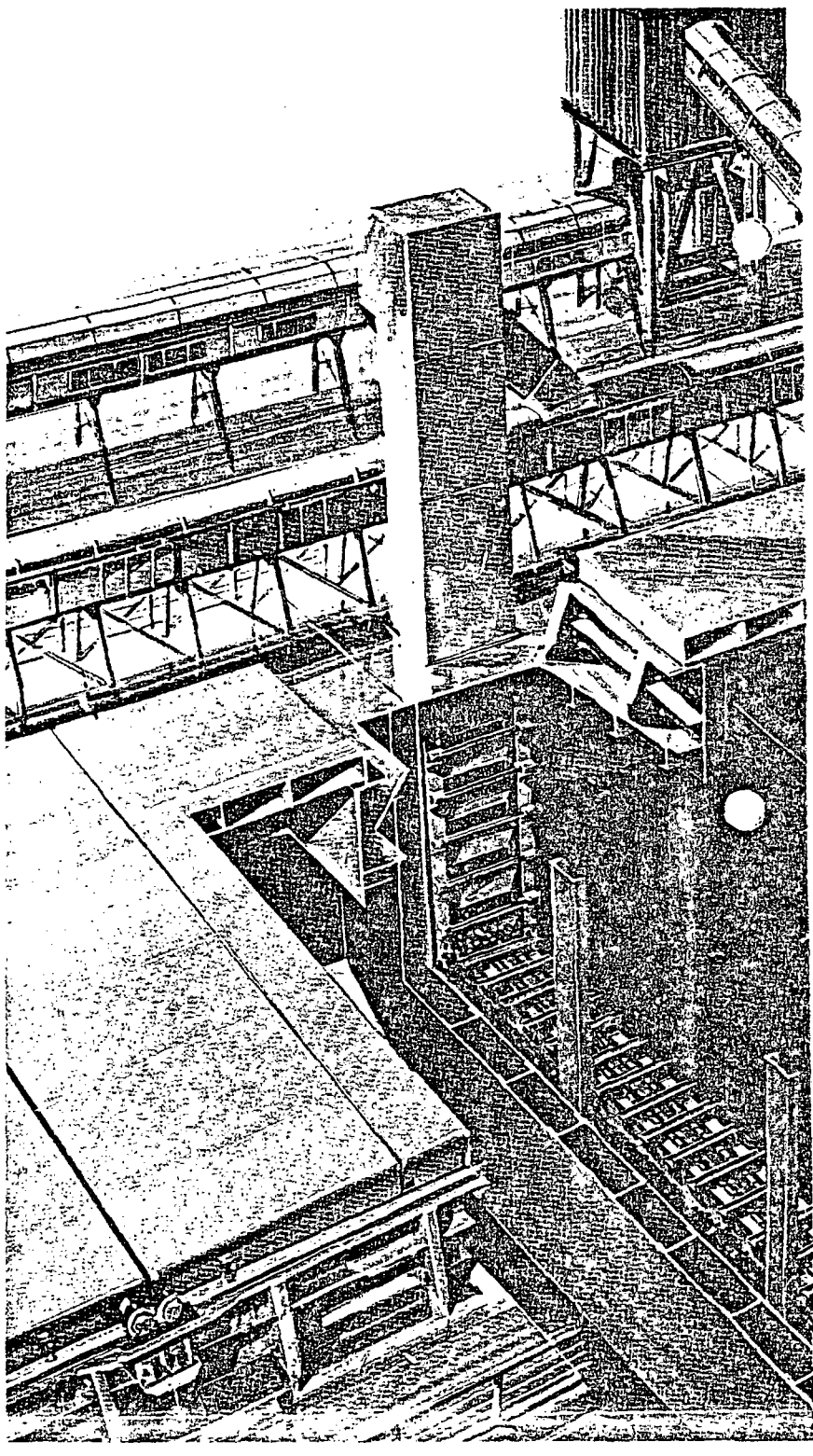
Two and two elevators placed against the same bulkhead can discharge into a common chute.

Thus 4 hatches could have two slewing booms over the side, working simultaneously.

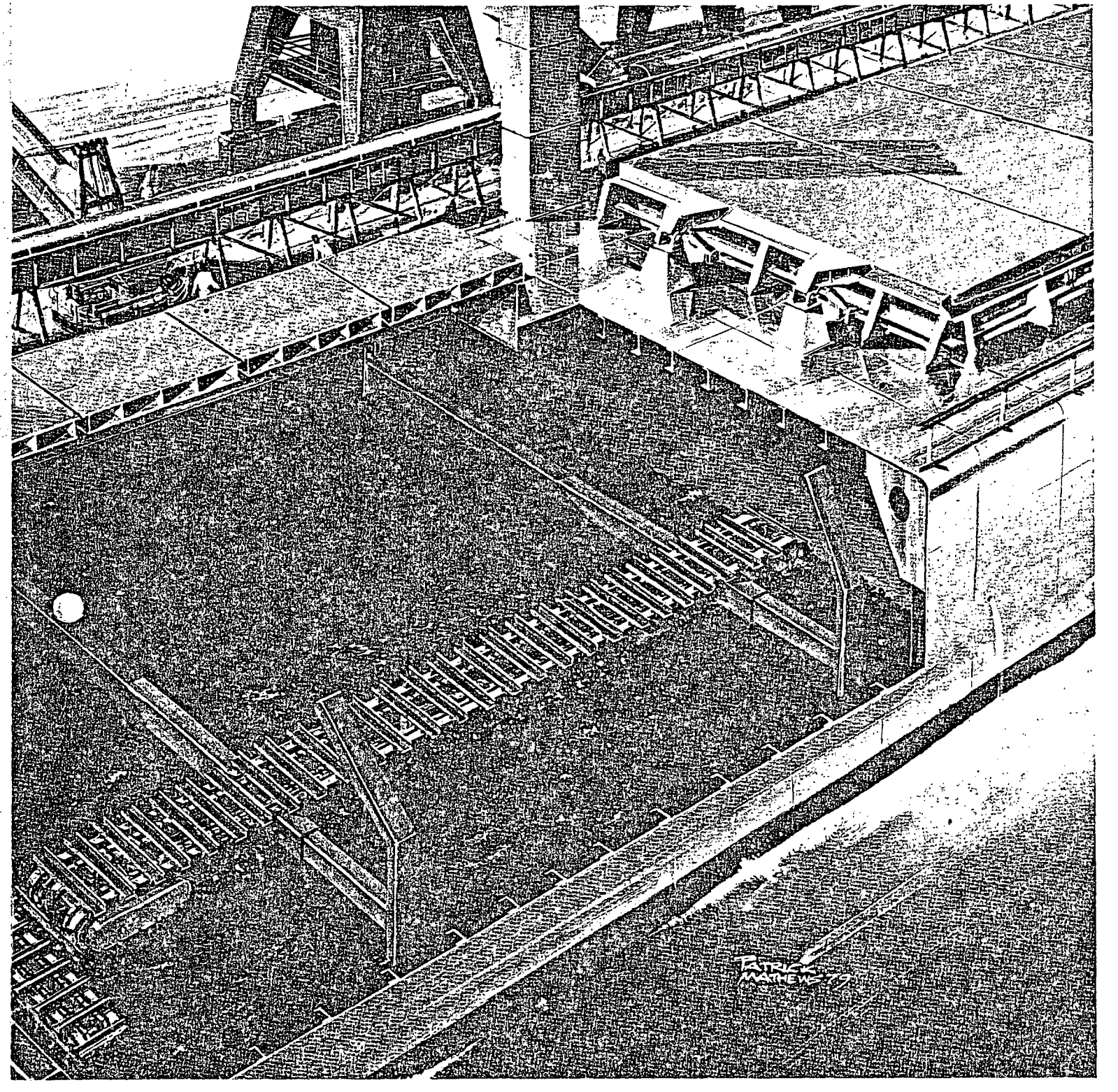
In general:
Obviously the scraper conveyors are ideally suited for trimming the bulk cargo during the loading sequence.

All movements during operation of the system are automatic and selfcontained. Manual selection of a movement is possible.

To avoid pollution in the port area and onboard ship, the system can work with the hatches closed.

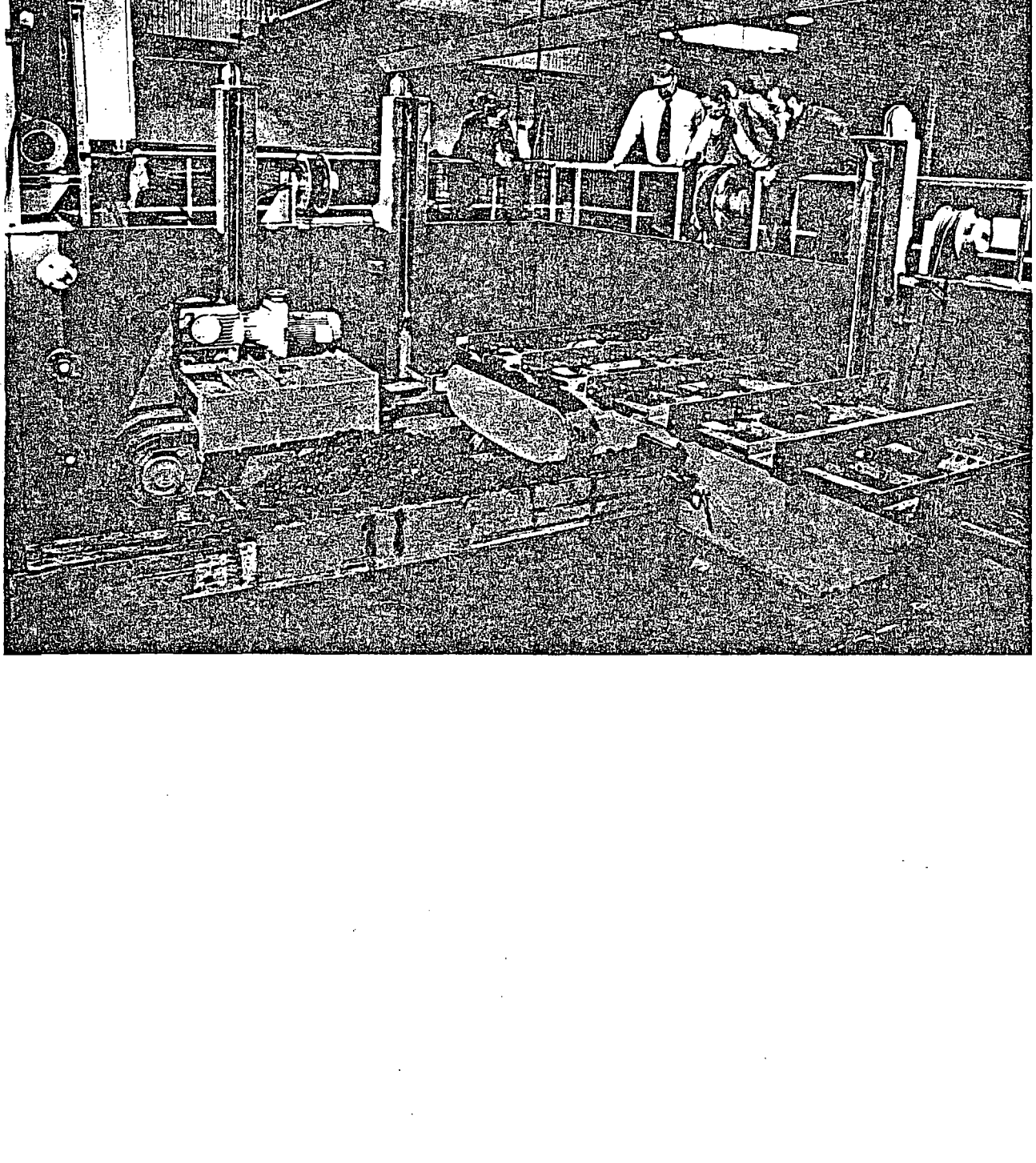


- High capacity, 5–600 tons/hour from each hold simultaneously.
- Low power requirement.
- One-point discharge onshore – more on request.
- Can be used to trim the cargo in the hold.
- Dustfree unloading possible. Hatch covers can remain closed.
- Unloading possible irrespective of weather conditions.
- Loss of cubic capacity in hold insignificant.
- May be adapted to bulk ship of almost any size.
- Versatile system able to handle different kinds of bulk cargo.
- Can unload in sparsely equipped ports.
- End result: Quicker turnarounds.



Kværner "Cargo-Scooper"
is an already proven system. The M/V "BEBCO" has similar scraper-conveyors fitted and up to now urea and grain have been handled very successfully.

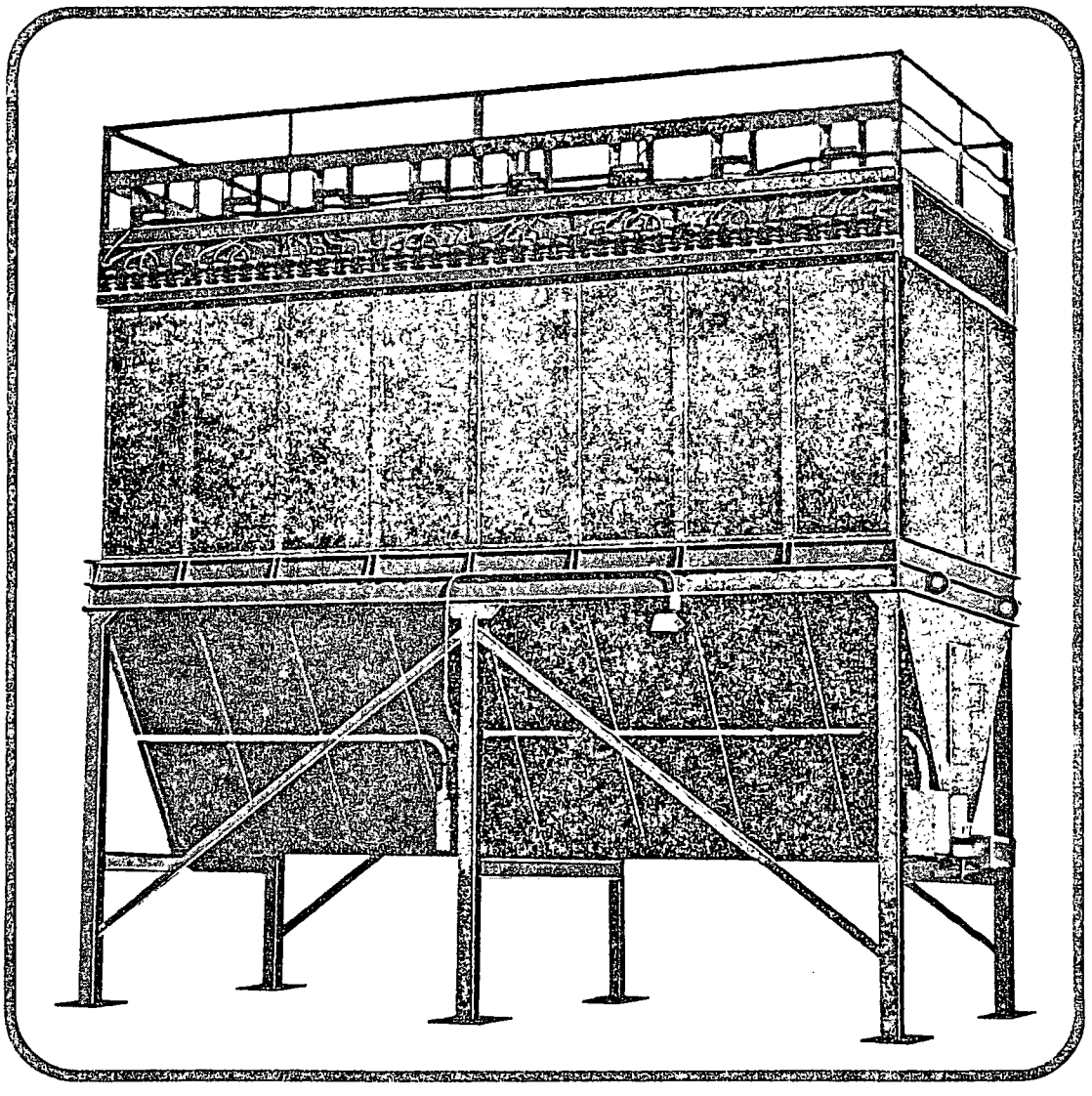
A test and demonstration plant have also been made. The photograph shows tests in progress with coal of lumpsizes up to 150 mm diameter being discharged at a rate of 150 tons/hour. The test "hold" is only 4.5 x 7 m, but the scraper conveyors are almost full size.



379 - 5/1000. Design: Anisdahl/Christensen. Print: Saturn.

CLEANING AIR REQ
ROUGHLY 3 CFM / 1000 CFM
D.C. CAP.

fabric filter dust collectors



INDUSTRIAL FILTER SYSTEMS

P. O. BOX 2145 • LONGVIEW, TEXAS 75606 • 214-759-3885

A LICENSEE OF BARBER-GREENE COMPANY

FEATURES THAT PROVIDE HIGH PERFORMANCE, MINIMUM MAINTENANCE, LOW OPERATING COSTS

1. All-welded house and hopper afford strong sealed unit for efficient operation.

2. Insulated panels can be mounted on the collector at the factory or in the field.

3. *High temperature protection. Double-safe dual thermo-*couple system senses inlet gases on both sides of the inlet duct. If the pre-set temperature is exceeded, automatic controls shut off the fan preventing damage to the bags.

4. Screw hanger bearings. Low maintenance hard cast iron hanger bearings require no lubrication.

5. Dust hopper acts as a dropout box for larger particles entering the collector. Hopper size provides low air velocities and good distribution of the inlet gases to all bags.
   Dust discharge can be located at either end of the house for added flexibility in feeding fines to the recovery system.

6. Simple, rigid support structure with standard length legs support the hopper discharge at the proper elevation.

7. Venturi-type injectors provide efficient compressed air shocks to bags for positive cleaning action.

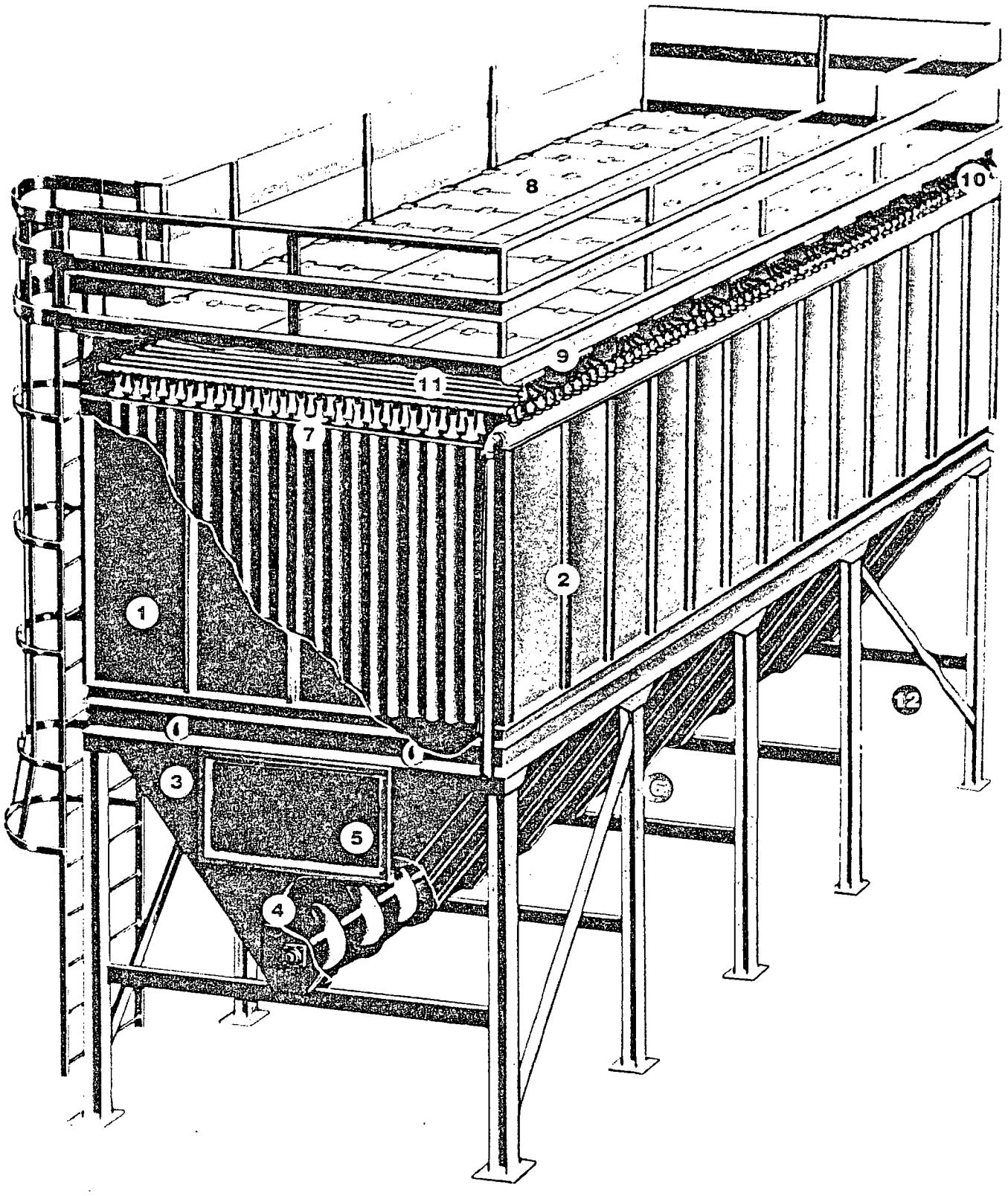
8. Top access. Bags can be removed and replaced from the top of the collector without entering the bag house. Air valves, solenoids, blow pipes, injectors, bags and cages are accessible from the top for easy, fast maintenance.
   The entire deck area is enclosed with handrails per OSHA specifications.

9. Solenoid control valves ensure the efficient operation of the cleaning air valves. The solenoids are protected by a weather-proof housing. Electric heaters to prevent solenoid freeze up in cold weather operation are available as an option.

10. Cleaning air valves. Large diaphragm delivers a dynamic air shock throughout the length of the blow pipe, ensuring positive cleaning action in every bag.

11. Large blow pipes distribute air evenly to individual injectors. Pipe size is balanced with air valve and orifice capacities to provide maximum uniform cleaning efficiency.

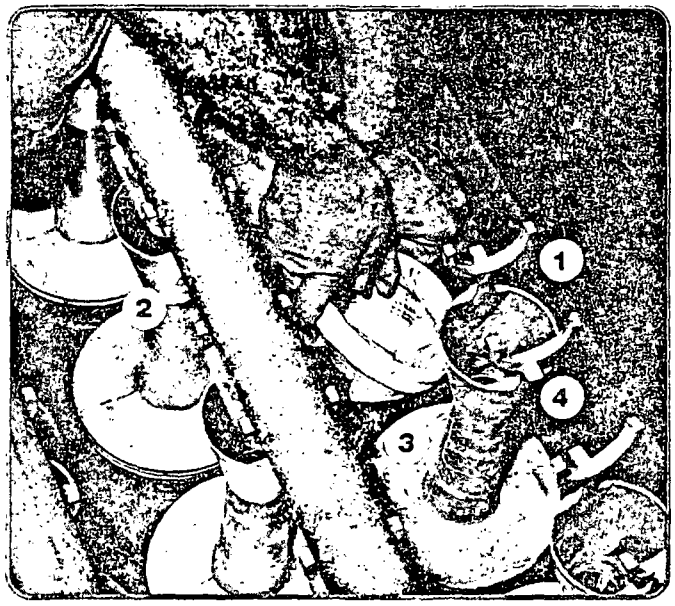
12. Fully automatic controls provided for cleaning bags also allow for manual sequencing of the cleaning valves to simplify maintenance procedures.


1
2
3
4
5
6
7
8
9
10
11
12

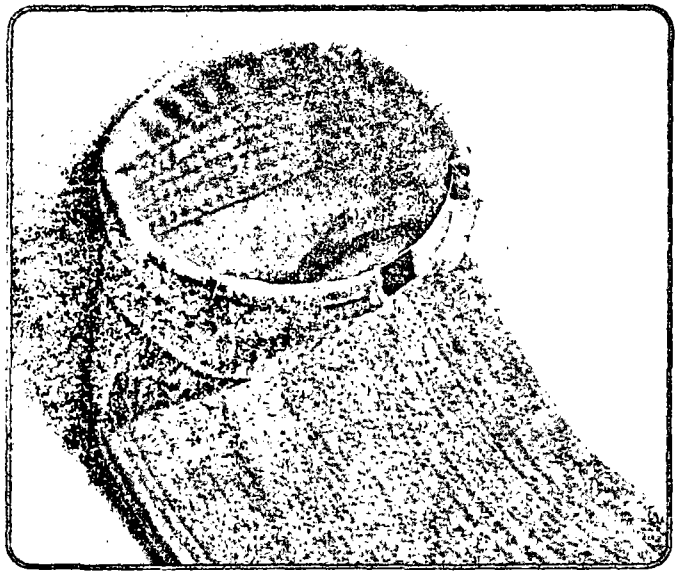
Exclusive venturi injector, the key to effective bag cleaning

Industrial Filter Systems uses a specially designed molded venturi-type air injector to provide an instantaneous air blast through the bags.

1. Injector cradle arms maintain proper alignment with the blow pipe orifice to ensure maximum air flow into the bag.
2. The injector is designed to inspirate additional plenum air into the bag along with the stream of compressed air, maximizing the efficient use of the compressed air.
3. Molded base flange supports the injector directly over the cage mouth for direct air flow to the whole bag.
4. Molded center guide locates the injector in the center of the bag without the use of clamps, bolts or nuts. The injector is simply lifted off for bag inspection.

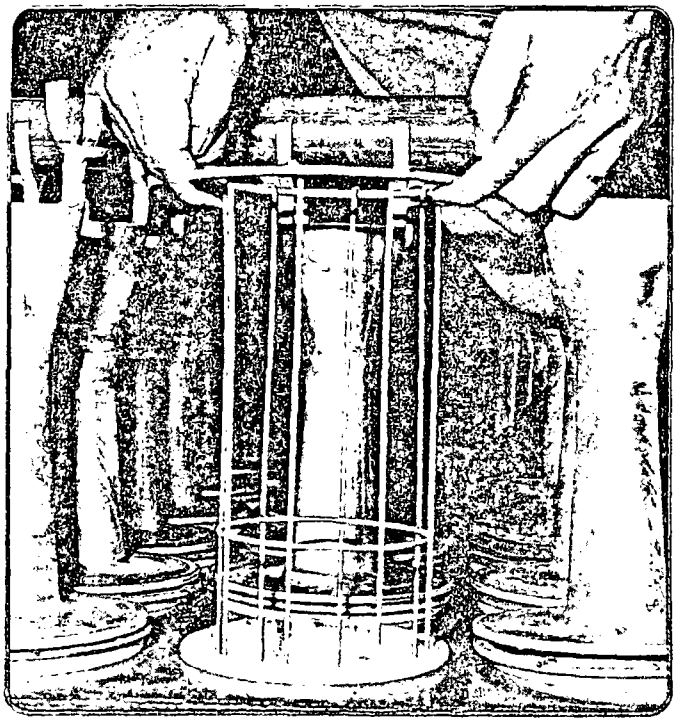


Bag and cage assemblies are designed to give high performance over a long life



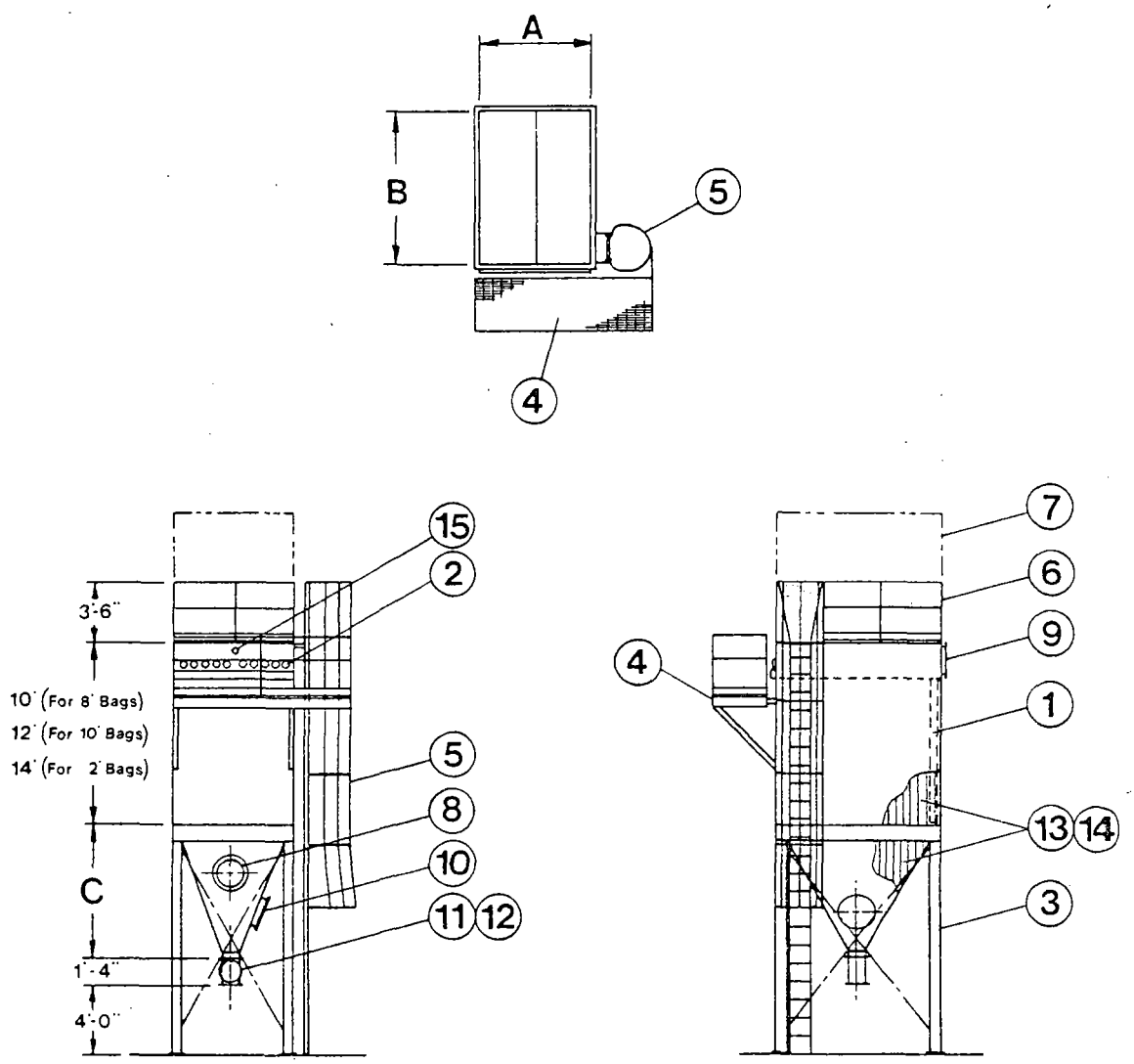
Standard fabric is polyester with a maximum continuous temperature rating of 275° F. Its surface is specially treated to facilitate dust release.

Precision stainless steel band snaps out to maintain pressure around the whole circumference of the tube sheet hole. The resulting seal is completely tight, and the bag is supported far beyond operation strength requirements.



Bag replacement is quick and easy. The operator only has to lift off the blow pipe and injector, pull out the cage, crimp the metal ring to break the seal and then simply pull the bag out.

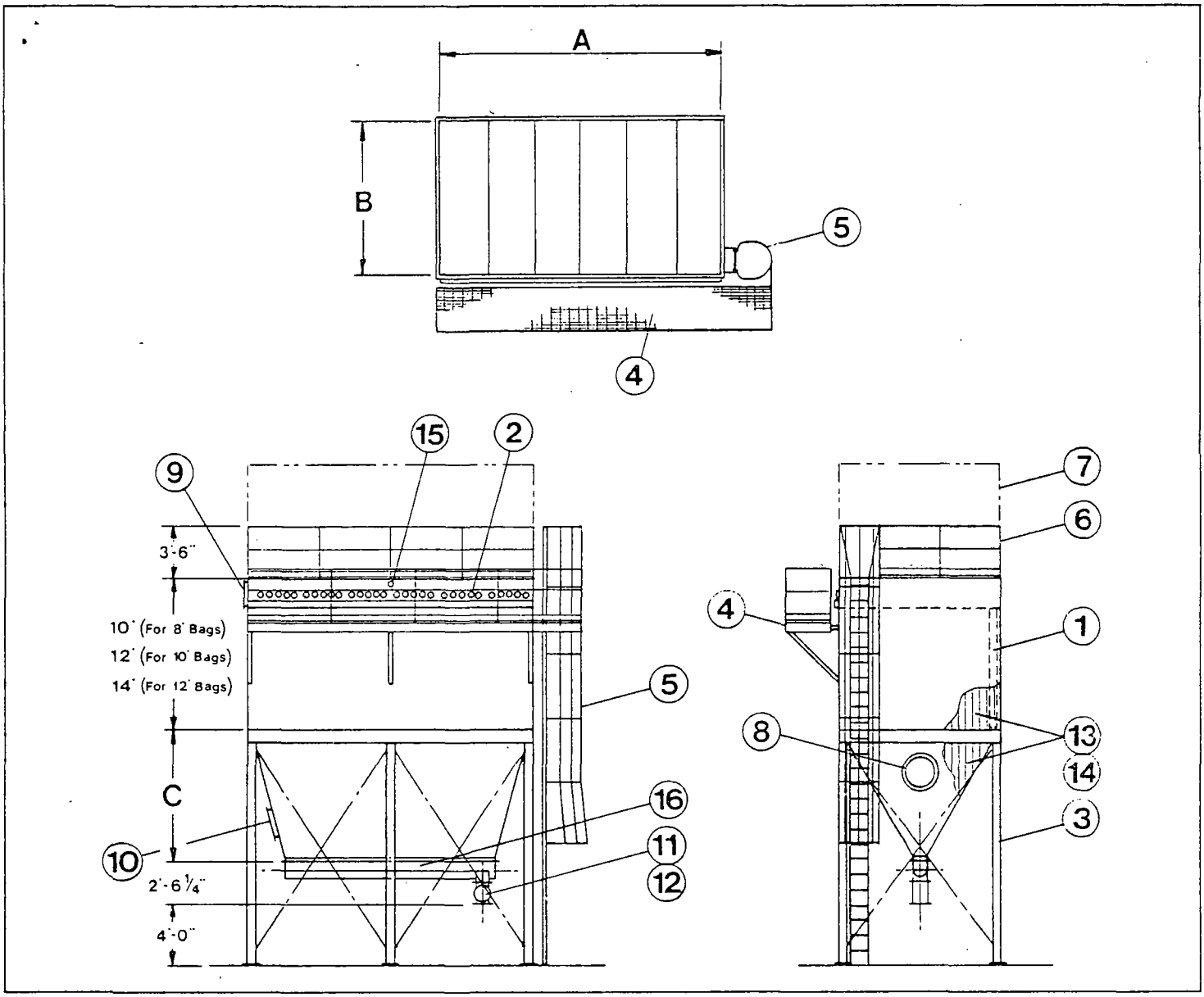
AIR PIPE HOLES : 9/32" ϕ



MODEL	CLOTH AREA			DIM. A	DIM. B	DIM. C
	8'	10'	12'	(Inside)	(Inside)	
AA-0510	500	625	750	3'-0½"	5'-8½"	4'-9"
AA-1010	1000	1250	1500	6'-1"	5'-8½"	5'-0"
AA-1015	1500	1875	2250	6'-1"	8'-5⅝"	7'-3"
AA-1020	2000	2500	3000	6'-1"	11'-3¾"	9'-6"
AA-1517	2550	3188	3825	9'-1½"	9'-7⅞"	8'-3"
AA-1520	3000	3750	4500	9'-1½"	11'-3¾"	9'-6"
AA-2017	3400	4250	5100	12'-2"	9'-7⅞"	10'-5"
AA-2020	4000	5000	6000	12'-2"	11'-3¾"	10'-5"

ITEM	PARTS LIST	
1	SHOP ASSEMBLY*	
2	PRE-WIRED VALVES	
3	SUPPORT STEEL	
4	ACCESS PLATFORM	
5	CAGED LADDER	
6	TOP HANDRAIL	
7	WALK-IN PLENUM	
8	INLET FLANGE	
9	OUTLET FLANGE	
10	MANWAY (20" dia.)	
11	ZERO SPEED SWITCH	
12	ROTARY AIRLOCK	
13	INSULATION & LAGGING	
14	SHOP INSTALLED INSULATION & LAGGING	
15	PRESSURE SENSITIVE SWITCH	
16	SCREW CONVEYOR	

*Includes: Bags, Cages, Venturis, Blowpipes, & Valves



MODEL	CLOTH AREA			DIM. A	DIM. B	DIM. C
	8'	10'	12'	(Inside)	(Inside)	
AA-2518	4500	5625	6750	15'-2½"	10'-2½"	8'-9"
AA-2520	5000	6250	7500	15'-2½"	11'-3¾"	9'-6"
AA-3018	5400	6750	8100	18'-3"	10'-2½"	8'-9"
AA-3020	6000	7500	9000	18'-3"	11'-3¾"	9'-6"
AA-3519	6650	8313	9975	21'-3½"	10'9⅛"	9'-2"
AA-3520	7000	8750	10500	21'-3½"	11'3¾"	9'-6"
AA-4019	7600	9500	11400	24'-4"	10'-9⅛"	9'-2"
AA-4020	8000	10000	12000	24'-4"	11'-3¾"	9'-6"
AA-4519	8550	10688	12825	27'-4½"	10'-9⅛"	9'-2"
AA-4520	9000	11250	13500	27'-4½"	11'-3¾"	9'-6"
AA-5019	9500	11875	14250	30'-5"	10'-9⅛"	9'-2"
AA-5020	10000	12500	15000	30'-5"	11'-3¾"	9'-6"
AA-5519	10450	13063	15675	33'-5½"	10'-9⅛"	9'-2"
AA-5520	11000	13750	16500	33'-5½"	11'-3¾"	9'-6"
AA-6019	11400	14250	17100	36'-6"	10'-9⅛"	9'-2"
AA-6020	12000	15000	18000	36'-6"	11'-3¾"	9'-6"
AA-6519	12350	15438	18525	39'-6½"	10'-9⅛"	9'-2"
AA-6520	13000	16250	19500	39'-6½"	11'-3¾"	9'-6"
AA-7019	13300	16625	19950	42'-7"	10'-9⅛"	9'-2"
AA-7020	14000	17500	21000	42'-7"	11'-3¾"	9'-6"

ITEM	PARTS LIST	
1	SHOP ASSEMBLY*	
2	PRE-WIRED VALVES	
3	SUPPORT STEEL	
4	ACCESS PLATFORM	
5	CAGED LADDER	
6	TOP HANDRAIL	
7	WALK-IN PLENUM	
8	INLET FLANGE	
9	OUTLET FLANGE	
10	MANWAY (20" dia.)	
11	ZERO SPEED SWITCH	
12	ROTARY AIRLOCK	
13	INSULATION & LAGGING	
14	SHOP INSTALLED INSULATION & LAGGING	
15	PRESSURE SENSITIVE SWITCH	
16	SCREW CONVEYOR	

To Ed Sec

Date 10/15 Time 3:00

WHILE YOU WERE OUT

M Henry Winters

of

Phone 214 387 9000
Area Code Number Extension

X	TELEPHONED	X	PLEASE CALL
	CALLED TO SEE YOU		WILL CALL AGAIN
	WANTS TO SEE YOU		URGENT
	RETURNED YOUR CALL		

Message letter f/ Complete

Operator

Stan

S. L. Stiles
Director Engineering and Construction

General Portland Inc. | 12700 Park Central Place, Suite 2100
P. O. Box 324, Dallas, Texas 75221
214/387-9000

William H. Winders
Corporate Environmental Manager

General Portland Inc. | 12700 Park Central Place, Suite 2100
P. O. Box 324, Dallas, Texas 75221
214/387-9000

General Portland Inc.

04-076537

PAY: FL DEPT OF ENVIRONMENTAL REGULATION VENDOR NO: 29624 DATE: 9 19 84

VOUCHER	INVOICE NO.	INVOICE DATE	AMOUNT	DISCOUNT	NET AMOUNT
35273		9 19 84	100.00		100.00
	CONSTRUCTION PERMIT FEE FOR TAMPA CLINKER HANDLING PROJECT.				
CHECK NO.					

General Portland Inc.

88-88
1113

04-076537

29624	9 19 84	PAY 0,000,100 DOLLARS 00 CENTS	$ 100.00
VENDOR NO.	MO. DAY YR. DATE		NOT VALID AFTER 90 DAYS

PAY TO THE ORDER OF:

FLORIDA DEPARTMENT OF ENVIRONMENTAL
REGULATION
2600 BLAIR STONE ROAD
TALLAHASSEE, FL 32301

San Angelo National Bank
MEMBER OF:
Texas Commerce Bancshares, Inc.
P.O. BOX 2558, HOUSTON, TEXAS 77001

AUTHORIZED REPRESENTATIVE

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No. 76045

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from General Portland Inc. Date October 1, 84

Address 1111 N. 31st Street Blvd. Tampa, FL 33605 Dollars $ 100.00

Applicant Name & Address Same as above

Source of Revenue

Revenue Code 301031 Application Number AC 29-094093

By Patricia G. Adams