

COMMISSION
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FAX (813) 272-5157



ROGER P. STEWART
EXECUTIVE DIRECTOR
ADMINISTRATIVE OFFICES
AND
WATER MANAGEMENT DIVISION
1900 - 9TH AVENUE
TAMPA, FLORIDA 33605
TELEPHONE (813) 272-5960
AIR MANAGEMENT DIVISION
TELEPHONE (813) 272-5530
WASTE MANAGEMENT DIVISION
TELEPHONE (813) 272-5788
ECOSYSTEMS MANAGEMENT DIVISION
TELEPHONE (813) 272-7104

June 19, 1991

Mr. Paul Reinerman
Air Enforcement Branch
Air, Pesticides and Toxics
Management Division
U.S. EPA - Region IV
345 Courtland Street, NE
Atlanta, GA 30365

Re: Lafarge Corporation (formerly General Portland Cement)
Kiln No. 6 (NEDS 0018-29)

Dear Mr. Reinerman:

Please be advised that I have reviewed Lafarge's letter of May 24, 1991, to Jewell harper and would like to offer the following comments to help you in developing your response. Specifically:

Kiln Status

The kiln last went through modification in 1975 with the submittal of an application (attached) to modify the kiln and was authorized (AO29-2433) as proposed. The modification outlined three (3) types of fuels [Type A - 100% #6 fuel oil (2.58% Sulfur), Type B - 20% #6 fuel oil (2.58% Sulfur) and 80% Coke (3.44% Sulfur), Type C - 100% Coal (2-6% Sulfur)] which would be used.

In May 1984, General Portland announced a temporary shutdown (1-5 years) of the kiln for economic reasons during a meeting with the DER and EPC/HC (record attached). Currently the kiln is permitted under the shutdown provision of 17-2.210(2)(c) and (2)(d), Florida Administrative Code (F.A.C.).

Reactivation of the Kiln

Currently Lafarge is authorized to start-up the kiln under permit no. AO29-174609. This authorization is limited to the kiln as it was last operated in 1985 and does not authorize the addition of a waste heat recovery boiler. In addition, the permit requires notification and assurance that the reactivation will not trigger NSPS requirements.

RECEIVED
JUN 21 1991
Division of Air
Resources Management

Mr. Paul Reinerman
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If Lafarge reconstructs the kiln with a waste heat recovery boiler a modification (State definition) will occur and require review under either 17-2.500 PSD, 17-2.510 NSR or 17-2.520 Sources Not Subject to PSD or NSR Requirements. The level of review will be dependent above Lafarge's requested total allowable emission levels from the kiln and waste heat recovery boiler. Baseline (actual) emissions should be calculated based on calendar years 1981 and 1982 as the most representative years. It is my understanding that Lafarge is attempting to use a stack test conducted in June 1983 to identify actual emission levels of sulfur dioxide. Be advised that the test was not performed under normal operating conditions and, in fact, was part of a larger test attempting to evaluate particulate and sulfur dioxide emissions associated with the burning of a 45% Coal/55% Coke mixture. Authorization was apparently provided for the test as reported by General Portland (record attached).

Pollution Control Equipment

The kiln is currently authorized to operate with a Western Precipitation electrostatic precipitator any replacement will require pre-authorization by both the EPC/HC and FDER. "Authorization" is required to insure that the replacement meets or exceeds the old units performance and should not be confused with "modification".

NSPS Reconstruction

Lafarge's procedures for determining reconstruction costs appear to be inconsistent with the Federal definition of "reconstruction" and the designation of an affected facility. Lafarge needs to address the reconstruction costs of each of the affected facilities identified in 40 CFR 60.60(a). A comparison of the reconstruction cost to cost of a new comparable facility must then be made for each affected facility individually. The same reconstruction methodology should be followed for the waste heat recovery boiler.

NSPS Modification

Lafarge's assumption that the "physical or operation change" to the kiln was the removal of ESP is inconsistent with the NSPS modification regulation (40 CFR 60.14). The replacement of the control equipment is clearly not a trigger for modification since Lafarge can easily meet or exceed the performance level of the old ESP. The addition of the waste heat recovery boiler does raise the applicability question. As far as particulate matter emissions, the kiln should be able to exempt out of NSPS modification with the right control equipment. However, the boiler must show a reduction in both nitrogen oxides and particulate matter while not exceeding the reconstruction costs. In addition, total stack emissions from the combined cycle system must be reviewed.

Mr. Paul Reinerman
June 19, 1991
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In conclusion, the reactivation of the kiln as proposed will result in the submittal of a construction/modification application in accordance with State regulations. At that time the State and local agencies will be able to review the entire project and determine emission levels and applicable regulations. I hope these comments help you in the development of your response. If you have any questions please feel free to contact me at (813) 272-5530.

Sincerely,



Darrel J. Graziani
Chief, Air Permitting Section

bm

Attachments

cc: J. Harry Kerns, P.E., FDER - Tampa
Clair Fancy, P.E., FDER - Tallahassee
John Wittmayer, Lafarge - Texas



STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

POST OFFICE BOX 9205
500 EAST CENTRAL AVENUE
WINTER HAVEN, FLORIDA 33880

JOSEPH W. LANDERS JR.
SECRETARY

General Portland Inc.
Hillsborough County-A.P.
September 15, 1975

RECEIVED
NOV 6 1975
H.C.E.P.C.

Mr. Roy D. Auten, Plant Manager
General Portland Inc.
P. O. Box 1002
Tampa, Fla. 33601

Dear Mr. Auten:

Pursuant to your recent application, please find enclosed a permit (No. ~~A029~~^{A029-2433}) dated 9-15-75 to construct/operate the subject pollution source.

This permit will expire on 9-15-77, and will be subject to the conditions, requirements, and restrictions checked or indicated otherwise in the attached sheet "Construction/Operation Permit Conditions."

This permit is issued under the authority of Florida Statute 403.061(16). The time limits imposed herein are a condition to this permit and are enforceable under Florida Statute 403.161. You are hereby placed on Notice that the Department will review this permit before the scheduled date of expiry and will seek court action for violation of the conditions and requirements of this permit.

You have ten days from the date of receipt hereof within which to seek a review of the conditions and requirements contained in this permit. Failure to file a written request to review or modify the conditions or requirements contained in this permit shall be deemed a waiver of any objections thereto.

Your continued cooperation in this matter is appreciated and in future communication please refer to your permit number.

Yours very truly,

J. H. Kerns, P. E.
District Engineer

cc: Bill Nickonovitz
H.C.E.P.C.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

OPERATION PERMIT

FOR General Portland Inc.
P.O. Box 1007
Tampa, Florida 33601

PERMIT NO. AO 29-2433 DATE OF ISSUE 9-15-75

PURSUANT TO THE PROVISIONS OF SECTIONS 403.061(16) AND 403.707 OF CHAPTER 403, FLORIDA STATUTES AND CHAPTERS 17-4 AND 17-7 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:
Roy D. Auten, Plant Manager

FOR THE OPERATION OF THE FOLLOWING:
No. 6 Portland Cement Kiln with Western Precipitator

WP-3 Job No. 5856

Subject to attached conditions of approval, Numbers:
1, 2, 3, 4, 5, 6, 7 and 9

LOCATED AT 601 McCloskey Blvd. Tampa

UTM 17-358 3 E - 3090 9 N

IN ACCORDANCE WITH THE APPLICATION DATED 5-12-75

ANY CONDITIONS OR PROVISOS WHICH ARE ATTACHED HERETO ARE INCORPORATED INTO AND MADE A PART OF THIS PERMIT AS THOUGH FULLY SET FORTH HEREIN. FAILURE TO COMPLY WITH SAID CONDITIONS OR PROVISOS SHALL CONSTITUTE A VIOLATION OF THIS PERMIT AND SHALL SUBJECT THE APPLICANT TO SUCH CIVIL AND CRIMINAL PENALTIES AS PROVIDED BY LAW. 9-15-77

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ISSUE UNTIL _____
OR UNTIL REVOKED OR SURRENDERED AND SHALL BE SUBJECT TO ALL LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

[Signature]
DISTRICT ENGINEER
Roger P. Stewart
H.C.E.P.C.

[Signature]
JOSEPH W. LANDERS, JR.
SECRETARY
DISTRICT MANAGER

OPERATION PERMIT CONDITIONS

FOR AIR POLLUTION SOURCES

Permit No.: AO29-2433

Date: 9-15-75

- (X) 1. Fugitive dusts, odors and other pollutants from all sources shall be effectively controlled or eliminated by suitable means. (Chapter 17-2.04 (3)(4)(5))
- (X) 2. The pollution control equipment shall be maintained and operated in such a manner that all emissions will be in compliance with applicable rules and regulations of the DER. A log of maintenance activities shall be kept and available for DER review. (Chapter 17-2.03 (7))
- (X) 3. Report any problems encountered in the operation of the source that may result in discharge of pollutants in amounts higher than permitted herein. Cease operation forthwith unless permission has been obtained from the regional office of the DER to operate the source for an interim period. (Chapter 17-4.13)
- (X) 4. This permit is issued on the basis of the data submitted in the application and the existing requirements of this agency as set forth in Chapter 17-2 (revised January 18, 1972) Florida Administrative Code. The owner shall obtain written permission from the DER before making changes in the operation of the source (i.e. higher production rate, different raw materials and fuels, etc.) that may increase the quantity of pollutants or change their composition. (Chapter 17-2.01)
- (X) 5. This permit is not transferable. Upon the sale or legal transfer of the source covered by this permit, the new owner must apply by letter for a transfer of this permit within thirty days. (Chapter 17-4.12)
- (X) 6. Test the emissions for the following pollutant(s) at intervals of six months from the date of this permit and submit two copies of test results to the District engineer of this agency within fifteen days of such testing. (Chapter 17-2.07 (1))
- | | |
|-------------------|---------------------|
| (X) Particulates | (X) Sulfur Oxides |
| () Fluorides | () Nitrogen Oxides |
| () Plume Density | () Hydrocarbons |
- (X) 7. Provide such sampling and testing facilities as may be necessary for the proper determination of the nature and quantity of air pollutants emitted from this source. (Chapter 17-2.07)
- () 8. Identify the pollution source and/or control equipment by its manufacturer, model number, serial number, capacity, and any other pertinent information. Submit this information on or before
- (X) 9. There shall be no discharge of liquid effluents or contaminate run-off from this site.

APPROVED
SEP 9 1975
ATTORNEY



4029-2433
0018
06

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL

APPLICATION TO OPERATE/CONSTRUCT POLLUTION SOURCES

SECTION I - GENERAL INFORMATION FOR ALL POLLUTION SOURCES
I TO BE FILLED IN BY APPLICANT

Source Type: Air Pollution
Type application: Operation Temporary Operation Construction
Status Source: New Existing Modification

Source Name: NO. 6 KILN County: Hillsborough

Source Location: Street: 601 McCloskey Blvd. City: Tampa

(Water Source Only) Lat: _____ Long: _____
(Air Source Only) UTM: East 358,300 North 3,090,900

Appl. Name and Title: Tampa Plant, Florida Division, GENERAL PORTLAND INC.
Appl. Address: P. O. Box 1002, Tampa, Florida 33601

II TO BE FILLED IN BY REGION (*BY BUREAU OF PERMITTING)

Control No: Region _____ County _____ Type _____ *Project _____

Type Permit	Date Rec'd	*Permit No.	*Issue Date	*Compl. Date	*Exp. Date
_____	_____	_____	_____	_____	_____

Source Description: _____
Control Equipment: _____

Water Permits

Receiving Body Code: _____ Surface Water Code: _____
Station No.: Influent: _____ Effluent: _____

Effluent:	Average	Design	% Reduction
Flow rate, MGD	_____	_____	_____
BOD, lbs/day	_____	_____	_____
Susp. Sol., lbs/day	_____	_____	_____
Other: _____	_____	_____	_____

Air Permits

Operating Time: Continuous Intermittent
Fuel: Type _____ M-BTU/hr. In Put _____
Incinerator: Capacity, tons/day _____ Type Waste _____
Mfg. & Model _____

Pollutant Emissions, lbs/day	Actual	Design	Allowable
Particulate	_____	_____	_____
Sulfur Oxides	_____	_____	_____
Other: _____	_____	_____	_____

Implementation: Estimated Appl. Filing Date _____
Estimated Start of Const. _____ Estimated Compliance Date _____

DESCRIPTION OF PROPOSED PROJECT

A. Describe the nature and extent of the proposed project. Refer to existing pollution control facilities, DPC permits, conditions, orders and notices, expected improvement in performance of the facilities and state whether the proposed project will result in full compliance of the source. Attach additional sheet if necessary.

The last improvement project covered the installation of additional transformer-rectifier units to increase the power supply to WP-3 Precipitator. This improvement increased the available power on Sections C, D, & E by 100% and on Section F by 43%. Mr. R. M. Johnson's letter of 9/13/74 to Mr. Roger Stewart, HCEPC, explained this project and the agreement that a Construction Permit was not required. A Court Order was issued on June 16, 1972 requiring modifications necessary to upgrade performance toward that required under Chapter 17-2 Florida Administrative Code by Jan. 1, 1973, it being acknowledged that present technology might not be available for compliance. Attached test results show No. 6 Kiln emission is in compliance.

B. Schedule of Project Covered in this Application (Construction Permit Application Only).

Federally or State Financed Projects only:

Planning Complete _____

Financing Program Complete _____

Indicate other local, state and/or federal agency approvals and dates _____

All projects:

Start of Construction _____

Completion of Construction _____

C. Costs of Construction (Show a breakdown of costs for individual components/units of the proposed project serving pollution control purpose only). Information on actual costs shall be furnished with the application for operation permit.

Increase Precipitator power supply:

Engineering	\$ 8,000
Transformer-Rectifier Units	35,000
Structural	5,000
Power Bus Ducts	6,000
Power Transmission	17,000
Relocation of Existing Power Units	4,000
TOTAL :	\$ 75,000

D. Indicate any previous DPC permits, issuance dates, and expiration dates.

Construction Permit No. AC-296 issued July 2, 1970. On 11/4/71 requested extension to Construction Permit No. AC-296. Submitted Application for Construction Permit Feb. 8, 1973. Overall Operation Permit No. AO-2181 issued May 25, 1973 to expire July 1, 1975.

10/71

AIR POLLUTION SOURCES & CONTROL DEVICES

A. Identification of Air Contaminants

- 1) Particulates
 a) Dust b) Fly Ash c) Smoke d) Other (Identify)
- 2) Sulfur Compounds
 a) SO_x as SO₂ b) Reduced Sulfur as H₂S c) Other (Identify)
- 3) Nitrogen Compounds
 a) NO_x as NO₂ b) NH₃ c) Other (Identify)
- 4) Fluorides 5) Acid Mist 6) Odor
- 7) Hydrocarbons 8) Volatile Organic Compounds
- 9) Other (Specify): _____

B. Raw Materials and Chemicals Used (Be Specific)

Description	Utilization Tons/day,	Approximate Contaminant Content		Relate to Flow Diagram
		Type	% Wt.	
Aragonite	2726			
Clay	701			
Blast Furnace Slag	203			
Total	3630	Particulates	9%	1

C. Process Weight:

- 1) Total Process Weight Rate 302,529^a lbs./hr. [See Sec. 17-2.04(2)]
- 2) Product Weight 162,800 lb./hr. expressed as Portland Cement Clinker
- 3) Normal Operating Time 24 hrs/day 7 days/week, if seasonal describe: _____
1974 Operation 37 weeks (258 days)
1973 Operation 44 weeks (306 days)

D. Airborne Contaminants Discharged:

Name of Contaminant	Actual Discharge		Discharge Criteria*	Allowable Discharge*		Relate Location to Flow Diagram
	Lbs./hr.	Tons/Yr.		Lbs./hr.	Tons/Yr.	
9/19/74 Particulates	27.6 ^b	103 ^c	Process Weight Rate	37.8 ^d	166 ^f	5
3/17-18/75 Particulates	31.4 ^b	117 ^c		38.4 ^d	168 ^f	
				38.6 ^e	169 ^f	
SO ₂	See Attachment G.					
NO _x	Trace					

* Refer to Chapter 17-2 Florida Administrative Code
 (Discharge Criteria: Process Weight Rate, #/ton P₂O₅, #/M BTU/hr etc.)

- a) See Attachment "A" on Process Weight Rate derivation.
 b) See attached reports.
 c) Based on 310 days operation.
 d) Based on Process Weight Rate for dates tested.
 e) Based on C (1) above.
 f) Based on 365 days operation.

E. Control Devices:

Name	Eff.	Conditions of Operation, Particle Size Range, etc.	Relate to Flow Diagram
WP-3 Western Precipitator Job No. 5856	^a 99.8%	350°-500° F. Particle size range not available	4
(a) See Attachment "A"			

F. Fuels:

Type (Be specific)	Daily Consumption	Heat Input BTU/hr.	Relate to Flow Diagram
See Attachment "B"			3

G. Describe briefly, without revealing trade secrets, the unit processes/operations generating the airborne emissions identified in this application:

The clinker burning process in cement manufacture is done in a rotary kiln. The raw material is fed into the upper end of the kiln and undergoes a physical and chemical change as it passes through the kiln. Dust is created in this process and collected in an electrostatic precipitator.

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

Dust collected in the precipitator is either received by a paving company or hauled to a sanitary landfill.

ADDITIONAL INFORMATION:

Stack Data: Height: 145'6".
 Diameter: 15'6".
 Temperature: 350-500° F.
 Flow Rate: 428,900 acfm @ 404° F.

STATEMENTS BY APPLICANT AND ENGINEER

A. Applicant

Tampa Plant, Florida Division,
GENERAL PORTLAND INC.

The undersigned owner or authorized representative of * _____
is fully aware that the statements made in this application for an Operation permit are
true, correct and complete to the best of his knowledge and belief. Further, the undersigned agrees to maintain and
operate the pollution source and pollution control facilities in such a manner as to comply with the provisions of Chapter
403 Florida Statutes and all the rules and regulations of the Department or revisions thereof. He also understands that a
permit, if granted by the Department, will be non-transferable and he will promptly notify the Department upon sale or
legal transfer of the permitted establishment.

R. D. Auten

Signature of the Owner or Authorized Representative

Roy D. Auten

Plant Manager

Name and Title (Please Type)

Date: May 12, 1975 Telephone No.: 247-4831

* Attach a letter of authorization

B. Professional Engineer Registered in Florida:

This is to certify that the engineering features of this pollution control project have been designed/examined by me and
found to be in conformity with modern engineering principles applicable to the control and discharge of pollutants
characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution
source(s) with appropriate control facilities, when properly maintained and operated, will comply with all applicable
statutes of the State of Florida and the rules and regulations of the Department. It is also agreed that the undersigned
will furnish the applicant a set of instructions for the proper maintenance and operation of the installation covered in
this application.

Signature *Robert D. Dubois*

Mailing Address: GENERAL PORTLAND INC.
P. O. Box 324
Dallas, Texas 75221

Name: Robert D. Dubois
(please type)

Telephone No.: 742-1551

Florida Registration Number 17834
(Please affix seal)

Date: April 18, 1975

If applicant is a corporation, a Certificate of
Good Standing must be submitted with application.

This may be obtained, for a \$5.00 charge, from
the Secretary of State, Bureau of Corporate
Records, Tallahassee, Florida 32304.

ITEM C (1)

PROCESS WEIGHT RATE DERIVATION


	<u>Desired</u>	<u>9/19/74</u>	<u>3/17/75</u>	<u>3/18/75</u>
Product Weight --				
Tons Clinker/Dry	1,954	1,919	1,980	1,839
Lbs. Clinker/Hr.	162,800	159,887	165,019	153,234
<u># Dry Raw Mix</u>	x 1.558	x 1.558	x 1.558	x 1.558
Lbs. Clinker				
<u># Dry Raw Mix/Hr.</u>	253,642	249,104	257,099	238,739
<u># Dust Loss/Hr.</u>	25,085	14,000	24,000	24,000
To Precipitator				
<u># Dry Kiln Feed/Hr.</u>	278,727	263,104	281,099	262,739
<u># As Received Coke/Hr.</u>	25,214	17,000	17,703	20,368
% Moisture in Coke	5.6%	5.6%	5.6%	5.6%
<u># Dry Coke/Hr.</u>	23,802	16,048	16,712	19,227
Process Weight Rate --				
<u>#/Hr.</u>	<u>302,529</u>	<u>279,152</u>	<u>297,811</u>	<u>281,966</u>
			<u>289,888</u>	

ITEM E

		<u>9/19/74</u>	<u>3/17-18/75</u>
Average # Dust Loss/Hr.	=	<u>14,000</u>	<u>24,000</u>
Average # Dust Emission/Hr.	=	<u>27.6</u>	<u>31.4</u>
Precipitator Efficiency	=	$\frac{14,000 - 27.6}{14,000} = 99.80\%$	$\frac{24,000 - 31.4}{24,000} = 99.87\%$

ITEM F - FUELS

	<u>TYPE</u>		<u>Daily Consumption</u>	<u>Heat Input MM BTU/Hr.</u>
A.	<u>KILN FUEL</u>			
100%	#6 Fuel Oil	MEAN (Gals)	69,000	431
	With 2.58% S. (150,000 BTU/Gal)	EXTREME (Gals)	86,250	539
	<u>LIQUID PHASE HEATER FUEL</u>			
	#2 Fuel Oil	MEAN (Gals)	302	1.76
	With 0.2% S. (140,000 BTU/Gal)	EXTREME (Gals)	377	2.2
<hr/>				
B.	<u>KILN FUEL</u>			
20%	#6 Fuel Oil	MEAN (Gals)	13,800	86
	With 2.58% S. (150,000 BTU/Gal)	EXTREME (Gals)	17,250	108
80%	Coke	MEAN (Tons)	286	345
	With 3.34% S. (14,500 BTU/Lb.)	EXTREME (Tons)	357	431
	<u>LIQUID PHASE HEATER FUEL</u>			
	#2 Fuel Oil	MEAN (Gals)	60	0.35
	With 0.2% S. (140,000 BTU/Gal)	EXTREME (Gals)	75	0.44
<hr/>				
C.	<u>KILN FUEL</u>			
100%	Coal	MEANS (Tons)	450	431
	With 2.6% S. (11,500 BTU/Lb.)	EXTREME (Tons)	562	539

General Portland Inc.  Southeastern Div

January 3, 1975

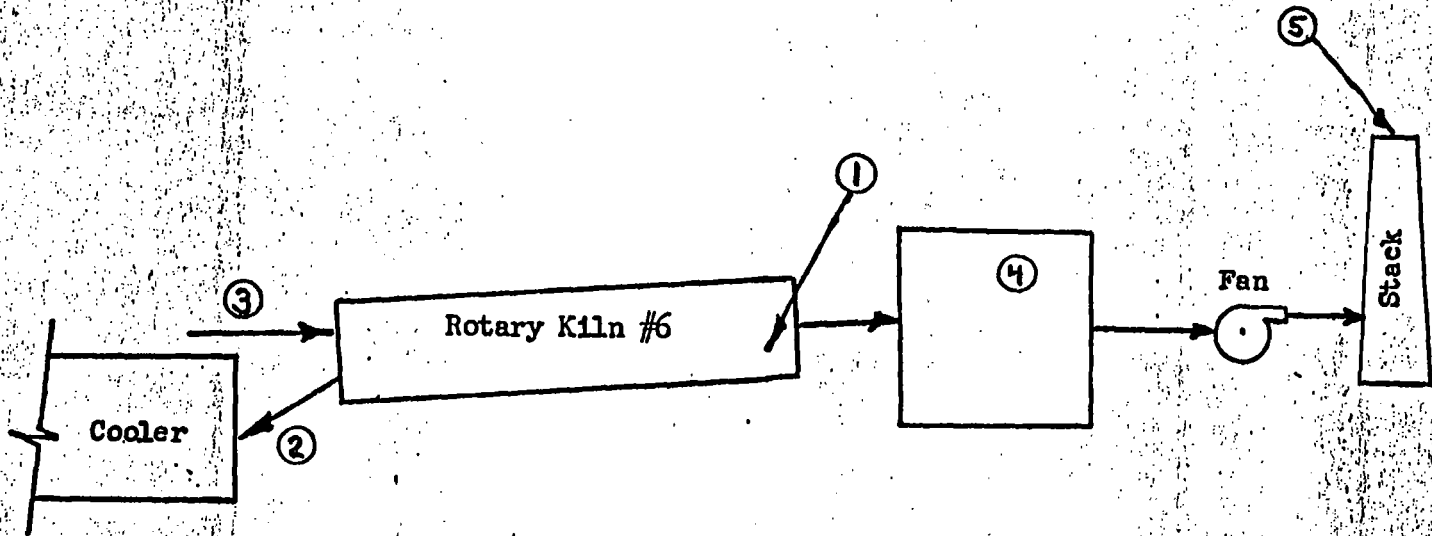
TO WHOM IT MAY CONCERN:

This is to advise that Mr. Roy D. Auten will be appointed Plant Manager of the Tampa plant on January 6, 1975. In this capacity, he is a General Portland Inc. representative authorized and responsible for preparing permit applications and related correspondence as required by the Florida Department of Pollution Control for the Tampa plant.



K. R. Olson
General Manager
GENERAL PORTLAND INC.
Southeastern Division

FLOW SHEET - NO. 6 KILN



- (1) Raw Material
- (2) Finish Material - Clinker
- (3) Fuel
- (4) Electrostatic Precipitator
- (5) Discharge Point

STATE OF FLORIDA

DEPARTMENT OF STATE



STATE OF FLORIDA)
Department of State) SS

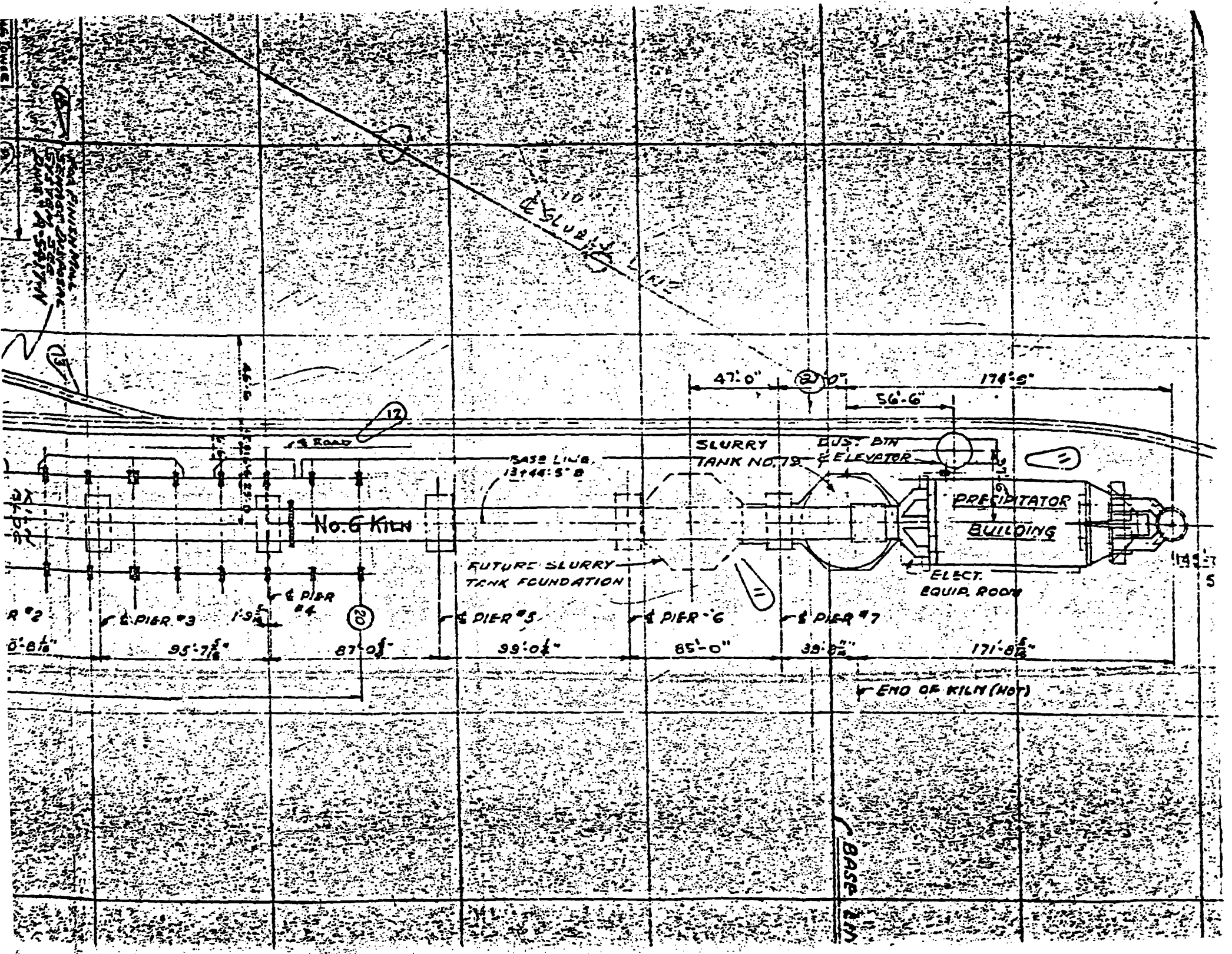
I, **RICHARD (DICK) STONE**, Secretary of State of the State of Florida, do hereby certify from the records of this office that

GENERAL PORTLAND INC.

a corporation organized and existing under the laws of the State of Delaware is duly authorized to transact business within the State of Florida.

I further certify that said corporation has paid all fees and taxes due this office to date; has otherwise fully complied with the corporation laws administered by this office; and that its permit is in full force and effect.

GIVEN under my hand and the Great



ATTACHMENT "G"

SO₂ REMOVAL AND EMISSION CALCULATIONS

The following Table shows the recent SO₂ tests made on No. 4, 5 and 6 Kilns with the amount of SO₂ removed by the kiln process and the amount emitted.

<u>K I L N S</u>	<u>NO. 4 & 5 KILNS</u>	<u>NO. 6 KILN</u>
<u>D A T E</u>	<u>7/9-10/74</u>	<u>2/18-19/75</u>
Coke Usage - #/hr.	14,667	20,546
SO ₂ from Coke - #/hr.	1,172	1,679
Oil Usage - #/hr.	10,667	4,458
SO ₂ from Oil - #/hr.	543	243
Total SO ₂ from Fuel - #/hr.	1,715	1,922
SO ₂ in Emission Gas - #/hr.	340	857
SO ₂ removed by kiln process - #/hr.	1,375	1,065
% SO ₂ removed by kiln process	80%	55%

Memo

To: Air Engineering

From: Steve Gyong

Re: Meeting with representative from Port General Portland

Present at meeting: Henry Winder, General Portland
Roger Stewart
Ivan Choronenko } HCEPC
Steve Gyong

Henry Winder of General Portland discussed the possibility that # 6 Kida & # 6 Coper might be shut down for economic reasons. Coal handling would also be eliminated. Also to be eliminated would be the aragonite, clay and coal piles. General Portland desires that the associated permits be retained during the operations hiatus. The length of down time was estimated to be 1-5 years. Mr. Winder asked HCEPC to begin thinking about a permit to allow the use of clinker. Mr. Stewart said that unloading of clinker would be watched very carefully, and that he saw no problem with the use of clinker as long as the total emission level does not increase. A ship with a load of clinker is due to arrive May 19, 1984. General Portland will continue the following operations: grinding, finishing, packaging, cement handling, truck and ship loading. Cognizant persons are:

Don Williams } D.E.R.
Bill Thomas

Chire Fancy Tallahassee

This ended the meeting May 7, 1984.

To: Files

FROM: Jerry Campbell

DATE: April 18, 1984

SUBJECT: 4/18/84 Mtg w/ General Portland
(R. Auten, H. Winters, I. Choronenko, J. Campbell + R. Stewart)

The following items were discussed:

- 1) GP reported that the trial runs with petroleum coke were not working out. They have approximately a 60 day supply left which they intend to burn at a 10 to 1 ratio of coal to coke. They seemed to indicate that Mr. Stewart had given them permission to try the coke at a previous meeting. GP agreed to notify us in writing when they have exhausted their coke supply.
- 2) GP intends bring in a 11,000 ton load of cement clinker and unload at their Tampa plant. They described their controls for the unloading and promised to submit a copy this information prior to the ships arrival. The ship is expected in within 30 days. Mr. Stewart gave GP his OK to unload this one time as a trial + see how GP's controls work. Air Engineering will observe the operation. If GP intends to unload ships on a regular basis permits will be required.

I. SUMMARY

On June 22 and 23, 1983, Environmental Engineering Consultants, Inc. conducted an emissions test at the General Portland Cement Manufacturing Plant located on Hooker's Point in Tampa, Florida.

The source tested was an electrostatic precipitator controlling emissions from the No. 6 rotary kiln. The test was performed to determine the particulate and sulfur dioxide emissions resulting from burning a 45% coal/ 55% coke mixture to fire the kiln.

A summary of the test results is shown in Table 1. The average particulate matter emission rate was 54.6 pounds per hour and the average sulfur dioxide emission rate was 1178 pounds per hour. The allowable particulate emission rate as determined by EPA method 5 is 95 pounds per hour. There is no emission limit for sulfur dioxide. The clinker production rate during the test was 60.5 tons per hour.

All emission rates were determined according to the procedures prescribed by the Florida Department of Environmental Regulation and the tested source was found to be in compliance with all applicable emission standards.

The tests were performed by Carl Fink, and Bob Soich with the assistance of the staff at General Portland, Inc.

AOR

Year	Tons Clinker Produced	Fuel Types/Utilization Rates			SO2 Emissions (TPY)			
		Coal (%S)/TPY	F.O. (%S) gallons/yr.	Coke (%S)/TPY	AOR #	EPA 1990 Calculations 100% Conv Test Reduction		
1978	513,455	2.14/100,392	2.2/755,000	8.05 lbs./gal.	--	3,888 (Report) ¹	4,431	3,386
1979	487,708	0.878/100,188	2.2/169,000	8.05 lbs./gal.	--	2,806 (Report) ²	1,789	1,367
1980	453,971	2.6/86,804	--	--	--	2,572 (Report) ³	4,514	3,449
1981	529,127	2.56/108,733	--	--	--	2,910 (Report) ⁴	5,567	4,253
1982	502,360	2.1/98,068	--	--	--	2,910 (Report) ⁵	4,119	3,147
1983	505,126	25.3/88,475	--	--	?	2,853 (Report) ⁶	4,477	3,420
1984	481,402	2.00/93,169	--	--	--	4,026 (Report) ⁷	3,727	2,847
1985	55,817	N/A	--	--	--	510	--	--

? - Test of 6/23/83 shows usage of coke.

1. Reflects 1079 lbs./hr. - 2. Reflects 804.6 lbs./hr. - 3. Reflects 804 lbs./hr. - 4. Reflects 804 lbs./hr. -
 5. Reflects 804 lbs./hr. - 6. Reflects 804 lbs./hr. - 7. Reflects 1178 lbs./hr.

KILN #6 - LAFARGE, Formerly GPC

SO2 lbs./hr.

<u>Test Data</u>	<u>PM. lbs./hr. (AVG)</u>	<u>Test Run: 1</u>	<u>SO2 lbs./hr.</u>			<u>4/AVG</u>	<u>Input Rate</u>	<u>Fuel Rate</u>	<u>Remarks</u>
			<u>2</u>	<u>3</u>	<u>TPH</u>		<u>TPH</u>		
04/26/76	42.9	1,279	1,847	1,778	1,635	N/A	N/A	17-2.700 met (?)	
02/22/79	38.26	956	778	1,271	1,001*	141	13.1	1.7% S Coal	
07/02/79	35.52	6.94	574	711	644/656**	145	14.8	1.45% S Coal	
06/23/83	54.64	1,245	1,078	1,211	1,178	60.5 ¹	N/A	45% Coal/55% Coke (NoSulfurContent)	

% Reduction by Test 7/2/79: 23.6%

* 891 by fuel analysis

** 858 by fuel analysis

¹ clinker production

? - No production rates/no field data with test