

PGS

PLAINTIFF'S EXHIBIT

CT-1390

Pennsylvania Glass Sand Corporation

A Subsidiary of ITT

8000 Bonhomme Avenue,

St. Louis, Mo. 63105

July 26, 1976

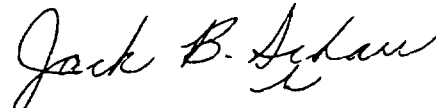
Mr. Lawrence Quinn
Certain-Teed Products Corp.
600 St. Cyr Road
St. Louis, Missouri 63137

Dear Mr. Quinn:

As per our discussion, attached please find screen and chemical analyses of our 140 Mesh and 160 Mesh silica flour.

If you have any questions or need any additional information, please do not hesitate to call.

Sincerely,



Jack B. Scharr
District Manager
General Products Sales

JBS/bjb

Attachment

A/C PIPE
- SILICA
- Asbestos

SCREEN & CHEMICAL ANALYSES

140 MESH

<u>Chemical Analysis</u>		<u>On</u>	<u>Screen Analysis</u>	<u>% Ret.</u>
SiO ₂	99.76	80 Mesh		Trace
Fe ₂ O ₃	.118	100 Mesh		Trace
Al ₂ O ₃	.070	120 Mesh		0.2
TiO ₂	.015	140 Mesh		0.7
CaO	.017	160 Mesh		0.5
MgO	Trace	200 Mesh		5.5
Loss on Ignition	.120	270 Mesh		9.1
		325 Mesh		12.5
		Passing 325 Mesh		71.5

160 MESH

<u>Chemical Analysis</u>		<u>On</u>	<u>Screen Analysis</u>	<u>% Ret.</u>
SiO ₂	99.79	80 Mesh		Trace
Fe ₂ O ₃	.017	100 Mesh		Trace
Al ₂ O ₃	.070	120 Mesh		0.1
TiO ₂	.015	140 Mesh		0.3
CaO	.010	160 Mesh		0.2
MgO	Trace	200 Mesh		3.5
Loss on Ignition	.100	270 Mesh		7.3
		325 Mesh		11.5
		Passing 325 Mesh		77.1

CTD019167

CERTAINTEED SM

CTP VF VAFG

MARCH 30, 1978

TO* MR. J. T. NIXON ST. LOUIS #259

FROM: BOB HARTMAN VF P_PG

CC: MR. J. P. MCGINLEY VF P_PG
MR. M. R. STREEPY VF P_PG
DR. P. F. HEILMAYR VF P_PG

THIS IS TO CONFIRM THE DATA I GAVE TO MR. QUINN.

DURING THE TWO YEAR PERIOD 1975 + 1978 THE ST. LOUIS PLANT USED 15.48% FIBER IN THEIR MANUFACTURED PIPE. 13.59% WAS CHRYSOTILE AND 1.89% CROCIDOLITE. THE CROCIDOLITE WAS THE ONLY AMPHIBOLE FIBER USED; NO AMOSITE, TREMOLITE, ACTINOLITE, OR ANTHOPHYLLITE WAS USED. OF THE 13.59% CHRYSOTILE, 2.15% WAS OF USSR ORIGIN.

IF THERE IS FURTHER INFORMATION DESIRED, PLEASE ADVISE.

END OR GA

CERTAINTEED SM

CERTAINTEED SM

CTP VF VAFG

MARCH 31, 1978

TO: MR. J. T. NIXON ST. LOUIS #259

FROM: BOB HARTMAN VF P_PG

CC: MR. J. P. MCGINLEY VF P_PG
MR. M. R. STREEPY VF P_PG
DR. P. F. HEILMAYR VF P6PG

SUBJECT: MY TVX OF 3/30/78

OBVIOUSLY, THE TWO YEAR PERIOD STATED ON THE TVX WAS NOT 1975 + 1978, BUT IS 1975 + 1976. PLEASE CORRECT YOUR COPIES AS NOTED.

END OR GA

CTD019168



CERTAIN-TEED PRODUCTS CORPORATION
PIPE & PLASTIC GROUP
600 St. Cyr Road
St. Louis, Missouri 63137 314/867-6567

John Nixon

November 14, 1977

Mr. John Dixon
16th Floor
314 North Broadway
St. Louis, Missouri 63120

Dear Mr. Dixon:

Enclosed find the information requested.

1. Provide all air sample studies on fiber and dust counts made by the St. Louis Plant from June 30, 1976 to the present date.

Copies of the air sample studies taken at the St. Louis Plant were given on November 3, 1977.

2. Provide the average amount of silica used on a shift between January 1, 1976 and present date, also the screen size and the kind of silica purchased.

The screen and chemical analyses are attached. Pioneer Silica Co. is also known as Pennsylvania Glass and Sand Company.

3. What is the amount of time, test samples are taken on any one date or any one occasion in any one area.

The time of the samples vary, depending on the estimated amount of dust present in the area. Fifteen minute samples are taken during the employees peak exposure level. Sampling time is as required to yield an eight hour time weighted average.

4. Provide a chemical breakdown of the cement used by the St. Louis Pipe Plant as purchased from Missouri Portland Cement Company.

The mill test report from Missouri Portland is attached.

5. Provide a log for the number of times that the dust system carrying cement, silica and fiber clogged up over the last few years.

A log of this information, dating back to May of 1976, is attached.

CTD019169

6. Provide a copy of the citation issued by OSHA and the follow-up reports.

A copy of the citation was given on November 3, 1977. No follow-up letter in regard to the citation could be found.

7. Obtain the information regarding the number of cubic feet of air per minute that is moved by the ventilating system to the dust collectors.

We have seven dust collectors in use. The Finishing Department has four dust collectors: ^{whirlator}Scrap system - 3,570 CFM; Rework Saw - 6,000 CFM; Lathe Lines - North Amber Jet - 10,200 CFM and South Amber Jet - 12,700 CFM. The Manufacturing Department has two dust collectors: Number 1 and Number 2 - ^{whirlator}8,340 CFM each. The Fittings Department has one dust collector which is ^{whirlator}9,790 CFM.

8. What is the number of filters that is used in any one given testing on a given individual who has the test filter and holder attached to him.

One filter is used per cassette, and as many cassettes are used as required to yield an eight hour time weighted average.

9. Provide a list of the masks or respirators used by the employees. Describe by the type, kind, serial number, etc.

A listed of the respirators furnished to the employees is attached.

Sincerely,

CERTAIN-TEED CORPORATION

John Nixon
John Nixon
Plant Manager

jw/JTN

CTD019170

Cement
Silica
Lathe
Crusher
to mill
Fin End
mix #1
" 2
Saw
Kiln #1 oil #2
Boiler #2

1975-77

SCREEN & CHEMICAL ANALYSES140 MESH

<u>Chemical Analysis</u>		<u>On</u>	<u>Screen Analysis</u>	<u>% Ret.</u>
SiO ₂	99.76	80 Mesh		Trace
Fe ₂ O ₃	.118	100 Mesh		Trace
Al ₂ O ₃	.070	120 Mesh		0.2
TiO ₂	.015	140 Mesh		0.7
CaO	.017	160 Mesh		0.5
MgO	Trace	200 Mesh		5.5.
Loss on		270 Mesh		9.1
Ignition	.120	325 Mesh		12.5
		Passing 325 Mesh		71.5

An average of 16.25 tons per shift.

CTD019171

RED RING PORTLAND CEMENT

RED DIAMOND MASONRY CEMENT

RED BALL HIGH EARLY STRENGTH CEMENT

MILL TEST REPORT

PLANT St. Louis, Missouri

Certain Teed Products Corporation

600 St. Cyr Road

St. Louis, Mo. 63137

Cement Type	Type I		
Cl	6		
No. Tons	3000		
Manufactured	9/28, 29/77		
SiO ₂ (%)	20.86		
Fe ₂ O ₃ (%)	2.90		
Al ₂ O ₃ (%)	5.32		
CaO (%)	64.57		
MgO (%)	2.65		
SO ₃ (%)	2.89		
Ignition Loss (%)	.22		
Insoluble Residue (%)	.17		
Na ₂ O (%)			
K ₂ O (%)			
Alkalies, Total as Na ₂ O (%)	.56		
C ₃ S (%)	56.16		
C ₂ S (%)	12.44		
C ₃ A (%)	9.20		
C ₄ AF (%)			
-325 Mesh (%)	89.60		
Specific Surface (Wagner)	1390		
Specific Surface (Blaine)	3585		
Autoclave Exp. (%)	.086		
Gillmore Initial Set	3:00		
Gillmore Final Set	5:05		
Vicat Time of Set			
Air Content (%)	8.4		
Comp. Strength (psi) 1-day	1810		
3-day	3545		
7-day			
28-day			
Tens. Strength (psi) 1-day			
3-day			
7-day			
28-day			
Heat of Hydration			
False Set Test	89.4		
Water Retention (%)			

between 40 - 42

Batches per
8 hour shiftBatch consists of
a ratio of 1200
800
150
approx 350
2500

I hereby certify that this cement complies with the requirements of
A.S.T.M. C-150-76a & Fed. Spec. SS-C-1960/3

for Type I Portland Cement

J. Henderson

MISSOURI PORTLAND CEMENT COMPANY

DATE October 11, 1977

CTD019172

ATTC

Item #5

##4

Log of Willow Mill Block-Ups

May 19, 1976
June 2, 1976
June 3, 1976
June 4, 1976
October 4, 1976
March 21, 1977
March 22, 1977
March 30, 1977
May 9, 1977
May 27, 1977
September 12, 1977
October 5, 1977
October 20, 1977
October 22, 1977
October 24, 1977
October 25, 1977

CTD019173

Respirators Furnished to Employees

American Optical -

Regular Respirator	A-O #5030
Filter	A-O #R-30

Welsh -

Regular Respirator	#7406
	#7506
Filter	#7500-3
	#7500-6
	#7500-21
	#7500-23

3M Brand -

Powered Air Purfier	2009AD
Filter	78-8007-5959-5
Disposable	#8710

Glendale -

Regular Respirator	GR4000
Filter	BM21B83
Regular Respirator	1031