PLAINTIFF'S EXHIBIT
tabbies
AL-585

FROM R. M. MAZGAJ Rm3201
PHYSICAL CHEMISTRY DIVISION
ALCOA TECHNICAL CENTER - C

TO MR. M. J. CAPRIO
PITTSBURGH OFFICE - 19

August 24, 1976

RE: GARLOCK GASKET

In reference to your letter of August 20, 1976, I would like to thank you for researching the Garlock gasket problem. I believe your comments as stated will satisfy everyone concerned in the Physical Chemistry Division.

Since Garlock still does contain asbestos fiber, we will still try to find an acceptable substitute. Should we find one, I will notify you so other users can be informed.

R. M. MAZGAJ
Robert M. Mazgaj
RMM:amm

cc: T. D. Tidd - ATC
C. N. Cochran - ATC
R. P. Carter - Pgh. Office (7)
W. W. Hill - ATC

Looked at gaskets and application on 8/31/76 w Bob + Neil (technician). Told them that if they can cut + punch the gaskets slightly damp, the continued use of asbestos would not probably involve the overall of the standard on this basis this would be no asbestos fiber.

RPC 9/2/76

411084 1535

ALCOA

AF-4563 (REV. 11-68)

PITTSBURGH PURCHASING
INDUSTRIAL & PACKAGING
MATERIALS - 19

MR. R. M. MAZGAJ

PHYSICAL CHEMISTRY DIV.
ALCOA TECHNICAL CENTER - C

20AUG76

RE: GARLOCK GASKET

In reference to your letter of 13MAY76, we do not have an acceptable substitute for compressed asbestos sheet for your application. In discussing this matter with various manufacturers including Garlock, there is no concern on their part that compressed asbestos sheet will be a source of airborne asbestos fiber. Compressed asbestos sheet is essentially a rubber or elastomer encapsulated asbestos. It is produced in a manner similar to that used in manufacturing brake linings. To date, OSHA has not issued citations every time we apply the brakes to the thousands of fork lift trucks in our plants.

Substitutes which have been considered but have not performed satisfactorily are fiberglass and ceramic fiber formulations such as Carborundum's Fiberfrax paper, felt and blanket. The substitute materials lack strength and are more permeable than compressed asbestos.

We realize that the above comments will not satisfy everyone concerned, but you can be sure that we are continuing our search for an acceptable substitute.

M. J. CAPRIO

MJC:gih

cc: C. M. Cochran - Alcoa Technical Center
W. W. Hill - Alcoa Technical Center
R. B. Carter - AB 7

ALCOA

411084 1536

FROM R. M. MAZGAJ
PHYSICAL CHEMISTRY DIVISION
ALCOA TECHNICAL CENTER - C

TO MR. M. J. CAPRIO
PITTSBURGH OFFICE - 19

May 13, 1976

RE: GARLOCK GASKET

I have enclosed the data on the Garlock gasket which you requested in our recent conversation.

It is #31038-0471 white compressed asbestos sheet, 40" x 42" x (1/16" & 1/32"), ordered from Industrial Sealing Devices, Vermont Avenue Extension, Rochester, Pa. 15074.

Our primary use is on the coker of Dr. M. B. Dell. Two gaskets are used (top and bottom). The temperature of the bottom gasket is between 500-700°C and the temperature of the top gasket is approximately 400-500°C. The top gasket is replaced approximately three times a year and the bottom about twice a year; however, both gaskets are removed and handled twice a week in setting up the reactor.

Also enclosed is a copy of the gas analysis of the fumes in contact with the gasket. Should you find a replacement for this Garlock gasket, please contact me.

Robert M. Mazgaj
R. M. MAZGAJ

RMM:amm

Enclosures

cc: TID - ATC
R. P. Carter - Pgh. Office (7)
C. N. Cochran - ATC
W. W. Hill - ATC

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ALCOA

ALCOA RESEARCH LABORATORIES
ANALYTICAL CHEMISTRY DIVISION

MATERIAL: Gas
ASSIGNED TO: Guthrie(33)
J.O.: 75-111701
SOURCE: Phys. Chem.
DATE SUBMITTED: 11/17/75
S.O.: 02W03602
REPORT TO: N. Laney
DATE REPORTED:
NO. SPLE: 2

cc: B. Dell, C. N. Cochran

Submitted: 2 Gas Samples
S.No. 428628A1 - 1st segment (1/2 hr.)
428628A2 - 2nd segment (15 min.)
J.O. 7-75-3[illegible]0

Determine: Gas Analysis

MOLE %

CONSTITUANTS	S#428628A1	S#428628A2
Phenol	0.4	—
1-Pentene	0.1	—
2-Pentyne	0.02	—
1-Pentyne	0.03	—
N-Butane	0.7	0.7
Total Butenes	0.5	1.2
1,2-Butadiene	0.05	0.2
CO_2	2.5	2.7
Propane	0.4	1.4
Ar	0.2	0.04
Cyclopropane	0.8	4.4
Propene	[illegible]	0.5
H_2S	0.3	0.3
Ethane	2.2	2.5
Ethyne	0.3	1.4
Ethene	0.3	0.3
O_2	0.2	0.4
CH_4	0.6	9.2
CO	0.3	2.0
N_2	[illegible]	69.2
H_2O	0.02	—
H_2	0.2	2.2

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LAB REF [illegible] #4 ANALYZED BY J.F. Drost 12/10/75 APPROVED BY [illegible] 12/10/75

FORM [illegible]

FILE

IBB
RPC

ROBERT P. CARTER
HEALTH & ENVIRONMENT DEPARTMENT
PITTSBURGH OFFICE, 7AB

MR. C. N. COCHRAN
ALCOA TECHNICAL CENTER
ALCOA CENTER, PA.

13May76

RE: USE OF ASBESTOS GASKETS IN R&D WORK

This letter will serve to confirm the discussion which I had with Mr. Robert Mazgaj of your group concerning the present use of fairly large asbestos gaskets in several R&D projects. He indicated that you are presently cutting and punching from asbestos sheeting gaskets in the 4 - 8 inch diameter range. He indicated, that while these may be replaced only 2 - 4 times per year, the equipment is disassembled about 2 times per week, with the gaskets being handled at each disassembly.

While the operations of cutting, punching and handling these gaskets probably do not give rise to asbestos fiber counts above the present OSHA levels, there undoubtedly can be exposure of the employees doing this work to very low levels of airborne fiber, which would make them subject to the air sampling and medical surveillance requirements of the OSHA asbestos standard. Mr. Mazgaj expressed his judgment that probably non-asbestos alternates which would be functionally suitable could probably be located for this application. Even if such replacements should have somewhat shorter service life than asbestos, it would still be quite desirable to make this change if a suitable material can be located. Mr. Mazgaj is contacting Mr. M. J. Caprio of the Pittsburgh Purchasing Department for his assistance in locating a suitable substitute for the asbestos sheeting. We concur strongly with the desirability of making such a change if a functionally suitable alternate can be established.

ROBERT P. CARTER

RPC:lmn

cc:
Mr. Robert Mazgaj, ATC, Alcoa Center,Pa.
Mr. M. J. Caprio, Pittsburgh 19AB

ALCOA

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MEMO for RPC

CALLER OF Robert Mazzaj

PHONE NO. 124-2585

- [x] PHONED
- [ ] WANTS TO SEE YOU
- [ ] WAS IN TODAY
- [x] PLEASE CALL
- [ ] WILL CALL AGAIN
- [ ] URGENT
- [ ] SEE BELOW
- [ ] RETURNED YOUR CALL

MESSAGE:

Re: Your letter - Asbestos and replacements

Does he need to replace Garlock Gasket used at about 700°C? With what?

SIGNED ll | DATE 5/5 | TIME 1:50

SE-3275

411084 1540

+38124

Robert Braggs 5/5/76

Cutting and punching gaskets from sheet for 10 2X/month
charges. Could possibly use precut rings for some of the

Believes Crafelt may be satisf. May have to change
more frequently but not a major problem.
Recommended eval Crafelt.

Asked me to confirm to Norm Cochran