

FILE NAME: Asbestos Sacks and Bags (ASB)

DATE: 1951 Dec 4

DOC#: ASB097

DOCUMENT DESCRIPTION: Memo to Dr. Hawkins RE Eugene Gray
Asbestos Exposure with Sample Results

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December 4, 1951

TO: Dr. E. R. Hawkins

SUBJECT: Asbestos Exposure
Eugene Gray, #3217
No. 2 Stores Building

An evaluation of this employee's exposure to asbestos dust has been made on three occasions. The three asbestos materials involved are as follows:

#450 insulation cement - 50 lb. paper bags.
#302 rubberoid cement - 100 lb. burlap bags.
"Asbestos floats" - 100 lb. paper bags.

Dust counts were made during the unloading of railroad cars containing each of these materials. On November 1, 1951, 150 bags of #450 were unloaded; on November 27, 600 bags of #302 were unloaded, and on November 29, 600 bags of "Asbestos floats" were unloaded. Shipments arrive about every three months.

Samples of air collected during these periods, and under the weather conditions prevailing, showed concentrations of asbestos and total dust to be less than the maximum allowable concentration for an 8-hour per day exposure. It is probable that peak concentrations may exceed the accepted limit, however, the intermittent nature of the work makes the evaluation of the resulting exposures difficult.

Eugene Gray has been employed in #2 Stores building since May, 1922, except for the period Sept. '31 thru June '33. During this time he has had a certain amount of exposure to the asbestos insulating materials. Before the advent of fork lift trucks, it was customary to unload rail cars using 2-wheel trucks and the bags were restacked in the warehouse. Present day practice is to load the bags on a wooden Pallet in the railroad car and utilize the fork lift to stack them in the warehouse. Due to the reduced handling, lower dust concentrations are present under the new system.

Gray is probably no longer exposed to high concentrations of dust since he is presently acting as gang-pusher and does not enter the car where high concentrations are present on occasions. You may, however, wish to consider the irritant effect of his exposure to low dust concentrations.

Other workers have infrequent exposures to this type of material since labor is made available from the general labor pool. One man, Ed Valentine, #3056 is an exception to this statement as he is more or less regularly assigned to car unloading, along with E. Gray.

Very truly yours,

Fred S. Venable

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SA

11-29-51

ASBESTOS STUDY -

10:30 AM

Fair - No Wind.

Sample = 3

UNKOWN ASBESTOS "Flots" in 100# paper bags.

15 min.

Sample No 1- $4 \times \frac{75}{1000} \times \frac{6}{3} = 180000 \times \frac{6}{3} = 600000 \times \frac{6}{3} = 1200000$

#2

$\frac{14644 \times 1000 \times 10}{10 \times 0.1} = 146440000$

Sample #3

$250 \times 4 \times 1000 \times 7 = 700000$

avg. m. prof.

5.44-

5.84 m. prof. $\times 135 = 787.8$

0005

VENABLE
355

Wednesday - November 27, 1951

Began unloading Rubberoid Cement (302) at 9:30 a.m.
from carload of 600 - 100 lb. burlap bags, 12 bags
to a pallet.

Weather - Cool - rainy - wind from North.

Sample #1 - Inside box car while loading pallet
at box car door.

27 minutes @ 0.1 cfm. ~~3 pallets~~

Sample #2

@ Inside Car while unloading
3 minutes per pallet
10 min sample.

Counts

Sample #II

Slide I

Field 1 11 x 100

2 17

3 21

4 35

5 19

6 29

7 27

Ans - 26

$$\frac{2600 \times 1000 \times 10}{0.1 \times 10} = 26000 \text{ ppct.}$$