

FILE NAME: General Motors (GM)

DATE: 1959 Jan 13

DOC#: GM020

DOCUMENT DESCRIPTION: Letter to GM from Lake Asbestos with Handwritten Letter Attached



LAKE ASBESTOS OF QUEBEC, LTD.

SUBSIDIARY OF AMERICAN SMELTING AND REFINING COMPANY

120 BROADWAY, NEW YORK, N.Y. 10005

E. A. FARRELL
SALES MANAGER

MINE AT BLACK LAKE
QUEBEC, CANADA

January 13, 1969

JAN 16 1969

Mr. J. F. Hale
Inland Manufacturing Division
General Motors Corporation
Dayton, Ohio 45401

Dear Jim:

Working closely with Mr. E. M. Fenner of the Johns-Manville Corp., the Hygiene meeting has been set for:

January 28, 1969, 9:00AM
St. Luke's Hospital
11311 Shaker Blvd.
Cleveland, Ohio 44104
216-797-1000

Dr. G. W. Wright, M.D. of St. Luke's Hospital, and Chairman of the Scientific Committee of the Institute of Occupational and Environmental Health will speak on "Asbestos & Human Health".

The following tentative agenda has been established:

1. J. F. Hale, Inland Mfg., Dayton, Ohio - Introductory remarks.
2. Dr. T. W. Wright, M.D., St. Luke's Hospital, Cleveland, Ohio - Discussion of Asbestos & Human Health.
3. Roundtable discussion by all present.
4. Lunch

The following people will attend the meeting:

Inland Mfg.

1. J. F. Hale, Mgr. Production Purchasing
2. Dr. M. E. Gibson, M.D., Inland Mfg.
3. Dr. G. Rappaport, Ph.D., Section Chief, Chem. Lab.
4. J. Feldman, Superintendent of Mfg.
5. S. T. Wright, Safety Director *slw*
6. L. Kotlarek, Buyer
7. H. Newsum, Personnel Director *Jrw.*

PRODUCED
IM - 23

St. Luke's Hospital

1. Dr. T. W. Wright, M.D.

Johns-Manville, Corp.

1. E. M. Fenner, Dir. Environment Control
2. H. G. Donovan, Sales Mgr., U.S.
3. D. Standel, Counsel
Spaid

Lake Asbestos

1. K. W. Nelson, Dir. Hygiene, Asarco *K...*
2. E. A. Farrell, Sales Mgr. LAQ

Asbestos Corporation, Ltd.

1. P. LeClerc, Sales Mgr., U.S. and Canada

Thetford (Mines) Industrial Clinic

1. Dr. P. Cartier, M.D.

Mr. E. A. Farrell will be at the Somerset Inn Motel Monday night from 7 to 9PM to discuss any final changes in the agenda, etc.

Very truly yours,

E. A. Farrell
E. A. FARRELL

EAF:amc

cc: MEGibson	TWright
GRappaport	EMFenner
JFeldman	HGDonovan
STWright	DStandel
LKotlarek	KWNelson
HNewsum	PLeClerc
	PCartier

PRODUCED
JM - 83

V.1
4/25/

Five Neuron

Geo.

Elan

Jim Hale Ireland.

Purpose: Find out just what asbestos does to Homo sapiens
not here on behalf of GM but as Ireland.

Index in Italy - Bologna Vol/Geneva single cell
mic Gill U, Smittal.

Biological effects.

1. Diameter of asbestos.

INCREASE OF USE OF GYPSUMHYLITE + TREMOLITE
FIBLER = $\frac{3 \times 1}{(L)(W)}$ > is a particle.

Dia clay 250-300 Å units

can't see 1/2 micron dia fibril, with existing microscopes.
electron ^{micro} will do so.

diameter dictates rate of fall out (not length) or tendency
to remain airborne.

1 micron ^{size particle} suspended indefinitely

particles > 5 microns not found in human lungs.

smaller size do penetrate lung 5 microns or below.

lengths usually 10 microns or longer. longer eliminated
by lungs or not allowed

PRODUCED
JM - 83

Mucociliary escalator.

1-23 69

Macrophages in alveolar ducts or ducts

alveolar ducts, macrophages could not know: prob. does this -

Some fibers develop a protein layer on surface
a ferrogeneous body. (protein is iron complex)

Macrophage can move to mucociliary escalator

Such bodies can be made with fiber glass, aluminum
fibers, CaPO_3

Work on organic fibers & whether they can produce them.

Most careful workers (MD's) have
abandoned term "Asbestos bodies"
Now called ferrogeneous bodies.

Identification of fibers check by micro probe

Some fibers seem to have no attraction
to macrophages. Asbestos just lay there.

Chrysotile either become so small can't be seen

Possibilities → ② is dissolved

③ or

carried out by some ^{MECHANISM} ~~mechanism~~

Large amount get development of fibrous,
(a scar like material) No one has worked
on this, ~~great~~ quantity related to critical mass,
no one doing it on lung itself.

PRODUCED
JM - 81

no one checked the difference
in deposition on lower vs higher
lung.

Surfactant secreted to keep
lung from ~~the~~ collapse. Counter

Surface tension of liquid on
surface of lung

Scars makes lungs less compliant
too much scar do not have muscular
ability to stretch.

When scar formed blood vessels destroyed
Lacy multilobed structure - million of blood vessels
Inflammatory process induced by foreign
bodies destroys ^{cells} locally in area where
infection goes on. hence smaller
vascular surfaces. Leads to perm. problem

* (analog of electrical circuitry in body operation)

Human body low press circuit

Blood press 100 mm Hg. 6 ft/sec must pump

same amt thru lung at 15 mm Hg (low press
system)

PRODUCED
JM - 83

4.
lung is shorter circuit
it side of heart does pumping (helps) ^{does not develop good pressure}
left side is special

Heart build up pressure in pump
& pulmonary arteries pump up.
So pulmonary artery hi pressure results in
pulmonary disease
hi pressure developed in left side

on average Cardiac output 18-20 gts vs
6 gts -

eventually resistance to blood flow so
had have hi pressure even at rest
results in dropsy & congestive heart failure
is a disease of later life now not in the
past.

Murray report 1902 10 Card operation in Eng. all dead ^{before 35}
1913 13 in US textile plant.

Scarring due long term irritant called asbestosis
history of exposure but we are known
<sup>Determined by
in single specimen</sup> Exposure

1. X ray pattern - abnormal & consistent & subcutaneous
2. Basal rales (sounds in back - usually British)

PRODUCED

JM - 83

misconception and misinterpretation of (Deborah's)

1) cited explicitly - early diagnosis for problem

Because alteration of known of being

as problem

Deborah showed method with as many

effective by means of King & Ship's explanation

They found men working over 20 years were susceptible

By means of method student markedly the inside

Early 1900's: Affected combinatorial association of activities

Greenwood and of reduced association to 1000000

Also not independent: basically a presumed limit

also found among this 1000000 in 1000000 cases of patients

An impregnation method for charring rock fossils.
New of fossil impregnation accepted.

Differents:

Colored plural places. Coming on under
surface of chest cases.

Inclusions area - kind same surface
as plural. Called "meath. ha."

Indurac -
Plural
Indurac.

Thickness of clippature. comes from take small
pieces indicates exposure with either take
or cut. under

PRODUCED

JM - 83

not an adequate
men. with transient exposure - do not
have them. But only with light exposure
on X-ray are old looking dense areas
"placental plac" peculiarly sometimes
have no biological
Does this play any role in development
of mesothelioma - no real correlations far

1935 - good & some 2 cases of lung cancer - (established but
lung cancer
(22 & 23 years old only 25)

in 1948 - some of the of asbestos - (asbestos) got 1940
lung cancer - (asbestos) in 1940 - (asbestos) in 1940
(asbestos) of (asbestos) in 1940

Brown & Co. of Canada. Some asbestos & this
is full scale study done by many small asbestos workers
made in 1958 - showed no numerical frequency
among asbestos workers (data questionable - no good
exposure history) Best could be done with info at hand
now called a "white wash" of conducting game - a false
sense of security (at least with dipnet)

Little more documented 1962 - (asbestos) in 1962
reported to be homogeneous across 13% of cases of asbestosis
frequency of lung cancer in terms of asbestos workers
10% that most exposure asbestos - (asbestos) in 1962
of (asbestos) in 1962

PRODUCED
JM - 83

Robinson says we are in a position to make a

* (initials) (initials) (initials) (initials)

to show a clear relationship

to show a clear relationship to the

(initials) (initials) (initials) (initials)

which is a very clear relationship

between the two (initials) (initials)

4.5 (initials) (initials) (initials)

after (initials) (initials)

Could have been seen before

and data, admits to most of them

~~What is it?~~ (initials) (initials)

No. (initials) (initials) (initials)

Other (initials) (initials)

As (initials) (initials)

In 1960, in 50 (initials) (initials)

more (initials) (initials) (initials)

found in (initials) (initials) (initials)

from (initials) (initials) (initials)

like (initials) (initials) (initials)

different (initials) (initials) (initials)

In several cases (initials) (initials)

My (initials) (initials) (initials)

PRODUCED JM - 83

Lapse time more between two areas.
 Density of exposure says maybe ND type
 sl. higher. More ferruginous bodies in specimen
 of 10 v. comp. people than in the normal.

Amosite story

- Del. diff. studied no. people under sl. 1,
- found for small bit more of amosite in the area
 areas to 1 chrysotile (contains in Blue)
- no cases of mesothelioma in person with (in the 3 but questionable)

120 small chrysotile exposure

Chrysotile, Plate will come brown like an
 but no evidence that it will
 come mesothelioma.

Public exposure

ferruginous body - much of public exposure
 to 2.25 mg/m³ as, a study of workers and
 a density of exposure as a function

Prints

2 or under filter 4 cm³ / m filter,

11/10/82
 18 mins
 PRODUCED
 JM - 83