PLAINTIFF'S EXHIBIT

CAP-283

May 1, 1959

Ref: 595

Mr. R. D. Bradford
NEW YORK OFFICE

RECENT PUBLICATIONS ON ASBESTOS

103. Bowles, Oliver
Asbestos, a materials survey.
U.S. Bureau of Mines Information Circular 7880(1959) 94p.

104. Carroll-Porczynski, C. Z.
New asbestos-based materials for aircraft and missiles.
Eng. Materials & Design (Dec. 1958), 4p.

105. Asbestos 40, #9 (March 1959)
Contents:
Needled felts for the manufacture of asbestos-cement products--No. 2
A new process for the separation of asbestos fibre from crushed rock
Asbestos--a symposium of articles
ASTM to organize new division on materials sciences
Canadian specifications
Building
Market conditions
Production statistics
Imports and exports
News of the industry
Asbestos stock quotations
Automobile sales
Current range of price

106. Ind. Hyg. Dig. 23, #3, 19 (Mar. 1959)
Gross, P. & Smith, K. W.
Topographic distribution of mineral dusts in some pneumoconiotic lungs
Diseases of Chest 35, 140-154 (Feb. 1959)
"By means of a photographic method it has been possible to study the topographic distribution of otherwise occult mineral dust deposits in the lungs. The more important features of mineral dust distribution in several types of silicosis as well as asbestosis are described and illustrated...."

107. Monthly Index of Russian Accessions 11, 3647 (Mar. 1959)
Kozlovskii, A. S.
Constructing asbestos cement roofs without using roofing steel
Biull. Stroitel. Tekh. (Bull. Construction Eng.) 12, #4, 15-18 (Apr. 1955)

108. Monthly Index of Russian Accessions 11, 3650 (Mar. 1959)
Kruglov, S.
Designs of asbestos cement wall panels
Stroitel. Materialy (Bldg. Materials) 4, #11, 9-14 (Nov. 1958)

109. Monthly Index of Russian Accessions 11, 3650 (Mar. 1959)
Kitaev. E.
Adsorption of calcium hydroxide by asbestos and its significance for the technology of asbestos cement production
Stroitel. Materialy (Bldg. Materials) 4, #12, 31-33 (Dec. 1958)

110. Monthly Index of Russian Accessions 11, 3668 (Mar. 1959)
Syrovatkin, V. G.
Asbestos cement casing pipes
Raznedka i Okhrana Nedr (Prospecting & Conservation of Nat. Resources) 24, #6, 36-40 (June 1958)

111. A.M.A. Arch. Ind. Health 19, 437 (April 1959)
Pendergrass, E. P.
Silicosis and a few of the other pneumoconioses: Observations on certain aspects of the problem, with emphasis on the role of the radiologist; Caldwell Lecture 1957.
Am. J. Roentgenol. 80, 1-41 (July 1958)
"....discusses silicosis, pneumoconiosis of coal workers, asbestosis, rheumatoid pneumoconiosis, and the occurrence of carcinoma, tuberculosis, and infections....

112. Nicodemus, P. O.
Significance of iron in asbestos materials used for electrical insulating purposes
ASTM Bull. #237, 62-66 (Apr. 1959)
The magnetic rating of ASTM D 315-52 is adequate as a test for iron that would interfere with using the asbestos for electrical insulation. Methods measuring total iron content are not.

113. Asbestos 40, #10 (April 1959)
Contents:
The outlook for amosite asbestos
Building
Market conditions
Production statistics
Imports and exports
News of the industry
Asbestos stock quotations
Automobile sales
Current range of price

114. Chem. Abst. 53, 6571b (Apr. 10, 1959)
Budnikov, P. P.
Reciprocal reaction between lime, products of hydration of portland cement and mineral fiber
Cement-Wapno-Gips 14(23), 228-30(1958)
"B. shows that certain mineral wools having a diam. over 6 μ can be used for reinforcing of concrete. This has been proven already in U.S.S.R. where they are commercially using mixts. of asbestos, mineral wool, and cement. The compn. of the mineral wool which can be used for the above purpose is $SiO_2$ 39.5-44.8, $Al_2O_3$ 10.4-13.9, $Fe_2O_3$ 0.6-13.1, MnO 0.3-8.6, CaO 27.5-39.0, and MgO 1.7-12.6%. Such fibers when surrounded by the products of hydrolysis and hydration of the portland cement are not destroyed. B. synthesized mineral fibers which contained $SiO_2$ 6.7, $Al_2O_3$ 50.6, and CaO 43.1%; the latter fibers were destroyed by the products of hydrolysis and hydration of portland cement."
(complete abstract)

115. Chem. Abst. 53, 6573e-6574e (Apr. 10, 1959)
Farran, J.
Mineralogical investigation of the adherence between cement paste and aggregate materials in concrete
Silicates inds. 22, 447-452; 23, 528-534, 595-598 (1958)

116. Eng. Mining J. 160, #4, 170 (April 1959)
"Initial results of check drilling on the asbestos property of advocate Mines near Baie Verte have substantiated former estimates and have suggested improvement in grade. Final results in volume and grade will not be available until completion of the present program which will carry through the coming summer. A pilot plant is being erected for assessment work with bulk samples obtained from two shallow shafts. The main deposits are: the north orebody, 11,421,200 tons grading $10.50 per ton; the west body, 8,518,100 tons averaging $9.67 per ton; and the south zone, 5,501,300 tons grading $9.10 per ton. Canadian Johns-Manville is managing present operations with other participants including Patino of Canada, Amet Corp. and Financiere Belge de L'Asbeste-Ciment, S.A."
(this item is copied here in its entirety)

117. Eng. Mining J. 160, #4, 180 (April 1959)
"The geological survey of Canada has released its report of findings of asbestos and molybdenum in northern B.C. and as a result a staking race is under way. Among those staking claims are Cassiar Asbestos, Phelps Dodge Corp. of Canada, Kennecott Copper Corp. (through its subsidiary, Northwestern Explorations), Dome Mines, Moneta Porcupine Mines and Buffalo Ankerite Gold Mines. It is understood that at least seven other major exploration groups are also in the field. The asbestos showings are in the Dease Lake area, east of Telegraph Creek and about 50 miles east of theAlaskan Panhandle. The molybdenite showings are about 40 miles south and west of Dease Lake. The Geological Survey report is released in Ottawa, and British Columbia firms, who did not receive it until nearly a week later are complaining that they were "left at the post" in the staking race."
(this item is copied here in its entirety)

118. Eng. Mining J. 160, #4, 188 (April 1958)
"Australian exports of crocidolite asbestos are expected to rise to 20,000 tons a year within the next 12 to 18 months. Plans are now being studied to increase the capital investment in the western Australian plant to achieve an exportable surplus of 40,000 tons a year but a decision is unlikely in the near future."
(this item is copied here in its entirety)

119. anon
Canadian asbestos in 1958 (in German)
Gummi u. Asbest 12, 202 (Apr. 1959)
Condensed from Rubber J. & Int. Plastics for January 1959.

120. anon
1959 Leipzig Spring Fair (in German)
Gummi u. Asbest 12, 230 (Apr. 1959)
Brief description of asbestos exhibits.

121. Göksel, A.
Preparation of fibrous sheets by means of a centrifugal filter process and its use with asbestos-cement (in German)
Gummi u. Asbest 12, 238, 242, 244, 246(Apr. 1959)

122. Chottiner, J.
Dimensional stability of plastics at high temperatures
Machine Design 31, #8, 170-174 (Apr. 16, 1959)

123. Materials in Design Eng. 49, #4, 184 (Apr. 1959)
"An organic fiber-reinforced thermosetting plastic, composition of which has not been revealed, shows promise as an insulating material in missiles subject to temperature of 4000 F and up. The developer says temperature range of the material extends well above that in which phenolic-asbestos and phenolic-glass insulations are currently operating. The insulating material, called Orbiton, was developed by Haveg Industries, Inc., Missile Div., 900 Greenbank Rd., Wilmington 8, Del. It is expected to find use as an insulation in such missile parts as exit cones, blast tubes, tail pipes, guide vanes, motors, jet vanes and launching pads. The

ASARCO ALV 0001856

company says Orbiton is fabricated by laminating, compression molding and filament winding."
(this item is copied here in its entirety)

124. Waspe, L. A.
South African mining in 1958
Mining Mag. 100, 201-209 (Apr. 1959)
Two paragraphs on asbestos.

125. Mod. Plastics 36, #8, 39 (Apr. 1959)
"Specialty phenolics are claimed to be the best money makers for both producers and molders according to one school in the industry. In following this theory, Rogers Corp., Rogers, Conn., has introduced a new line of asbestos-reinforced phenolics that will withstand 250 hr. exposure to 500°F. These compounds are claimed to be lower in cost than such accepted Class H materials as silicone- and melamine-glass laminates, yet to offer the stability of asbestos-reinforced materials under conditions of higher temperature. They are not suggested as universal replacement for Class H but are adequate in many applications. The material is available in sheet laminates, bulk molding compounds, and sheet molding compounds."
(this item is copied here in its entirety)

126. Gruntfest, I. J., Shenker, L. H., & Saffire, V. N.
Behavior of reinforced plastics at very high temperatures. Part 2.
Mod. Plastics 36, #8, 137-138, 140, 142, 144, 146, 148, 204 (Apr. 1959)
Work with phenolics at temperatures up to 23,400°F indicates that organic fillers are preferable to inorganic above 6000°F. Nylon, Fiberglas, and Refrasil were the reinforcements studied. 17 references.

127. anon
Gaskets for reactor-plant service
Nucleonics 17, #4, 128, 130 (Apr. 1959)
Based on p.30-38 of "Reactor and plant engineering," WAPD-BT-9 (1958)

128. Gardner, A.R.
For built-in conveyors - nonmetals widen the choice
Prod. Eng. 30, #17, 51-53 (Apr. 27, 1959)
Discussion of conveyor belt materials.

H. McBride

lk

ASARCO ALV 0001858