



Dr G. V. Wright MD
John-Manville Corporation
Greenwood Plaza
Denver
Colorado 80217

Tuesday
3rd July
1973

Dear Dr Wright,

Selikoff and the BORG Standard

You will have received a copy of the proposed letter to Dr Selikoff which Steve Holmes and I have drafted, but nevertheless Draft 4 is herewith enclosed. I am also enclosing herewith photocopies of the tables I sent to Dr Selikoff which were used in compiling figures 2 and 3 in my paper.

Mr Solon has given me a copy of your memo dated 22nd June 1973 and I hope that the draft letter has adequately dealt with most of your queries. I will, however, briefly reply to each question in turn in case there are points which remain unclear to you.

Page 2. Table 2.

- 1) The criteria for a diagnosis of asbestosis have, to the best of my knowledge, changed since 1930. In 1930 radiological appearances, symptoms and signs were used and tuberculosis often confused the issue. (Cook's case in 1924 was an example of this). By 1957 radiological technique had probably improved but the criteria for diagnosis had not greatly altered. It was in the early 1960s that the Pneumoconiosis Medical Panels began to insist upon a recorded D in addition to other criteria (McVittie, 1964). As you know, the UICC/Cincinnati classification has further added diagnostic value to X-rays.
- 2) The case diagnosed in 1957 would have been based predominantly on basal rates and exposure history and that in 1963 on rates, D by DCO and exposure history.
- 3) The answer to this question is that both these cases would have been exposed for much of their employment to dust concentrations above 2 fibres/cc.

Page 2. Selikoff's Graph

- 1) This is answered in (8) on page 3 of the attached letter.
- 2) Fibrosis was not counted more than once in any one person as was done for pleural thickening.

Page 3. Selikoff's Graph

- 3) This is difficult to answer directly but because I attempted to use the UICC/Cincinnati classification and John Knox did not, there must have been basic differences in interpretation. John Knox did not record X-ray changes as being significant unless they were compatible with the entire clinical picture. This is explained in item (6) of the draft letter.

Cont'd

- 4) Abnormal X-rays, as explained to Dr Solikoff, meant all radiological abnormalities of note such as cardiac enlargement, pleural thickening as a result of past illnesses, healed lung TB, etc, etc.
- 5) I do have X-rays, of a non-exposed population and am currently X-raying volunteers from offices to supplement this. The task of matching asbestos workers with this group can be done but no attempt has yet been made to compare X-rays in the two groups. The 0-9 years group obviously includes some individuals in the exposed category X-rayed as new starters. In the group above X-rays increase with age.
- 6) I have X-ray data for men and women.

Page 3. (1) and (2)

these questions are answered in the draft letter.

I hope these points are now clear to you.

With best wishes.

Yours sincerely,

HILTON LEMINSOHN

*Asbestosis in Great Britain, J C McVittie,
p.128, Annals of the New York Academy of Sciences,
Vol.132. Art.1. Biological Effects of Asbestos, 1965

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- 2) The case diagnosed in 1957 would have been based predominantly on basal rates and exposure history and that in 1968 on rates, X-rays DCO and exposure history.
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- 5) I do have X-rays, of a non-exposed population and am currently X-raying volunteers from offices to supplement this. The task of matching asbestos workers with this group can be done but no attempt has yet been made to compare X-rays in the two populations. The 0-2 year group obviously includes some individuals in the non-exposed category X-rayed as new starters. In the group abnormal X-rays increase with age.
- 6) I have X-ray data for men and women.

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HCL/PS
cc: FJS/NS
DWI
WPH
SH

To: Senior Staff

From: Paul Kotin, M.D.

Copies: File

Re: PROPOSED CHANGE TO ASBESTOS STANDARD

W. VANDERBECK
2/2
G.F.

AFD

Today (October 9, 1975) the Occupational Safety and Health Administration (OSHA) will publish in the Federal Register proposed changes to the job health standards on asbestos. These proposed revisions will include:

- reduction of permissible exposures to an 8-hour time-weighted average of 0.5 f/cc;
- reduction of ceiling limit (determined during any 15-minute sampling period) to 5 f/cc;
- establishment of additional requirements for regulated areas, employee rosters, hygiene facilities, worker training and information programs, signs and labels, and monitoring and medical surveillance programs;
- extension of the period for retaining monitoring and medical records to 40 years, or for the duration of the employee's employment plus 20 years, whichever is longer (current retention period is three years for monitoring and 20 years for medical records);
- exclusion of construction activities from the revised standard, continuing coverage of that industry under the existing standard.

By far the most important change is the proposed reduction of the permissible 8-hour time-weighted average exposure to asbestos to 0.5 f/cc from the 2 f/cc standard which was to take effect July 1, 1976.

We are concerned by the proposal for several reasons. First, by the haste with which the standard was proposed and the apparent lack of consultation with either industry or labor, or even other appropriate offices within OSHA. Comprehensive inquiries have failed to identify the source of the pressure on OSHA to reduce the standard from 2 f/cc, as planned for July 1, 1976, to 0.5 f/cc.

Second, customary procedures have not been followed in the development and publication of this proposal. For example, preparation of an economic impact statement usually precedes publication of a proposed standard; however, this procedure has been reversed in this situation.

Third, while the proposed revision includes a bibliography of approximately 50 references, none of these references contains data that were not known at the time the 2 f/cc standard was established. At the recent International Congress on Occupational Health at Brighton, England, however, Sir Richard Doll reported on the mortality experience for lung cancer in employees of Turner Brothers through 1974, and he indicated a lung cancer rate three times over that expected in asbestos workers. At the same meeting, Dr. Muriel Newhouse, in collaboration with her statistician Dr. Geoffrey Berry, reported on the development of a prospective mathematical model from which they concluded that the attack rate for mesothelioma in the work population of Cape Asbestos, United Kingdom, would be approximately 11 percent. This figure is significantly higher than the 7 percent rate projected by Dr. Irving Selikoff for his highly exposed asbestos insulation workers, and the more generally accepted rate of 4 percent in asbestos occupational groups as a whole.

These findings, though, do not provide support for the proposed reduction of the standard. The assumption made by Doll that the Turner population was exposed only to 2 f/cc is not supportable by fact. The Newhouse data uses a mathematical model that has serious limitations in the opinion of other recognized statisticians.

Johns-Manville adheres to the position that 2 f/cc, the standard promulgated for implementation July 1, 1976, is a level of exposure at which there is no hazard as measured by impact on morbidity and mortality patterns. In addition, the justification for, as well as the feasibility of, many other aspects of the proposed change are open to serious question.

In accordance with regulations, Johns-Manville will respond to the proposal in the Federal Register within 60 days, following which a public hearing will certainly be held, although it may be postponed until spring since an inflationary impact statement must be published at least 30 days prior to any scheduled hearing. While we are preparing our response, it is the recommendation of Health, Safety and Environment that J-M's position regarding the proposal be that the review and analysis of all scientific data available do not support the proposed reduction of the permissible exposure to asbestos from 2 f/cc to 0.5 f/cc.