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March 10, 1975

To: Asbestos Study Committee

Subject: Various Papers Concerning Asbestos

Mr. I. H. Weaver, Chairman, forwarded three papers concerning the asbestos problem which he suggested I send on to the Committee.

Internal Raybestos Report by I. H. Weaver 3/4/75

This concerned a meeting at Rutgers University for the Occupational Health Conference. The safety of the 2 fiber/cc limit (June 1976) was questioned. Also concern was expressed for fibers less than 5 microns in length.

Industrial Hygiene Progress Reports

Dr. Selikoff is Program Director for these Reports. In it is a fairly strong push for reducing the standard to 1 fiber per cc or less.

Mesothelomata in Rats - - - -

This is a British paper that indicated mesothellomata was observed in a considerable proportion of animals with all the samples of asbestos. Mr. Weaver indicated that this was bad news for those hoping that chrysotile would be proven not to be associated with mesothelloma.

The foregoing is for your information.

EWD/erc
Enclosure:

E. W. Drislane
Executive Director

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Wenheim, Pa.

Mr. J. E. Marsh — Trumbull March 4, 1975

Occupational Health Conference, Rutgers University

On Tuesday, February 25th, I attended an Occupational Health Conference at Rutgers University in Brunswick, New Jersey, sponsored by the Department of Environmental Science of Cook College at Rutgers, and the American Lung Association of New Jersey. The morning program was devoted to a panel discussion and question and answer period on current health regulations, enforcement problems, and review of current research findings and their potential application to future policies and standards.

Much of the morning discussion concerned relative merits of State versus Federal program control. The recent decision to turn over responsibility for the occupational health in New Jersey to the federal government was severely criticized. James Challis, New Jersey's Department of Labor Deputy Director, outlined features of the General Factory Act of 1883 that still are being violated in New Jersey and expressed disdain of purported need for additional legislation in the occupational health field. He feels there is plenty of legislation that has not been enforced effectively and cited lack of communication as the major problem in improving occupational health conditions.

New Jersey has operated a program that is far from adequate in the opinion of many, but better than is likely under federal control. A major problem is that labor sees the OSHAct as a worker's bill of rights and wants to wipe out state plans under the impression their interests will be better served by federal programs. In most cases they are badly misguided, as it appears very unlikely that the federal government will be in a position to improve on the better administered state programs that have been in effect for some time, many of which are being upgraded.

Mary Louise Brown, Regional Consultant to OSHA Region II, estimated the Department of Labor would require as many employees as are now employed by the entire federal government to enable OSHA to accomplish what congress intended when it passed the OSHAct. Since less than one-tenth of a percent of the federal budget now is applied to occupational safety and health, it is discouragingly evident that we are an extremely long way from achieving what congress mandated.

The afternoon sessions consisted of six workshops covering various hazards. I attended those concerning lead and asbestos. Dr. William Wilmeth, former Chief Medical Examiner for Middlesex County, New Jersey, presented an impassioned dissertation on the hazards of lead exposure. He characterized lead as an insidious, slow poisoner that is capable of making people sicker than anything else he knows. He emphasized the following points:

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1. No one with any chronic ailment should ever be placed in lead exposure. A very thorough pre-employment physical should be given to discern chronic ailments in candidates for work in lead exposure areas.

2. Most lead sickness occurs in young and in old employees. Propensity of the young to contract lead sickness may be attributable to carelessness.

3. Once a person contracts lead poisoning — don't permit re-exposure!

4. Too much emphasis is placed on blood lead analysis. Monthly tests for blood lead, urine lead, hemoglobin count, porphorine and stippling should be required for all workers exposed to lead.

5. Lead poisoning is best treated in the hospital by intravenous therapy.

Professor Herbert Bibalos of Rutgers spoke briefly on various non-industrial sources of lead exposure and recent research on effects of lead on health. He said the principle source of lead in human environment is from naturally occurring lead in food sources. Recent work indicates smoking aggravates the effects of exposure to lead.

Dr. Arthur Langer of Mt. Sinai reviewed their studies of New Jersey asbestos insulation workers and cited their dismal health picture. He mentioned additional studies conducted in rural areas to eliminate possible etiological effects of exposure to air pollution in the New Jersey industrial megalopolis and said that conclusions from these again related excessive cancer with asbestos exposure. Tyler, Texas also was reviewed, and the Newhouse and Thompson neighborhood exposure study also was mentioned. Mt. Sinai has studied effects of neighborhood and secondary (conjugal) exposure in the Patterson, New Jersey area. In the first 130 people checked, 50% have chest abnormalities.

Langer stated pleural plaques are occurring abroad more in non-asbestos workers in certain industries, notably ship building and construction, than they do in asbestos workers. This is attributed to the fact that the non-asbestos workers do their jobs without respiratory protection but near enough to the asbestos work to breathe contaminated air. The asbestos workers wear respirators.

The safety of the OSHA 2c fiber per cc limit was questioned. Langer and his associates are particularly concerned about exposure to fibers in the sub 5 micron range. He mentioned fibers of specific origin such as the Coalinga area in California, which characteristically contain few fibers greater than 5 microns in length. Under the present standards, it would be possible to have workers exposed to very high concentrations of this type of dust on a mass basis without exceeding the 5 fibers per cc greater than 5 microns in length parameter. A better index of exposure or hazard is badly needed for this type of material, as it is well known to cause problems. The German Instrument mass basis was mentioned as a possible alternate monitoring method, but it is recognized many difficulties would exist and that some operators who are now okay at the 2 or 5 fpcc standard would become in violation on a mass basis.

Mt. Sinai is extremely wary of smaller fibers and considers them very suspect in respect to mesothelioma and lung CA. They question the effectiveness of existing respirators for protection against mesothelioma and lung CA and are not at all willing

to dismiss them as being biologically insignificant. They have found sub light microscopic fibers by electron microscopy in the tissue of virtually all major body organs of asbestos workers. Additional tests are being made to determine quantity and size distribution of fibers in tissue of the general public.

While they consider the burgeoning use of asbestos worrisome, Mt. Sinai recognizes the need for it and recommend it be used wherever needed provided it can be sealed in so it doesn't become airborne. Langer cited good relationships with J-M contrary to popular opinion and expressed high regard for Dr. Rotin. He quoted Rotin as saying J-M would "ban" asbestos if they can't control it.

Langer spoke to the immunity of some individuals to asbestos disease, but said others also seem to be hypersusceptible. No one knows what level is "safe" if any! The Selikoff/Lewinsohn controversy was mentioned. Langer referred to Mt. Sinai's "guys" in Great Britain and said they believe incidence of asbestos disease to exposure is 70% versus 25 previously reported. He mentioned the "tremendous furor" that was raised in Kyoto during the recent international conference and predicts there will be a similar furor here when OSHA reopens hearings on the asbestos standard. He very much questions whether the 2 fpcc TLV will stand in light of the severe criticism to which it will be subjected.

Dr. Rohl of Mt. Sinai briefly discussed results of their studies in brake repair shops in New Jersey and the New York area. He had intended to show slides and present a longer talk, presumably similar to the one he gave at the ACGIH conference in Miami, but the slide machine broke down and Dr. Langer preempted most of the time that was available. Rohl mentioned many light microscope counts of membrane filter samples yielding 3 to 5 fibers per cc up to 20 ft. from the service area when brake drums were blown off with air hoses. However, he was much more concerned about the relatively large number of sub 3 micron and sub light microscopic fibers found up to 75 ft. away from this operation 15 minutes and longer after the blowing was performed.

I. E. Weaver

grb