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BC Notes: Center for Science in the Public Interest (Oct. 4, 1972) calls on government to revoke Generally Recognized As Safe status of talc, largely because of asbestos. pp 179-180

Barry Castleman Comments - Center for Science in the Public Interest (Oct. 4, 1972) calls on government to revoke Generally Recognized As Safe status of talc, largely because of asbestos. pp 179-180

TOXIC SUBSTANCES CONTROL ACT OF 1973

HEARINGS

BEFORE THE

ENVIRONMENT SUBCOMMITTEE

OF THE

COMMITTEE ON COMMERCE

UNITED STATES SENATE

NINETY-THIRD CONGRESS

FIRST SESSION

ON

S. 426 and Amendments 1, 8, and 9

TO REGULATE INTERSTATE COMMERCE BY REQUIRING PRE-MARKET TESTING OF NEW CHEMICAL SUBSTANCES AND TO PROVIDE FOR SCREENING OF THE RESULTS OF SUCH TESTING PRIOR TO COMMERCIAL PRODUCTION, TO REQUIRE TESTING OF CERTAIN EXISTING CHEMICAL SUBSTANCES, TO AUTHORIZE THE REGULATION OF THE USE AND DISTRIBUTION OF CHEMICAL SUBSTANCES, AND FOR OTHER PURPOSES

S. 888

TO BE KNOWN AS THE TOXIC SUBSTANCES CONTROL ACT OF 1973

FEBRUARY 23, 26, AND MARCH 21, 1973

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U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1973

Mr. RALPH NADER,
Dr. ALBERT FRITSCH,
Washington, D.C.

JUNE 1, 1971

GENTLEMEN: This is in reply to your March 29 letter calling attention to the practice of using ceiling spaces in new buildings as return air plenums and the consequent potential hazard of introducing asbestos fire-protection fibers into the air.

This Agency is concerned about airborne asbestos fibers. On March 31 of this year we included asbestos in the initial list of hazardous air pollutants under section 112 of the Clean Air Act, as amended, Federal regulations controlling emissions into the ambient air of any hazardous pollutant so listed must be promulgated by March 31, 1972. During the past year we have carried out a field sampling program for asbestos in some fifty urban and nonurban sites. These samples are being analyzed at a rate of about 20 to 30 samples per month.

I note that your letter questions whether the Environmental Protection Agency has authority to require modifications in building design in order to control potential contamination of indoor air. Nevertheless, exploratory measurements have already been made inside buildings in Columbus, Ohio, in New York City, and in Berkeley, San Diego and Santa Clara, California. Our present plans are to initiate a pilot study to measure asbestos concentrations inside and outside public buildings as soon as a competent contractor can be found.

Let me again say that we welcome the continued efforts of the Center for Study of Responsive Law to help us identify problems of the environment and develop effective programs to deal with such problems.

Sincerely yours,

WILLIAM D. RUCKELSHAUS,
Administrator.

APPENDIX 1c

CENTER FOR SCIENCE IN THE PUBLIC INTEREST,
Washington, D.C., December 15, 1971

Mr. WILLIAM RUCKELSHAUS,
Administrator, Environmental Protection Agency,
Washington, D.C.

DEAR MR. RUCKELSHAUS: I sent a letter to you on March 24, 1971 to call your attention to asbestos hazards arising from ciculation of air in buildings through areas with exposed asbestos on interior surfaces. It was requested that you embark upon a program to determine to what extent these plenums are contaminated by asbestos. In your reply of June 1, 1971 you mentioned having plans to initiate a pilot study to measure asbestos concentrations inside and outside public buildings. After an 18 month lapse we are seriously concerned about your findings.

It is evident from your letter that your agency has the authority to require modifications in building design in order to control potential contamination of indoor air. I would like to know what corrective actions have been initiated as the result of the above study.

One final request. May I have permission to use our correspondence in an appendix to a report on asbestos which is to be published in January, 1972. A prompt reply would be deeply appreciated.

Thank you for considering these requests.

Sincerely yours,

ALBERT J. FRITSCH, Ph.D.

APPENDIX 1D

ENVIRONMENTAL PROTECTION AGENCY,
OFFICE OF AIR QUALITY PLANNING AND STANDARDS,
Research Triangle Park, N.C., January 17, 1972.

DR. ALBERT J. FRITSCH,
Center for Science in the Public Interest,
Washington, D.C.

DEAR DR. FRITSCH: This is to confirm our telephone conversation today on the problem of asbestos concentrations in indoor air of selected commercial buildings. It will also respond to your letter of December 15 to Mr. Ruckelshaus. In our discussion, I believe I covered fully the points raised in your letter. In summary:

1. Our emission standards for hazardous pollutants, soon to be promulgated, will contain a ban on spraying of materials containing over 1% asbestos during construction of buildings. This should eliminate future situations.

2. The existence or magnitude of the problem of asbestos in indoor air is unknown; the measurements just don't exist. Contrary to our earlier indications to you, EPA's sampling program has been limited to outdoor air.

3. Erosion from asbestos-lined plenum chambers in buildings is a potential problem. With the successful promulgation of the regulations to reduce emissions of asbestos into the outdoor air, it seems appropriate at this time to shift some of our resources into programs to define the magnitude of indoor exposures. This is also in keeping with a recent formalization of concern in my group for indoor pollutants. We will initiate a modest sampling program to develop a data base on asbestos in indoor air and attempt to relate it to past construction practices.

4. The question of the need for and advisability of control, regulations, and legal authority are all ambiguous at this time. However, such considerations are premature until we determine whether we have a problem and we will postpone further discussion on them until a later date.

We will begin to develop a monitoring study and keep you informed of progress and schedules. Mr. Robert Neligan, Director, Monitoring and Data Analysis Division, Office of Air Quality Planning and Standards, will be responsible for the program. I have presumed on your knowledge and interest and assured Bob that you would be willing to make recommendations to him and our contractor on selection of sampling sites and be available for additional discussions on the problem.

I enjoyed talking with you and hope we can continue the exchange.

Sincerely yours,

B. J. STEIGERWALD,
Director, Air Quality Planning and Standards.

APPENDIX 2

CENTER FOR SCIENCE IN THE PUBLIC INTEREST,
Washington, D.C., October 4, 1972.

HEARING CLERK,
Department of Health, Education, and Welfare,
Rockville, Md.

DEAR SIR OR MADAM: We are writing to comment on the proposed new regulations (*Federal Register*, August 12, 1972) relating to prior-sanctioned food ingredients and a change in the prior sanction for talc.

It has long been known that many tales contain substantial fractions of tremolite asbestos. Schultz and Williams[1] analyzed 51 different samples of commercial talc and found tremolite asbestos present in greater than trace amounts of 17. Kleinfeld *et al*[2] performed a mortality study on talc miners in New York and found a substantial excess of lung cancer. The talc these workers handled contained 25 to 35% tremolite.[3]

Among asbestos workers, even more severe hazards were exposed in Selikoff's investigations[4] of mortality of insulation workers. Among these men, who handled chrysotile and amosite containing materials, 40% of the observed deaths were attributable to occupational asbestos exposure. Gastrointestinal cancer was the cause of death in 37 cases (versus 11.2 expected based on U.S. Mortality data), and malignant mesothelioma of the peritoneum was the cause of death in an additional 14. This latter is an extremely rare cause of death in the general population. There certainly would have been larger numbers of cases in the above categories were it not for competing risks of lung cancer (66 versus 8.9 expected), pleural mesothelioma (6 versus none expected), and asbestosis (27 versus none expected).

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[1] Schulz, R. Z. and C. R. Williams, J. Industrial Hygiene, 24, 75 (1942).
[2] Kleinfeld, M. *et al.*, Arch. Environ. Health 14, 663 (1967).
[3] Private Communication, M. Kleinfeld to B. Castleman, August 1, 1972.
[4] Selikoff, I. J., *et al.*, Pneumoconiosis. *Proceedings of the International Conference*, Johannesburg, 1969, Capetown Oxford University Press, p. 130.

In a review of the literature for the National Air Pollution Control Administration, it was stated by the authors that "it has not been determined whether more than one [asbestos] fiber is necessary to induce a malignant tumor." We are concerned that talc will continue to enjoy the status, "generally recognized as safe." There is a strong similarity in the compositions of the asbestiform silicates and talc. Talc particles have been found deeply embedded within tumor tissue taken from a number of patients with ovarian and other cancer. No asbestos particles were found in these tumors.

We know of no epidemiological studies of workers with pure talc exposure. However, at this time there is plenty of reason to suspect that talc is not "safe" for use in foods, perfumed vaginal sprays, etc.

In view of the above reports, we conclude that a ban of asbestiform talc in foods is long overdue. The presently proposed ban on asbestos-contaminated talcs is a beginning, and we favor its adoption. We urge the Food and Drug Administration to extend its activities to assure that asbestos is not present in filtering of such items as beer, whiskey and parenteral drugs.

Sincerely yours,

ALBERT J. FRITSCH, Ph. D.
MICHAEL F. JACOBSON, Ph. D.
RABBY CASTLEMAN.

APPENDIX 3

CENTER FOR SCIENCE IN THE PUBLIC INTEREST,
Washington, D.C., November 9, 1971.

Mr. WM. D. RUCKELSHAUS,
Administrator, Environmental Protection Agency,
Washington, D.C.

DEAR MR. RUCKELSHAUS: We have been following for some time your Agency's progress toward National Emission Standards for hazardous air pollutants. We are particularly concerned about proposed standards for asbestos which is a major contaminant in our environment. Our center has received copies of the proposed "Standard for Hazardous Air Pollutants: Asbestos, Beryllium and Mercury" as sent to you for final approval. Further, we have seen the comments of the Baltimore County Health Department on this document. There is no need to repeat the deficiencies referred to in their letter of November 6th. We concur with all the contents of that letter and think it should be given immediate consideration.

Overall, our impression is that the watered-down version of the Standard sent to you for approval is not really a regulation—it is a permit to operate "business as usual." All six sections of the Standard, as originally proposed in the *Fedcral Register* of December 7, 1971, have been weakened or discarded completely. We remind you that under the law, the emission of hazardous air pollutants must be regulated by the Environmental Protection Agency so as to provide "an ample margin of safety to protect the public health." As the Baltimore County letter makes clear, you will be put in an embarrassing position if called upon to explain how the sanctioning of visible emissions of asbestos dust from demolition (or any source) is protective of the public health.

There is little need to remind you of the voluminous medical literature on asbestos. We are all familiar with many reported cases of malignant mesothelioma of the pleura and peritoneum, a disease extremely rare in the general population, but quite common among asbestos workers. Also a number of persons have this disease whose only known exposure to asbestos was environmental, that is, they have lived or worked *near* a mine, mill, manufacturing plant, or fabrication area where asbestos was handled. Lung cancer among men who are occupationally exposed to asbestos and smoke cigarettes is nearly 100 times as common as among men who neither smoke nor handle asbestos

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[illegible] times as common among men who smoke but do not work with asbestos. These figures would undoubtedly be considered higher if asbestos were not simultaneously subjected to competing risks of mesothelioma, gastrointestinal cancer, and asbestosis.

It is nearly impossible to estimate the level of asbestos exposure to which the general population can be continuously exposed with no increased risk of mesothelioma, or to which the cigarette-smoking population can be exposed with no increased risk of lung cancer. The National Institute of Occupational Safety and Health, in its recently published criteria document on "Occupational Exposure to Asbestos" says: "there is insufficient information to establish a standard to prevent such diseases including asbestos-induced neoplasms of any all-inclusive limit other than one of zero." In the *Preliminary Air Pollution Survey of Asbestos* it is stated that ". . . it has not been determined whether more than one fiber is necessary to induce a malignant tumor."

Obviously, it was appropriate to designate asbestos as a hazardous air pollutant and make it the subject of a regulation whose only criterion for acceptance is the protection of the public health. The Labor Department has gone through the ritual of promulgating a standard for occupational exposure which is insufficient to protect the health of asbestos workers and many others working in the vicinity of asbestos construction materials. We strongly urge the Environmental Protection Agency to adopt a much tougher position on asbestos contamination, and to do so at the earliest possible date.

Sincerely yours,

ALBERT J. FRITSCH, Ph. D.,
Director.
BARRY CASTLEMAN, M.S.P.

Appendix: Letter to Mr. E.C. Guenther, Occupational Safety and Health Administration.

APPENDIX 4

CENTER FOR SCIENCE IN THE PUBLIC INTEREST,
Washington, D.C., July 17, 1972.

Mr. E. C. GUENTHER,
Assistant Secretary of Labor,
Occupational Safety and Health Administration,
Washington, D.C.

DEAR SIR: We deplore your recently promulgated Standard for Exposure to Asbestos Dust (*Federal Register*, Vol. 37, No. 110—June 7, 1972). It is well established in the medical literature that workers exposed to the conditions prescribed face a greatly enhanced risk of developing fatal asbestos diseases. Your action followed pleas by the AFL-CIO for a one fiber per cubic centimeter (1 f/cc) limit and by the Oil, Chemical and Atomic Workers Union for a zero exposure limit, as well as statements by recognized authorities of the Mount Sinai Environmental Sciences Laboratory to the effect that 40% of deaths of insulation workers in this country, whose time-weighted exposure to asbestos is 3 f/cc, are attributable to occupational asbestos exposure. This fact was revealed at the March 1972 Hearings.

The Criteria document prepared by the National Institute for Occupational Safety and Health, "Occupational Exposure to Asbestos," makes it clear that while a 2 f/cc level cannot be declared safe, it is undoubtedly less hazardous than 5 f/cc and all haste should be made to reach that level industrywide.

Tabershaw, reviewing the literature on asbestos in 1967, compared asbestos to radiation. If there is a safe threshold above natural background to which large human populations can be exposed with no enhanced risk to developing certain diseases, this threshold is not known, it will not soon be known, and it appears to be quite low. We are perplexed and alarmed by the government's