

ASBESTOS AIR POLLUTION IN NEW YORK CITY

Department of Air Resources
Environmental Protection Administration
New York City

Austin N. Holler
Commissioner

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At a meeting of the Medical Advisory Committee, Dr. Irving Selikoff of Mt. Sinai Environmental Sciences Laboratory presented strong evidence showing that occupational exposure to asbestos had resulted in asbestosis and cancer. This correlation between asbestos workers and asbestos-caused diseases has been realized for some time.

9C The material presented by Dr. Selikoff evoked serious concern about the relevance of asbestos in the ambient air as a health hazard. Therefore, we are embarking on an intensive study to determine whether concentrations of asbestos particulates in the general atmosphere carry a concomitant risk of widespread community asbestos disease.

It is vital that current sources of asbestos air pollution and the levels created in the atmosphere be gathered in New York City. We have already begun an emissions inventory of asbestos related activities in New York. Table I contains data on the use of fireproofing sprays containing asbestos on buildings currently under construction or recently finished.

The Department of Air Resources plans to work jointly with the Environmental Sciences Laboratory in this project. Mt. Sinai has recently completed an investigation of sampling techniques and equipment, and correlation of field and

laboratory procedures which can be used for monitoring asbestos in the ambient air. We wish to determine specific information as to the form in which asbestos is used -- raw material, finished product, end-product use -- and the conditions under which it is used. This will all be done with special reference to its potential for community air pollution during and as a result of such use.

We shall attempt to gain knowledge in all areas of asbestos usage in New York. We will ascertain details relating to the transportation, receiving, importation, warehousing, and shipping of raw asbestos fiber in the City. We must know which docks usually receive this material. Similar studies in London, for example, brought about the result of closing the port of London to asbestos. Only three British ports are now handling this material. Furthermore, over 3,000 products are now known to be made with asbestos. We need to identify the specific industries and companies employing these products.

It will also be determined where in New York manufacturing of finished and partially finished asbestos products takes place. The conditions under which these products are manufactured will be of concern. Studies will also be made as regards the installation and manipulation of asbestos

products. The construction industry is one such major area of end-product use, and will, therefore, be a main area of investigation.

We shall also look into solid waste disposal of products associated with the aforementioned activities. In addition, the disintegration of asbestos materials is tangentially associated; demolition problems being a special example. Explorations into this area will also be made.

The ambient air will be sampled and analyzed in areas which are specifically believed to emit asbestos and in areas without suspected or known asbestos sources. For the latter category, five sites will be chosen based on meteorological factors. In the former category -- areas in which asbestos emission is suspect -- three field sites will be selected. They will be chosen on the basis of the nature of the source of the emission, such as construction or demolition sites, neighborhoods surrounding factories using asbestos, or garages and brake shops.

On-site concentrations will be monitored. Samples of concentrations will also be made at selected distances from the locations. Upon completion of this extensive program in sampling and emissions inventory, the data will be analyzed. We expect this project to extend for a fifteen month period.

Your comments on this proposed study will be most welcome to us. We are eager to assimilate all suggestions so as to insure our goal that this project will provide us with the necessary information with which to form an overall evaluation of the asbestos situation in New York City.

However, there remains a very important question which we would like to put before you today. On the basis of your medical knowledge and experience, is there sufficient evidence from the existing information to take peremptory action to regulate use of asbestos in certain areas? In this regard, our attention is especially focused on asbestos fireproofing sprays used in construction and demolition dust. These are, as I have pointed out previously, two uses of asbestos which we suspect as most directly affecting the community-at-large. Can you guide us in our responsibility to determine how quickly we should move and in what direction? Furthermore, is there any medical criteria for determining -- or even approximating -- how much asbestos in the atmosphere is acceptable? Your counsel in these matters will be of inestimable help to us in formulating our course of action in controlling asbestos pollution in the City of New York.

TABLE 1

SPRAYING OF NEW YORK CITY BUILDING STRUCTURES
WITH FIREPROOFING ASBESTOS COMPOUND

Address	Asbestos Compound (lbs.)	Floor Area (Sq. ft.)	Height (ft.)	No. of Stories	Asbestos* (lbs.)
345 Park Avenue	175,000	1,634,670	681	44	52,500
7 East 42nd Street	268,370	312,039	388	27	80,511
1700 Broadway	55,000	557,649	503	41	16,500
141 West 54th Street	75,000	1,873,946	615	49	22,500
15 Columbus Circle	535,853	563,705	583	46	160,756
115 Broad Street	500,000	887,436	282	22	150,000
1 New York Plaza	2,250,000	2,525,841	664	50	675,000
100 Wall Street	600,000	472,748	365	23	180,000
Total	4,459,223	8,828,034			1,337,267

* Asbestos compound contains 30% asbestos fibers, 60% mineral wool and 10% binder.