INTRODUCTION.

The Asbestos Advisory Board of the State of New York was established in 1987. It was created under Article 30, Section 911, of the Labor Law of the State of New York, a law intended to reduce exposure of the citizens of New York to asbestos in buildings.

The principal concern of the Asbestos Advisory Board is the presence of asbestos in many thousands of buildings across New York. Asbestos poses extraordinarily serious hazards to human health. It causes asbestosis, a chronic disease of the lungs. Also it is a potent carcinogen. It is known to cause cancer of the lung, mesothelioma (a rare tumor of the lining of the lung), cancer of the larynx and gastrointestinal cancer.

Most of the asbestos now in buildings in New York was applied between 1945 and 1975. It exists today in many forms, including insulation, tiles, ceilings and wall covering. As buildings containing asbestos age, deteriorate and become subject to renovation and demolition, the likelihood increases year by year, that the asbestos now in them will be disturbed and become airborne. Once it is in the air, this asbestos can be inhaled by workers, by school children and by members of the public. After it is inhaled, it will in some persons eventually and inevitably cause cancer.

The principal functions of the Asbestos Advisory Board are to monitor the current status of the asbestos hazard in New York and to provide advice on how to minimize this hazard. Specifically, the Board is responsible for advising the Commissioner of Labor in regard to the implementation of Article 30. Also, through the Commissioner of Labor, the Board is responsible for advising the Commissioner of Health in regard to the health hazards of asbestos, and the Commissioner of Education in regard to the hazards of asbestos in the schools.

Finally, the Board is charged with the responsibility of preparing an annual report on asbestos in New York to the Governor and the Legislature.

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This year's Annual Report reviews current medical knowledge about the health hazards of asbestos. It emphasizes that the asbestos now in buildings in New York must be treated with great care and that enormous caution must be exercised in handling, manipulating, repairing or removing this asbestos. Also, the report warns against an insidious and highly misleading disinformation campaign being orchestrated by the asbestos industry to minimize current concern about the grave hazards of asbestos in buildings. The report then goes on to review the progress that has been made in the past twelve months by the New York State Legislature and the Departments of Labor, Health and Education in revising and amending the laws and regulations pertaining to asbestos. Whereas a year ago the Board was concerned about numerous deficiencies that then existed in these laws and regulations, it is the opinion of the Board that the majority of those problems have now been resolved. In consequence of this legislative and regulatory reform, New York now has strong, carefully crafted and enforceable laws and regulations that are capable of protecting our citizens against the health hazards of asbestos.

Enforcement is now the major issue confronting New York. The Asbestos Advisory Board is very seriously concerned that present levels of enforcement and oversight of asbestos projects in New York are not adequate to protect either asbestos workers or members of the public against the hazards of airborne asbestos.

Inadequately controlled exposure to asbestos in buildings will result in a new epidemic of asbestos-related disease in the citizens of New York State.

This epidemic, if it is not controlled, will claim many thousands of lives from lung cancer, mesothelioma and other asbestos-related malignancies. Such an epidemic would be a tragedy, and worse, a preventable tragedy. We know how to prevent this disease. We must, therefore, take strong and vigorous action to prevent a future epidemic of asbestos-related illness.

BACKGROUND: THE HEALTH HAZARDS OF ASBESTOS.

Asbestos is a fibrous mineral which provides thermal insulation and is non-flammable. Because of these properties, asbestos was used widely in building construction in New York State from the 1920's through the mid-1970's. It was used as pipe wrapping, boiler insulation, reinforcement in floor and ceiling tiles and wall covering. Many millions of tons of asbestos were sprayed on building surfaces as accustic insulation or for fireproofing until the practice of spraying asbestos was banned in 1972 in New York City and in 1973 by the U.S.

Widespread occupational exposure to asbestos, primarily in the construction trades, occurred as a result of the use of the mineral. Exposures have been documented in persons who worked directly with asbestos, such as asbestos insulators. Additionally, serious and extensive exposures have been documented him members of other trades, such as carpenters, sheet metal workers, plumbers and pipefitters who did not themselves handle asbestos, but who worked in close proximity to asbestos workers, or who were required to disturb asbestos-containing materials after they had been applied by members of other trades.

Asbestosis, lung cancer, mesothelioma, and a wide range of other cancers have been shown to be caused by exposure to asbestos. Epidemiological studies conducted at the Mount Sinai School of Medicine and at other institutions in New York' State and throughout the nation have established clearly that all forms of asbestos have the capacity to cause these illnesses. Additionally, this work has established that the incidence of asbestosis, lung cancer, and other tumors is quantitatively related to cumulative asbestos exposure in a positive doseresponse relationship.

By the end of the century, an estimated 30,000 to 50,000 premature deaths

will have occurred in New York State as the result of occupational exposures to asbestos that occurred prior to 1980. The additional number of deaths which may ultimately result from asbestos exposure since 1980 is not yet known.

Prevention of the diseases caused by asbestos is principally achieved by reduction of asbestos exposure. Because the incidence of these diseases is directly related to the extent of exposure, the extent and the severity of disease will be strikingly diminished by reduction in occupational exposure to asbestos.

Additionally, prevention of certain of these diseases is achieved by prevention of cigarette smoking. Cigarette smoking has been shown to interact with asbestos exposure to increase the clinical severity of asbestosis and to increase in multiplicative fashion the incidence of certain tumors caused by asbestos exposure, most notably lung cancer. It is, however, important to note that the incidence of mesothelioma is in no way related to cigarette smoking. Prevention of mesothelioma can be achieved only through reduction of exposure to asbestos.

CURRENT STATUS OF ASBESTOS EXPOSURE IN BUILDING IN NEW YORK STATE.

A very large number of buildings in New York State contain asbestos. Although no statewide survey has been undertaken, a survey in New York City in 1988 showed that two-thirds of 900 buildings sampled city-wide contained asbestos. This asbestos was in good condition in 13 per cent of buildings, in fair condition in 68 per cent, and in poor condition in 19 per cent. Asbestos in poor condition, which has been fractured or damaged by water becomes brittle or friable. When it is disturbed in any way, asbestos fibers can intermittently become airborne from such material. Once airborne, these fibers can be inhaled and will in some persons eventually cause disease.

Today as buildings constructed with asbestos over the past six decades begin to age and deteriorate, and as plans are made for the renovation and demolition of many of these buildings, serious potential exists for a new wave of occupational exposure to asbestos among persons in New York State who are engaged in the repair, renovation, and demolition of these buildings. Potential also exists for serious environmental exposure to asbestos among residents, tenants and users of these buildings, such as school children, office workers, maintenance workers and the elderly, as well as other members of the general public. The Centers for Disease Control, the American Academy of Pediatrics and the U.S. Environmental Protection Agency have projected that over the next 30 years approximately 1,000 cases of mesothelions and lung cancer will occur among persons in the United States exposed to asbestos in school buildings as school children (range of estimates: 100 to 7,000 cases). The additional number of cases of these diseases that will result from exposures in offices or other buildings is not yet known.

WARNING: MISINFORMATION ON ASBESTOS IN BUILDINGS.

The asbestos industry and their consultants, in particular a trade association, The Safe Building Alliance, have over the past year conducted an extensive and highly misleading disinformation campaign which attempts to minimize the health hazards caused by asbestos. They have placed articles in the Reader's Digest. Forbes and scientific journals. The central theme of this campaign is that the health risk posed by asbestos in buildings is "very small."

Two claims run through this industry-sponsored campaign:

- (1) that different types of asbestos vary in their hazard, and the hazard associated with the most widely used form of asbestos is minimal; and
- (2) that assessment of the risk posed by asbestos in buildings must be based on air sampling.

Both of these claims are unfounded and, in the opinion of the Ashestos Advisory Board, highly inaccurate. Horeover, they are very dangerous because they are falsely reassuring.

The claim that various types of asbestos differ in their hazard is particularly insidious. It is put forth by the manufacturers of Canadian asbestos (chrysotile asbestos), the type of asbestos most widely used in New York and throughout the United States. The central claim here is that the Canadian product, tarmed "chrysotile asbestos" is relatively harmless. However, that claim is not based on fact, and it is not supported by the results of epidemiological and toxicological studies conducted in the United States and overseas. These studies show that all types of asbestos, including Canadian asbestos, are fully capable of producing the full spectrum of asbestos-related diseases including asbestosis, mesothelioma, lung cancer, laryngeal cancer.

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cancer of the pharynx and cancer of the gastrointestinal tract. The Board's observed concern here is that this inaccurate claim of the asbestos manufacturers and the Safe Building Alliance will persuade persons exposed to asbestos in buildings in New York to be incautious and cavalier when they are working with or around asbestos. The Board's concern is that some of our citizens will pay for this lack of caution with their lives.

The industry's claim that air sampling provides the most accurate assessment of the hazard of asbestos in buildings is also misleading. It too is intended to falsely minimize the hazard of asbestos in buildings. This claim ignores the fundamental fact that asbestos in buildings is released into the air only intermittently - usually only when it is disturbed. Air sampling, which ordinarily is conducted for only one or at most a few days, can therefore very easily miss such intermittent releases. In such a case, air sampling will provide an apparently negative and thus falsely reassuring result. By contrast, however, school children or office workers who are present in a building with asbestos every day will be exposed to airborne asbestos whenever release occurs. This release may occur on a sampling day, under what are often best-case conditions, or on an ordinary day. Thus, the exposure of building occupants may well not be reflected by the results of occasional air sampling.

A much more accurate assessment of the risk of asbestos in buildings is provided by periodic visual inspection of all buildings containing asbestos. Procedures for such inspection have been developed with great care and are established in federal and state laws. These procedures are detailed in this report. In their efforts to trivialize the health hazards of asbestos, the industry would apparently prefer to overlook this carefully developed body of law and regulation pertaining to the visual inspection of asbestos in buildings.

This position put forth by the industry is not only inaccurate, it is also highly harmful to the health of the public.

The Asbestos Advisory Board wishes to call the attention of the New York State Legislature, the state agencies and the Attorney General's Office to the dangerous and wilfully misleading disinformation being disseminated today in New York State by the asbestos industry.