ADOPTED ASBESTOS REGULATIONS:

ILLINOIS POLLUTION CONTROL BOARD January 6, 1972

In the matter of) R71-16 ASBESTOS REGULATIONS)

ILLINOIS POLLUTION CONTROL BOARD Rules and Regulations

Chapter V: Hazardous Substances
Title I: Asbestos and Spray Insulation and Fireproofing

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PART I: INTRODUCTION

101. Authority

Pursuant to the authority in Sections 9, 10 and 13 of the Environmental Protection Act which empower the Board to adopt regulations forbidding the "sale, offer, or use for reasons of air pollution control" of any article, and to set "standards specifying the maximum amounts or concentrations of various contaminants that may be discharged into the atmosphere"; and to set standards for the issuance of permits for the operation of any equipment or facility capable of causing or contributing to air pollution; and to promulgate "conditions regarding the... use of any...article determined by the Board to constitute an air pollution hazard"; and to adopt effluent standards limiting the amounts of contaminants that may be discharged into the water of Illinois, the Board adopts the following rules and regulations:

102. Policy

It is the purpose of the General Assembly in adopting the Environmental Protection Act to maintain and enhance the purity of the air and water of Illinois in order to protect health, welfare and the quality of life. Accordingly, it is hereby determined that the uncontrolled discharge of asbestos fiber into the environment tends to severely endanger the public health and welfare and that the uncontrolled spraying of fiber-containing materials unreasonably interferes with the enjoyment of life and property.

It is the purpose of these regulations to control the amount of asbestos fiber released into the environment from the major sources of emission. Such control is necessary not only to protect those members of the public who are in proximity to heavy concentrations of asbestos fiber but also to safeguard the health of future generations endangered by the continuous discharge of asbestos fiber which can be toxic and which tends to be cumulative both in the atmosphere and in the human body.

Where health can be protected by the adoption of an emission standard or of procedural safeguards, such a course has been pursued. In those instances where restriction is unfeasible because of the unusual nature of the emission source (spray asbestos at construction sites) a product ban has been resorted to. This prohibition has been made with full consideration given to the available alternative materials.

It is also the purpose of these regulations to reduce the emission of non-asbestos particulate from spray-fireproofing and insulation. To protect against these emissions, the biological effects of which are unknown, procedural safeguards have been enacted.

103. Definitions

Agency The Illinois Environmental Protection Agency

Asbestos

Any fiber or any mixture containing fiber of hydrated silicate mineral, which, on the basis of its crystalline structure, falls into one of two categories:

(1) pyroxenes - chrysotile fiber;

(2) amphiboles - crocidolite, amosite, tremolite, actinolite or anthophilite fiber.

Board The Pollution Control Board of Illinois.

Commercial Activity

Any activity done for hire or having financial profit as a primary aim.

Debris Asbestos-containing waste produced by the demolition of a structure.

Spraying The pneumatic application of material used for fireproofing or insulation.

Waste Any asbestos-containing matter which has been

or is intended to be discarded.

PART II: General Requirements

- 201. After June 30, 1972 no commercial activity, not otherwise hereinafter prohibited, involving the potential discharge of visible amounts of asbestos fiber or asbestos-containing materials into the ambient air from the construction, alteration, repair or demolition of a structure or from the processing or manufacturing of asbestos-containing products, shall be conducted unless the person or entity in charge of such activity complies with the following regulations:
 - (a) Personnel shall be designated to exercise full-time supervisory authority over all aspects of the activity from which the release of asbestos fiber into the environment could result, in such a manner as to insure compliance with the pertinent asbestos control regulations.
 - (b) Each employee engaged in such activity shall complete a course of instruction on the potential hazards of exposure to asbestos fiber, including the precautions that must be observed to prevent or restrict the dispersion of asbestos fiber into the environment.
 - (c) Facilities shall be provided and procedures instituted and supervised that prevent the removal from the site of visible amounts of asbestos-containing material on the clothing of the employees.
 - (d) Asbestos-containing wastes shall be immediately vacuumed or otherwise collected where vacuuming is impossible, and shall be placed in a container resistant to tearing or breaking under normal handling conditions, which shall be tightly sealed and clearly marked as containing asbestos waste. Such containers shall be placed directly upon a vehicle for disposal by burial at a sanitary landfill.

Section 201(d) shall not apply to the demolition of a structure, except as provided in Section 401 (d) and (e) or to the disposal of sludge waste except as provided in Section 506.

202. After June 30, 1972 the manufacturing or processing of asbestos containing products is prohibited unless the person or entity in charge of such activity has obtained a permit from the Agency. Before obtaining such permit the applicant shall demonstrate compliance with Sec. 201 and such additional standards as are hereinafter specifically required.

PART III: Construction, Alteration and Repair of a Structure

- 301. The spraying of asbestos-containing material is prohibited after March 31, 1972.
- 302. Non-asbestos fibrous matter shall not be sprayed in an area open to the atmosphere unless the following procedures are taken:
 - (a) The entire floor or area to be sprayed shall be enclosed with plastic or plastic-coated tarpaulins in a manner which shall preclude the escape of fiber-containing material from the enclosure. All interior open areas such as elevator shafts and stairwells shall be enclosed in a manner which shall prevent the escape of fiber-containing material from the working area.
 - (b) The entire sprayed area, all ledges and surfaces including tarpaulins within the enclosure shall be thoroughly vacuumed upon completion of the spraying operation and immediately before the enclosure is dismantled.
- of asbestos-containing material in the construction, alteration or repair of a structure which is done at the site of such structure in an area open to the atmosphere shall be conducted within a special enclosure designed to preclude the escape of asbestos fiber from the immediate area of such enclosure.
 - (b) The mechanical exhaustion of dust from such enclosure to the ambient air is prohibited unless such exhaust system is equipped with a properly sized fabric filter for dust collection or an equivalent device as approved by the Agency.
- 304. Compliance with Sections 302 and 303 notwithstanding, visible emissions of fiber-containing material in an area open to the atmosphere shall be considered a violation.
- 305. Asbestos-containing material applied in the construction, alteration or repair of a structure shall be coated with a sealant, provided with a cover or installed in some other manner so as to preclude emission of the asbestos-containing material to the circulating air. Any plenum or other structure coated with or containing asbestos-containing insulation and used in the circulation of air in a building shall be horoughly cleaned of all debris and waste insulation.

PART IV: Demolition

401. Where the risk of public exposure to asbestos fiber from the dislodging of asbestos-containing materials is present, no demolition of a structure shall be initiated unless all safeguards necessary and practicable to reduce the emission of dust are taken.

Such procedures shall include, but are not necessarily limited to:

- (a) Boilers and pipes and steel members insulated or fireproofed with asbestos-containing material shall be wetted and stripped before toppling of walls is begun. This procedure shall be followed, where practicable, as to all other asbestos-lined surfaces. Such asbestos waste shall be immediately bagged and disposed of in accordance with Section 201(d).
- (b) When demolition by toppling occurs such reasonable enclosure for dust emission control as is compatible with the character of the structure shall be employed.
- (c) Before the demolition or toppling of any section or wall of the structure, adequate wetting to suppress the dust shall be employed.
- (d) Asbestos-containing debris shall not be dropped or thrown from any floor but shall be transported by dustight chutes or buckets. Asbestos-containing debris in chutes or buckets shall be sufficiently wetted to preclude dust dispersion at the point of discharge.
- (e) All asbestos-containing debris shall be thoroughly wetted before loading into trucks, other vehicles or containers. During transport such waste shall be enclosed or covered so as to prevent dust dispersion. Asbestos-containing debris shall be disposed by burial at a sanitary landfill.

PART V: Manufacturing

501. (a) After June 30, 1972 a factory, plant or enterprise which engages in the processing or manufacturing of any asbestos-containing product shall discharge no visible emission of particulate matter from such manufacturing or processing into the ambient air and shall emit no concentrations of asbestos fiber into the ambient air in excess of 2 fibers per cubic centimeter of air.

- (1) Sampling of emissions shall be by the membrane filter method and according to the procedures recommended in the ASME Power Test Code 27-1957, or other procedures generally accepted by persons knowledgeable in the state of the art.
- (2) Counting shall be according to the procedure outlined in Edwards, G.H., and Lynch, J.R., "The Method Used by the U.S. Public Health Service for Enumeration of Asbestos Dust on Membrane Filters," Ann. Occupational Hyg. (Oxford), 11 (1): 1-6, Jan. '68; with 20 fields per sample, counted at random using phase contrast microscopy at 430 x magnification and counting only fibers 5 microns or greater in length, with a length to breadth ratio of 3 to 1 or greater.
- 502. Any factory, plant or enterprise which engages in the processing or manufacturing of any asbestos containing product shall control all asbestos handling facilities so that exhaust air can be ducted through necessary air pollution control equipment and samples taken of the gases which are emitted into the ambient air.
- 503. Any factory, plant or enterprise for which a permit is sought or has been granted pursuant to Sec. 202 hereunder shall be subject to inspection by the Agency at any reasonable time, without prior notice.
- 504. At a frequency to be determined by the Agency, any factory, plant or enterprise which engages in the processing or manufacturing of any asbestos-containing product shall sample the exhaust from such factory, plant or enterprise and submit the emission data to the Agency.
- of which add asbestos fiber to water shall not discharge such process waste water to the sewers or waters of Illinois unless such process waste water is given the best available treatment consistent with technological feasibility and economic reasonableness.
- 506. Waste sludge containing asbestos and collected from settling ponds shall be enclosed during transport and shall be disposed by burial at a sanitary landfill.
- 507. No product which may emit asbestos-fiber during its transportation shall be transported unless such product is enclosed so as to preclude the emission of asbestos fiber into the ambient air.

508. Nothwithstanding compliance with Sections 506 and 507 the visible emission of particulate matter in the course of such transportation shall be considered a violation.

PART VI: Local Enforcement

601. It shall be the obligation of local governments as well as the Agency to enforce by appropriate means the requirements of Section 201, of Parts III, IV and of Sections 506, 507 and 508.