

Interoffice Correspondence



Windsor Office

R. L. Hancock
Corporate Health & Safety

March 9, 1981

PLAINTIFF'S
EXHIBIT

WV-012706

TO: F. T. Christenson

cc: R. L. Hoover

HEALTH & SAFETY REQUIREMENTS FOR
WORKERS REMOVING ASBESTOS INSULATION

In answer to your recent request for information on an asbestos removal procedure, the following precautions must be considered:

1. Monitoring

To determine occupational exposures, a program of monitoring must be conducted. Both personal breathing zone and work area samples must be collected to verify compliance with exposure limits. The OSHA permissible exposure limit to asbestos fibers is 2.0 fibers per cubic centimeter of air for an eight-hour time-weighted average, or ten fibers per cubic centimeter of air as a maximum ceiling for any time period.

Monitoring is performed by the membrane filter method, incorporating a sampling pump that draws air through a filter, and the fibers on the filter are examined and counted microscopically. Monitoring must be conducted initially to determine exposure levels and at intervals no greater than six months if employee exposures may reasonably be foreseen to exceed permissible limits.

2. Controls

A. Engineering

Where possible, local exhaust ventilation and dust collection must be used to meet OSHA permissible exposure limits. For small intermittent operations that might occur during insulation removal, a low-volume, high-velocity type exhaust system utilizing a high-efficiency vacuum cleaner might be suitable.

B. Wet Method

Where practicable, asbestos insulation material should be sprayed with a water mist before and during removal to prevent the emission of airborne fibers in excess of the permissible limit.

March 9, 1981

3. Protective Equipment

A. Respirators

If engineering or work practices cannot be feasibly used to keep airborne asbestos fibers below the permissible limit, respirators must be worn by all personnel working in the area where insulation removal takes place. If the fiber concentration does not exceed ten times the permissible limit, a NIOSH-approved air purifying (reusable or single use) respirator can be used. For concentrations up to, but not exceeding, 100 times the permissible limit, a powered air purifying respirator must be used. In concentrations exceeding 100 times the permissible limit, a type "C" supplied air respirator is required.

If respirators are used, a written respirator program containing procedures on fitting, maintaining, cleaning and proper use as per ANSI Z88.2-1969 must be established. It must be also ascertained that any person required to wear a respirator is medically fit to function properly when wearing one.

B. Clothing

Whenever airborne fiber concentrations exceed the prescribed ceiling level, the employer must provide the use of special clothing, such as coveralls, head coverings, gloves and foot coverings. Along with this provision, the employer must also provide for laundering or disposal of throw-away type clothing.

Change rooms with two separate lockers or containers for employees to separate contaminated clothes from their street clothes must be provided whenever airborne fiber concentrations exceed the eight-hour time-weighted permissible limit.

4. Caution Signs and Labels

Caution signs must be displayed at each workplace where asbestos fiber concentrations exceed permissible exposure limits. Caution labels shall be applied to all materials and products which during any reasonably foreseeable use might release concentrations of asbestos fibers in excess of permissible exposure limits.

Signs and labels are described in detail in Appendix A of the standard.

5. Housekeeping

All external surfaces, machinery and equipment shall be maintained free of asbestos fiber accumulations that might, if dispersed, create asbestos fiber concentrations above permissible exposure limits. Asbestos waste, scrap, debris and contaminated clothing shall be collected and disposed of in sealed, impermeable bags or other closed, impermeable containers.

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F. T. Christenson

Page 3

March 9, 1981

6. Recordkeeping

Every employer shall maintain records of personal and environmental monitoring required by the standard. Records shall be maintained for a period of at least five years.

7. Medical Examinations

Preplacement, annual, and termination medical examinations must be provided or made available by the employer for any employee "...engaged in occupations exposed to airborne concentrations 0.1 fibers/cc or greater of asbestos fibers.." These medical records must be kept for 20 years and are available to the employee's physician.

If you have questions concerning these requirements or need further information on the subject, please let me or Bill Hoover know.

R. L. Hancock
R. L. Hancock *etc*

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