

AT&T Bell Laboratories

subject: Removal of Asbestos

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from: H. R. Fitch
IH 77143A
2B-104 x6937

MEMORANDUM FOR FILE

Procedure for Building Shop Personnel, Maintenance Personnel, Plant Operational Personnel, Engineers, and Contractors involved in removal of asbestos.

Attached is a copy of the operational procedures, recommended by the Industrial Hygiene and Safety Group of AT&T Bell Laboratories, to be followed when removing asbestos in the work area. These procedures supercede all previously issued memorandums or operational procedures.

Supervision is responsible for the protection of/and notifying their employees of the possible health hazard due to the exposure to asbestos fibers.

Periodically, air samples are taken from the work area and analyzed for the exposure contaminant levels. We have yet to record an exposure level anywhere near the Permissible Exposure Limits (PELs). You will be kept abreast of any changes in regard to the EPA asbestos regulations.

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Att.

As stated

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Attachment # I

PROCEDURES FOR WORK
REQUIRING HANDLING OR DISRUPTION
OF ASBESTOS-CONTAINING MATERIALS

All procedures must be in compliance with OSHA and EPA regulations.

A member of management must be designated as an asbestos program manager and given responsibility for directing, managing, and implementing work practice and general control procedures.

Engineering or work practice controls must be utilized to comply with the permissible exposure limit specified by OSHA. Whenever possible, disruption of the asbestos-containing materials must be minimized.

When feasible, wet methods of handling asbestos-containing materials are recommended. In some applications, wet methods are not appropriate and use of a high efficiency particulate (HEPA) filter is preferred.

A vacuum equipped with a HEPA filter must be available and used to clear adjacent areas of asbestos-containing debris, remove any debris from work clothing and clean surrounding areas after completion of job. Caution signs should be posted on the vacuum as follows:

CAUTION
Contains Asbestos Fibers
Avoid Creating Dust
Breathing Asbestos Dust May Cause
Serious Bodily Harm

A routine maintenance and inspection program should be established to assure integrity of containments, for example, hung ceiling structures, throughout the complex.

Whenever possible, work involving handling or disruption of asbestos-containing material occupied areas should be scheduled out of hours.

To the extent possible reentrainment of asbestos fibers onto the return air should be minimized by

- isolating area from return air plenum
- blocking off return air vents
- Shutting down HVAC System in and around work area

A notification or permit system should be developed for entry into containments, for example, hung ceiling structures.

Representative and Routine Monitoring must be conducted to:

- a. establish range of exposures during work in hung ceilings and other tasks involving handling or disruption of asbestos-containing materials
- b. determine fiber concentrations in surrounding areas during hung ceiling work

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- c. determine ambient fiber concentrations in building subsequent to major building changes (e.g. construction and renovation activities)
- d. establish compliance with OSHA regulations.

Medical Surveillance must be provided for employees involved in work requiring handling and disruption of asbestos containing materials. These requirements may be modified if exposures do not exceed the OSHA action level of 0.1 fibers/cm³. Medical surveillance requirements include:

- a. Preplacement, annual examinations, and examinations at termination of employment must be provided. These must include chest roentgenogram, pulmonary function, medical history, and physicians examination, and an assessment of suitability for respirator use, as appropriate.
- b. Medical records must be retained by employers for at least 20 years.

Personal Protective Equipment - Since monitoring data for personnel involved in work with asbestos-containing materials are not currently available, the following precautions must be provided immediately.

- a. Disposable single-use respirators with a protection factor of 5 should be made available (respirators should display NIOSH approval).
- b. Disposable fire-retardant, protective coveralls and head coverings should be provided for each ceiling entry or asbestos handling activity. Whole-body coveralls should be secured at sleeve and ankle openings with tape or elastic.

Housekeeping must be conducted so that all external surfaces are maintained free of accumulation of asbestos fibers. A 6 mil plastic sheet should be placed on floor beneath work area. A vacuum equipped with a HEPA filter must be available and used to clear adjacent areas of asbestos containing debris, remove any debris from work clothing and clean surrounding area after completion of job.

Depending on the scope of work, the area must be isolated from surrounding occupied areas and access to the work area must be restricted. At a minimum, occupants within a 5 m (20 ft.) radius of the work-site should be relocated until the job is completed.

Training

A comprehensive training program must be initiated for personnel required to work with asbestos containing materials and their supervision. Training must include:

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1. the nature and hazards of asbestos
2. proper use of respiratory/protective equipment
3. safe work practices/engineering controls

Annual refresher courses of shorter duration must be provided, and periodic training programs must be available for new employees.

Employee Education

Additionally, to affect the overall education effort for the general population, Group Supervisors need to be trained in a brief session to gain proper perspective of safety procedures when asbestos work occurs, and to understand their responsibility in disseminating this information to the general population.

To meet the influx of new employees, periodic training and education should be provided.

Records should be maintained documenting all training and educational activities and employee participation.

Disposal

Asbestos-bearing waste including contaminated protective gear should be transported in sealed impermeable bags or other closed impermeable containers and labeled with caution signs described above. Materials should be wetted prior to containment and disposal (EPA recommends use of sealable plastic bags with a 6 mil minimum thickness).

Disposal must be in accordance with federal, state, and local regulations, including 40 CFR 61 National Emission Standards for Asbestos.

State regulations require that asbestos wastes generated from Piscataway Township must be landfilled at the Industrial Land Reclaiming (ILR) facility in Edison Township.

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PROCEDURES FOR BUILDING SHOPS PERSONNEL-
REMOVAL, MANIPULATION OR WORKING IN AREAS
CONTAINING MINIMAL AMOUNTS OF ASBESTOS
(BUILDING 1-4 AT IH)

1. Safety Equipment, Handling and Disposal Materials :
 - a. R-1070 disposable filter face mask.
 - b. Hand-operated sprayer with "Asbestos Wet Dust Control" and water mixed to manufacturer's standard.
 - c. Disposable protective clothing (suit, gloves).
 - d. Disposable plastic drop cloth and bag with seal and paper towels.
 - e. HEPA vacuum cleaner.
 - f. Warning signs, labels and ropes.
2. Removal or Manipulation of Asbestos
 - a. Assemble all equipment and material before commencing work.
 - b. Rope off area and post warning signs.
 - c. Spread plastic drop cloth under the area of insulation to be removed.
 - d. Put on protective clothing and face mask.
 - e. Enter ceiling carefully and vacuum tiles.
 - f. Spray area with "Asbestos Wet Dust Control" mixture. Soak insulation to obtain total depth penetration.
 - g. Carefully cut and remove only the required area of insulation and collect in plastic bag. Spray

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the work area to prevent any emission of dust during the work.

- h. After work is completed, carefully replace ceiling tile.
 - i. Spray and wipe clean any tools used for the work.
 - j. Vacuum ladder and general work area.
 - k. Carefully roll up plastic drop cloth.
 - l. Place all used equipment, contents of vacuum cleaner, and drop cloth in plastic bag.
 - m. Remove protective clothing and place in plastic bag.
 - n. Seal and label disposable plastic bag and remove to protective storage area.
 - o. Wash hands, face and forearms before eating, smoking or drinking.
3. Working In Area Containing Asbestos Material (Not Removal or Manipulation)
- Follow same procedures as outlined in 2a through 2e and 2j through 2o.

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