

IN RE: ABRAMS

November 1992

From : R&D CENTER - 401-3X9
WIN : 236-1362
Date : June 12, 1985
Subject : ASBESTOS REMOVAL INSTRUCTIONS



MMBB-0030574

To : INDUSTRIAL HYGIENE REPRESENTATIVES

Please review the attached instructions on the safe removal of insulation which contains asbestos. Information is included on monitoring requirements, work practices and clean-up procedures during renovation or demolition of this insulation.

You are to use these instructions whenever work is being performed on ceiling, wall or pipe insulation. Additional EPA or local authority requirements may apply when removing asbestos insulation. Contact your site Environmental Control Officer for more information.

Mark A. Perriello, CIH
Senior Industrial Hygiene Engineer

/jme
Attachment

#1938A

Discard Date:

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WESTINGHOUSE CORPORATE INDUSTRIAL HYGIENE DEPARTMENT

ASBESTOS REMOVAL INSTRUCTIONS

W488-0030575

A. Evaluation of Insulation to Determine if Asbestos is Present

1. Collect bulk samples of insulation. Send to Clayton Environmental Consultant Laboratory for analysis.
2. Until it is definitely known, all insulation shall be assumed to contain some asbestos.

B. Procedure for Asbestos Removal

1. Tag those sections of insulation which contain asbestos. Isolate area and label: Entry Restricted to Authorized Personnel Only.
2. Begin removing the outside cover (if applicable) of the insulation carefully to get to the asbestos insulation.
3. Cover all insulation not to be removed with plastic sheets. Tape plastic sheets securely to isolate the work area. To reduce contamination of surfaces, tape plastic sheets to all walls and floors.
4. Spray insulation with water or soap solution (water with wetting solution) immediately prior to asbestos removal.
5. Cut manageable sections of insulation using a cutoff saw or appropriate power hand tool equipped with local exhaust ventilation.
6. Each cut section of insulation shall be carefully placed in impermeable plastic bags, sealed with duct tape and labeled with the appropriate Asbestos label affixed to outside of bags.

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7. Debris shall not be dry swept or blown with compressed air. Clean areas of asbestos dust by wetting the debris first and scooping into impermeable bags. Finally, clean surfaces with an ultrafilter (NILFISK) vacuum cleaner, or equivalent. When using such a vacuum cleaner, care should be taken to control the vacuum cleaner exhaust so that re-entrainment of dry asbestos particles does not occur.
8. Remove all plastic sheeting and dispose along with asbestos insulation. Clean walls and floor with soap solution (twice).

C. Asbestos Removal Work Practices

1. An isolated clean room, or area partitioned off with plastic sheet shall be used as a change room. All workers are to enter from the uncontaminated area, remove street clothing, put on clean disposable work clothing (coveralls, boots, etc.) and appropriate respirators, and then enter the contaminated work area.
2. Drinking and eating shall not be permitted in the work area. Water may be supplied by portable covered cooler and paper cups.
3. When the work schedule is completed (do not shake coveralls), remove all disposable protective clothing and place in impermeable bags. Seal with duct tape, affix label as asbestos waste and segregate with other asbestos waste. Respirators shall be removed subsequent to removal of disposable protective clothing.
4. If a shower facility is available, the workers shall shower before entering the clean room during or after work shift. Otherwise, portable wash facility to clean face and hands shall be available near the clean room entrance. The worker shall enter the clean room, dress in disposable coveralls and re-enter contaminated area or dress in street clothes and leave.

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5. Respirators shall be picked up, cleaned, and placed in plastic bags by a respirator protected worker at the end of each work shift. The clean respirators are to be put back into the clean room for the next day's use.

D. Asbestos Removal Air Monitoring Requirements Background

1. 29 CFR 1910.1001 (OSHA Asbestos Standard) requires air monitoring when asbestos fibers are released which could be inhaled by any employee.
2. The appropriate respiratory protection given to employees is determined by the air concentration of asbestos fibers in the workplace.
3. OSHA medical surveillance requirements are triggered by air concentrations greater than 0.1 fibers greater than 5 microns per cubic centimeter of air.
4. When insulation which contains asbestos is removed, residual asbestos fibers can remain in the air, or attached to walls or floor. These can be re-entrained in the air. Because you cannot see these fibers, the only way to determine if an area is clean is to again air monitor after the demolition and/or removal is complete.

E. Asbestos Removal Air Monitoring Procedure

1. Follow the (W) Corporate Industrial Hygiene Sampling Procedure for Asbestos. Each Site Safety and Health Representative has this procedure.
2. Throughout the removal and cleaning operation air monitoring will be conducted for compliance with 29 CFR 1910.1001.

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3. Before demolition or removal of asbestos, collect a background sample. This air sample for asbestos should be collected for at least 20 minutes.
4. During the removal, full shift and ceiling personnel and area samples are to be collected in the demolition area to comply with 29 CFR 1910.1001. We also recommend the collection of additional full shift samples in the change room and outside the clean areas. These additional samples document the adequacy of our containment procedure.
5. Within 48 hours after completing the cleaning work (B. 8.) on all surfaces (walls and floors), air monitor the work areas and clean areas. Compare these air concentrations to the original background air concentration. If the present air concentration exceeds the background level, repeat cleaning procedure until background level is achieved.

For further information contact Mark Perriello or Kathleen Goellner, Westinghouse Corporate Industrial Hygiene Department, telephone (412) 256-1364 or 256-1365, or WIN 236-1364 or 236-1365.

MAP/RMG
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