



D. SHEPPLER

Inter Office

Personnel and Organization Staff

14 December 1983

Plant Managers
Division and Plant Industrial Relations Managers
Division and Plant Engineering Managers
Division and Plant Safety Engineers

Subject: Corporate Procedure - Hazard Control of Asbestos Insulating Materials

Because of increased awareness on the part of governmental agencies, the UAW, and the public, in addition to a recent OSHA citation at a Company facility for improper removal of asbestos insulating materials, it is necessary to more clearly define and reemphasize Company procedures relating to hazard control of asbestos insulating materials. It has been Company practice since 1973 not to use asbestos insulating materials and to strive for eventual removal of all existing asbestos under appropriate circumstances. Details of this practice are contained in Industrial Hygiene Bulletin No. 4b, 23 August 1983, "Asbestos Insulation Removal and Repair" and Manufacturing Guidelines G3-19, September 1981, "Recommended Work Practices for Handling Asbestos".

The regulation of asbestos insulating materials is specified by standards promulgated by the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA) and their local governmental counterparts. In order to comply with existing standards all Company facilities (plants, office buildings, laboratories, etc.) must:

- o Complete a thorough survey to identify where asbestos insulating materials are present. This survey must include piping, duct work, walls, ceilings, plenum chambers, mechanical rooms, fan station outer and inner coverings, and all other areas where insulation may have been used for fire protection, noise abatement, or thermal properties. This includes conventional and sprayed materials.
- o Determine friability of asbestos materials found.
- o Determine the structural integrity of the asbestos material and the surfaces to which it is attached.
- o Develop a plan to remove, recover, encapsulate, or enclose asbestos materials as appropriate.

The survey to identify asbestos insulating materials shall begin as soon as possible. The first step in the survey is to review facility specifications to determine where insulating materials are being used and their composition. Asbestos insulation, including sprayed insulation, was used in most buildings before 1970. If this information is not available, a complete inspection of the facility must be undertaken. Where the composition of insulating materials is not known, core samples must be taken to determine asbestos content. The asbestos analysis will be done by a certified laboratory using EPA polarizing light

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microscopy or X-ray diffraction methods. These analyses are available through the Company Industrial Hygiene Laboratory and should outside laboratory service appear more appropriate, the Industrial Hygiene Section will designate the laboratories to be used. The survey will result in an assessment of the square feet of area involved, identity of types of applications, and the type of construction.

Friability is a subjective determination. By definition, friable asbestos material is any material that contains more than one percent asbestos by weight and can be crumbled, pulverized, or reduced to a powder when dry, by average hand pressure. Notes as to friability and structural integrity of asbestos material and the surfaces to which it is attached should be made during the identification survey.

The long-range objective of all facility plans must be the complete removal of all asbestos materials. However, short and mid-term goals will be based on the immediacy of need and appropriate timing with other projects. The decision to remove, recover, encapsulate, or enclose shall be based on:

- o Friability
- o Occupancy and use
- o Deterioration, delamination from substrate, physical damage, or water damage
- o Proximity to an air plenum or airstream
- o Proximity to high activity areas and subsection to physical damage by employees, equipment or vibration
- o Planned changes to the facility that will impact the above factors

If friable asbestos insulating material is in or near an air plenum or air stream, it shall be scheduled for removal as soon as possible. If asbestos is in an occupied high-activity area, is friable, damaged, and subject to further damage, it shall also be removed. In cases less severe than listed above, the occupancy, use, possible future friability, damage, and other factors that may contribute to causing asbestos fibers to become airborne on a continuous or peak basis shall be weighed before a decision is made on a plan of action for asbestos fiber control. It should be noted that ambient air samples are of little value in making this decision. Structural integrity of the material and substrate are more important considerations in recovering, encapsulation or enclosure decisions.

Where local labor agreements permit, all removal of asbestos insulation of over 160 square feet of material shall be done by approved outside contractors. Removal of asbestos from an area of less than 160 square feet may be done by Company employees only after clearance is received from Industrial Hygiene. Emergency repairs may be done only after prior approval of the local individual responsible for safety and consultation with Industrial Hygiene. Further emergency repairs must be done following the respiratory protection and protective clothing guidelines specified in Industrial Hygiene Bulletins 4b and 15.

OSHA and the EPA are specific in their requirements relative to asbestos. These requirements include pre-notification of EPA, air monitoring, specific respiratory protective equipment, job-site enclosure, posting of warning signs, worker training and education, medical examinations, indefinite record keeping, and proper disposal of asbestos laden materials. In order to insure these requirements are met, Mr. H. B. Lick, Industrial Hygiene Associate (337-8955) is assigned as the Corporate Asbestos Control Program Coordinator. Each division and individual facility will also designate an employee as Asbestos Control Program Coordinator. Further, to assure proper selection of outside asbestos control contractors, a committee consisting of:

- o Corporate Asbestos Control Program Coordinator
- o Representative of the Corporate Plant Engineering Office
- o Representative of the Stationary Source Environmental Control Office
- o Representative of the Office of the General Counsel
- o Representative of Purchasing and Supply Staff

is formed to develop a list of approved contractors. No deviations from this list will be allowed.

The Asbestos Control Contractor Selection Committee will select contractors based on their ability to satisfy the following requirements:

- o Remove, repair, recover, encapsulate, or enclose asbestos materials while meeting applicable OSHA and EPA standards. A copy of OSHA regulation 1910.1001, Asbestos, and EPA 40 CFR Part 61, Subpart B: National Emission Standard for Asbestos, shall be in the contractor's possession and available at the job site.
- o Have at least four years experience as an asbestos control contractor.
- o Provide all labor, materials, services, equipment, and insurance necessary to complete the specified project.
- o Complete timely notification of the EPA and other appropriate agencies before commencing work on the project.
- o Remove all asbestos wet after low-pressure fine spraying with a wetting agent of an equivalent to 50 percent polyethylene ester and 50 percent polyoxyethylene ether at a concentration of one ounce per five gallons of water.
- o Prepare job site by providing for employee protective equipment and decontamination, job-site containment, material disposal, and job-site clean-up.
- o Provide for air monitoring before removal is begun, during removal, and after removal completion. Air monitoring will be conducted inside the containment enclosure, outside the enclosure, and outside the facility.
- o Provide a report signed by an American Board of Industrial Hygiene Certified Industrial Hygienist with experience in asbestos control verifying the results of air monitoring and attesting that the project was completed following OSHA and EPA requirements.

If local labor agreements will not permit the use of outside contractors, employees performing asbestos removal must first be trained in removal techniques consistent with OSHA and EPA regulations. Further provisions for all employee protection requirements and EPA pre-notification must be satisfied before approval will be given for any removal project over 160 square feet.

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