



INDUSTRIAL HYGIENE

BULLETIN
No. 122

May 21, 1984

ASBESTOS DEMOLITION AND REMOVAL

In the early 1970's Reynolds Metals Company instituted a program to remove all non-essential asbestos-containing products from its manufacturing facilities. In addition, additional work practices and engineering controls were implemented to control employee exposure to asbestos fibers where substitutes were not available. Our present policy mandates that all asbestos-containing products, which have feasible substitutes, will be eliminated from our facilities. Where there are no feasible substitutes, appropriate engineering controls and work practices will continue to prevent exposure to asbestos. More recently, the Medical Department and Central Engineering have completed an audit of our operating locations in an effort to identify all materials suspected of containing asbestos. The results of the audit indicate that the greatest remaining potential for asbestos exposure is the removal of in-place asbestos insulation.

A bulletin was previously issued requesting that the Industrial Hygiene Department be contacted prior to the removal of materials containing asbestos. After review, the conclusion was reached that it would be helpful to issue more specific policies and guidelines concerning the demolition or removal of asbestos-containing materials. Both health and environmental considerations are involved. Three key points to remember are:

- (1) It is the policy of Reynolds Metals Company to protect the health and safety of its employees and comply with all environmental regulations relating to the handling and disposal of asbestos-containing products.
- (2) Whenever it is necessary to remove any asbestos-containing materials, the Industrial Hygiene Department in Richmond should be contacted for health and safety guidance. Upon receiving the initial contact, the Industrial Hygiene Department will notify the Environmental Control Department and any other departments which should be involved in planning or implementing the project.
- (3) These policies apply whether the removal is to be performed by Company employees or by independent

May 21, 1984

contractors. In particular, no contract, agreement or purchase order is to be made for such work without prior consultation with the Industrial Hygiene Department and the Environmental Control Department.

Attached to this bulletin are the Asbestos Demolition and Removal Guidelines. These provide background information and a general outline of considerations typically involved in asbestos demolition or removal operations. Please review these Guidelines carefully. You will also find it useful to again review the Guidelines prior to contacting the Industrial Hygiene Department about a specific project.

Should you have any questions, feel free to contact the Industrial Hygiene Department in Richmond.



Homer M. Cole
Director of Industrial Hygiene

UD3773

Distribution:

*EH-1 list
Div. & Plant Engineers &
Environmental Personnel*

002887

TX Tiner
RMC0086226

REYNOLDS METALS COMPANY
ASBESTOS DEMOLITION AND REMOVAL GUIDELINES

Asbestos is a general term applied to a family of silicate minerals that have a number of properties in common that render them useful for several commercial purposes. These minerals are fibrous in structure and have electrical and thermal insulating properties as well as being sufficiently flexible that they can be woven into fabrics.

The mineral fibers that comprise the asbestos group are the serpentines, chrysotile, and the amphiboles: actinolite, amosite, anthophyllite, crocidolite, and tremolite.

Exposure to excessive asbestos is known to lead to asbestosis characterized primarily by pulmonary fibrosis, the formation of pleural plaques, a greatly increased risk of bronchogenic carcinoma, pleural mesothelioma, and peritoneal mesothelioma after occupational exposure to inhaled asbestos dust.

Due to the heat resistant properties of asbestos, it has received widespread usage in the aluminum industry. It has been used extensively in casthouse operations—in particular, molten metal transfer. In addition, it has also been extensively used as bulk thermal insulation for such items as piping, boilers, ovens and paste mixers.

In order to protect the health and safety of Reynolds Metals Company employees and comply with all environmental regulations relating to the handling and disposal of asbestos-containing products, the following procedures are mandatory:

General

1. Identify any material suspected of containing asbestos. The Medical Department/Central Engineering audit for your facility should be useful for this determination.
2. For materials not identified in our Medical Department/Central Engineering audit, a bulk sample should be forwarded to the Industrial Hygiene Department in a plastic container for identification and guidance.
3. For asbestos-containing materials, the Industrial Hygiene Department should be contacted for a determination concerning potential exposure.
4. Where a potential exposure exists, appropriate work practices and/or personal protective equipment shall be employed to prevent employee exposure.

002888

TX TINER
RMC0086227

5. Personnel assigned to work where there is potential for asbestos exposure shall be trained regarding the potential hazard and the use of personal protective equipment.

6. Asbestos-containing materials require special handling and disposal procedures. The Environmental Control Department must review and approve in advance all disposal arrangements.

Personal Protective Equipment

1. Individuals having a potential exposure to asbestos shall be supplied with a respirator approved for asbestos by NIOSH. For larger projects, a decontamination area should be established to allow the workers a place to don and remove the personal protective equipment.

2. Personal protective equipment may also include necessary overalls, gloves, and shoe covers.

Work Practices

1. No asbestos-containing material (such as Marinite, Merimet, Transite, etc.) shall be cut, drilled, or machined by Reynolds Metals Company personnel.

2. Any prefabricated asbestos-containing parts or materials shall be vacuumed and sealed in plastic bags prior to shipment to Reynolds Metals Company.

3. Prior to beginning removal or demolition of any asbestos material, caution signs shall be placed around the work area, at a distance safely away from any dust which may be created. For large projects (i.e., furnaces, ovens, boilers, etc.), the immediate work area shall be enclosed and a decontamination area established.

4. All asbestos insulation material shall be kept thoroughly wet, while handling and/or removing the material.

5. No blowing or dry-sweeping, scraping, or sanding of asbestos material or surfaces covered with asbestos-containing material shall be permitted.

6. All scrap asbestos material, as well as the disposable personal protective equipment, shall be placed and sealed in a labeled plastic bag and disposed of as directed by the Environmental Control Department.

7. Work areas shall be kept free from accumulation of any asbestos.

Monitoring

Measurements of airborne asbestos fibers, during the handling and/or removal of asbestos material, shall be conducted by, or under the direction of, the Corporate Industrial Hygiene Department. Based on the results of the monitoring study, the Corporate Industrial Hygiene Department will make any necessary recommendations concerning additional monitoring, employee notification and training, and any changes in personal protective equipment.

Medical Examinations

Personnel assigned to work involving exposure to airborne concentrations of asbestos fibers must be included in a medical surveillance program. This will be coordinated through your local medical facility.

Employee Notification

Any employee found to be exposed to asbestos fiber in excess of the federal standard must be notified in writing of his exposure within five working days. The employee must also be notified in writing of what efforts are being taken to control such exposure levels.

If there are any questions regarding the application of this procedure to your local facility, please contact the Industrial Hygiene Department in Richmond.

UD3775

002890

TX Tiner
RMC0086229