FILE NAME: Reynolds Metals (RM)

DATE: 1979

DOC#: RM020

DOCUMENT DESCRIPTION: Memos and Recommended Practices - Asbestos Substitutes & Control of Asbestos

Mgrs. memo
- says import A exp. < 2 f/cc
- using 3M 8710 resp. for import

5/1/79

1st page
Memo Re: Asbestos Substitutes

ITRACOMPANY CORRESPONDENCE

98 (Rev. 1-68)

ROM:	Homer M. Cole - Industrial Hygiene, GOB
→ TO:	ALL PLANT AND OPERATION MANAGERS
OPY:	Dr. E. C. Irby - EXO
ATE & UBJECT:	May 1, 1979 ASBESTOS SUBSTITUTES

PLAINTIFF EXHIBIT RMC-44

In 1974 RMC began a program to eliminate the use of asbestos-containing materials which may pose a health hazard to our employees. Tests conducted since that time have shown that the machining of marinite board may produce elevated levels of asbestos. As a result, RMC had discontinued all machining of asbestos-containing materials.

Recently, however, it has been brought to our attention that the removal and/or repair of asbestos insulation on pipes, boilers, etc. may result in an asbestos exposure to the individuals involved in that particular job. Although the exposures were below the OSHA standard of 2 fibers/cc, they were high enough to require medical surveillance for all affected employees. In order to maintain worker exposure as low as possible while performing this operation, I am enclosing a copy of a procedure which is to be used while removing and/or repairing any asbestos-containing insulation.

Please note that the insulation material should be kept as wet as possible during the entire operation, in order to prevent the release of asbestos fibers into the workplace. In addition, employees should be issued a NIOSH approved respirator for asbestos, such as the 3M 8710, while removing and/or repairing the insulation. Finally, it is imperative that an initial monitoring study be conducted to determine every employee's exposure to asbestos while performing this task. Please have someone from your plant make an inventory of all areas where asbestos-containing products may be used. This should include all present uses of asbestos, as well as removal and/or repair of insulation already in place. After the inventory has been completed, please contact the Industrial Hygiene Department to initiate the necessary sampling program.

When replacing insulation, every effort should be made to replace it with a non asbestos-containing product. A list of possible substitutes has been enclosed for your information. In addition, Mr. J. W. Carson at Metallurgical Research Division is coor-

dinating an effort to identify other available substitutes for asbestos.

If you have any questions, please do not hesitate to call.

Homer M. Cole

Homer M. Cole

HMC/mhh

Enc.

DEMOLITION AND/OR REMOVAL OF ASBESTOS-CONTAINING INSULATION

WORK PRACTICES

(1) Prior to beginning removal or demolition of any asbestos insulation, caution signs are to be placed around the work area, at a distance safely away from any dust which may be created. The signs must be located so as to warn anyone approaching the area.

(2) Rope off the area, to prevent anyone from entering it unknowingly.

(3) Whenever practical, asbestos insulation is to be wetted sufficiently to prevent emission of airborne fibers.

(4) All scrap asbestos insulation material is to be placed and sealed in labelled bags and disposed of at an approved sanitary landfill.

(5) Whenever possible, dry asbestos material shall be vacuumed into impermeable plastic bags. Dry sweeping of such material is prohibited. Vacuum cleaners used for asbestos clean up should be equipped with a filter to prevent re-introduction of the asbestos fibers into the work environment.

(6) The caution signs and rope around the area are to be taken down at the end of the shift, unless the work is to be continued on the following shift.

PERSONAL PROTECTIVE EQUIPMENT

(1) Personnel engaged in removal, demolition, or clean-up of asbestos insulation or removal of coverings from asbestos insulation must wear an approved asbestos respirator.

(2) Employees shall be trained in the proper use and limitations of each respirator issued for protection against asbestos.

(3) The Company will provide the necessary disposable coveralls, gloves, and head and shoe coverings.

(4) After each use, contaminated coveralls, gloves, and head and shoe coverings shall be placed and sealed in labelled plastic bags and disposed of at an approved sanitary landfill.

MONITORING

(1) Measurements of airborne asbestos fiber levels shall be conducted by the Corporate Industrial Hygiene Department during the removal or demolition of asbestos-containing materials, or the handling of any other asbestos-containing products (Merimet, Marinite, Transite, Asbestos paper, Thermocouple wire).

(2) If monitoring shows that the exposure level is in excess of the federal standard, monitoring shall be repeated whenever the job is performed.

(3) If monitoring results made at least five days, but not more than three months apart, show exposure levels to be below both federal standards (eight hour TWA and ceiling value), no additional monitoring is required.

EMPLOYEE NOTIFICATION

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

MEDICAL EXAMINATIONS

Personnel assigned to work involving exposures to airborne asbestos in excess of 0.1 fibers/cc must have had, within the past year, a comprehensive medical examination. The exam shall include as a minimum:

(1) A chest x-ray.

(2) A history of elicit symptomatology of respiratory disease.

(3) A pulmonary function test to include forced vital capacity (FVC) and forced expiratory volume at 1 second (FEV_1).

ASBESTOS SUBSTITUTE

Several suitable substitutes for various asbestos-containing products have been found to perform as well or better in laboratory tests and actual performance trials. The following is a partial list of asbestos free products now available and some of their uses.

MATERIAL	MANUFACTURER	APPLICATION FORM
Cerwood	C. E. Refractory C.	Loose Fiber, Blanket Roll
Kaowool	Babcock and Wilcox	Kaowool Loose & Bulk Fiber, Kaowool M. Board, Fiberboard
Fiberfax	Carborundum Corp.	Loose Fiber, Blanket Roll, Paper Form
Fiber Seal Gasket Strip	Fibrous Glass Product Co.	Rope
Glass Rock	Glass Rock Product Co.	Sheet, Mortar
Refrasil	Hitco-Armco Steel Co.	Cloth, Insulation, Sleeving, Tape, Thermocouple, Covers, Blanket
Pyrolite, Pyroflex	Rex Roto	Board, Custom made Shapes, Moldable Blanket, Rigid Insulation Shape
Kevlar 29	DuPont*	Gloves, Blankets, Pads
Siltemp	Haveg-Hercules Inc.	Blankets, Mold Liners, Electrical Insulation Fabric, Cordage, Tape Mat, Refractory Applicator

*Sager Glove, A-Best, Bestos Product are fabricator who make up blanket, pads, glove, shielding, to customer specification out of Kevlar or similar material.

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continued...

ASBESTOS SUBSTITUTE

MATERIAL	MANUFACTURER	APPLICATION FORM
Hovomat	Hollingsworth & Vose Co.	Insulating Paper
Pyrotek	Pyroteck Inc.	Low-Temp Felt, High-Temp Felt, Fabric, Paper, High-Temp Compressor Board, Med-Temp Compressible Board, Rope, Trough Lining Material, Composite Material Impregnated Packing

Last page

time to start posting OSHA signs for A. insulation removal

1979

Memo -
Re - Control of Asbestos

INTRACOMPANY CORRESPONDENCE

Form (Rev. 1-68)

FROM:	Jack B. Barbee
TO:	Dave Ogle
COPY:	B. W. Hunton, D. V. Hopkins
DATE & SUBJECT:	5-8-79 CONTROL OF ASBESTOS

PLAINTIFF'S EXHIBIT RMC-4b

Attached to this letter is a copy of the NIOSH and Corporate recommendations for asbestos control.

As you will note many of these items are contained in our standard practice for removing asbestos insulation, however, there are several items that we need to initiate as follows:

Under the title "Work Practices", caution signs are to be placed around the work area so as to warn anyone approaching the area that asbestos is being used. Please fabricate sufficient signs to initiate this item.

Items 2, 3, and 4 are being followed.

Item 5 states that dry asbestos material shall be vacuumed into impermeable plastic bags. We have our portable vacuum cleaner which can be used for this purpose, although the Maintenance Engineers will need to specify the proper bags. Perhaps the small vacuum cleaners originally purchased for use in Area 24 could be used for this purpose.

Items listed under Personal Protective Equipment are being followed except for Item 2, which states employee shall be trained in the proper use and limitations of each respirator issued for protection against asbestos. We should review this procedure and insure that the ironworkers, carpenters, service repairmen, and pipefitters, specifically, are using 3M 8710 NIOSH approved respirators and that these affected employees are trained in the proper use and care of these respirators.

I am including four pages of information issued by the Corporate Industrial Hygiene Department. Those itmes for which your actions are required are listed above, the other pages are for your general information.

Jack B. Barbee

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