



From L.L. RIPPEY

To DISTRIBUTION

PITTSBURGH OFFICE - 6

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RE: ASBESTOS DEMOLITION/RENOVATION PROJECTS

It is critically important to take whatever steps are necessary to insure that people involved in jobs where there is a potential for exposure to asbestos are aware of the hazards. These people whether they are Alcoa employees or contractors must be informed of the presence of asbestos. Because asbestos containing materials were used so widely at one time, their presence should be investigated prior to all demolition and renovation projects.

One Alcoa location is considering the establishment of an Environmental Permit for demolition/renovation projects similar to Welding Permits or Confined Space Entry Permits to make sure that the asbestos question is raised in the job planning stage. The Environmental Permit idea being considered is a pre-job safety and health review procedure to cover asbestos and possibly other hazardous materials such as PCBs and silica.

Most Alcoa plants have a policy which calls for treating all unknown insulation types as if they were asbestos until a reliable analysis is done. The new OSHA Asbestos Standards for Construction requires labeling of installed asbestos insulation either by direct labeling or by the same types of alternatives that are allowed under the Hazard Communication Standard. These alternatives may include placards, job procedures, diagrams, or color coding of asbestos containing materials. Whatever method is used to make the presence of asbestos known must be communicated to employees in order to be effective. Even with a good asbestos identification program, there is still a possibility of finding asbestos concealed within process equipment or building structures, so a contingency plan for this eventuality needs to be formulated and communicated.

The risks of accidental and unnecessary exposure to asbestos are too great to leave the detection of asbestos and the communication of the hazards to chance.



HAZARDOUS MATERIAL - ASBESTOS

PRIMARY CONSIDERATIONS

- A. RATIONALE - Asbestos dust exposures have been associated with asbestosis (permanent lung damage), lung and GI cancer, and mesothelioma (rare cancer of the lining of the chest or abdominal cavity).
- B. CONSULT YOUR PLANT INDUSTRIAL HYGIENIST for assistance in the recognition, evaluation, and control of the hazardous material. He/she may also want to monitor the work environment to determine exposure levels.
- C. INFORM EMPLOYEES of the presence of asbestos, explain the hazards and the appropriate control measures to be taken.
- D. PERSONAL HYGIENE PRACTICES:
 1. Do not permit smoking or eating in the work area.
Note: Smoking greatly increases the risks of developing lung cancer in employees exposed to asbestos.
 2. Thoroughly wash all skin surfaces that have been exposed to asbestos before eating, smoking, or leaving work.

WORK PRACTICES

A. RESTRICTED AREAS:

1. Enclose the work area to the maximum amount feasible and delineate with tape or rope and warning signs as follows:

ASBESTOS

DUST HAZARD

Avoid Breathing Dust

Wear Assigned Protective Equipment

Do Not Remain in Area Unless Your Work Requires It.

Breathing Asbestos Dust May Be Hazardous To Your Health.

2. Prohibit access to work area to all but properly trained and attired maintenance personnel.

B. WET METHODS OF REMOVAL:

1. Wherever possible, the material to be removed should be wetted down (i.e. water spray) to prevent the emission of airborne fibers. However, water should not be used where electrical or other hazards exist.
2. Never dry sweep asbestos material. Utilize local exhaust or vacuum methods to collect fibers.

PERSONAL PROTECTIVE EQUIPMENT

1. An approved respirator, (such as the 3M 9910), is to be worn at all times in the regulated area. (Plant should specify respirator and how to obtain it here.)
2. All employees wearing a respirator must be trained in its use and limitations, and be tested for proper fit. Contact your Industrial Hygienist for assistance.

B. CLOTHING:

1. Disposable protective garments are to be worn in the work area to prevent asbestos fiber accumulation on employee's work clothes.
2. All contaminated disposable clothing is to be handled as asbestos material with regard to disposal. (Plant should specify how to obtain disposable garments).

IV. DISPOSAL

- A. DISPOSE OF ALL ASBESTOS CONTAINING MATERIAL in plastic bags and seal in specially marked steel drums.

B. LABEL CONTAINER:

CAUTION

Contains Asbestos Fibers

Avoid Creating Dust

Breathing Asbestos Dust May Cause

Serious Bodily Harm

- C. FOLLOW APPROPRIATE LOCAL, STATE AND/OR FEDERAL EPA requirements. Contact Environmental Control Department for assistance.

OUTSIDE CONTRACTORS

- A. ALERT CONTRACTORS to the presence of asbestos. They must be required to meet Alcoa's procedures for asbestos removal.
- B. DOCUMENTATION of EPA contacts made by outside contractors should be kept on file by Alcoa.

VI. REFERENCES

- A. Alcoa Material Safety Data Sheet No. 40 - Asbestos
- B. OSHA 21 CFR 1910.1001

DEMOLITION - ASBESTOS PRESENT

PRIMARY CONSIDERATIONS

A. RATIONALE - Asbestos dust exposures may cause permanent lung damage and cancer

B. CONSULT YOUR PLANT INDUSTRIAL HYGIENIST for more detailed guidance about appropriate safeguards and controls

C. INFORM EMPLOYEES of the presence of asbestos, its hazards and the control measures to be taken. *Fit test and train them in the use of respirators*

D. PERSONAL HYGIENE PRACTICES

1. *Prohibit* smoking or eating in the work area.
2. Thoroughly wash before eating, smoking, or leaving work.

WORK PRACTICES

A. RESTRICT AREA

1. Enclose the work area as much as possible. *
Rope off and post warning signs

ASBESTOS

DUST HAZARD

Avoid Breathing Dust

Wear Assigned Protective Equipment

Do Not Remain in Area Unless Your Work Requires It.

Breathing Asbestos Dust May Be Hazardous To Your Health.

2. Prohibit access to work area to all but properly trained and attired maintenance personnel.

B. DUST CONTROL

1. Wherever possible, wet down the material to be removed to minimize dust

2. Never dry sweep asbestos material. Use local exhaust or vacuum methods to collect dust.

PERSONAL PROTECTIVE EQUIPMENT

1. Use of respirator (e.g. 3M 9910) is mandatory

B. CLOTHING

1. Disposable protective garments are required
2. *Disposal of* contaminated disposable clothing (See IV)

IV. DISPOSAL

A. *PLACE* ASBESTOS CONTAINING MATERIAL in plastic bags and seal in drums.

B. LABEL DRUM *

CAUTION

Contains Asbestos Fibers

Avoid Creating Dust

Breathing Asbestos Dust May Cause

Serious Bodily Harm

* OSHA Reg 2

C. FOLLOW APPROPRIATE

EPA requirements. Contact *Plant* Environmental Control

engineer for assistance.

OUTSIDE CONTRACTORS

B. ALERT CONTRACTORS to the presence of asbestos.

A. MUST CONFORM TO ALCOA PROCEDURES

Alcoa must keep

C. DOCUMENTATION of EPA contacts made by outside contractors.

VI. REFERENCES

A. Alcoa Material Safety Data Sheet No. 40 - Asbestos

B. OSHA 21 CFR 1910.1001