OFFICE MEMO

BROWN & ROOT, INC.

TO: Greg Garvin DATE: September 28, 1977
FROM: Carl Richardson
SUBJECT: Asbestos Exposure

Please find enclosed "Guidelines For Control and Measurement" for Asbestos Dust. This might be of help in establishing your requirements for the cutting and handling of Transite.

OSHA limits for Asbestos are presently 2 fibers/cc for an 8 hour TWA. Also, there is a ceiling of 5 fibers/cc for any 15 minutes. Other requirements exist and I refer you to OSHA Standard 1910.1001. Initial monitoring and medical surveillance have been emphasized by OSHA inspectors on other Brown & Root jobsites.

OSHA's current policy on medical surveillance is, if exposure exceeds 0.1 fibers/cc for an 8 hour TWA, then medical surveillance is required.

In handling and cutting Transite, exposure levels to Asbestos are below the OSHA limits but above the 0.1 fiber/cc Medical Surveillance-Policy level. When applying a wet method of cutting Transite, the levels fall substantially below the 0.1 fiber/cc level, therefore, eliminating the expensive medical surveillance requirements. The tests we conducted were on 15%-20% Asbestos Transite and your exposure levels may be different depending on Asbestos content of the material, type of operation and location. This is why it is important to have initial monitoring, if possible.

If you need more information and assistance on Asbestos exposure, feel free to call at 713-676-4207.

Carl Richardson

Carl Richardson, Industrial Hygienist
Brown & Root, Inc.

CR/ka

P.S. If you go to a wet method of cutting Transite, have the operator of the saw wear rubber gloves because the wet Transite will possibly give a concrete rash on the operator's hands.

PLAINTIFF'S EXHIBIT
tabbies
B&R-61

DEDICATED TO CONSERVING HUMAN LIFE AT WORK AT HOME AT PLAY

# LIFE/SAFETY ASSOCIATES

SAFETY DEVICES & EQUIPMENT

P O BOX 82870 OCS
LAFAYETTE LOUISIANA 70501
PHONE 318/233 1873

[redacted]
P.O. Box 45226
Baton Rouge, La. 70895
504/ 383-0268

## STEPS FOR THE REMOVAL OF ALL INSULATION MATERIALS; ESPECIALLY "ASBESTOS" BEARING MATERIALS.

1. Notify local EPA office when asbestos bearing materials are scheduled for removal.

2. Locate the proper dump site before removing asbestos bearing materials.

3. Before removing asbestos bearing materials post "Caution-Asbestos" signs and rope off ground area.

4. During removal of asbestos bearing material monitor the site for exposure level. 2.0 F/cc is the standard.

5. The following shall be provided when removing asbestos bearing materials, regardless of exposure level.

   a. LIFE/SAFETY #8RP-8711 non-toxic dust masks. Packaged twenty (20) per box, ten (10) boxes per case.

   b. LIFE/SAFETY disposable type, whole body work clothing; such as coveralls, hoods, shoe covers and so on.

   c. The law requires employers to supply "full face piece powered respirator" (LIFE/SAFETY #2200A) or "powered air purifying respirator" (LIFE/SAFETY AIRSTREAM) to all workers on jobs where asbestos dust is ten (10) to one hundred (100) times the maximum OSHA standard.

   d. For heavily concentrated worksites where the level of asbestos dust is one hundred (100) times or more the standard, workers must be supplied with a type "C" continuous flow or pressure demand supplied air respirator.

   NOTE: LIFE/SAFETY can supply this equipment. We have several types available such as "Safe Air"

6. Offer annual medical examinations for employees who have been exposed.

7. Maintain personnel and environmental monitoring records for twenty (20) years.

8. Wet insulation before removal.

9. Place contaminated and/or bad insulation into heavy gauge plastic bags properly identified and securely tied off.

10. The additional items available to always make certain of being in compliance with OSHA and EPA standards are listed below:

    a. "LIFE/SAFETY #47-1 Asbestos Caution Bag". Made from four (4) mil, heavy duty, polyethylene. Meets OSHA requirement #1910-1001. Packaged seventy-five (75) per case. Each bag measures 25" x 15" x 55". Color: Clear.

    b. "LIFE/SAFETY #4776 Asbestos Caution Dust Hazard Sign". Constructed of plastic. Each sign measures 14" x 20". Yellow background with black lettering. Meets OSHA requirement 1910.932.

    c. Disposable Clothing:

        1. "LIFE/SAFETY #1011 Coverall". Packaged twenty-five (25) to a case. Snap front. Sizes S,M,L,XL and XXL. Color White.

        2. "LIFE/SAFETY #1067 Hood". Packaged two hundred fifty (250) per case. Below shoulder. Snap-on. Fits all. Color White.

        3. "LIFE/SAFETY #1080 Shoecovers". Packaged two hundred (200) pair per case. Elastic top. Fits all. Color White.

    d. "LIFE/SAFETY PBR 106 PLASTIC BARRIER ROPE". To block off hazardous areas and to control traffic flow. Yellow and black. 3/8" x 600 feet in a roll.

Other items such as safety glasses, hard hats, goggles, respirators, gloves, monitors, resusitators, supplies and devices of all types are also available.