

⁹⁻⁹⁻⁷⁶
Ashton, I assume that this
procedure is still in effect
and B+R are following it?

WSC:

Bill - we wrote up Gran
our own procedure - please give me
a copy for Gran. I assume bill are
following our procedure? correct? L.H.

JERRY DELAY

SUBJECT:

DISPOSAL OF
ASBESTOS MATERIAL

B. GLOCK
C.C. ED KINETT
G. TOWNSEND ✓

DATE 12-14-72

1. ALL ASBESTOS SCRAP AND CLEANINGS WILL BE
PLACED IN PLASTIC BAGS OR OTHER
APPROVED SEALED CONTAINERS. (WET MATERIAL)
2. ALL CONTAINERS OF ASBESTOS WILL BE
LABELED IN ACCORDANCE WITH OSHA 1910.734
(WE WILL USE OUR "STICK ON" LABEL)
3. STOCK PILE ALL CONTAINERS UNTIL
WE GET ONE OR TWO DUMSTER
LOADS TO CARRY TO THE PORT DUMP
4. CONTACT THE PORT THE DAY BEFORE
WE PLAN TO DISPOSE OF MATERIAL.
CONTACT AT PORT: CAPT GAY
PHONE 831-4068

- A. HOW MUCH ASBESTOS MATERIAL
DO WE HAVE?
- B. WHEN CAN WE DUMP MATERIAL?
- C. WHERE AT THE PORT DO WE
DUMP THE MATERIAL?

I WOULD LIKE FOR YOU OR ONE OF
YOUR AREA SURTS BE THE PERSON TO
CONTACT CAPT GAY AT THE PORT.

THANKS
Al Stephen

SAFE WORK PROCEDURE *HANDLING ASBESTOS*
INSULATION APPLICATION, FABRICATION, REMOVAL & DISPOSAL

OCC BROOKSVILLE PLANT

PURPOSE

The purpose of this procedure is to make known to all employees the health hazards and required work procedures for removing and disposing of insulation containing dust and asbestos.

There are two inhalation health hazards associated with removing insulation. The first is the problem of nuisance dust which is for the most part an irritant due to abrasive action in the respiratory system, and in this situation the airborne dust concentrations must be kept below 5 mg/M³ without respiratory protection.

The second and most injurious health hazard is breathing dust containing asbestos fibers. The exposure limit is five fibers, no longer than five micrometers, per cubic centimeter of air, eight hours time weighted average. This amount will be further reduced effective July 1, 1976 to two fibers, no longer than five micrometers, per cubic centimeter of air. The result of excessive exposure to asbestos is harmful to the efficiency of the lungs and may cause bodily harm. Asbestos is classified as a cancer hazard.

For the purpose of this procedure "asbestos" is defined to include chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite.

PROCEDURE

Whenever any insulation is to be removed, we must assume it will be a dusty job requiring protective equipment for the personnel assigned to the work and that precautions to protect those persons working nearby be taken. When asbestos is present, every effort must be made to eliminate and contain the dust and properly dispose of waste.

The following precautions and work practices are the minimum require-

ments:

- 1) Request permission to do the work and determine material to be removed.
- 2) When asbestos is involved, barricade the work area by erecting guardrails by using a rope barricade. Post caution signs at the work site where the airborne concentration of asbestos fibers may exceed the limits. The signs should be located at a distance which will allow an employee to take the necessary protective steps before entering the area. Sign should read:

CAUTION

AVOID BREATHING DUST

CONTAINS ASBESTOS

MAY CAUSE BODILY HARM

USE PROTECTIVE EQUIPMENT

DO NOT REMAIN IN AREA

- 3) Notify persons working nearby that the work is going to take place and to stay away from all visible airborne dust.

NOTE: Notify the Industrial Hygiene Department, Ext.

so air sampling to monitor the atmosphere can be arranged.

This is required.

- 4) Insofar as practicable, asbestos shall be handled, mixed, applied, removed, cut, scored, or otherwise worked in a wet state sufficient to prevent the emission of airborne asbestos fibers in excess of exposure limits unless the usefulness of this product would be diminished thereby.

- 5) Asbestos cement, mortar, coating, grout, plaster, or similar material containing asbestos shall not be removed from bags, cartons, or other containers in which they are shipped, without being either wetted, or enclosed, or ventilated so as to prevent the release of airborne asbestos fibers.
- 6) Employees engaged in the spraying of asbestos, the removal or demolition of pipes, structures, or equipment covered or insulated with asbestos, and/or material containing asbestos, and in the removal or demolition of asbestos insulation must use respiratory protective equipment in the form of a respirator with an approved dust filter and more complete protection when conditions warrant.
Normal dust exposure - use 3M respirator, No. 8710 or equivalent.
Heavy dust exposure - use Type "C", air-supplied respirator.
- 7) Special clothing such as coveralls or similar body covering, head covering, gloves, and foot coverings must be obtained daily and worn to prevent fibers being contacted and carried away from the job.
- 8) Contaminated clothing (coveralls, etc) shall be collected and transported in sealed impermeable bags or other closed containers to prevent using them. Containers must be labeled to prevent unknown exposure of the persons assigned to the laundering of the garments. Laundering must be done in a manner to prevent the release of airborne fibers and exposure of the attendant.
- 9) An excellent level of housekeeping must be maintained including cleaning of all surfaces and maintained free of accumulations of asbestos fibers. Area should be wet cleaned or vacuum cleaned. Never use a broom, brush or blow with air.

- 10) Disposal of waste materials, debris, bags, equipment and containers which may produce in any foreseeable use airborne asbestos fibers, must be collected and disposed of in sealed impermeable plastic bags or impermeable containers. This waste is to be sent to the land fill for burial after requesting and receiving approval of the local plant waste disposal coordinator. Container labels should read:

CAUTION

CONTAINS ASBESTOS FIBERS

AVOID CREATING DUST

BREATHING ASBESTOS DUST MAY CAUSE

SERIOUS BODILY HARM

SAFE WORK PROCEDURE

INSULATION APPLICATION, FABRICATION, REMOVAL & DISPOSAL

PURPOSE

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228 or 337

- 5) Asbestos cement, mortar, coating, grout, plaster, or similar material containing asbestos shall not be removed from bags, cartons, or other containers in which they are shipped, without being either wetted, or enclosed, or ventilated so as to prevent the release of airborne asbestos fibers.
- 6) Employees engaged in the spraying of asbestos, the removal or demolition of pipes, structures, or equipment covered or insulated with asbestos, and/or material containing asbestos, and in the removal or demolition of asbestos insulation must use respiratory protective equipment in the form of a respirator with an approved dust filter and more complete protection when conditions warrant.
Normal dust exposure - use 3M respirator, No. 8710 or equivalent.
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TRANSPORTING, HANDLING, REPAIR AND SALVAGING OF ASBESTOS INSULATED OBJECTS

1.0 SCOPE: Transporting, Handling, Repair and Salvaging of Asbestos Insulated Objects.

2.0 PROCEDURE:

2.1 For Pipe, Vessels, etc. to be transported and repaired.

2.1.1 The zone insulator will make a positive identification as asbestos insulation covered. If no insulator is available, contact the insulator foreman for this service or zone foreman.

2.1.2 In case of repair, an adequate amount of insulation will be removed from the object in the area where repairs are to be made. The exposed ends of asbestos insulation left on will be coated or thoroughly wetted before transporting or repair. Coating is preferred. Asbestos insulation removed will be handled and disposed of as in 2.3 below, (Handling and Disposal).

2.1.3 Exposure to dust by truck drivers and others involved in transporting and handling is felt to be minimal. All truck drivers will receive instructions on How To Identify Asbestos Insulation. (Responsibility - Insulator Foreman). All trucks have the proper respirators on Board for dust protection. They will be worn if any doubt of exposure exists.

2.1.4 Transportation should be alerted when asbestos insulated items are to be transported, so that special precautions can be taken. Trucks so "alerted" will carry special water spray cans to wet down spots or breaks that might occur in handling or transporting. Person requesting truck will be responsible for "special" notification and will make sure object is prepared as in 2.1.1 & 2.1.2 below.

2.1.5 Removal, Handling and Disposal of asbestos insulation will be in accordance with OSHA, Article 1910.93a
NOTE: When large amounts of asbestos insulation are removed, request transportation to supply a special container which they maintain. Transportation will also provide special handling to the disposal area with positive notification of the land fill equipment operator.

training?

*sign
noted of
area*

2.2 For pipe, vessels, etc., to be salvaged.

2.2.1 Whenever possible, the equipment should be transported to the salvage yard with insulation on. Handling should be as in 2.1, 2.1.1, 2.1.4 & 2.1.5. The salvage yard has an area especially designated and marked for delivery of asbestos insulated objects. The salvage yard is also best equipped to handle removal and disposal of asbestos insulation.

2.2.2 Removal, handling and disposal of asbestos insulation shall be as defined in 2.1 - 2.1.5.

2.3 Brief Summary of OSHA Article 1910.93a as it applies to this subject -

2.3.1 Minimum Requirements:

All personnel involved in the removal of asbestos insulation must wear Comfo Type "H" respirator equipped with an 0.3 micron filter.

2.3.1.1 Insulation is thoroughly wet, conditions are dust free.

2.3.2 Maximum Requirements: (All persons involved in removal)

Where test results indicate the asbestos fiber concentration is over the limits established by OSHA.

2.3.2.1 Type "C" respirator equipment.

2.3.2.2 Protective clothing.

2.3.2.3 Area of work barricaded.

2.3.2.4 OSHA approved asbestos hazard signs displayed.

2.3.3 Handling and Disposal:

2.3.3.1 All scrap asbestos insulation must be placed in plastic or plastic-lined bags and securely closed.

2.3.3.2 OSHA approved asbestos hazards labels must be attached to each bag.

2.3.3.3 Bags should be removed from the area to special trash containers. In case of large removal job, request special handling and special container from transportation.

PROPER HANDLING AND DISPOSAL OF ASBESTOS

1.0 SCOPE

The purpose of this procedure is to make known to all employees the health hazards and required work procedures for removing and disposing of insulation containing asbestos, allowing this task to be performed within the limits as prescribed by OSHA, article 1910.93a, ASBESTOS, dated October 26, 1978.

2.0 PROCEDURE

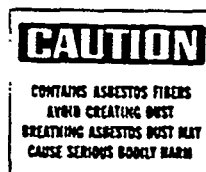
All personnel involved in the removal of asbestos insulation must be aware of the health hazards. It is mandatory that protective equipment be worn as prescribed.

3.0 PROTECTIVE EQUIPMENT

- 3.1 All personnel, whenever removing asbestos insulation, shall wear protective clothing - rain slicker suit or paper disposable type coveralls.
- 3.2 Cotton or rubber work gloves shall be worn while handling asbestos.
- 3.3 Each employee working with or in the immediate area where the asbestos is being removed, shall wear a 3-M disposable type respirator. These shall be changed as the users feels necessary or daily depending on use.
- 3.4 Foot gear worn should be of a type that can be washed or vacuumed at completion of job or daily basics.

4.0 HANDLING AND DISPOSING

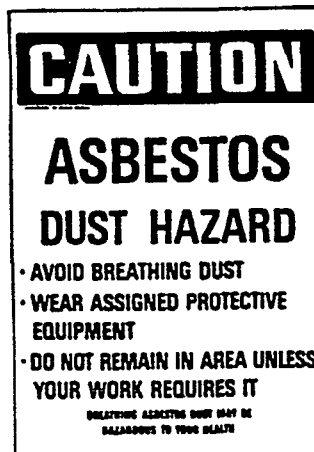
- 4.1 Asbestos shall always be handled, cut, removed, and disposed of in a wet state sufficient to prevent the emission of airborne fibers.
- 4.2 Asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing consigned for disposal, shall be collected and disposed of in sealed impermeable bags. These bags are in Stores specially for this purpose.
- 4.3 OSHA approved labels shall be affixed to each bag containing the waste asbestos. A "stick-on" type label is available in Stores. These labels shall read:



- 4.4 Bags of waste asbestos shall be held in the Salvage Yard "cage" for proper disposal.

5.0 WORK PRACTICES AND PRECAUTIONS

- 5.1 When asbestos is being removed, barricade the work area by erecting rope guardrails. Caution signs shall be posted at the work site, located at a distance which will allow an employee to take necessary protective steps before entering the area. These signs shall read:



- 5.2 Notify the Industrial Hygiene Dept., Ext. 228 or 337 before commencing to remove asbestos so air sampling monitoring of the atmosphere can be arranged.
- 5.3 An excellent level of housekeeping must be maintained including cleaning of all surfaces and maintained free of accumulation of asbestos fibers. Area should be wet cleaned or vacuum cleaned. Never use a broom, brush, or blow with air.
- 6.0 CUTTING ASBESTOS SIDING OR PIPING
- 6.1 Employees cutting asbestos siding or piping shall wear 3-M dust respirators.
- 6.2 Special circular saw equipped with a vacuum unit shall be used.
- 6.3 All scrap, waste, and vacuum bag accumulation shall be disposed of per paragraph 4.0.
- 7.0 RESPONSIBILITY
- 7.1 It shall be the craft foreman's responsibility to see that all regulations in regards to handling and disposing of asbestos, are followed.

Maintenance Procedures Don Townsend

*Don: A Safe Policy we have been
utilizing for the last 4-5 years. A 42*

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NOTE: When large amounts of asbestos insulation are removed, request transportation to supply a special container which they maintain. Transportation will also provide special handling to the disposal area with positive notification of the land fill equipment operator.

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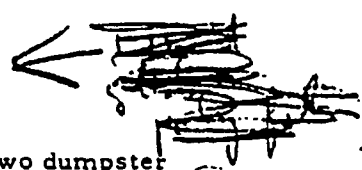
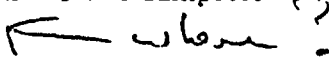
2.3.3.3 Bags should be removed from the area to special trash containers. In case of large removal job, request special handling and special container from transportation.

1- BFB FYI

INTERNAL CORRESPONDENCE

BROWN & ROOT, INC.
P.O. Box 3370, Brownsville, Texas 78520

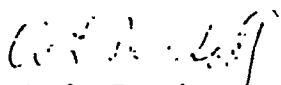
To (Name)	All Brown & Root Foremen	Date	September 16, 1976
Company		Originating Dept.	
Location	Brownsville Plant	Answering Letter Date	
Copy	B. Glock G. Townsend ✓	Subject	<u>DISPOSAL OF ASBESTOS</u> <u>MATERIAL</u>

1. All asbestos scrap and cleanings will be placed in Plastic Bags or other approved sealed containers. (Wet Material)
2. All containers of asbestos will be labeled in accordance with OSHA 1910 93 A
(We will use our "Stick on" label) 
3. Stock pile all containers until we get one or two dumpster loads to carry to the Port Dump. 
4. Contact the Port the day before we plan to dispose of material.

Contact at Port: Capt. Gay
Phone: 831-4068

I would like for you or one of your Area Supt's be the person to contact Capt. Gay at the Port.

Thanks,


A. L. Barefoot

ALB/og

DE 009585