WV-0191 #14

MANDATORY SAFETY / HEALTH TRAINING

LESSON PLAN

PLAINTIFF'S EXHIBIT

UC-2304

S.& U.I.

SOUTH CHARLESTON,WV.

514

UNION CARBIDE

ASBESTOS

ASBESTOS MATERIAL REMOVAL AND DISPOSAL

(LEADERS GUIDE)

STAIRS Code: 514-2421

OBJECTIVES: Upon completion of training participants will be able to:

1. Identify asbestos.
2. Safely strip, clean up, and dispose of asbestos.
3. Identify proper personal protection required.

MATERIALS REQUIRED OR RECOMMENDED:

1. Maintenance Materials Safety Manual, Section XVIII.
2. Inventory

ADDITIONAL AIDS:

1. Caramate Slide Program and Caramate projector. (Optional) - - - (May be obtained from Wayne Williams, Bldg. 308-2 - - X-2856.)

RECOMMENDED METHOD OF INSTRUCTION:

Safety Meeting

One-On-One

TIME REQUIRED: 1 Hour

SPECIAL NOTES:

1. Annual retraining is required for this subject. Successful completion of the inventory will satisfy the retraining requirement.
2. Both the initial training and annual retraining should be entered in STAIRS using code 514-2421.

ASBESTOS MATERIAL REMOVAL AND DISPOSAL

Suggested Lesson Plan

Estimated Time - 1 Hour

STEP I (10 Min.)

INTRODUCTION, CONCERNS AND EMPLOYEE'S OBJECTIVES - STATE: Subject matter, precautions and procedures in handling or working around materials containing asbestos.

THE CONCERN: Inform the participants the potential harm is from insulation materials purchase or installed prior to 1972. The exposure is during stripping, clean-up and disposal of these materials.

OBJECTIVES SET FOR THOSE ATTENDING:

A. They will learn to identify potential asbestos suspects.

B. They will be able to safely strip, clean up and dispose of these materials.

C. They will be able to use proper personal protection before, during and after exposure to asbestos.

STEP II (15 Min.)

LESSON MATERIAL RESOURCES

(A) Maintenance Materials Safety Manual, Section XVIII - Key Points to cover:

1. Inform employee the asbestos fibers that are harmful are those longer than five (5) micrometers. When these fibers are inhaled and collect in the lung sacs, they are not dissolved or absorbed into the body's waste stream. They remain in the lung sacs and membranes form around the fibers, lessening the area in the lungs, thereby resulting in asbestosis.
2. Assure the employee that since 1972 asbestos free materials have been used in the South Charleston Plant, thereby reducing the exposure to asbestos fibers.
3. Inform the employee of some of the telltale signs of asbestos materials are:
   A. Tank covers installed prior to 1972.

B. Unibestos pipe coverings (gray, cement crust, old steam traced lines).

C. Pipe lines with cloth weather barriers.

D. Pipe lines with rusted metal jacketing.

E. Trap lines or tracers with sock or tape.

F. If they have doubts, ask an insulator or insulator supervisor.

4. Make the employee aware of the OSHA standard for exposure to asbestos. This standard limits their exposurer to two (2) fibers longer than 5 micrometers per cubic centimeter of air averaged over the workday (8 hours), and a ceiling of 10 fibers longer than 5 micrometers per centimeter of air, must not be exceeded at any time.

STEP III

PERSONAL PROTECTION

- 1. When removing or cleaning up insulation containing asbestos, respirators must be worn. Encourage the employees to wear respirators and monogoggles any time they are working with insulation of any kind.
  (a) When removing any insulation it should be treated as containing asbestos.
  (b) Many times insulation can be soaked with chemicals and dried. When breathing those dust particles they can also cause respiratory problems.
- 2. Instruct the participants in the preparation and precautions of the work area in which asbestos laden insulation is being removed.
  (a) Barricade tape is to be used to isolate the area.
  (b) Proper caution signs placed in strategic points.

Those signs must state: CAUTION - ASBESTOS - AVOID - BREATHING DUST - WEAR PROTECTIVE EQUIPMENT - DO NOT REMAIN IN AREA UNLESS YOUR WORK REQUIRES IT - BREATHING ASBESTOS CAN BE HAZARDOUS TO YOUR HEALTH. Stress the point that these signs must be honored by everyone.

- 3. The work area clean up:
  Use plastic or tarps on slagged areas and gratings. This will eliminate particles from blowing around later and make an easier clean-up.
- 4. Impress the importance of wetting down and a wet clean-up if possible.
- 5. Insulation being removed should never be dropped. If dropped it is broken causing the release of dust and asbestos, thereby, creating a greater hazard and a large clean-up problem.
- 6. When practical and safe, insulation should be placed in plastic bags and lowered to the ground. Finally, point out the importance of removing barricade tape and returning caution signs to their storage place when clean up is completed.

- 7. DISPOSAL: Inform those in attendance the importance of proper disposal of insulation containing asbestos. Asbestos must be buried in an approved land fill (Goff Mountain).
First, it must be put into poly-ethylene bags which are labeled with CAUTION - ASBESTOS information on them. They must also be wired closed, set along the road to be picked up by trucking to be hauled to Goff Mountain. If these bags are used for anything besides asbestos materials, they must be turned inside out to prevent special disposal treatment.
Larger amounts may be placed in open top dumpsters if wet down thoroughly, covered with plastic, labeled and secured to prevent dust loss.
- 8. STORING OF CLOTHING: Coveralls will be supplied (standard or paper) but must be kept separated from street clothes.
(a) Coveralls must be changed daily if working with asbestos. They must be removed or vacuumed before entering an eating place (never use compressed air).

(b) When sending coveralls to the laundry they must be placed in sealed plastic bags with a tag labeled: CAUTION - ASBESTOS DUST - HAZARDOUS TO BREATH, ETC.

- 9. Assure each participant these standards, guidelines, protective equipment and records are all for their protection as well as their fellow workers.
- 10. EPA and/or S/H may monitor some jobs and they may be asked to wear a small monitor near their breathing area.
- 11. Medical checks and records are kept and available to their personal physician on request.
- 12. In wrapping up, encourage participants to follow these few precautions and thereby make everyones environment cleaner.

-- THANK THEM --

--- ASK FOR QUESTIONS.

CED
5/14/82

ASBESTOS INVENTORY

Name_____

Dept._____ Date_____

1. _____ _____ should be worn any time insulation is being removed.

2. Plastic or tarps should be spread on _____ and _____ to make clean-ups easier.

3. _____ should be used before stripping and in final clean-up.

4. Following proper procedures can lessen the chances of _____.

5. We have had asbestos-free insulation since: (Check correct answer)

   1980 1977 1972 1968

6. Asbestos material should be disposed of in _____.

SAVE YOUR BREATH BY PROTECTING YOUR LUNGS

CED
4/14/82