PLAINTIFF'S EXHIBIT

UC-5117

DRAFT

STANDARD MAINTENANCE PROCEDURE

NO.: D-12
PAGE: 1 of 5
EFFECTIVE: 05/04/85
REVIEWED/REVISED: 10/14/86

UNION CARBIDE CORPORATION
Solvents and Coatings Materials Division
Texas City, Texas

SUBJECT: REMOVAL AND HANDLING OF ASBESTOS CONTAINING MATERIAL

1.0 PURPOSE

1.1 To protect the health and safety of employees directly involved and others who may be exposed to dust/fibers in the immediate area of asbestos-containing material removal or demolition.

1.2 To provide a standard method of safe removal and handling of asbestos-containing material in compliance with Plant Procedure I-B-8 and OSHA Standards.

1.3 To provide a standard method of disposal of asbestos-containing material from the plant, in accordance with E.P. Department guidelines.

2.0 SAFETY

2.1 Breathing asbestos dust may cause cancer and lung disease.

3.0 EXPOSURE LIMITS

3.1 Employee 8-hour time-weighted average (TWA 8) exposure to airborne concentrations of asbestos fibers shall not exceed (0.2) fibers, per cubic centimeter of air.

4.0 PROCEDURE

4.1 A Hazardous Work Permit will be secured for any work with asbestos.

4.2 Where feasible, a negative pressure enclosure will be established before asbestos removal begins.

4.3 Caution signs will be posted at all approaches to areas where removal, demolition or handling of asbestos-containing material is being performed.

Union Carbide trial exhibit UC-5117: Standard Maintenance Procedure D-12: Removal and Handling of Asbestos C... Published by AsbestosClaims.Law
ACL Doc 19609 · Page 1 of 5 asbestosclaims.law/library/19609/1

UNION CARBIDE CORPORATION
Solvents and Coatings Materials Division
Texas City, Texas

SUBJECT: REMOVAL AND HANDLING OF ASBESTOS CONTAINING MATERIAL

4.3.1 The signs will conform to 20" x 14" vertical format.

R 4.3.2 The signs will state:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE
CLOTHING ARE REQUIRED IN THIS AREA

4.4 An appropriate barricade, using green tape, will be erected around the perimeter of regulated areas as a supplementary, protective measure to discourage unauthorized entry.

4.5 Insofar as practicable, demolition, removal or handling of asbestos-containing material will be performed while the material is in a sufficiently wet state to prevent emission of airborne fibers exceeding the exposure limits.

4.6 Removed insulation will be wetted and placed directly into labeled plastic bags or other suitable containers.

4.7 In cases where this is not practicable, place plastic sheeting beneath the job site, mist spray the removed insulation with water, then place in plastic bags.

4.8 Vacuuming will serve as an effective alternate cleanup method.

4.9 Where a portable change facility is provided, entry to and from the regulated area must be through the change facility.

Union Carbide trial exhibit UC-5117: Standard Maintenance Procedure D-12: Removal and Handling of Asbestos C... Published by AsbestosClaims.Law
ACL Doc 19609 · Page 2 of 5 asbestosclaims.law/library/19609/2

UNION CARBIDE CORPORATION
Solvents and Coatings Materials Division
Texas City, Texas

SUBJECT: REMOVAL AND HANDLING OF ASBESTOS CONTAINING MATERIAL

R 4.10 Containers used for disposing of removed asbestos material will bear a caution label readily visible and legible which states:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

4.11 All external surfaces will be maintained free of accumulation of asbestos fibers. Scaffolds used for this work will be cleaned.

4.12 Asbestos waste, scrap, debris, bags, containers, equipment and contaminated disposable clothing for disposal will be collected and sealed in impermeable bags or other closed impermeable containers and placed in place in an area to where damage to the containers would be at minimal.

4.13 All pipe or equipment insulated with asbestos containing will be stripped before taking to Salvage or Investment Recovery.

5.0 PERSONAL PROTECTIVE EQUIPMENT

R 5.1 Respiratory Protection - Employees engaged in the spraying (wetting-down) of asbestos, the removal; in the demolition of pipes, structures, or equipment covered or insulated with asbestos; and in the removal or demolition of asbestos insulation or coverings shall be provided with respiratory equipment as follows:

Union Carbide trial exhibit UC-5117: Standard Maintenance Procedure D-12: Removal and Handling of Asbestos C...
Published by AsbestosClaims.Law
ACL Doc 19609 · Page 3 of 5
asbestosclaims.law/library/19609/3

UNION CARBIDE CORPORATION
Solvents and Coatings Materials Division
Texas City, Texas

SUBJECT: REMOVAL AND HANDLING OF ASBESTOS CONTAINING MATERIAL

5.1.1 An air purifying respirator may be used to reduce exposure below permissible limits, when the ceiling or the 8-hour time-weighted average (TWA 8), airborne concentrations of asbestos fibers are reasonably expected to exceed no more than ten times the PEL limits. This consists of a half face dual cart. Respirator with type "H" filter.

5.1.2 An air powered purifying respirator will be available at employee's request.

5.1.3 A pressure-demand, supplied-air respirator shall be used to reduce exposure below permissible limits when the ceiling or the 8-hour time-weighted average airborne concentrations are reasonably expected to exceed 10 times those limits.

5.2 Special Clothing - The supervisor shall provide and require use of special clothing, such as coveralls or similar whole body clothing, head coverings, gloves, and foot coverings for any employee exposed. Contaminated clothing should not be stored in lockers. A daily change is mandatory, more frequently, if conditions warrant.

A 5.3 Hygiene Facilities and Practices-

5.3.1 A portable clean change facility will be provided as necessary, adjacent to and connected to the regulated areas.

5.3.2 For the purpose of small, short term operations, an HEPA vacuum or glove bag may be used.

5.3.3 A permanent change area is provided for employees use as a follow-up for small short term operations as necessary.

Union Carbide trial exhibit UC-5117: Standard Maintenance Procedure D-12: Removal and Handling of Asbestos C... Published by AsbestosClaims.Law
ACL Doc 19609 · Page 4 of 5 asbestosclaims.law/library/19609/4

UNION CARBIDE CORPORATION
Solvents and Coatings Materials Division
Texas City, Texas

SUBJECT: REMOVAL AND HANDLING OF ASBESTOS CONTAINING MATERIAL

R 6.0 TRAINING

6.1 All employees entering a regulated area will be trained prior to and annually thereafter on:

6.1.1 Methods of recognizing asbestos.

6.1.2 The health effects associated with asbestos exposure.

6.1.3 The relationship between smoking and asbestos in producing lung cancer.

6.1.4 Operations that could result in exposure in asbestos, the importance of necessary protective controls to minimize exposure including, as applicable, engineering controls, work practices, respirators, housekeeping procedures, hygiene facilities, protective clothing, decontamination procedures, emergency procedures, and waste disposal procedures, and any necessary instruction in the use of these controls and procedures:

6.1.5 The purpose, proper use, fitting instructions, and limitations of respirators.

6.1.6 The appropriate work practices for performing the asbestos job.

6.1.7 Medical surveillance program requirements.

6.1.8 A review of this standard, including appendices.

6.2 All other Maintenance employees will be trained every three years.

6.3 Training records will be maintained by the Maintenance Department with a copy to the Safety Department.

ID#0084y/ivh

Union Carbide trial exhibit UC-5117: Standard Maintenance Procedure D-12: Removal and Handling of Asbestos C...
ACL Doc 19609 · Page 5 of 5
Published by AsbestosClaims.Law
asbestosclaims.law/library/19609/5