



INTERNAL CORRESPONDENCE

Engineering, Manufacturing, and Technology Services
Central Engineering
Technical Center

Post Office Box 8361
Building 2000
South Charleston, WV 25303

October 14, 1986

TO: Mr. B. G. Perry

COPY TO: Mr. P. D. Franson
Dr. P. R. Kavasmaneck
Mr. W. G. Lilly, Jr.
Mr. C. C. Neely
Mr. S. W. Turicchi

RECEIVED

OCT 20 1986

CCN

SUBJECT: Recommended C&P Program - Phase-Out Use of
Asbestos-Containing Materials in Workplace

Bob:

In July of this year, you requested on behalf of the Manufacturing Council that a Task Group be assembled to evaluate the implications for Chemicals and Plastics of continued use of asbestos-containing materials in the workplace. You should be aware that asbestos-containing insulation materials were prohibited for new construction and for replacements beginning in 1976.

The Task Group, headed by Mr. C. C. Neely, Corporate Fellow - Engineering Mechanics, was comprised of the following individuals and areas of expertise.

L. E. Calvert	- Maintenance
S. W. Clark	- Health/Safety
G. B. Elder	- Corrosion-Materials
R. W. Engle	- Valve and Piping Technology

The Task Group has surveyed current and projected industry practices with regard to the use of asbestos-containing materials and has evaluated current government regulations and made judgements with regard to future regulations which could impact on the use of and cost of use of asbestos-containing materials. Additionally, the Group evaluated the availability and cost effectiveness of substitute materials.

UCC 015841

Mr. B. G. Perry
Page 2
October 15, 1986

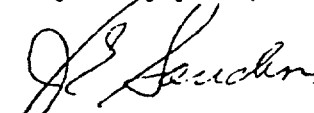
Based on available evidence that airborne asbestos in the occupational workplace has proven to be a carcinogen and that cost effective alternative materials are available, or can be developed with relative ease, the Team has recommended that C&P continue to phase out the use of asbestos-containing materials with no purchase or installation of asbestos-containing materials, without a formal variance, after January 1, 1989. Asbestos-containing materials that are in use and retain their structural and functional integrity need be replaced only if this integrity is compromised, or when normal maintenance occurs.

Other recommendations are contained in the attached draft of the C&P Recommended Program.

I want to thank the Task Group for their efforts in this study and for their breadth of judgement as reflected in the recommendation.

Please let me know of further work you require, or of any questions you may have.

Very truly yours,



J. E. Sanders

JES:he
Attachment
4701Y

RECOMMENDED PRACTICE



SH-256
PAGE 5 OF 6
SEPTEMBER 1986

b. At least 10 days before a demolition operation that involves at least 260 linear feet on piping or 160 square feet on other facility components of friable asbestos materials.

c. At least 20 days before a demolition operation that involves less than 260 linear feet on piping or 160 square feet on other facility components of friable asbestos materials (EPA requires further advance notice for these demolitions that are shorter in duration).

d. As early as possible before a structurally unsound facility in danger of imminent collapse is demolished under an order of a state or local government agency.

2. Text of Notification Letter - A suggested notification letter for the demolition and/or renovation of facilities containing friable asbestos material per requirements of 40 CFR 61, Subpart M, Section 146 (c), is:

Form of Notification

NOTICE OF INTENT TO DEMOLISH OR RENOVATE STRUCTURES, EQUIPMENT OR PIPING INVOLVING FRIABLE ASBESTOS INSULATION

1. Name of Owner	Union Carbide Corporation
2. Address of Owner	(Location Street Address of facility being demolished or renovated).
3. Description of Facility	Various buildings, equipment and piping used in manufacture and distribution of chemicals and plastics and also age, size and prior use of these facilities.
4. Estimate of Quantity of Asbestos	Approximate amount of friable asbestos material present in the facility and explanation of techniques of estimation if estimate for demolition operation is less than 160 square feet or 260 linear feet.
5. Scheduled Start and Completion Dates	
6. Method(s) of Demolition/Renovation	
7. Compliance Procedures	How EPA regulations will be followed
8. Disposal Site	Name and location of site where asbestos waste material will be deposited

Only parts 1 through 4 are necessary for demolition operations involving less than 260 linear feet or 160 square feet of friable asbestos material. The name, title, and authority of the State or local government representative who orders the demolition should be added to the notification for demolition of structurally unsound facilities. Some states, including Georgia, New York, North Carolina, and California, also require notification of demolition and/or renovation operations involving friable asbestos materials.

2.6.3 Key Removal Requirements - For a planned demolition operation or for the total of scheduled renovation operations in which at least 260 linear feet or 160 square feet of asbestos material is removed:

1. Friable asbestos materials shall be removed before a demolition or renovation operation if the operation would likely break up or preclude access to the asbestos materials for subsequent removal unless the asbestos materials are on a facility component encased in a material such as concrete or are adequately wetted whenever exposed.

2. If a facility component is covered or coated with asbestos materials and is removed in sections or units, it shall be carefully lowered, not dropped or thrown, to the ground level and shall have any exposed asbestos materials adequately wetted while cutting or disconnecting.

3. Wetting is not required during renovations if the EPA is requested to confirm that wetting would unavoidably damage equipment. If the EPA confirms this, then a local exhaust ventilation and collection system must be used to collect asbestos particulates. The exhaust system must exhibit no visible emissions to the outside air or be designed and operated according to 40 CFR 61.154.

RECOMMENDED PRACTICE



CENTRAL ENGINEERING

4. After sections or units of piping or equipment with asbestos materials have been taken out of the facility, the asbestos materials during stripping shall be adequately wetted or shall be collected by a ventilation and collection system as specified in 2.6.3.3.

5. Dust-tight chutes or containers shall be used to lower asbestos material removed or stripped more than 50 feet above ground level and not removed in units or sections.

6. All friable asbestos materials that have been removed or stripped shall remain adequately wet until collected for disposal.

7. If the ambient temperature is below 0°C, then the only wetting requirements are those specified in 2.6.3.4 and 2.6.3.6. Equipment or piping coated or covered with asbestos materials shall be removed to the maximum extent possible.

8. For demolition of a structurally unsound facility under the order of a State or local government agency, the portion of the facility that contains friable asbestos materials shall be adequately wetted during the wrecking operation. The wetting requirements specified in 2.6.3.4, 2.6.3.5, 2.6.3.6, and 2.6.3.7 shall also apply to any emergency demolitions.

2.6.4 Key Disposal Requirements

1. Visible emissions shall not occur during the collecting, transporting, or disposal of any asbestos-containing waste material unless the air-cleaning methods specified in 40 CFR Part 61.154 are used to collect asbestos fibers before they escape to the outside air.

2. The disposal method for collecting and transporting asbestos-containing waste materials shall be approved prior to use by the EPA, unless either of these two EPA-approved methods are used:

a. Form all asbestos-containing waste material into nonfriable pellets or other shapes, or

b. Adequately wet and seal while wet in leak-tight containers all asbestos-containing waste material. The waste containers shall be labeled according to Section 2.2.4.

3. The disposal site for asbestos-containing waste material shall have no visible emissions, or the disposed material shall be covered within 24 hours with at least six inches of nonasbestos-containing material or with an effective resinous or petroleum-based dust suppression agent (waste crankcase oil is not acceptable.) Alternative methods for controlling asbestos emissions must have EPA approval before being implemented.

4. Either a natural barrier or a fence shall adequately deter (as determined by the EPA upon request and supply of appropriate information) public access to the waste disposal site. If fenced, then warning signs (20" x 14") shall be posted at all entrances and at intervals no greater than 330 feet along the perimeter of the sections of the site where asbestos-containing material is deposited. The signs shall state:

ASBESTOS WASTE DISPOSAL SITE
DO NOT CREATE DUST
BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH

2.7 AUDITS

2.7.1 Each location shall periodically audit this procedure to ensure understanding and compliance.