

1c Plant Managers  
Area Managers of Operations  
Staff Heads



*United  
States  
Steel  
Corporation*

PLAINTIFF'S  
EXHIBIT  
USX-133

Interorganization Correspondence

Date: April 9, 1984

From: S. A. Bennett, Jr.  
General Manager  
Mon Valley Works

Subject: Revised Mon Valley Works Guideline  
for the Handling and Removal of  
Asbestos Bearing Materials.

The attached revised guideline must be implemented to insure continued compliance with existing asbestos regulations and to protect employees against the hazards of exposure to asbestos. This supersedes the Mon Valley Guideline dated August 24, 1983. Questions regarding the Guideline should be addressed to J. R. Dierdorf, General Supervisor-Industrial Hygiene (Homestead-Ext. 2945).

A handwritten signature in dark ink, appearing to read "J. R. Dierdorf".

egb

Attachment

cc: E. E. Harris  
E. M. Gorden  
K. F. Kuhns, M.D.  
J. R. Dierdorf  
- Safety & Environmental Health Staff

GUIDELINES FOR THE REMOVAL AND HANDLING OF  
ASBESTOS CONTAINING MATERIALS

| <u>INDEX</u>                         | <u>PAGE</u> |
|--------------------------------------|-------------|
| Introduction                         | 1           |
| Notification for Exposure Monitoring | 1           |
| Notification for Reporting           | 2           |
| Initial Determination                | 2           |
| Safe Work Practices                  | 2           |
| Disposal                             | 4           |
| Personal Protective Equipment        | 5           |
| Respirators                          | 5           |
| Protective Clothing                  | 5           |
| Personal Hygiene                     | 6           |
| Restricted Area                      | 6           |
| Employee Training                    | 6           |
| Physical Exams                       | 6           |

MON VALLEY WORKSGuidelines for the Handling and Removal of  
Asbestos Containing Materials

In November 1983, an OSHA Emergency Temporary Standard was promulgated reducing the eight (8) hour exposure limit from 2.0 fibers/cc to 0.5 fibers/cc. As policy in the Mon Valley a permissible exposure limit of 0.5 fibers/cc will be enforced.

Asbestos exposure has been associated with a variety of pulmonary abnormalities and diseases including pleural thickening, asbestosis, lung cancer, mesothelioma and gastrointestinal cancer. The effects of cigarette smoking compound the risk.

Teardown and removal of asbestos bearing products has the potential to generate levels of asbestos in excess of permissible exposure limits. Handling of asbestos bearing products such as gaskets, rope, brake shoes, etc. may also cause asbestos exposure.

The following guideline must be followed in all handling applications.

A. NOTIFICATION FOR EXPOSURE MONITORING

The Plant Industrial Hygiene Representative should be notified prior to all asbestos removal and handling jobs in order to arrange for monitoring of employee exposures. Notification must be made in a timely manner before each job begins. Once exposure levels have been determined for a job or occupation and protection procedures have been established, further routine monitoring will not be required and management will be so notified.

Subsequent to initial monitoring, only those jobs which present new or different circumstances and hazards will require monitoring. The Plant Industrial Hygienist should be notified to arrange for monitoring.

B NOTIFICATION FOR REPORTING TO CORPORATE INDUSTRIAL  
HYGIENE SERVICES

All major jobs (i.e., those requiring more than 2 man-days to complete) which involve the handling or removal of asbestos materials, and all shipments of asbestos materials to dump sites must be reported to the Corporate Office. Initial reporting of the above information should be to the Superintendent - Safety and Environmental Health - Mon-Valley Works. The information will then be transmitted to the Corporate Industrial Hygiene Services Organization.

C INITIAL DETERMINATION

Before beginning any job where handling a material suspected to contain asbestos is involved, a member of Management must either confirm that the material is asbestos free or if uncertain, contact the Plant Industrial Hygienist to have a bulk sample analyzed.

If the material is determined to contain asbestos, or a determination cannot be made, the precautions outlined below must be followed:

SAFE WORK PRACTICES

The work practices established for handling asbestos are designed to minimize dust generation and exposure to airborne fibers. The Mon-Valley Works Safe Work Practices for handling asbestos are as follows:

1. Prior to handling asbestos material, it should be thoroughly wetted when conditions permit such application. The water spray should be controlled to prevent the breakdown of the material, when existing materials are being removed. When installing new material, the product shall be thoroughly soaked when feasible, prior to application.

2. Drop cloths or other suitable means should be used to contain both the asbestos material as it is removed, as well as fibers that may be released during handling and cutting of asbestos bearing products. This will prevent spreading of the material and also facilitate clean up operations.
3. The existing asbestos bearing material should be removed in as large of sections as possible. That is the amount of fracturing should be minimized.
4. Where asbestos bearing materials must be cut, hand tools such as chisels or knives are preferable to hand saws or power tools. Use of power tools is strictly prohibited without approval of the Superintendent of Safety and Environmental Health.
5. Cleanup of asbestos material from the ground, equipment or clothing must be in such a way as to minimize dust generation and material breakdown. Dry sweeping and blowing with compressed air are strictly prohibited. Vacuum cleaning methods should be used where a high efficiency vacuum cleaner is available. Where a high efficiency vacuum cleaner is not available, wet methods of sweeping, wiping or shoveling may be used. The Safety and Environmental Health Organization should be consulted to determine if vacuum cleaners meet high efficiency requirements.
6. All asbestos debris, contaminated disposable clothing, respirator cartridges and drop cloths should be collected and placed in sealed, labeled, impermeable bags. The bags shall then be placed in a sealable drum which must be labeled with the warning:

CAUTION  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
BREATHING DUST MAY CAUSE BODILY HARM

7. Safe Job Procedures should be developed for all existing applications where asbestos bearing materials are handled. Employees shall be contacted annually on the requirements specified. The Safety and Environmental Health Organization is available to assist in insuring all required safe handling procedures are addressed in the Safe Job Procedures.

E. DISPOSAL

When the drums are sealed and ready for disposal, the Mon-Valley Environmental Engineering Organization (Horsestead Extension: 3111) must be notified. They will secure the appropriate agency permits and will insure that the drums are disposed of in a properly licensed landfill.

## F. PERSONAL PROTECTIVE EQUIPMENT

### 1. Respirators

All employees involved in asbestos removal or dismantling operations, regardless of duration, shall be required to wear NOISH-approved respirators. The type of respirator to be used shall be determined by the exposure level as outlined below. All handling of asbestos bearing products other than removal or dismantling shall require the use of respiratory protection only when job exposures have been documented in excess of the OSHA PEL.

| <u>Required Respirator</u>                                                | <u>Exposure Level</u>            |
|---------------------------------------------------------------------------|----------------------------------|
| Air Purifying Dust Respirator<br>(with specific approval for<br>asbestos) | Not exceeding 10 times the PEL   |
| Powered Air Purifying Respirator                                          | Not exceeding 100 times the PEL  |
| Type "C" Supplied Air Respirator                                          | Not exceeding 1000 times the PEL |

If the asbestos material is thoroughly wetted, hand tools are used and the operation is in an area of good ventilation, air purifying respirators should be adequate to reduce employee exposures to below the permissible levels.

Before using any respiratory protection, training and fit testing must be provided to insure proper use, fitting, handling and cleaning of the respirator. Due to the hazardous nature of asbestos, it is important to comply with the Mon-Valley Respiratory Protection Program and Facial Hair Policy.

### 2. Protective Clothing

Disposable protective coveralls shall be worn by employees involved in all asbestos removal or dismantling jobs greater than one hour in duration, or upon employee request regardless of exposure duration. Coveralls without pockets or cuffs, made of impermeable material are preferred. Clothing, including boot covers and hoods, shall be mandatory at all times (regardless of the type of handling performed) when OSHA ceiling limits are exceeded as determined by Industrial Hygiene surveys. Respirators must be worn until contaminated disposable clothing is removed after completion of the job. Compressed air should not be used to blow the dust from clothing or tools.

Suggested ordering information for respiratory protection equipment and protective clothing is attached.

## **G. PERSONAL HYGIENE**

Personal hygiene is important in protection against gastrointestinal exposure to asbestos. Hands, face and forearms must be washed prior to drinking, eating, smoking, etc., in order to prevent transfer of fibers and accidental ingestion.

## **H. RESTRICTED AREA**

All employees whose work does not require occupancy in the area of the asbestos job are prohibited from entering such areas. Areas should be roped off as a minimum. In some applications, such as indoor removals, the work area may need to be sealed to prevent exposure of nearby employees and areas. The Plant Industrial Hygienist should be contacted for consultation in these instances.

## **I. EMPLOYEE TRAINING**

All employees potentially exposed to airborne asbestos fibers shall receive initial instruction in the hazards and precautions required when handling asbestos bearing products. Initial training is to be arranged with the Safety and Environmental Health Organization, and is to be recorded on the employee's blue safety record card.

Periodic retraining for those employees frequently handling asbestos bearing product is to be conducted every six (6) months by the employees' supervisor and is to include the information in sections D, E, F, G and H of this document. Retraining shall be conducted prior to each job for those employees handling asbestos on an infrequent basis (i.e., less than twice a year). All training shall be recorded on the employee's blue safety record card.

Occupations handling asbestos bearing products, which have been demonstrated through Industrial Hygiene monitoring to have negligible asbestos exposure, will be exempted from the training requirements by the Mon Valley Safety and Environmental Health Organization.

## **J. PHYSICAL EXAMS**

OSHA requires that all employees exposed to airborne asbestos fibers, in excess of 0.1 fibers per cc of air, must be given annual medical examinations, including chest x-rays and pulmonary function tests. Arrangements should be made with the Plant Medical Department to insure proper scheduling is provided.

April 9, 1984

ATTACHMENT I  
**RESPIRATORY PROTECTION  
FOR ASBESTOS**

Mine Safety Appliance Company - Vendor Stocking Contract No. 89060

A. Respirator body without filter or cartridge:

| <u>Size</u> | <u>Commodity Code</u> | <u>Cost</u> |
|-------------|-----------------------|-------------|
| Small       | 896-151-1873          | \$ 11.50    |
| Medium      | 896-151-1857          | 11.50       |
| Large       | 896-155-1085          | 11.50       |

The following filters and filter covers must be ordered separately from item A:

- 1) Type "F" filters - 100 per box, \$29.50 per box, commodity Code: 896-172-2967
  - 2) Type "F" filter covers - \$0.80 each, commodity code: 896-172-1704, two required per respirator.
- B. Respirator with 10 type "F" filters and two covers - medium size only, \$13.60, commodity code: 896-155-1077

