EXHIBIT
DUP-1723

FOR 7/14/82 CENTRAL SAFETY REVIEW

INDUSTRIAL HYGIENE MANUAL

I/H PROCEDURE NO. 10

ASBESTOS HANDLING AND DISPOSAL

A. GENERAL

The purpose of this procedure is to set forth protective and procedural requirements where there is a potential for exposure to airborne asbestos fibers.

Asbestos in the form of fibers that can be inhaled into the lungs has been identified by the Occupational Safety and Health Administration (OSHA) as a carcinogen. Exposure to it is regulated by them (29 CFR 1910.1001) under the Occupational Safety and Health Act and by the Environmental Protection Agency (EPA) under Regulations on National Emission Standards for Hazardous Air Pollutants (40 CFR 61 Subpart B). A summary of these legal requirements is given in Engineering Standard S4T along with recommended handling practices. Exposure hazard information is summarized on the Victoria Plant Material Safety Data Sheet.

Procedures to be followed on the Victoria Plant are given below.

B. SCOPE

This procedure covers only the potential sources of exposure listed in Paragraph D below and the removal of up to 260 linear ft. on pipes of any size or 160 sq. feet of asbestos insulation on vessels at any one time. The Environmental Control Consultant for Air in the Engineering Division must be consulted before undertaking any other jobs involving asbestos or removing more than 260 linear feet and/or 160 square feet of asbestos insulation.

C. DEFINITIONS

Asbestos for the purposes of this procedure includes chrysotile, amosite, crocidolite, tremolite anthophyllite, and actinolite. The CAS Registry Number for asbestos is 1332-21-4.

Asbestos Fibers means asbestos fibers longer than 5 micrometers.

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Exposure means airborne concentrations greater than the lower limit of reliable quantification which is 0.1 fibers per cubic centimeter.

D. SOURCES OF EXPOSURE

The sources of potential exposure to airborne asbestos fibers on the Victoria Plant are:

1. Removing old asbestos insulation from lines and vessels;

2. Cutting asbestos cement (Transite) siding, roofing, etc.

3. Cutting asbestos-containing gasket material; and

4. Handling and use of asbestos listing tape.

E. POLICY ON USE

Victoria Plant policy is that non-asbestos bearing materials must be substituted wherever feasible for asbestos.

F. PERMISSIBLE EXPOSURE LIMITS

The 8-hour time weighted average (TWA) concentration of airborne asbestos fibers to which an employee may be exposed shall not exceed 2 fibers longer than 5 micrometers per cubic centimeter of air.

And, no employee shall be exposed at any time to airborne concentrations greater than 10 fibers longer than 5 micrometers per cubic centimeter of air.

Exposure in both of these cases means concentrations in the air that is inhaled.

G. CONTROL OF ASBESTOS DUST

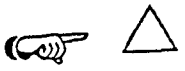
Engineering controls and work practices are to be used to the maximum extent feasible to meet permissible exposure limits. Where applicable, signs & label per paragraph 6 below shall be posted before any asbestos work is begun.

1. Handling Asbestos Insulation

(a) Asbestos insulation should be handled in plastic bags or other impermeable containers to the point of use.

(b) Cartons should be vacuumed inside and out prior to removal of the contents and if possible the contents dampened or handled wet.

(c) Fabrics and insulation containng asbestos should be purchased with a glaze coating if possible.



(d) Asbestos tape should be wetted down before wrapping lines and before unwrapping for removal.

2. Asbestos Cutting Operations

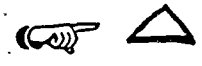
(a) Cutting should be done with a knife or scissors if possible.

(b) All hand or power-operated tools that may cause asbestos fibers in excess of permissible limits shall be provided with a high efficiency dust collection system.

(c) The work areas on jobs which have been shown by task monitoring to result in asbestos exposure shall have a vacuum clean-up system equipped with a high efficiency particulate filter and parts of the room where asbestos dust may settle shall be kept free of any appreciable accumulation.

CAUTION: OSHA regulations prohibit dry sweeping or the use of an air hose in clean-up.

3. Removal of Asbestos Insulation



(a) Insulation containing asbestos which is to be removed and discarded should be thoroughly wetted prior to and during removal when possible. (MATERIA DELETE

(b) Remove fasteners with care. Support insulation temporarily until it can be put into proper containers. Do not drop.

(c) Avoid sawing where possible. Knife cutting is preferred.

(d) Maintain good housekeeping.

(e) These requirements do not apply to removal of insulation designed for repeated removal and re-installation, providing the techniques employed have been demonstrated to maintain asbestos concentrations within allowable limits.

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H. MEASURED EXPOSURE LEVELS

Background concentrations and exposure levels from known plant asbestos handling operations have been measured and results are summarized in Table 1.

I. MONITORING

1. Task monitoring shall be done to measure airborne asbestos levels for all activities involving potential asbestos exposure.

2. Sampling shall be done on the following schedule:

   a. Every 6 months where airborne concentrations above the permissible limits (Para. F) are found.

   b. Annually where airborne concentrations above 0.1 fibers per cubic centimeter are found. When asbestos or asbestos material is wetted per Para. G, sampling of identical work, such as asbestos insulation removal from any area on plant, may be counted toward meeting this requirement.

   c. Representative samples showing airborne concentrations below the 0.1 fiber per cubic centimeter detection limit do not need to be repeated unless the job is changed in such a way as to increase potential asbestos exposure.

3. Sampling and analysis shall be arranged through the Area Industrial Hygiene Coordinator (See I/H Procedure #1, Appendix) for the area involved.

4. Victoria Plant supervision of the work group handling asbestos is responsible for scheduling sampling with the Area Industrial Hygiene Coordinator.

5. Records and results of sampling will be permanently retained in Victoria Plant databooks of the Area where the work was done.

6. Results of all sampling shall be sent to the Plant Occupational Health Coordinator.

RESPIRATORY PROTECTION

1. Respiratory protection is required for all activities involving asbestos containing materials which might cause concentrations of airborne asbestos fibers above the 0.1 detection limit.

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2. For exposures below the 2 fiber per cubic centimeter permissible exposure limit, a particulate filter respirator shall be worn. See I/H Procedure #8.

3. For potential exposure above the permissible limit, respirator protection as specified in Table 1-A of Industrial Hygiene Procedure No. 8 shall be worn.

K. HYGIENE AND PROTECTIVE CLOTHING

1. Food, gum, tobacco or other materials to be placed in the mouth should not be kept on the person or consumed in the work area where asbestos bearing materials are being handled.

2. Coveralls or other suitable protective clothing will be provided for personnel when handling asbestos bearing materials. These coveralls shall be changed daily and should not be hung in employees' change room lockers.

3. It is recommended that employees working with asbestos shower before changing into street clothing.

4. Clothing exposed to airborne asbestos fiber concentrations above permissible exposure limits shall be disposed of per Paragraph M below. The Industrial Hygiene Coordinator should be consulted for other than disposable clothing.

L. SIGNS AND LABELS

1. Caution signs conforming to Figure 1 shall be posted at all approaches to areas where asbestos concentrations may be above permissible limits and the area shall be barricaded.

2. They shall be placed at a sufficient distance to permit employees to take necessary precautions before entering the area.

3. Non-asbestos insulation re-installed after a job should be labeled per Victoria Plant Standard 9H.

M. WASTE DISPOSAL

1. Asbestos waste, including items such as scrap, empty bags or clothing to be discarded, vacuum system collection, and other wastes which may create airborne dust concentrations, shall be collected and disposed of in sealed, impermeable bags or containers. Caution labels shall be attached conforming to Figure 2.

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2. These wastes shall be disposed of in "Southeast" Landfill Cells A or B as specified in "Victoria Plant Solid Waste Disposal Guides".

N. EPA NOTIFICATION

1. Except in emergencies, removal of more than 260 linear feet or 160 square feet of asbestos containing insulation requires 20 day prior notification to the EPA along with other data. The Engineering Division Environmental Control Consultant for Air shall be consulted when any job falling under this requirement is planned.

2. For emergencies involving removal of more than 260 linear feet or 160 square feet of asbestos containing insulation, notification must be made as soon as possible. Again, the Environmental Control Consultant for Air shall be contacted.

O. MEDICAL EXAMINATION REQUIREMENTS

1. All employees who handle asbestos in a way that has potential for producing airborne fibers (Par. D above) will receive an annual physical examination which includes PA chest X-ray, medical history and pulmonary function check.

2. Medical Division will maintain a list of these employees.

3. Supervision will supply Medical Division with the names of employees potentially exposed. Included are:

   a. All mechanics and shop workers, plus

   b. Any other employees exposed to airborne asbestos concentrations greater than 0.1 fibers/cc.

4. Employees may be removed from this list if monitoring shows all exposures are below 0.1 fibers/cc.

P. ACCIDENTAL EXPOSURE

1. Employees accidentally exposed to inhalable concentrations of asbestos fibers which may exceed permissible limits while not wearing respiratory protection shall report to Medical as a precaution and for record purposes.

2. Portions of clothing accidentally contaminated by contact with an asbestos surface should be vacuumed clean.

3. Clothing contaminated from airborne asbestos concentrations above permissible limits shall be disposed of per Paragraph M above or as specified by the Plant Occupational Health Coordinator.

Q. Responsibilities

1. Victoria Plant Supervision of the group doing asbestos work shall be responsible for seeing that all field requirements of this procedure are met. They shall also be responsible for consulting with the Area Industrial Hygiene Coordinator to determine what sampling is required.

2. All supervision are responsible for submitting the information in Paragraph O-3 for their employees to Medical Division.

3. The Area Industrial Hygiene Coordinator, Plant Occupational Health Coordinator, Environmental Control Consultant, and Medical Division shall be responsible for the specific duties assigned them in this procedure.

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TABLE 1

MEASURED ASBESTOS CONCENTRATIONS

A. Background concentrations in process areas where asbestos insulation is or has been used and in office buildings where asbestos containing materials may have been used have been measured and found to be below the reliable detection limit of 0.1 fiber/cc.

AREA
Laboratory - Alathon®
Laboratory - Nylon
Office - Bldg. 1
Office - Bldg. 3
Office - Bldg. 530
Office - Bldg. 550
Process - Acids Waste
Process - DDDA Op. 13
Process - Diamine Refining
Process - DNA Synthesis
Stores
*Shop - Acids
*Shop - ADN
*Shop - Central
*Hold Yard - Upwind
*Hold Yard - Downwind

B. Job samples taken with samples on man performing job. (Respiratory protection being worn while performing job)

JOB	CONCENTRATION OUTSIDE RESPIRATOR (FIBERS/CC)
ADN Shop - Cutting asbestos containing gasket material	<0.1
Acids Shop - Cutting asbestos containing gasket material	<0.1
Hold Yard - Stripping asbestos insulation	<2

*Area samples taken while jobs were being performed.

Date recorded in VP Notebooks: 15951, 17058, 17064, 17068, 17078, 17081 and 17091.

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