

J. W. Sweet

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PLAINTIFF'S
EXHIBIT

DUP-205

June 1, 1978

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FROM: J. W. TWERTY - ESD

OSHA IDENTIFIED CARCINOGEN - ASBESTOS - 29CFR 1910.1001

✓ Definitions - Asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite and actinolite.

✓ Permissible exposure - Effective Jan. 1, 1976 the 8-hour TWA of asbestos fibers to which an employee may be exposed shall not exceed 2-fibers longer than 5-micrometers, per cubic centimeter of air.

- The ceiling concentration is never to exceed 10-fibers longer than 5-micrometers, per cubic centimeter of air.

✓ Methods of Compliance - Engineering Controls such as, but not limited to, isolation, enclosure, exhaust ventilation, and dust collection shall be used to meet exposure limits.

- Work practices - Insofar as practicable, asbestos shall be handled, mixed, applied, removed, cut, scored, or otherwise worked in a wet state sufficient to prevent airborne exposure in excess of the exposure limits. No asbestos cement, mortar, coating, grout, plaster or similar material containing asbestos shall be removed from bags, cartons or other containers in which they are shipped without being either wetted, or enclosed, or ventilated so as to prevent effectively the release of asbestos in excess of the limits prescribed. Employees engaged in the spraying of asbestos, the removal, or demolition of pipes, structures

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or equipment covered or insulated with asbestos, and in the removal or demolition of asbestos insulation or covering shall be provided with respiratory equipment.

Personal Protective Equipment - Compliance with the exposure limits prescribed may not be achieved by the use of respirators or shift rotation of employees except:

- During the time necessary to install engineering controls and institute work practices.
- In work situations in which the methods prescribed are either technically not feasible or feasible to an extent insufficient to reduce the airborne concentrations of asbestos below the limits prescribed.
- In emergencies.
- Where both respirators and personnel rotation are allowed and both are practicable, personnel rotation shall be preferred and used.

Respirator Program - The employer shall establish a respirator program in accordance with 29CFR 1910.134.

Special Clothing - The employer shall provide, and require the use of, special clothing, such as coveralls or similar whole body clothing, head coverings, gloves and foot coverings for any employee exposed to airborne concentrations of asbestos fibers, which exceed the ceiling level prescribed.

Method of Measurement - All determinations of airborne concentrations of asbestos fibers shall be made by the membrane filter method at 400-450X (magnification) (4 millimeter objective) with phase contrast illumination.

Monitoring - Within 6-months of the effective date every employer shall cause every place of employment where asbestos fibers are released to be monitored in such a way as to determine whether every employee's exposure is below the limits prescribed. Samples shall be collected in the breathing zone of the employees on membrane filters of 0.8 micrometer porosity mounted on an open face filter holder. Samples shall be taken for the determination of the 8-hour time weighted average airborne concentrations and the ceiling concentrations of asbestos fibers. In no

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case shall sampling be done at intervals greater than 6-months for employees whose exposure may reasonably be foreseen to exceed the limits prescribed.

Caution Signs and Labels - Caution signs shall be provided and displayed at each location where airborne concentrations may be in excess of the exposure limits. Caution labels shall be affixed to all raw materials, mixtures, waste and other products containing asbestos fibers, or to their containers, except that no label is required where asbestos fibers have been bonded so that any reasonably foreseeable use, handling, storage, disposal, processing, or transportation, no airborne concentrations of asbestos fibers in excess of the exposure limits.

✓ Waste Disposal - Asbestos waste scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing, consigned for disposal, which may produce any reasonably foreseeable use, handling, storage, processing, disposal or transportation of airborne concentrations of asbestos fibers in excess of the exposure limits shall be collected and disposed of in sealed impermeable bags or other closed, impermeable containers.

Recordkeeping - Every employer shall maintain records of any personal or environmental monitoring for a period of at least 3-years and these records shall be made available upon request of the Assistant Secretary of Labor for Occupational Safety and Health, the Director of the National Institute of Occupational Safety and Health, and to authorized representatives of either. Every employee and former employee shall have reasonable access to any record required which indicates the employees own exposure to asbestos. Any employee found to have been exposed at any time to airborne concentrations of asbestos fibers in excess of the limits prescribed shall be notified in writing of the exposure as soon as practicable but not later than 5-days of the finding. The employee shall also be timely notified of the corrective action taken. Medical examination records shall be retained by employers for at least 20 years.

Medical Examinations - The employer shall provide or make available to each of his employees, within 30 calendar days following his first employment in an occupation exposed to airborne concentrations of asbestos fibers, a comprehensive medical examination which will include, as a minimum,

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a chest roentgenogram (posterior-anterior 14 x 17 inches), a history to elicit symptomatology of respiratory disease, and pulmonary function tests to include vital capacity (FVC) and forced expiratory volume at 1 second FEV₁, etc. Annual medical examinations shall be provided by the employer for those employees exposed to airborne concentrations of asbestos fibers. This examination shall include, as a minimum, the same items as included in the initial employment physical. The employer shall provide, or make available, within 30 calendar days before or after termination of employment of any employee engaged in an occupation exposed to airborne concentrations of asbestos fibers a medical examination that includes as a minimum the same items included in the initial employment physical.

Plant Locations - The following locations reported asbestos in the indicated roles:

<u>Department</u>	<u>Plant</u>	<u>Role</u>
Elastomers	Chambers Works	C
"	Chestnut Run	B
"	Experimental Station	B
Biochemicals	Belle	C
Polymer Inter.	Savannah River	C
"	Birmingham	C
"	Corpus Christi	C
"	Louviers	C
F&F	All Plants	B
ICD	Augusta	B
Photo Products	Towanda	B,C
"	Monrovia	B

- B - Process Chemical (starting material, solvent, catalyst packaging)
C - Auxiliary Substance (fuel, lubricant, cleaning material, etc.)

General - Asbestos has been and in some cases is being used in materials of construction including insulation, transite, roofing felts and adhesives. Application and dismantling activities involving these materials should be monitored, appropriate respirators worn and regulated areas established except for roofing where the fibers are bound in such a manner as to preclude the release of free asbestos fibers.

JWI/cgs

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