PLAINTIFF'S EXHIBIT

DOW-1363

DOW CHEMICAL U.S.A.

TEXAS DIVISION
FREEPORT, TEXAS 77541

February 23, 1984

Caustic Finishing

H. L. Hall
A-612

cc: J. P. Jones A-612

EVALUATION OF ASBESTOS DEMOLITION CLEANUP - A-612
EHS File A6-2506

An asbestos demolition job site located at Caustic Finishing (A-612) was monitored for airborne asbestos fibers. Although, no samples were collected on the day of demolotion, several samples were collected on the following day to assure that the asbestos cleanup was satisfactory. The concern was that fork truck traffic in the building would cause fugitive asbestos fibers to remain airborne and possibly present an exposure hazard to unprotected workers.

Results showed airborne asbestos concentrations to be well within current guidelines and that cleanup was adequate to prevent overexposure to asbestos. Samples taken in the process area ranged from 0.04 fibers/cc to less than 0.01 fibers/cc. An air sample taken inside the control room showed an average asbestos fiber concentration of 0.02 fibers/cc.

Asbestos samples were collected on cross-hatched cellulose acetate filters (Millipore MAWG037AO), using calibrated MSA, Model S portable air sampling pumps at a flowrate of 2.0 - 2.4 lpm. Sample time was approximately 191 min.

Analyses of samples were performed at Analytical Services, B-1225. The samples were prepared by placing a section of filter on a microscope slide containing a few drops of clearing solution and then covering with a glass slip. The fibers were counted using optical microscopy.

The evaluation criteria was based upon Industrial Hygiene Guides (IHG's) which are concentrations of airborne substances that nearly all employees may be repeatedly exposed throughout a working lifetime without adverse effect. They are based upon industrial handling experience and on experimental animal toxicological studies. IHG's do not represent fine lines between safe and dangerous exposures; rather they are intended for use as guides for evaluating occupational exposures and for plant design. For asbestos fibers, IHG's are expressed as the number of asbestos fibers per cubic centimeter of air (# fibers/cm^3). An asbestos fiber is defined as a particle greater than or equal to 5 microns in length.

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Effective November 4, 1983, the Occupational Safety and Health Administration (OSHA) set an Emergency Temporary Standard for asbestos, limiting employee 8-hour time-weighted average exposures to 0.5 asbestos fibers/cm^3 of air. The ETS was held up by a suit filed in the 5th Circuit Court of Appeals in New Orleans. Review of the case was to be held in January, 1984 but at this time no decision has been announced. Therefore, the current guideline for asbestos is 2 fibers/cm^3.

In any case, the asbestos fiber levels found at Caustic Finishing are below either guideline.

If you have any questions regarding these results, please contact me at phone number 1281.

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bbs

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