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**PLAINTIFF'S
EXHIBIT**

ARCO 21

January 21, 1992

Robert Sloane, Master
S/S ARCO SPIRIT

Dear Captain Sloane:

On board monitoring for airborne asbestos was conducted on the SS Arco Spirit from October 2-7, 1991 while the vessel was underway from Long Beach to Valdez. The monitoring was conducted by Clayton Environmental Consultants, Inc., an environmental consulting firm specializing in asbestos monitoring and abatement. The final report documenting the results of the monitoring has been received and is enclosed for your information and use. A summary of the survey results is also attached which should be posted in a central location on board the vessel. Results of the survey should be discussed at the next safety meeting.

A letter summarizing the results of the survey has been sent to all employees on board the Arco Spirit during the sampling period. Employees were advised that the report is on board the Arco Spirit and available for review. On completion of the monitoring program, when all Arco ships known to contain asbestos has been surveyed, a summary for all ships will be sent to the fleet.

Please feel free to call me if you have any questions.

Very truly yours,


Jay C. Kitchener
Manager, Safety, Health &
Environmental Protection

cc: F. E. Robinson, LAC-1157
J. L. Sullivan, LAC-1101

Enclosure
JCK/cec

**ASBESTOS ASSESSMENT SURVEY
ABOARD THE SS ARCO SPIRIT**

Arco Marine, Inc. retained Clayton Environmental Consultants to conduct an asbestos monitoring program and to perform employee awareness training during the northbound sailing of the SS Arco Spirit from October 2 - 7, 1991.

Results of 24 air samples determined by PCM analysis indicated airborne fiber concentrations ranging from 0.001 to 0.02 fibers per cubic centimeter (f/cc). All but one sample showed airborne fiber concentrations of less than 0.01 f/cc. The one sample that was at or above 0.01 was analyzed by transmission electron microscopy (TEM) using NIOSH Method 7402. The TEM method, unlike PCM, can distinguish between asbestos and non-asbestos fibers. The results of TEM analyses for the sample submitted indicated airborne asbestos fiber concentrations of less than 0.00026 f/cc. The TEM results indicated that the majority of the fibers seen through PCM are of non-asbestos type.

All air samples collected on SS Spirit showed concentrations below the applicable permissible exposure limits (PELs) established by the U.S. Coast Guard (0.1 f/cc) and the U.S. Occupational Safety and Health Administration (OSHA) PEL of 0.2 f/cc. These samples were also below the Environmental Protection Agency (EPA) recommended concentration of 0.01 f/cc for general occupancy.

The Captain has a copy of the full report.