

BACKGROUND

Law Associates was retained by the Law firm of Ashcraft and Gerel to provide technical support and expert testimony in the case of Pratchenko v. Abex Corporation et. al. It is our understanding that the plaintiff in this case died as a result of occupational exposure to asbestos.

Given the plaintiff's occupation (aircraft mechanic) an effort was made to yield an indication of the probability of his exposure to asbestiform minerals from the aircraft he typically serviced. The DC-3 was identified by Ashcraft & Gerel as one such aircraft in which asbestos exposure to the plaintiff was probable due to the asbestos-containing brake shoes found in the landing gear.

To evaluate this exposure potential, a DC-3 brake assembly was sought and located at the Chesapeake Airways Service Corp. (CASC) in Salisbury, Maryland. Arrangements were made with the owner of CASC, Mr. Sam Goldman to extract the interior brake assembly from a tire taken off a DC-3.

OBSERVATIONS

The disassembly of the wheel and the removal of the brake was performed by an employee of CASC who was provided with protective clothing and appropriate respiratory protection. When the brake assembly was lifted from the tire, Mr. Goldman identified the brake as representing BF Goodrich's latest configuration (a Hayes design), he also noted a lack of wear on the surface of the tire. Based on this observation, Mr. Goldman stated that the tire was relatively new and that there was a good chance that the brake assembly would have been blown out, and cleaned when the tire was installed. In summary, Mr. Goldman stated that it was his opinion that the unit (brake assembly, wheel and tire) had seen a limited amount of use - approximately 5 hours or less, or roughly 2 landings, hence the lack of large accumulations of black dust typically observed with normal wear.

RESULTS

A small amount of suspect asbestos-containing dust was observed during the removal of the brake from the tire despite the units limited use.

In order to yield an indication of the relationship between the plaintiffs work environment and exposure to asbestos, settled dust samples were collected from various surfaces of the landing gear (see table 1). These samples were collected and analyzed using the EPA's Draft surface sampling protocol entitled: Standard Test Method for Sampling and Analysis of Dust for Asbestos Structures by Transmission Electron Microscopy (see appendices).

Analysis of samples #1 and #3 indicate asbestos fiber concentrations within the brake assembly ranging from 3.5 billion to 8.1 billion asbestos structures per square foot. A third sample was collected from the dust which spilt out onto the surface of the tire following the removal of the brake assembly. Analysis of this dust yielded a concentration of 12.7 million asbestos structures per square foot.

