STANDARDS

Present OSHA standards for asbestos exposure call for a maximum of:

> "Five fibers greater than five micrometers in length per cubic centimeter - 8-hour time-weighted average concentration and,
>
> Ten fibers greater than five micrometers in length per cubic centimeter - ceiling concentration.
>
> Effective July 1, 1976, the time-weighted average concentration standard becomes two fibers greater than five micrometers in length per cubic centimeter."

In all cases, the standards refer to fibers greater than five micrometers in length that can be seen by phase contrast light microscopy at approximately 430X magnification.

These and other similar standards are generally referred to as Threshold Limit Values (TLVs).

TLVs refer to airborne concentrations of substances and "represent conditions under which it is believed that nearly all workers may be repeatedly exposed, day after day, without adverse effect." - - - American Conference of Governmental Industrial Hygienists.

MONITORING

To determine whether or not a workplace meets the required standards, a system of monitoring is required.

The asbestos standards require that:

> "Within six months of publication of the regulations (June 1, 1973), every employer shall cause every place of employment where asbestos fibers are released to be monitored in such a way as to determine where every employee's exposure to asbestos fibers is below the prescribed limits."

Monitoring usually is done by the membrane filter/personal air sampler technique. It requires that an employee wear an air sampler, which can be obtained from a number of manufacturers.

The personal air sampler draws workplace air onto a filter which collects the particulates and fibrous dust in the air. This filter is then placed under a microscope and the number of fibers counted. After the count is complete, the actual fiber concentrations, expressed as fibers per cubic centimeter of air, are calculated by formula.

METHODS OF COMPLIANCE

It is expected that future asbestos standards will place a greater emphasis on methods of compliance than the present ones. However, the present standard does include an important section on engineering controls. It states that "engineering controls such as, but not limited to, isolation, enclosure, exhaust ventilation and dust collection shall be used."

This rule is a logical requirement for any dust generating process, regardless of whether or not

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