

**Recommended
Work Practices
for Using
Asbestos in
Drilling Mud**

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The Occupational Safety and Health Act (OSH) was enacted in the United States, and similar laws in Canada and other countries were enacted to ensure every worker, as far as possible, a safe and healthy workplace. This legislation is far-reaching. It covers millions of employees and nearly every employer. The information and guidance in this booklet have been developed to assist in assuring compliance with the OSHA Act and the Occupational Safety and Health Administration's (OSHA) standard for occupational exposure to asbestos dust, 29 CFR 1910.1001. The use of good work practices is recognized as a principal means of reducing the hazards associated with exposure to asbestos dust.

OSHA acknowledges that a need existed to regulate asbestos in certain workplaces where a high concentration of workers is employed. This standard was adopted for fixed facilities. Mining industries do not have fixed facilities. Worker health goals in

this booklet are based on work practices involving asbestos in the mud additive. The recommendations are based on the following: research, experience, study, and field testing. They are designed to achieve safe and more healthful working conditions when dealing with asbestos additives in the drilling industry.

The Asbestos Information Association, North America, believes that this booklet will be helpful for warehousemen, engineers, superintendents, inspectors, foremen, and drilling crews.

Asbestos and Health

The health problems which are occurring today are associated primarily with excessive past occupationally-related exposure to airborne asbestos dust. However, there is no evidence of any health risk to the general public from current uses of asbestos in our society nor from ingestion of asbestos fibers, as in drinking water, beverages or food.

It should be emphasized that the evidence of adverse health effects due to the combined actions of cigarette smoking and exposure to chemical and physical agents in the workplace is well established. Workers who handle asbestos greatly reduce their health risks by not smoking cigarettes.

We will continue to see cases of asbestos-related disease for some years because of the unfortunate legacy of excessive past exposures. Current medical evidence leads to the expectation that workers exposed to current permissible levels of asbestos dust will not develop disease.

The present state of scientific knowledge shows clearly that minimizing exposure to airborne asbestos dust reduces the risks of asbestos-related disease. Good work practices are one means of significantly reducing generation of dust.

Summary of OSHA Asbestos Standard

Under the current OSHA standard for occupational exposure to asbestos dust, it is the employer's responsibility to assure that exposure of employees to airborne concentrations of asbestos fibers does not exceed the following permissible exposure levels:

- a. Eight-hour time-weighted average (TWA) of two fibers longer than 5 micrometers per cubic centimeter.
- b. Ceiling concentration of ten fibers longer than 5 micrometers per cubic centimeter (C).

OSHA's final rule, 29 CFR 1910.1001, February 18, 1981, states that medical examination requirements of the asbestos standard will be required where the 8-hour TWA asbestos concentration is 0.1 f/cc or greater.

Extensive field monitoring has demonstrated that the proper use of asbestos mud additives can result in dust levels which are less than an 8-hour TWA of 0.1 f/cc. By following the work practices recommended in this booklet when using such products, dust levels can be kept consistently below this level. (Suppliers of asbestos mud additives should be contacted for monitoring data.)

Products and Operations

These work practices apply to the use of specially processed asbestos mud additives in drilling fluids.

Operations to which these work practices apply include:

- A. Shipping, Receiving, Handling, Warehousing and Storage
- B. Addition to Mud System
- C. Housekeeping and Waste Disposal

Recommended Work Practices

Shipping, Receiving, Handling, Warehousing and Storage

Shipping and Receiving

Asbestos mud additives are shipped by suppliers in loose or palletized sacks. Normally, pallets will be shrink-wrapped or stretch-wrapped.

Inspect sacks for any damage in shipment. Repair damaged sacks with heavy-duty tape or resack in sealed sift-proof bags.

Handling, Warehousing and Storage

Be careful to avoid rough handling of sacks. Do not store sacks or pallets to excessive height (no more than 6 feet for sacks or pallets high).

Allow ample clearance between pallets and be especially careful to avoid damaging sacks when using mechanical aids such as forklifts and handcarts in storage area.

... material, frequently
... and make
... repairs promptly.

... be cleaned up promptly by
... the spill before sweeping or
... material in a sealed
... bag. Alternately, a vacuum with
... filter can be used to clean up
... NEVER DRY SWEEP OR BLOW
... WITH COMPRESSED AIR.

... CREATING DUST

... Mud System

... when emptying sack. A
... streamer should be used to
... wind direction.

... should be added directly to the
... by emptying the sack at
... the special equipment
... the asbestos
... could be accumulated in
... disposal.

... CREATING DUST

... Waste Disposal

... is an essential part of any
... asbestos dust created
... of good housekeeping has the
... to harm to employees and others.
... clean by hosing down or
... NEVER DRY SWEEP OR
... ASBESTOS. WASH
... AIR.

... empty sacks in a safe place
... from immediate view
... burial.

... the well is finished, the
... asbestos left
... the storm
... if it can be used.

... CREATING DUST



ASBESTOS INFORMATION ASSOCIATION

1745 Jefferson Davis Highway

Arlington, Virginia 22202