



DOW CHEMICAL U.S.A.



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*I would  
discuss the  
information in  
Midland  
with  
WFF*

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*24- Asbestos  
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#### OSHA PROPOSED RULE MAKING-OCCUPATIONAL EXPOSURE TO ASBESTOS

Asbestos is used or handled in the Chlor-Alkali related facilities in the Louisiana, Michigan, Oyster Creek, Texas and Western Divisions in the U.S. Area. These locations have been contacted to find out if they wished to make comments on the OSHA proposed changes to their standard for Occupational Exposure to Asbestos. A number of comments were received. A brief summary of the comments is as follows:

ST0514014

#### SUMMARY OF COMMENTS FROM EACH DIVISION

##### Louisiana

Louisiana Division can meet the reduction to 0.5 fibers/cc without too much difficulty. More data is needed for the ceiling concentrations. Regulated areas for the facilities would be a problem. The Cell Services Department has a high rate of employee turn-over.

##### Michigan

Previous monitoring indicates that there are areas where asbestos levels are above the proposed limits. Results of recent monitoring have not been received by the plant.

Administrative costs will increase by a substantial amount.

DOW 05637



The turn-over rate for employees in asbestos-related areas is very high.

Additional costs will result from changes to storage and unloading building, pulp shack revisions, additional ventilation, separate shower facilities, regulated areas, and laundry facilities.

The monitoring and medical procedural changes will cause an additional increase in costs.

#### Oyster Creek

At Cathode Cleaning, the area may meet the proposed asbestos limits. Results from recent monitoring indicate there will not be a problem meeting the proposed limits. The change room will probably need to be revised.

At the Chlor-Alkali facilities, the TWA will probably be below the proposed limit. The new cell services facilities to be constructed may be a problem area.

Russellville is evaluating the standard and will let us know to what extent they may be affected.

#### Texas

Monitoring data indicates that some areas exceed the proposed asbestos limits. The conclude that they could comply by procedural changes. It will probably require some regulated areas.

#### Western

Monitoring indicates that all operations will be below the proposed limits. The regulated areas could be a problem, especially if roads were designated a regulated area. The daily roster for the street and cell block would be a difficult problem.

If clothing is required, it will double this cost. It is not clear whether underwear must be also provided.

Separate shower room, locker room, and laundry may be required and this would be the most troublesome part.

From the comments received, and in reviewing the proposed changes, there are parts of the standard that are a cause for concern, and will certainly add to the cost of operation.

ST0514015

The proposed standard would lower the permissible exposure limits for an 8-hour time weighted average to 0.5 fibers per cubic centimeter and the ceiling concentration to .5 fibers per cubic centimeter.

Some of the locations indicate that their monitoring results are low enough to be below the proposed limits. Other locations have areas that exceed these limits on the TWA or ceiling concentration or both.

More monitoring is being done by some locations. These results, when available, will give a better definition of the problem areas at present.

Most locations feel that reductions in exposure levels can be made. There will be areas which will exceed the proposed limits. It is not known at this time how much improvement can be achieved with engineering and work practice controls. These changes will be expensive.

The section on regulated areas is a cause of concern. It is written as follows:

- (d) **REGULATED AREAS.** Any work area where a person may be exposed to airborne concentrations of asbestos fibers in excess of either the limits imposed by paragraph (c) of this section, shall be designated a regulated area. Only authorized persons may be allowed to enter such an area. A daily roster of all persons entering a regulated area shall be made and maintained.

It is difficult to determine how the "may be" in the above paragraph will be interpreted. This probably means that a compliance officer will establish this. Therefore, this may not be done uniformly throughout the United States. The wording should be changed so regulated areas are only designated when workers are exposed in excess of either limit.

It should include a provision to "deregulate" areas where exposures can be reduced below the established limits and maintained below the limits.

It is desirable to have no, or at least very few, "regulated areas". Unless the regulated areas are better defined, plant roadways may be designated as "regulated areas". This would be well-nigh unenforceable.

ST0514016

Many of the requirements in the standard are based on regulated areas. A large portion are applicable only when the limits are exceeded.

(e) MONITORING

- (2) Frequency. Monthly monitoring is required if employee is exposed above either limit. This is six times the present frequency and result in a six-fold increase in monitoring costs for exceeding the limits. This would result in an additional \$100 per year for each employee that had to be monitored.

(f) METHODS OF COMPLIANCE

- (3) Particular tools. Tools which may release fibers in excess of limits shall be provided with local exhaust ventilation system. This should be required only for tools which do exceed limits.

(g) RESPIRATORY PROTECTION

- (3) (iv) Part which states "with the same seniority, status, and rate of pay", has nothing to do with employee's health and should be deleted.

(h) PERSONAL PROTECTIVE CLOTHING

- (4) The employee shall assure that all protective clothing and equipment is removed only in change rooms required by paragraph (i)(1) of this section.

There may be respiratory equipment worn even though the exposure levels of asbestos are well below the proposed limits. Will it be necessary in this case to go to the change room to remove it? The change rooms are a considerable distance from working areas and it seems unreasonable to go to the change room to remove respiratory equipment in this case.

(i) HYGIENE FACILITIES AND PRACTICES

- (2) Showers. Employees working in regulated areas shall be required to shower before leaving at the end of the work shift.

It would be preferable to change the wording to state "to shower just before leaving the premises".

ST0514017

- (4) Arrangement of Shower Facilities. Clothes lockers and shower facilities shall be arranged so as to separate regulated areas and uncontaminated areas.

This regulation is potentially one of the most troublesome. This is especially true if the interpretation of regulated areas covers more than areas that exceed the exposure limits. If this results in practice similar to those in handling of radioactive or carcinogenic materials, it could mean extensive revisions to locker rooms and perhaps construction of additional facilities. Some areas have separate clothing lockers, but they are adjacent and in the same room. Most locations have one shower room and one laundry. It may be necessary to provide a separate shower room, locker room, and laundry. These changes would be very expensive.

- (6) Prohibition of Activities in Regulated Areas.

There is a typographical error and "prohibit" should be replaced by products.

- (j) MEDICAL SURVEILANCE.

This is certainly more comprehensive than the practice in some areas. The medical department should comment on this section. This would probably be interpreted to include every employee as it includes each employee in an area exposed to airborne concentrations of asbestos fibers. There is no limit established which makes interpretation very difficult if it does not include every employee.

- (n) RECORD KEEPING

Exposure records, medical records, and rosters must be maintained for at least 40 years or for the duration of the personnel's employment plus 20 years, whichever period is longer. This could be about 65 years.

The roster alone for each regulated area could be a minimum of 14,600 pages. This is at least three file drawers full of records.

- (p) APPENDICES

II. B. The word "not" was omitted after employees.

ST0514018

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Administrative costs will be quite high for this proposed standard. There are areas that utilize asbestos where large numbers of employees work and these areas have a high rate of employee turn-over.

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