



ASBESTOS INFORMATION ASSOCIATION

1660 L Street, N.W. / Washington, D.C. 20036 (202) 223-4885

4.2.4

June 10, 1974

Mr. Harry B. Rhodes
Area Manager
Marketing & Technology
Union Carbide Corp.
P.O. Box 579
Niagara Falls, N.Y. 14302

Dear Harry:

Thank you very much for your letters of May 22 and 24.
Many of the suggestions that you made have been incorporated
in the final draft of our comments to OSHA.

This final draft and a copy of a letter to all members of
the Standards and Technical Committee is attached.

I agreed so completely with the suggestions made in your
May 24 letter that I have taken the liberty of copying the
letter and including it along with suggestions as to how
we might implement your recommendations in the attached
material.

I would appreciate any further comments and thoughts you
might have concerning these non-mandatory work practices.

Very truly yours,

Edmund M. Fenner, Chairman
Standards and Technical Committee

EMF/emr

Attachs.

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UCC 000095



ASBESTOS INFORMATION ASSOCIATION

1660 L Street, N.W. Washington, D.C. 20036 (202) 223-4855

June 10, 1974

TO: STANDARDS AND TECHNICAL COMMITTEE

A25001

REVISED OSHA ASBESTOS STANDARD

Attached is the final draft of our proposed submittal to OSHA. Included are:

- (1) The following Work Practices:
 - (a) Unloading and Storing Bagged Asbestos Fiber
 - (b) Introduction of Fiber into Manufacturing Processes
 - (c) Dust and Scrap Removal and Disposal
 - (d) Housekeeping.
- (2) Compilation of suggestions for clarification and amendment of the existing standard.

This material will be forwarded to Bob Mereness on June 12 for distribution to the AIA Board of Directors at their June 20 meeting.

Please call me not later than June 14, if you have any additional comments or suggestions concerning this material.

I enclose a copy of a letter I received from Harry Rhodes of Union Carbide. In my opinion, the suggestions he makes concerning non-mandatory OSHA approved work standards are excellent. I recommend that our Standards and Technical Committee accept the task of writing these work practices. I believe we should proceed with their preparation and issuance to our customers under AIA auspices even if OSHA does not formally give them their stamp of approval.

I suggest a meeting of our full Committee to discuss this assignment be held in New York, Philadelphia or Washington area the last week in July or the first week in August. Please let me know as soon as possible your preferred location and date.

Very truly yours,

Edmund M. Fenner, Chairman
Standards and Technical Committee

cc: R. H. Mereness

Mr. John Marsh
Raybestos-Manhattan, Inc.
100 Oakview Drive
Trumbull, Conn. 06611

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ASBESTOS INFORMATION ASSOCIATION/NORTH AMERICA

SUGGESTED ASBESTOS INDUSTRY WORK PRACTICES

UNLOADING AND STORING BAGGED ASBESTOS FIBER

1. Prior to unloading bagged asbestos fiber from a boxcar or truck, a visual inspection of the cargo shall be made to determine if bag damage has occurred and/or the extent of loose fiber present.
2. If the cargo has not been damaged, unloading and transport to storage may proceed normally. Asbestos fiber in undamaged plastic, paper or lined jute bags presents no exposure problem and therefore the use of respiratory protective equipment would not be necessary.

The asbestos fiber bags shall be handled and stored in a manner that will protect them from any damage that could create a future exposure problem.

3. If a visual inspection of the cargo determines that bag damage has occurred and/or loose fiber is present, then unloading shall proceed only with the necessary precautions to minimize worker exposure.

Loose fiber shall be picked up by vacuum cleaning or other suitable method. The damaged bags shall be repaired by taping or use of a slip bag. These repairs shall be made before transport of the bag to storage or use point. Suitable approved respiratory protective equipment shall be employed by the worker during this clean-up and unloading operation.

A25002

ASBESTOS INFORMATION ASSOCIATION/NORTH AMERICA

SUGGESTED ASBESTOS INDUSTRY WORK PRACTICES

INTRODUCTION OF FIBER INTO MANUFACTURING PROCESSES

1. In production operations involving asbestos fiber, the fiber must be introduced into the process under dust controlled conditions.
2. In those operations where bagged asbestos fiber is being used, the fiber bags shall arrive at the work station in clean condition, free of loose fiber on the bag surface. If the bags are stacked on pallets, the pallets must be clean and free from loose fiber.
3. In those operations where the fiber and its container, a paper bag, a plastic bag or other, can be introduced directly into the process without the necessity of opening the bag and removing the contents, dust control can be achieved without dust collection devices and systems.
4. In those operations where the fiber bag must be opened and contents removed from the bag prior to introduction into the process, then the fiber bag opening station must be equipped with a dust collection system in order to achieve dust controlled conditions. Automatic bag handling and opening devices with provision for empty bag disposal and including dust collection hoods for attachment to dust collection systems are commercially available. For a partial listing of manufacturers of this equipment refer to page ___ of ANSI Standard Z9.5 - 1974 entitled "Fundamentals Governing the Design and Operation of Local Exhaust Systems for the Control of Asbestos-Containing Dusts".
5. In many operations it is not practical or economical to use an automatic bag opening device. In these instances a manual fiber bag opening station, with provisions for dust collection, such as shown on page ___ of ANSI Standard Z.5 - 1974 entitled "Fundamentals Governing the Design and Operation of Local Exhaust Systems for the Control of Asbestos-Containing Dusts" or suitable alternate shall be used.
6. Asbestos fiber in the form of compressed blocks or bagged extruded pellets is virtually dust free and can be safely introduced into a process without the need for a dust collection system.

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INTRODUCTION OF FIBER INTO MANUFACTURING PROCESSES (Cont'd.)

7. Empty fiber bags, containing visible residues of asbestos fiber, shall be placed in closed containers or sealed plastic bags for transport to a disposal site. Empty fiber bags also may be placed in sealed paper bags and introduced as furnish into a manufacturing operation. Other suitable methods that do not create airborne concentrations of asbestos fiber in excess of the allowable exposure limits may be used.
8. Small intermittent production operations, regardless of the type of fiber used, may not require dust collection systems in order to achieve dust controlled conditions. This shall be determined by dust level monitoring during the operation.
9. Any fiber spills, either on equipment or on the floor resulting from this fiber feed operation, shall be picked up by vacuum cleaning or other suitable method* periodically during each shift.

*Method used shall not create airborne concentrations of asbestos fiber in excess of the allowable exposure limits.

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UCC 000099

ASBESTOS INFORMATION ASSOCIATION/NORTH AMERICA

SUGGESTED ASBESTOS INDUSTRY WORK PRACTICES

DUST AND SCRAP REMOVAL AND DISPOSAL

1. Dust and friable scrap material* shall be handled by methods that do not generate airborne concentrations of asbestos fibers in excess of the allowable exposure limits. If such procedures are not available, exposed employees shall wear suitable approved respirators.
2. Friable scrap material* for disposal shall be loaded into closed containers or sealed plastic bags for transport to the disposal site.
3. Empty fiber bags containing visible residues of asbestos fiber shall be disposed of in accordance with ANSI Standard Z9.5 - 1974 entitled "Fundamentals Governing the Design and Operation of Local Exhaust Systems for the Control of Asbestos-Containing Dusts" or other suitable procedure.
4. Asbestos fiber containing dust from dust collection devices, such as fabric filter baghouses, must either be returned to the process in a dust tight system, transported to a waste disposal site in closed containers, or sealed plastic bags, or prior to disposal converted to dust free pellets or balls.
5. Non-friable scrap material may be disposed of without use of the containment methods specified in paragraph 2. above.

*Friable scrap material is defined as any scrap material that may produce, during the disposal operation, airborne concentrations of asbestos fibers in excess of the allowable exposure limits.

125005

ASBESTOS INFORMATION ASSOCIATION/NORTH AMERICA

SUGGESTED ASBESTOS INDUSTRY WORK PRACTICES

HOUSEKEEPING

1. In Manufacturing plants where asbestos fiber is being used, asbestos fiber containing dust shall not be allowed to accumulate on machinery or on the floor, walls, ceiling and structural steel of a building to the extent that dust dislodgement could create airborne concentrations of asbestos fiber in excess of the allowable exposure limits. Equipment, buildings and building structures must be cleaned as frequently as necessary to meet this requirement.
2. Vacuum cleaning shall be used wherever possible. Other cleaning methods, including wet sweeping, may be employed if their usage does not generate airborne concentrations of asbestos fiber in excess of the allowable exposure limits.
3. If it is impossible to remove dust accumulations by vacuum cleaning or other methods, then compressed air cleaning may be employed. During compressed air cleaning only personnel performing the cleaning operations shall be present in the area and they must wear Type C supplied air respirators. This operation must be followed by thorough vacuum cleaning or other suitable procedure to pick up dust dislodged during the compressed air cleaning.

125006

UCC 000101

ASBESTOS INFORMATION ASSOCIATION/NORTH AMERICA

SUGGESTIONS FOR CLARIFICATION OF OSHA OCCUPATIONAL SAFETY
AND HEALTH STANDARD FOR EXPOSURE TO ASBESTOS DUST

We suggest that the OSHA Standard for Exposure to Asbestos Dust,
as published in the Federal Register, Vol. 37, No. 110, Wednesday,
June 7, 1972, be clarified as follows:

1910.93a Asbestos

(a)(2) "asbestos fibers"

Recommendation - Section to read:

"Asbestos fibers" means asbestos fibers whose length is greater
than 5 micrometers and whose diameter is less than 3 micrometers.

Reason:

Many medical authorities consider fibers greater than 3 micrometers
in diameter non-respirable. According to Dr. Steven Holmes,
Secretary, Asbestosis Research Council, Great Britain, this
limitation has been included in their asbestos regulations.

(a)(3) Ceiling concentration

Recommendation - Section to read:

No employee shall be exposed (at any time) to airborne concentrations
of asbestos fibers in excess of 10 fibers, longer than 5 micrometers,
per cubic centimeter of air, as determined over a 10 minute period
by the method prescribed in paragraph (e) of this section.

Note: Phrases underlined are additions
Phrases in parenthesis are deletions.

125007

UCC 000102

Reason:

The limitations of the monitoring procedure make it impossible to determine instantaneous peak exposures. A 10-minute sampling period appears to be the practical minimum.

(c) (1) (ii) Local exhaust ventilation

Recommendation - Section to read:

Local exhaust ventilation and dust collection systems.....
ANSI Standard Z9.2 - 1971 and American National Standard Fundamentals Governing the Design and Operation of Local Exhaust Systems for the Control of Asbestos-Containing Dusts, ANSI Z9.5 - 1974, which are incorporated by reference herein, or the equivalent.

Reason:

The Standards and Technical Committee of the Asbestos Information Association/North America has drafted ANSI Standard Z9.5 - 1974. It is anticipated that this standard will be issued prior to the promulgation of the revised Asbestos Standard.

Dust control systems which effectively accomplish the reduction of asbestos fiber levels can be designed without complete adherence to the ANSI design standards.

Note: Phrases underlined are additions.

125008

(c) (1) (iii) Particular tools

Recommendation - Section to read:

Insofar as practical, all hand operated and power operated tools which in any reasonably foreseeable use may produce or release asbestos fibers in excess.....shall be provided with local exhaust systems in accordance with subdivision (2) of this subparagraph.

Reason:

There are certain work situations in which it is not feasible or practical because of space limitations or other factors to equip portable tools with dust control equipment.

The use of the phrase "which in any reasonably foreseeable use" is in keeping with other portions of the OSHA Standard.

(c) (2) (ii) Particular products and operations

Recommendation - Section to read:

No asbestos cement.....or similar material containing asbestos shall be removed from bags, cartons or other containers in which they are being shipped without being either wetted or enclosed, or ventilated, or otherwise handled so as to prevent effectively.....

Reason:

There may be other work practices in addition to those presently specified which may effectively accomplish the purpose of this subparagraph.

Note: phrases underlined are additions.

125009

UCC 000104

(c) (2) (iii) Spraying, demolition or removal

Recommendation:

Provisions should be made in the standard so the restriction does not apply to products that have been modified by a bonding agent, coating, binder or other material so that during spraying, demolition or removal, no airborne concentrations of asbestos fibers in excess of the allowable exposure limits will be released.

Reason:

There are a number of materials, including liquid resins and textured paints, containing asbestos which are normally applied by spraying and do not generate significant airborne concentrations of asbestos fiber.

(d) (1) (ii)

Recommendation:

Add a provision that will allow the small and occasional user of asbestos fiber to achieve compliance by the use of a respirator, subject to the following limitations:

1. Respirator shall not be worn for more than 60 minutes in any 8-hour shift.
2. Respirator shall not be worn for more than 30 minutes in any hour in the 8-hour shift.
3. Exposures do not exceed 10 times the permissible limits and protection can be achieved by use of an air purifying respirator.

A25010

Reason:

There are a substantial number of small users of asbestos fiber who handle moderate quantities only occasionally, i.e., once or twice a shift or less. A hooded exhaust system here is a heavy financial burden. Dust levels will generally be low but a "puff" is always possible. Limited use of respirators would seem acceptable.

- (f) (2) (ii) Sampling Frequency
(f) (3) (ii) Patterns

Recommendations - Sections to read:

After the, samples shall be of such frequency and pattern as to represent with reasonable accuracy the levels of exposure of the employee except that monitoring will not be required during usage of products where asbestos fibers have been modified by a bonding agent, coating, binder, or other material so that during any reasonably foreseeable use, handling, storage, disposal, processing or transportation, no airborne concentrations of asbestos fiber in excess of the exposure limits prescribed in paragraph (b) of this section will be released. In no case shall the sampling.....prescribed in paragraph (b) of this section.

Reason:

Monitoring should not be required in those situations where significant quantities of asbestos fiber, from a health standpoint, will not be released.

Note: phrases underlined are additions.

A250.1

(h) (2) Waste disposal

Recommendation - Sections to read:

Asbestos waste, scrap.....shall be collected and disposed of in sealed plastic bags or other closed containers.

Reason:

The use of the word "impermeable" is misleading. The objective of this standard is to prevent the release of airborne concentrations of asbestos fiber over the permissible exposure limits, and the revised wording should accomplish this purpose.

(j) (2) (3) (4) Medical examinations

Recommendations:

...."every employer shall provide or make available, comprehensive medical examinations to each of his employees engaged in occupations exposed to airborne concentrations of asbestos fibers." The phrase "exposed to airborne concentrations of asbestos fibers" needs clarification. We are in agreement with the recommendation contained in the NIOSH Criteria for a Recommended Standard - Occupational Exposure to Asbestos, which basically defines the term "exposed to.." as exposures less than one-half the applicable Threshold Limit Value. This limitation should be included in the revised standard.

Reason:

The present standard could require medical examinations in situations where they are not necessary.

A250.2

UCC 000107

(j) (6) (2)

Recommendation - Section to read:

Access.....to authorize physicians and medical consultants
or either of them and upon the written request of an employee
or former employee to his physician.

Reason:

Employee request for medical records in writing would eliminate
possible problems.

1250 13

UCC 000108

May 24, 1974

Mr. E. M. Fenner
Johns-Manville Corporation
Greenwood Plaza
Denver, CO 80217

Dear Ed:

My comments on the AIA/NA work practice drafts are attached. Basically, I feel that the broad-base mandatory work practices are unworkable for an industry as diverse as ours. Since OSHA has shifted recently to about this same view, my comments tend to oppose things in the drafts which are more restrictive than the present regulations.

I would also like to take this opportunity to put forth for consideration some ideas that have developed from our meeting with Harry Gilbert and from a number of papers presented at the recent Industrial Hygiene meeting in Miami. The government regulatory agencies seem to have looked at the number of places that need to be monitored for dust and the number of people available to do this monitoring. They have arrived at the realization that it is totally impractical to control and enforce dust levels by a monitoring program. NIOSH is making a strong pitch for mandatory work practices as the way to overcome the problem. This NIOSH approach was tried in the recent Carcinogenic Substances regulations and drew a strong negative reaction from the industrial hygiene profession as an infringement on their professional prerogatives. OSHA appears to have recognized the problems in writing good, equitable but broad work practices and has tended to back away from this approach. No viable alternative was suggested, however.

In looking at the situation, it has occurred to me that some form of nonmandatory but official work practices may be a very useful approach. In the proposed arrangement, the OSHA regulations would prescribe maximum allowable exposure levels and in a general way what procedures are and are not acceptable to attain these levels. This is really the way they are written now except for a couple of places where they went overboard on work practices where a high dust level was assumed to always exist.

The regulations would then be supplemented by a series of nonmandatory work practices that had been reviewed and approved by OSHA. These practices could be written by asbestos suppliers, end user trade groups, the Unions, NIOSH, etc. They would be specific to a particular industry or substantial segment thereof.

A25014

UCC 000109

May 24, 1974

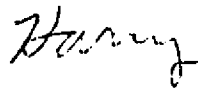
The key point, however, would be that they are nonmandatory. An asbestos user would have the option of following the appropriate work practice or complying with the regulations by alternative means. Those who follow the approved practice, however, would be allowed certain key exemptions such as a sharp reduction in eliminating monitoring requirements and, if the levels were low enough, from physical examinations.

This approach has the advantage that it would clearly and unambiguously point the way to compliance in the industry covered. It protects the workers without resorting to an extensive monitoring program. It allows the flexibility to come up with new solutions. The nonmandatory aspect provides a safeguard against abuse from too restrictive work practices. In essence, it is the British ARC booklet approach expanded somewhat and given an official position in the regulations.

It can be argued that a great multiplicity of work practices will result. Based on our experience, however, the development of good, usable work practice takes considerable effort. This should limit the number developed and accepted to the places where they make a positive contribution to compliance. This could also be controlled, if necessary, by setting some minimum number of workers to be covered before a work practice would be considered.

I would be very much interested to receive your comments on this approach to the problem. If you think it would be useful, feel free to discuss it with any others you choose.

Regards,



H. B. Rhodes
Area Manager
Marketing & Technology

HBR:cjb
Attachments

A25015

UCC 000110

- (A) The real objective is to ascertain whether the car is free of loose fiber that can generate airborne dust when disturbed. This can come from damaged bags or from leakage out of spouts in valve-pack bags.

The concept is good. The present wording is too detailed and in part incorrect.

- (B) Is there such a thing as an "approved" type of vacuum cleaner? If adopted, this would require a vacuum cleaner be available at every place a rail car or a truck is unloaded. This may be acceptable to large, regular users but becomes an extreme burden for the lesser users.

We have begun to look at sweeping compounds to control dust during cleanup at construction sites. Results are encouraging but data so far are limited. Do you have any experience in this area?

I would suggest the words be:

"A vacuum cleaner or other procedures where airborne dust generation is minimized should be used to clean up...."

- (C) This implies a rigid container. A heavy plastic bag would be equally suitable.
- (D) If "impermeable" means not permitting passage of dust under ordinary circumstances, the usage is acceptable. If it means not permitting the passage of anything, it is too extreme. It could be taken to mean steel containers. This word seems to have crept into the jargon from the British ARC publications. Let's avoid it.
- (E) There is no objection to this wording but it really doesn't define anything. The mask requirements in the regulations would presumably be in effect anyway as well as the protective clothing requirements.

425016