



E. I. DU PONT DE NEMOURS & COMPANY

WILMINGTON, DELAWARE 19898

ENGINEERING DEPARTMENT

October 19, 1972

MEMORANDUM NO. 1

PLAINTIFF'S
EXHIBIT
DUP-2053

cc: L.C.Schaller-Emp.Rel.
D.J.Beatty-Cent.Res.-F
J.E.Borden-PI-Victoria Plt.
R.W.Calhoun-Tex.Fib.-Seaford Plt.
J.T.Cavanaugh-Pigm.-Edge Moor Plt.
H.Lewis-Plast.-Carney's Pt.Dev.Lab.
W.T.Muncaster-Elaschem-Wilm.
P.A.Palmer-ESD
A.J.Major, Jr.-Orchem-Ch.Wks.
B.J.Stone-Design
W.H.Thompson-F&F-Parlin Plt.
J.C.Conrad-Photo Prod.-Parlin Plt.
F.H.Whitaker-Design
I.Zeise-Construction

Refer to Serial Letter 4013
Dated September 11, 1972 (Second review)

TO: D. G. WINDSOR - CHAIRMAN - EMPLOYEE RELATIONS - WILMINGTON

FROM: C. E. MARSH - STANDARDS SECTION *C E Marsh/hk*

STANDARDS SECTION - SAFETY & FIRE PROTECTION SUBCOMMITTEE
S4T - ASBESTOS DUST EXPOSURE, MEASUREMENT AND CONTROL

Our request to the Engineering Standards Committee for approval of the above standard has brought the following comments:

Summary

Approved (6)	C. D. Brown	-	Construction
	F. J. Martin	-	ESD
	J. J. Laurino	-	Photo Products
	R. H. McConnell	-	Pigments
	H. G. Shulby	-	Purchasing
	J. A. Sigman	-	Textile Fibers
Approved with Comments (7)	R. D. Carlton	-	Biochemicals
	H. B. Eaton	-	Elaschem
	J. C. Breckenridge	-	Employee Relations
	R. F. Stewart	-	Design
	H. H. Kohl	-	F & F
	W. H. McCoy	-	Industrial Chemicals
	R. H. Gruss	-	Remington Arms
Noted-Not Qualified to Comment (2)	J. P. Klimowicz	-	ERD
	C. W. Andrus	-	International

Disapproval (0)

Uses

Fifteen Engineering Standards Committee members advise an estimated total of 625 uses for this standard as reference per year.

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R. D. CARLTON, COMMENTS BY J. B. YOUNG - BIOCHEMICALS - BELLE PLANT

COMMENT NO. 1 - 3.4.2 - This section specifies that supplied-air or self-contained respirators shall be worn by employees engaged in dismantling asbestos insulation. This assumes that permissible TWA exposure limits are automatically exceeded on all dismantling operations and hence, respiratory protective devices are automatically necessary. We believe Section 3.4.2 should be amended to specify that respirator protection shall be worn on asbestos insulation dismantling operations anytime the asbestos dust concentration cannot be controlled below permissible TWA exposure ceiling limits by dampening with water or other suitable means.

COMMENT NO. 2 - 4.2 - This section is not very clear. What does "--and be required to do so---" refer to? Some amplification appears in order for clarity.

COMMENT NO. 3 - 6.4 - Is there sound justification for including an unexposed filter for analysis along with each completed sample? This doubles sample analysis costs and further loads up analysis technicians resulting in even slower return of analysis results.

H. B. EATON, COMMENTS BY S. E. WENZEL - ELASCHEM - LOUISVILLE

COMMENT NO. 4 - Table of Typical Dust Concentrations. Most asbestos insulation installed by plant forces in maintenance and small projects is done in the field in pipe alleys and open buildings. Dust sampling is not practical in these instances because of delay to get results and we do not want to compel the use of extreme protective measures if unnecessary. Could you include a typical table of dust concentrations that could be used for guidance for selecting appropriate control measures.

COMMENT NO. 5 - Clarification of "removal" and "dismantling" paragraphs 3.4.1 and 3.4.2. The OSHA states insulation should be removed in "a wet state sufficient to prevent the emission of airborne fibers of the exposure limits prescribed in paragraph (b) unless the usefulness of the product would be diminished thereby". If this can be done, it would appear 3.4.2 could be accomplished without the atmosphere supplying respirators providing the insulation was wetted and collected in impermeable containers. Please expand and clarify on your instructions in 3.4.1 and 3.4.2.

J. C. BRECKENRIDGE, COMMENT BY D. G. WINDSOR - EMP. REL. - WILMINGTON

COMMENT NO. 6 - Approved with inclusion of information mentioned in J. S. Queener's letter to Departmental OSHA Coordinators (10/12) and information from Haskell Lab which has been forwarded to the sub-committee.

R. F. STEWART, COMMENT BY M. L. PURTELL - DESIGN - LOUVIERS

COMMENT NO. 7 - It should be mentioned that workers, involved in other crafts other than those actively involved in removing insulation can be exposed to asbestos and must wear protective equipment.

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DU 062067

H. H. KOHL, COMMENTS BY R. D. MANNON - F & F - FLINT PLANT

COMMENT NO. 8 - At the Flint F & F Plant, asbestos fibers, delivered in 50 lb bags are used in making a Company product. This proposed standard includes no requirement for handling bagged asbestos fibers or disposing of empty, dusty bags.

COMMENT NO. 9 - The new OSHA standard requires that asbestos debris be removed in closed containers or plastic bags. Empty, dusty bags might well be classified as debris, since they do cause a dust problem. Our new engineering standard should include recommendations to cover this, and be consistent with the OSHA standard.

H. H. KOHL, COMMENTS BY A. J. GEIB - F & F - WILMINGTON

COMMENT NO. 10 - Waste Disposal - Suggest information be included on the requirements for waste disposal of asbestos or asbestos containers (bags, etc.) in sealed impermeable bags or suitable containers to avoid release of fibers during disposal.

COMMENT NO. 11 - 3.1 - Since calcium silicate contains 10%-20% asbestos and represents a common type of insulation in use, it is suggested the standard call attention to this fact and include appropriate information. Other materials, as for example talc, contain a percentage of asbestos fibers. Thus, including a word of caution to review all materials for asbestos fiber may be desirable.

COMMENT NO. 12 - 3.4.2 - Dismantling (removal) of small sections of insulation as frequently encountered by maintenance personnel in making minor repairs to equipment or lines would not be expected to exceed 10 times TWA. Provision should be made for exceptions where it can be shown the exposure levels do not require this degree of protection, i.e., atmosphere supplying respirators.

COMMENT NO. 13 - Paragraph 4 - Should include preface that "Compliance with the exposure limits may not be achieved by the use of respirators and their use is acceptable only during the time period necessary to install engineering controls and institute work practice necessary to reduce levels below the limits prescribed in 2.3".

COMMENT NO. 14 - 5.2 - Believe there is a danger from over simplification of the law since all details are not included in the standard. As for example, no reference is made to medical examinations. Suggest adding a caution statement that when these conditions exist (exceeding limits of pgh. 2.3) the law should be consulted for full details on the requirements. Same for 6.5 and 6.6. Suggest combining pghs. 5.2, 6.5, and 6.6 into one section to avoid repetition of caution statement.

COMMENT NO. 15 - 6.1 - Suggest clarify 6.1 with the following: Where employees are exposed to asbestos fibers monitoring is required to determine whether an employee's exposure is below the limits prescribed in 2.3.

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The law states "Sampling frequency and patterns. After the initial determinations required by subparagraph (1) of this paragraph (similar to pgh. 6.1), samples shall be of such frequency and pattern as to represent with reasonable accuracy the levels of exposure of employees. In no case shall the sampling be done at intervals greater than 6 months for employees whose exposure to asbestos may reasonably be foreseen to exceed the limits prescribed by pgh. (b), same as pgh. 2.3, of this section".

This is interpreted to mean that after it can be established the exposure can reasonably be foreseen not to exceed the limits, no further monitoring is required if conditions remain unchanged. It is estimated adequate controls can generally be established to eliminate exposure above the limits and probably is more typical of most Du Pont situations. Additional instructions on monitoring, therefore, are suggested for situations where limits are not exceeded to cover recommended practices for personnel and environmental monitoring, employee observation and record keeping which will satisfy the legal requirements.

COMMENT NO. 16 - 6.3 - The procedure refers only to personnel monitoring whereas samples collected from the areas of a work environment which are representative of the airborne concentrations of asbestos fibers which may reach the breathing zone of employees may be a more convenient means of demonstrating compliance where maximum levels are below the prescribed limits. Suggest adding note that ambient monitoring may be employed where appropriate.

W. H. MC COY, COMMENT BY O. J. MEYER - INDUSTRIAL CHEMICALS - EAST CHICAGO
COMMENT NO. 17 - 2.3 - I don't think we can measure this.

W. H. MC COY, COMMENT BY W. HENSLEY - INDUSTRIAL CHEMICALS - EAST CHICAGO
COMMENT NO. 18 - 2.2 - Reference to "insulation" should be "asbestos insulations" or "insulations containing asbestos" to avoid people thinking these guidelines are for asbestos-free insulation (i.e., Super Cal Temp, K-Fac, etc.).

R. H. GRUSS, COMMENT BY C. F. GUCK - REMINGTON ARMS - BRIDGEPORT
COMMENT NO. 19 - Section 5.1 - How do you plan to "sterilize" a mask?

kjk

DUP 1153841

DU 062069