



UNION CARBIDE CORPORATION • METALS DIVISION • P. O. BOX 579 • NIAGARA FALLS, N.Y. 14302 • TEL: 716-278-3376

September 28, 1976

Mr. Robert H. Mereness
Executive Director
Asbestos Information Association/NA
Suite 402
1835 K Street, N.W.
Washington, D.C. 20006

Dear Mr. Mereness:

Draft copies of a cover letter to members of the Ad Hoc Committee on Construction and a progress report are attached. The progress report is presented in a way that it can serve the needs of the Committee and be used more widely to solicit several additional members and also funds from the Contractor's Organizations. Please review it so we can get things lined up later this week.

The two attachments summarizing the regulations are not quite ready. I hope to have them in the mail by this Friday, October 1.

Very truly yours,

Harry

Harrison B. Rhodes
Chairman Standards & Technical Committee

HBR:da1
Attachments

CC: Messrs. G. G. Gabrielson, Jr.
W. C. Thurber ✓

UCC 018194

DRAFT

September 28, 1976

TO: Current Members of the Ad Hoc Committee on Construction

A progress report covering our last meeting, events which have taken place since, and the objectives for our next meeting is attached. The report was prepared for a wider circulation than just our committee so please excuse the inclusion of items that you already know.

Basically, we have selected Equitable Environmental Health, Inc. as our contractor for Phase I and they are hard at work collecting the information. We now need to prepare suggestions on regulatory provisions that are reasonable and feasible for the construction industry. These will serve as a basis for Phase II of the study. A meeting has been scheduled for 9:00 a.m. on Thursday, October 21 to work on this project. It will be held at the AIA/MA offices in Washington, D.C. Two background documents to help you prepare for this meeting are attached.

This is a crucial meeting, so please make every effort to attend. If you need any help with reservations, contact Bob Mereness.

Very truly yours,

Harrison B. Rhodes
Chairman Standards & Technical Committee

HBR:dal
Attachments

PROGRESS REPORT

AIA/NA Ad Hoc Committee on Construction

The initial meeting of the Ad Hoc Committee was held at the AIA/NA offices in Washington, D.C. on August 12 and 13, 1976. Those attending are listed below. The meeting was chaired by H. B. Rhodes of Union Carbide Corporation. Mr. Joe Koach of the National Insulation Contractors' Association has since agreed to serve as co-chairman.

Those present:	A. Daly	Certain-tyed
	G. Gabrielson	Nicolet, Inc.
	H. B. Rhodes	Union Carbide Corporation
	B. Martin	National Roofing Contractors Association
	W. Fassuliotis	GAF Corporation
	J. Koach	National Insulation Contractors Association
	J. Gafford	Celotex
	M. Trosper	Johns-Manville Corporation
	R. Locke	H. R. Grace
	B. J. Pigg	AIA/NA

Prior to the meeting, it was determined that the AIA/NA would sponsor a technical feasibility and economic impact study of the regulation of asbestos exposure in the Construction Industry. The main activity of the meeting was a detailed discussion of the organization and implementation of such a study. The following problem areas were identified:

1. The great multiplicity of types and end uses of asbestos-containing products particularly those such as A/C sheet that are field fabricated into many forms.

2. Identification of products which contain asbestos but are not required to be labelled under present OSHA regulations.
3. The variety of craft unions that handle asbestos-containing products and particularly where different unions handle the same product in different parts of the country.
4. Variability in the exposure level that are caused by any given product that arise from changes in weather, season, job scheduling, work practices, etc. The determination of average or representative exposure for even the same man doing the same job is likely to vary widely between locations.
5. Evaluation of the potential impact of the use of substitute materials.
6. An attitude on the part of many contractors that asbestos is not their problem but that of the material supplier. This, together with very limited moves to comply with the present standard and the problem of identifying asbestos-containing products in the field will both severely restrict the amount of information that is available and make it difficult to obtain.

No easy answers were found for these problems, but it was felt that the product manufacturers would cooperate fully regarding Items 1 and 2 and could help some with Items 5 and 6. Hopefully, our consultant can obtain assistance from the various contractors' associations in selecting contractors who will be willing to help with the end-use information needed. Actually, some "missionary" work is probably needed in this area, anyway, to make the contractors aware that asbestos is only the first point of attack. Fibrous glass, mineral wool, other natural fibers, minerals that have chips with length to diameter ratios greater than three, and even plain dust are being moved into

the regulatory process by the government. They will eventually be covered by comprehensive regulations with the attendant liability insurance pressure as is now the case with asbestos. Now is the time to establish the way to provide the worker with a realistic and reasonable level of protection without effectively prohibiting the use of important materials by massive over-regulation.

The Committee next prepared a draft of a "Request for Proposal" for use in engaging a consultant to carry out the AIA/NA study. The task was set up in three phases as follows:

Phase I

Compilation and organization of existing information to provide the data base needed to assess the technical feasibility and economic impact of various regulating schemes. It includes an identification of products, where, how, and how much are used, the numbers of people exposed, and if possible the approximate exposure level.

Phase II

This part of the study will involve field measurements of exposure levels with emphasis on the products and applications where significant exposures occur. The regulatory alternatives that industry plans to propose will be fairly well defined at this point and the data needed to support or modify them will be sought.

Phase III

This will cover the economic impact calculations and the development of a comprehensive final report. At the time this is done the OSHA proposal will be available and a response to their recommendations will probably be included.

Based on this work plan the AIA/NA obtained bids on Phase I and an estimate of costs for Phases I and II. The need for extensive, immediate manpower commitments by the contractor proved somewhat restrictive but three very good bids were received. From among these, Equitable Environmental Health, Inc. of Woodbury, NY, was selected as our contractor for Phase I. The cost will be about \$40,000 with a 10 week completion time starting from an initial meeting that was held on September 20. Phases II and III are estimated to add about \$100,000 for an overall total of \$140,000.

It should be noted that OSHA has commissioned a similar study in a somewhat different sequence to be conducted by Research Triangle Institute, Curham, NC. While it may seem superfluous for industry to also make a study, it is the only way we know to assure that the government's contractor does a thorough, unbiased job. It was also our experience with the Weston Report done in connection with the general standard, that the industry is better equipped and will work harder to dig out the facts for their own contractor. The government's contractor is also under severe OMB restraints on his information gathering activities.

The next job for the Ad Hoc Committee is the consideration of possible regulatory options that may be appropriate for the construction industry. The evaluation of the options selected will be an important part of the Phase II study. A meeting has been scheduled for 9:00 a.m. on Thursday, October 21, 1976, to work on this important project. It will be held at 9:00 at the AIA/NA offices in Washington, D.C. It is expected that our contractor will be fairly well along on Phase I at that time and will present the general nature of his findings.

In order to help prepare for this meeting, two documents have been attached.

1. A synopsis of the most important items in the current OSHA approach to health standards and a comparison of how they have been handled in the Proposed Rulemaking, by the OSHA Advisory Committee on Construction, by the AIA/NA in their response to OSHA, and in several other health standards under consideration.

2. A line-by-line comparison of the entire Proposed Rulemaking, the OSHA Advisory Committee on Construction recommendations, and the AIA/NA recommendations for the manufacturing standard.

The synopsis will be the working document for the meeting. It is strongly recommended that you study it thoroughly and be prepared to discuss the applicability of the various provisions to construction. Alternate recommendations will be welcome and are encouraged. The line-by-line comparison is primarily a convenient reference document where details are easily found if needed. It is not our intent at this meeting to try to finalize proposed wording.

In conclusion, it is worth noting that the OSHA Advisory Committee on Construction flatly rejected a number of important OSHA concepts regarding items that should be included in a health standard. While these recommendations are not binding on OSHA they appear to have provided them with considerable food for thought. The RTI study did not start with the original OSHA concepts but is structured to learn what is feasible and then assess the economic consequences. It would appear that OSHA has recognized that a real problem exists and are looking for a workable solution. It is very critical that industry makes a responsible input to help find this solution.

HBR:da1
9/28/76



ASBESTOS INFORMATION ASSOCIATION

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

RECEIVED
AUG 4 1976

2 August 1976

Memorandum To: Members, AIA/NA Ad Hoc Committee on Construction *OSHA*
From: H. B. Rhodes, Cochairman, AIA/NA Ad Hoc Committee on Construction
Subject: First Meeting of the Ad Hoc Committee

This is to inform you that the first meeting of this Committee will be held in Washington, D.C. on August 12 and 13. It will start at 9:00 a.m. at the AIA/NA office at 1835 K Street, N.W. Please contact Mr. R. H. Mereness at 202-223-4885 if you need help with hotel reservations.

The formation of this Ad Hoc Committee was authorized recently by the Executive Committee of the AIA/NA. In simplest terms, its objective is to develop a valid, documentable, broad-based industry response to the proposed OSHA asbestos regulations for the Construction Industry. A copy of Mr. Gabrielson's letter that provides more details is attached for your information.

With regard to timing, the latest information from OSHA is that Research Triangle Institute will receive the contract for the government's inflationary impact statement. Estimated completion time is six months but could be shortened considerably if the government decides to sacrifice quality for speed. Such a six month period would conclude about the end of February, 1977. This study would be published by OSHA at the same time as a proposed rulemaking for construction with probably 45-60 days then allowed for comments. It seems prudent to plan at this time to target the completion of our study for the end of February, 1977 to allow some time for adjustments if they appear to be appropriate.

While six months may seem like a long time, our past experience with Weston (and that of OSHA with Consad) shows that this type of study is slow and difficult to put together. Accordingly we are currently trying to get the AIA/NA contractor selected and started by the early part of September. In order to do this our meeting in Washington must be a working session with some prior preparation by the participants.

The basic objectives for this meeting are shown in the attachment. Several of the committee members are investigating various aspects of the points listed and we expect to have helpful reports on August 12. It is also very desirable that each of you do some "homework" on number 6, identification of products and uses, as it applies to your particular area of knowledge. Also included is an information package covering possible alternative ways to utilize available statistical information in our study. The usefulness of this in our consultant's efforts will be the first point covered at the meeting. It is suggested that you look this over. Comments will be welcome.

We are very pleased to have you as a member of this Ad Hoc Committee and I am looking forward to meeting you in Washington.

H. B. Rhodes
Harrison B. Rhodes
Cochairman, AIA/NA Ad Hoc Committee
on Construction

HBR:dal

CC: R. H. Mereness

MEETING OBJECTIVES

AIA/NA Ad Hoc Committee for Construction

Washington, D.C., August 12 & 13

1. Select the approach to be used to relate the uses of asbestos-containing products with the statistical information available on the various components of the construction industry.
2. Define in detail the asbestos-containing products to be covered.
3. Rough draft of protocol for AIA/NA consultant's study.
4. Rough draft of questionnaire for consultant to use to collect information from the construction industry.
5. Discussion of consultants to be considered.
6. Identification in detail the asbestos products used in construction and the particular types of construction where such use occurs.



ASBESTOS INFORMATION ASSOCIATION

1835 K Street, N.W., Washington, D.C. 20006 • (202) 223-4885

23 June 1976

Memorandum To: H. B. Rhodes, Co-Chairman, Ad Hoc Committee
for Construction

From: G. G. Gabrielson, Jr., Chairman, Asbestos
Regulation Task Force

Subject: Ad Hoc Committee Objectives

As a consequence of discussions at the last meeting of the Executive Committee of AIA, it is my belief that the Ad Hoc Committee for Construction; of which you have been appointed Co-Chairman, should have the following objectives:

(1) Identify and define typical or representative asbestos dust exposure situations in construction (including both persons working with asbestos materials and others casually exposed to asbestos dust) and initiate the measurement and recording of TWA asbestos fiber exposures for all such situations. This task will require, of course, the development of data concerning the portion of the working day during which a typical or representative worker is exposed to asbestos fibers.

(2) Develop a recommended protocol for a study, by an outside, independent consulting firm, of the technological feasibility and economic impact of whatever regulation OSHA may propose for the control of occupational exposures to asbestos in construction. I attach my own initial outline of such a protocol as a point of departure.

(3) Recommend to the Task Force Chairman and to the Executive Committee a list of independent consulting firms qualified to undertake the study outlined in (2) above.

(4) Based upon the general form and approach of the regulation proposed Oct. 9, 1975 by OSHA for the regulation of occupational exposures to asbestos in manufacturing, prepare, section by section, the language of a construction industry regulation which AIA and cooperating companies and associations may wish to advocate in response to any construction industry regulation which OSHA may propose.

A handwritten signature in dark ink, appearing to read 'Guy G. Gabrielson, Jr.', written over the typed name.

Guy G. Gabrielson, Jr.
Chairman, Asbestos Regulation
Task Force

Regulation of Exposure to Asbestos Fiber in Construction

PROTOCOL FOR STUDY BY CONSULTING FIRM

- (1) List of asbestos containing materials used in construction.
- (2) List of applications for materials defined in (1) above.
- (3) Census of workers fabricating asbestos materials in construction, dividing the total into trade or skill categories where appropriate.
- (4) Census of workers in construction casually exposed to airborne asbestos, dividing the total into trade or skill categories where appropriate.
- (5) Distribution of numbers obtained in (3) and (4) above into defined periods of time employed in construction (i.e., what portion, during their lifetimes, will work in construction 0-5 years, 5-10 years, 10-15 year, etc.)
- (6) Distribution of numbers obtained in (3) and (4) above into defined periods of average daily exposure to asbestos (i.e. what portion, during a normal work day, will be exposed to airborne asbestos 0-1 hour, 1-2 hours, 2-3 hours, etc.)
- (7) Cost per exposed person of mandated medical surveillance and total annual cost for the construction industry (derive number of annual physicals from the proposed regulation and (3) and (4) above and multiply by the medical surveillance cost per person).
- (8) Cost per exposed person of mandated industrial hygiene facilities or procedures (i.e. protective clothing, respirators, showers, change rooms, etc.) and total annual cost for the construction industry.
- (9) Typical dust count data for each category in (3) and (4) above.
- (10) Definition of engineering controls available for the different categories of tools and operations used in the fabrication and installation of asbestos materials in construction and dust counts which may be achieved.
- (11) Potential availability of engineering controls defined in (10) above. (At least one power tool manufacturer has decided that the potential market is too small to develop, introduce and sell tools with standard dust control attachments.)

- (12) Feasibility (including economic feasibility) of engineering controls in construction.
- (13) Data, if available, indicating transient nature of construction workforce.
- (14) Feasibility of any proposed medical surveillance or recordkeeping program in light of transient character of workforce.
- (15) Distribution of construction activity into categories by dollar magnitude of individual projects.
- (16) Percentage increase in construction cost of each category defined in (15) above which would result from compliance with proposed regulation.
- (17) Extent to which asbestos materials defined in (1) above would be displaced by non-asbestos materials as a consequence of implementation of proposed regulation.



Calidria ASBESTOS

UNION CARBIDE CORPORATION • METALS DIVISION • P. O. BOX 579 • NIAGARA FALLS, N.Y. 14302 • TEL: 716-278-3376

July 27, 1976

RECEIVED

JUL 29 1976

Mr. Milt Trosper
Johns-Manville Corporation
Research Division
P.O. Box 5108
Denver, CO 80217

Dear Milt:

The information package we discussed recently is enclosed. It contains:

Items 1 and 2: Selected data from the 1972 Census of Construction Industries and from SIC Code 1742. These illustrate the tremendous amount of detailed economic information on this industry that is readily available. The problem is that it is presented by "establishment" rather than job location which makes it very difficult to get the "location count" needed for monitoring cost estimates. It seems to me that we should try to structure our study to trace the way asbestos is used in these various categories so this employee count and economic data can be used to calculate economic impact.

Items 3 and 4: Item 3 is a detailed explanation of the type of construction included under each SIC Code. Item 4 is a summary that makes it a little easier to visualize the structure of the listings. They do have a well defined pattern. I am particularly intrigued with the possibilities of the 4-digit listing by crafts made under Major Group 17.

Item 5: This is the beginning of an attempt to identify asbestos products usage by SIC Code. I find that I am not sufficiently knowledgeable about the products to go very far at this. Please look into this approach very carefully with your associates. We need to decide very soon as to its feasibility and usefulness.

Item 6: This is a copy of the F. W. Dodge Worksheet where the construction industry is broken down into 267 categories of structure. F. W. Dodge can supply the same kind of information as the Government census plus a very accurate location count. Note, however, that they do not have the breakout by trades as in SIC Major Group 17 which may be particularly useful in identifying workers who have regular exposure to asbestos as

July 27, 1976

part of their jobs for long employment periods. Your suggestions on this approach as an alternative or in conjunction with the governmental statistics would be useful.

Item 7: This is some literature on Dodge Scan. They have extensive (alleged to be virtually complete) architectural plans and specifications for non-residential public and private buildings over \$50,000 that are out for competitive bids. They do provide a service for certain products (not those containing asbestos) reporting and predicting the amount used by type of construction.

Item 8: This is the product usage listing from the Weston Report with some very rough estimates of the fraction of each total that is used in construction. A considerably more detailed breakout by specific products in at least the asbestos paper, paints, etc., plastics, and miscellaneous categories will be needed to make any meaningful identification with particular phases of construction.

Item 9: This is a very detailed listing of uses that may or may not be complete. It seems to me that we need to cover all large tonnage uses plus all usages where substantial numbers of workers are exposed even if only a moderate tonnage of asbestos is involved. This is one of the most critical areas in defining the study. Can J/M come up with a list that we can at least use for "openers" on a survey?

It would be very much appreciated if you would review this and put together the J/M recommendations in time for our meeting during the week of August 2. We are very pleased to have you on the Construction Industry Subcommittee. Our work is certainly cut out for us.

Very truly yours,



Harrison B. Rhodes
Technology Manager

HBR:dal
Enclosures

CC: E. M. Fenner
G. G. Gabrielson, Jr.
R. H. Mereness
W. C. Thurber ✓