FILE NAME: Johns-Manville (JMA)

DATE: 1977-1979

DOC#: JMA294

DOCUMENT DESCRIPTION: Regulation RE Navy Contract & Asbestos Prohibition with Relevant Correpondence

C. H. BROOKS | 9159401 11/8/71

DISTRIBUTION: COMMANDER, NAVAL SHIP SYSTEMS COMMAND (06222) (3) (2 ea)VE Branches NAVSHIPYDS: All SUPSHIPS; NSRF Yokosuka; NARAD Code 807; CGHQTRS.ENE-3 Wash.D.C.; CGYD Curtis Bay; SPCC (735A)Mech; USNS Key West; NAVSEC Phila. Code 6784

BEFORE	AFTER
Use asbestos products for the thermal insulation and lagging of high temperature piping and boilers.	Use calcium silicate and fibrous glass products for the thermal insulation and lagging of high temperature piping and boilers.

Ref: (a) NAVSEC ltr 6764:MA:lal 9390 (FA-287) ser 752 of 5 May 1969
(b) NAVSHIPS NOTICE 9390 of 23 Feb 1971
(c) Philadelphia Naval Shipyard Plan - Type 500 - 2269464 REV C

DATE RECEIVED	SOURCE	DATE STARTED	INVESTIGATOR
12/8/70	CODE 249	9/1/71	E. H. CANNON

BACKGROUND

Reference (a) expressed the desirability of NAVSEC to discontinue or minimize the use of asbestos containing materials as a thermal insulating material due to the proven health hazard associated with the breathing of asbestos dust and particles over extended periods of time.

In keeping with the desirability to reduce the use of high content asbestos products, reference (b) discontinued the use of certain high content asbestos products by cancelling MIL-I-15091, class C and F materials of MIL-I-2781 and types 1B, 1F (except ½"), 5A, 5B, and 7B materials of MIL-I-24244.

(Cont.)

PROPOSAL

That this activity develop a local insulation and lagging plan similar to reference (c) specifying materials other than asbestos for piping and boilers.

RESULTS

SC NO.	ACCOUNT NO.	SERIAL NO.	SUBJECT	STATUS AND DATE	APPLICATION	SAVINGS
5640	181	591	ASBESTOS PRODUCTS SUBSTITUTE	A 10/22/71		

Class Code Number which identifies the project.

(2) ACCOUNT NO. - Enter activity accounting number.

(3) SERIAL NO. - Enter project number assigned locally.

(4) SUBJECT - Assign a brief and descriptive subject title. Do not exceed 30 spaces (EAM Punch Card Limit).

(5) STATUS - Insert the status and date of the status of the project by the appropriate key symbol as follows:

A - Active - Project in Progress Locally; P - Pending - Completed in local V.E. office and awaiting action other than Bureau (explain in remarks); PB - Pending Bureau Action - Completed in local V.E. office and submitted to the Bureau by official letter requesting specific Bureau action. Identify official correspondence under "Results"; CA - Completed and Approved (cite authority in remarks); CR - Completed ferred - Held in abeyance pending future developments (explain in remarks); X - Discontinued - Project dropped - (explain in remarks)

(6) APPLICATION - Insert the appropriate application of the project. Do not exceed 10 spaces (EAM Punch Card Limit).

(7) SAVINGS - Insert a dollar figure whenever a report is submitted. This figure shall be the estimated savings of the project as in Pending Bureau Action, Active, Completed and Rejected, Deferred or Discontinued status, and must be revised to Approved savings when the project is in Completed and Approved status. This figure must be changed and kept current with changes in project status.

BACKGROUND (CONTINUED)

The principle materials used at this activity for the insulation and lagging of high temperature piping and boilers are asbestos products.

The Philadelphia Naval Shipyard has developed for local use a standard insulation and lagging plan for piping systems -20°F to 1200°F, reference (c). This plan specifies approved materials, other than asbestos, for all piping systems at less cost than asbestos containing materials. The principle area of savings being in the use of J. P. Stevens and Company, Inc. style Nos. 1925 and 84205, or equal fiberglas cloth lagging in lieu of asbestos cloth lagging.

V.E. ITEM #

COST DATA (Applicable to work at the reporting activity)	UNIT ISSUE COST (1)	UNIT ISSUE COST X APPLICATION PER JOB (2)	UNIT ISSUE COST X APPLICATION PER 12 MOS. (3)	STATUS	DATE
a. PRESENT COST				A	10/26/71
				P	
b. ESTIMATED NEW COST				PB	
				CA	
c. ESTIMATED SAVINGS				CR	
				D	
d. APPROVED SAVINGS				X	
e. COST OF VE INVESTIGATION		f. MANHOURS EXPENDED			

96085

JOHNS-MANVILLE
RESEARCH & ENGINEERING CENTER
P. O. BOX 159 • MANVILLE, N. J. 08835 • TELEPHONE: 722-9000 • AREA CODE 201

JM

June 13, 1969

Dr. M. Anmuth
Naval Ship Engineering Center
Philadelphia Division, 6764
Philadelphia, Pa. 19112

Dear Dr. Anmuth:

Re: Your Inquiry 6764:NA:dmt
9390 (FA-287)
Ser 743
Proposed Insulating Materials for Naval Vessels

Subject inquiry raises a number of questions concerning:

(A) the feasibility of substituting alternate materials for asbestos used as lagging, pipe and boiler insulation in naval ships; and

(B) safety precautions to be followed during the manufacturing, processing, installation and replacement of asbestos containing insulations.

This letter is Johns-Manville's reply to your inquiry.

Before answering your questions, I would like to state that it is our opinion that, in most naval applications, no other insulation material will perform as satisfactorily as those containing asbestos.

It is also our opinion that, when proper safety and health precautions are followed, asbestos containing insulations do not present a major hazard to the workman. Therefore, we believe that the emphasis should be placed on safe handling of asbestos containing insulations, rather than searching for substitute materials.

It is in line with this belief that Johns Manville, together with the Asbestos Workers Union, is sponsoring the Insulation Industry Hygiene Research Program at Mount Sinai School of Medicine. This program is described in the attached copies of "Insulation Hygiene Progress Reports". Dr. Irving J. Selikoff, Director of Mount Sinai Environmental Sciences Laboratory, and Director of this Hygiene Research Program, would be glad to discuss with you in detail the procedures and the goals of the program.

Our replies to your specific questions are as follows:

Questions 1. through 11.

As an insulation to meet the specifications set forth in these questions (an insulation composed mainly of inorganic materials that will endure a temperature above 200°F), we have a fiber glass insulation, MICRO-LOK, which has a temperature limitation of 370°F, and 500° MICRO-LOK, which has a temperature limitation of 500°F. This insulation is also available with an aluminum or stainless steel jacket, under the trade name of METAL-LOK.

Questions a. through c.

Johns-Manville does not make any non-asbestos containing materials that will meet your specifications.

Question d.

For a lagging jacket we could offer an asbestos textile lagging cloth treated with a re-wettable adhesive compound that becomes sticky when immersed in water. This compound serves to encase the asbestos fibers, thus reducing the amount of dust created during handling and installation.

Question f.

Asbestos containing insulations are manufactured in Johns-Manville plants under strict dust control conditions. All steps in the process where dust is generated, whether asbestos containing or not, are provided with dust control systems engineered to rigid specifications.

Question g.

As to materials and methods that will reduce dust generation during installation and replacement of insulations, we have the following comments:

(A) - Materials

1. The use of our new molded THERMOBESTOS LD (calcium silicate) elbow insulation to eliminate field and/or shop fabrication of this item. Use of this material would also eliminate the need for mixing and applying the finishing cement that is required with the field fabricated elbow insulation.

2. The use of our metal jacketed (aluminum or stainless steel) calcium silicate pipe insulation, METAL-ON. The metal jacket on the pipe insulation greatly reduces dust generation during installation and removal.

(B) - Methods

The adoption and enforcement of improved working procedures and practices to reduce or eliminate dust generation, including:

1. Cutting and fabrication of insulation performed in a central or local fabricating shop equipped with suitable dust control devices to maintain dust concentrations below hazardous levels.

2. More detailed design of shipboard piping to reduce or eliminate the interference that requires the cutting and abrading of the insulation at the time of installation.

3. Adoption of health safety practices as recommended in the NIMA booklet (2 copies enclosed) on handling and applying thermal insulation products containing asbestos.

Additional information on the safe handling of asbestos containing insulations on shipboard can be obtained from the Asbestosis Research Council in Great Britain. Inquiries should be directed to:

Dr. S. Holmes, Secretary
The Asbestosis Research Council
Post Office Box #40
Rochdale, Lancashire
England.

Question h.

It is difficult for us to comment on the cost of non-asbestos containing insulations that would meet your specifications. It is our opinion, however, that such insulations would be higher in cost than the present asbestos containing insulations.

For your further information on the subject of asbestos and health, I enclose copies of two papers prepared by Johns-Manville entitled:

"Asbestos and Human Health", and
"Asbestos -- A Family of Minerals".

I am also enclosing sales literature describing the Johns-Manville products I have mentioned.

Johns-Manville representatives would be available to meet with you at the Naval Ship Engineering Center to discuss the subject in greater detail and answer any questions that may be raised by our comments in this letter. Also, we would be pleased to have you and your associates visit our Manville, N. J. Plant, where we could show you the manufacture of asbestos containing pipe and block insulations.

Please contact me if there is anything further that Johns-Manville can do.

Very truly yours,

E. M. Fenner

E. M. Fenner, Director
Environmental Control

May 22, 1969

E. M. Fenner - Research

cc: G. H. Martens, Jr. - GHQ
L. A. Fowler - GHQ
J. B. Jobe - GHQ
H. M. Ball - GHQ
B. H. Tower - Washington, D. C.
file
chrono

Re: Proposed Insulating Materials
For Naval Vessels

I have just received my copy of the Pipe Division's position paper on Asbestos-Cement Water Pipe and Human Health dated April 14, 1969, transmitted by M. Harris' letter dated May 7th.

I realize asbestos-cement water pipe is not used aboard vessels but perhaps this position paper should be included with the reply you are preparing to the Naval Ship Engineering Center only as reference material.

D. A. Stifflear

DAS:aa

Washington Office
June 30, 1969

6608A

E. M. Fenner - Research

cc: L. A. Fowler -N.Y.
M. W. Burleson -N.Y.
H. B. Moreno -N.Y.
W. L. VanDerbeek -N.Y.
J. B. Jobe -N.Y.
H. M. Ball -N.Y.
G. H. Martens, Jr. - N.Y.
F. J. Solon -N.Y.
A. Pocius -N.Y.
P. F. Coggins -N.Y.
D. A. Stifflear -N.Y.
B. H. Tower -WDC
J. L. Lach -WDC
Washington Staff
File

PROPOSED INSULATING MATERIALS FOR NAVAL VESSELS

Subsequent to meeting with Doctor Rosenwinkle of the Navy we worked out through Mr. Stifflear an agreed date of July 23 for a conference at Research.

You should know for background guidance that Doctor Rosenwinkle readily accepted our invitation. He obviously, as a man of science, desires to learn all that he can of the asbestos "problem" and feels strongly his responsibility to Naval personnel at shipyards and aboard ship.

I might state that he is a most affable person there being no indication whatsoever of the "indignant crusader" but as Director of Occupational Health the investigation of the situation is his responsibility.

It should also be stated for your guidance that Doctor Rosenwinkle, who prefers this title to Captain, has an M.D. from LSU as well as a Doctor's Degree in Public Health and nearly 25 years of experience in the field.

We did not endeavor to discuss technicalities with him after he accepted our invitation deeming it best to await our effort at Research by you and others so much better qualified to do so.

We have agreed for the Doctor's convenience to personally drive him to Research leaving Yale P.M. on July 22 and I would suggest that the conference convene at 9 A.M. on July 23.

May I ask that you secure three single rooms for us at a nearby Motel for "checkin" after 7 P.M.

We will contact Doctor Rosenwinkle several times before July 22 to try to ensure that there will be no change of date.

W. C. Winblad

6608L

Environmental Control Department
Research & Engineering Center
May 21, 1969

MAY 22 '69
OFFICE OF THE
GENERAL COUNSEL

M. W. Burleson - DHQ

Proposed Insulating Materials for Naval Vessels
D. A. Stifflear's letter to me of 5/15/69

In order for the Environmental Control Department to coordinate Johns-Manville's reply to the Department of the Navy letter of May 5, 1969, which was attached to D. H. Stifflear's subject letter, it will be necessary for us to have the comments of the Industrial Insulations Division.

I plan to formulate a reply in the rough for review by Division and Headquarters personnel, based on your comments and those previously received from H. B. Moreno. In order for the Navy to have their survey completed by June 15, I believe we should have our information in their hands not later than June 9. To accomplish this, I feel that the rough draft of our reply should be available for review by June 2.

I would appreciate any suggestions concerning our reply from the copyholders of this letter.

E. M. Fenner

EMF/ems

cc: W. L. VanDerbeek (w/attach.)
J. B. Jobe - DHQ
H. M. Ball - GHQ
G. H. Martens - GHQ
F. J. Solon, Jr. - GHQ
H. B. Moreno - GHQ
D. A. Stifflear - GHQ
L. A. Fowler - GHQ
File
C

AO 10221018b

NAVY CONTRACT
ASBESTOS PROHIBITION
1977, 1979

Johns-Manville

Internal Correspondence

[illegible] 1977

Date August 22, 1977

To R. P. Carter

From E. M. Fenner

Copies P. Kotin, M.D.

Subject ASBESTOS PROHIBITION - GOVERNMENT SOLICITATIONS

Our Northeast Regional Sales Office had an inquiry from a customer asking for an asbestos-free TRANSITE sheet. When queried as to "why the need", the customer replied he was preparing a bid for the Navy and the solicitation forbade the use of asbestos. The solicitation number and actual quote are shown on the attached.

Is there any way we can discover the source of this ban and the reasoning that led to its implementation?

E. M. Fenner

EMF:jh
Attach.

AO 102210188

Johns-Manville

Internal Correspondence

Date September 7, 1977

To E. H. Fenoc[illegible] 1-06

From R. C. Manahan - CMS/WDC

Copies P. Kotin, M.D. 1-06, [illegible] Carter - 1-06, L. D. Sorrentino - WDC, J. Hoffire - NFR, T. C. Dean - WDP, File

Subject ASBESTOS PROHIBITION
GOVERNMENT SOLICITATIONS
IFB N0060077B1607 (NAVY)

As represented by wire on 8/30/77, I was able to trace this invitation for bid through the Navy Regional Procurement Office in Washington, D. C. to the Plant Equipment Support Office at Annapolis. The IFB calls for a small induction furnace of the kind sold by Industo-Therm Corp., Ramcocus, NJ 08333 (609-[illegible]-9080) and Ajax Magnathermic Corp., Warren, Ohio (216-[illegible]-7520). The onsite [illegible] undoubtedly used as the housing of this equipment and subject to the solicitation clause "The use of asbestos and materials containing asbestos on or in the furnished equipment is prohibited."

Met with Mr. Ed Korff at Annapolis and he admitted that this was probably a safe application of an asbestos containing product. As a result of our discussion and pending review of several articles on the subject which I left with him, he will see if they can waive such a restriction in the future.

For the present, I suggested that he grant an alternate construction utilizing Marinite XL should the vendors embrace this concept.

Mr. Korff was also interested in viewing our film "working with Asbestos" and will advise probable dates for same in the near future.

As for source, he felt the [illegible] originated at Naval Sea Systems Command, Crystal City, [illegible] and we are checking this with our contact [illegible]

RCM:kjm

AO 1022 10215

MAR 15 1979

Johns-Manville

Internal Correspondence

To P. Kotin, M.D. Date Mar. 15, 1979

From R. P. Carter

Copies See Page 4 of this Memo

Subject NAVY POLICY ON USE AND PRESENCE OF ASBESTOS-CONTAINING PRODUCTS

Bob Manahan's letter of January 24 referred to OPNAV Instruction 6260.1A which essentially prohibits the use of all asbestos-containing products where acceptable asbestos-free materials are available.

Following an initial meeting on February 22 with Bal Lewis, Deputy Assistant Commander for Engineering and Design, I met last week with Commander Montoya, Director of the Environmental Protection Division within the Office of the Chief of Naval Operations. Commander Montoya invited a group of about a dozen individuals from NAVTAC, BUMED, NAVSEA, and NAVJAG. Bob Manahan, Bob Pier (AIA), John Welch (CPF) and Bob Connelly (Certainteed) also attended the meeting.

Commander Montoya was pleased that we had requested the meeting and indicated that the timing was excellent since they would be meeting shortly to reconsider the OPNAV Instruction on asbestos products.

The group was quite receptive to the 1½-hour presentation which I gave them. I essentially covered the following points:

1. The OPNAV Instruction assumes no safe use of any carcinogenic substance.
2. The OPNAV Instruction assumes there is no safe level of exposure to any carcinogen.
3. The OPNAV Instruction fails to distinguish between locked-in and friable products containing asbestos and appropriate versus inappropriate uses of asbestos.

4. The asbestos-related disease we see today is based on occupational exposures from asbestos-containing products which are no longer manufactured. In addition, the exposure levels which produced this disease are not likely today.

5. We question the wisdom of banning any substance about which we know a great deal and mandate the use of substitutes about which we may know very little.

6. The need to utilize proper work practices when handling, installing, maintaining and removing asbestos-containing products. The work done by Johns-Manville and the asbestos industry in preparing work practices and industrial hygiene monitoring results were emphasized.

Many questions were asked by the Navy personnel. They readily admitted that the OPNAV Instruction permitted them no leeway to continue utilizing locked-in asbestos-containing products.

Although there are some Navy personnel who are applying the OPNAV Instruction literally, those in attendance clearly felt such action was not warranted.

Presently, the Navy is undertaking a program to search for friable asbestos-containing products within its facilities and to issue precautionary instructions with respect to the use, maintenance and handling of these products. In this regard, they raised a very legitimate problem of identifying asbestos-containing products from similar products which are asbestos-free (e.g. Thermobestos vs. T-12). Some naval facilities have a combination of both products and they are experiencing considerable difficulties in determining when precautionary measures relating to the use of asbestos should be undertaken. They specifically asked if any steps were being taken to color-code the non-asbestos containing products (e.g. T-12).

The other industry representatives [illegible] encouraged by the meeting. It is my belief that if we provide the Navy with adequate information and [illegible] with respect to how to safely use asbestos-containing products, they will ratify the [illegible] an extent as to only apply it to friable products containing asbestos.

P. Nolan, J.D.
March 19, 19[illegible]
Page 3

he offered the following proposal to Commander Montoya and the others present. A select group from AIA's Technical Committee would meet on various occasions with a group selected by Commander Montoya to exchange information and provide assistance in such areas as:

A. An inventory of asbestos containing products currently available to utilities.

B. A listing of friable and locked-in asbestos-containing products.

C. Work practices for handling, installing, and removing asbestos-containing products.

D. Industrial hygiene monitoring results following the use of these practices.

E. Areas of needed research.

All those in attendance expressed strong interest in receiving data from the asbestos industry on airborne concentrations generated following the use of various asbestos containing products when utilizing recommended work practices.

Commander Montoya indicated that he will contact us to set up an initial meeting with a select group from AIA's Technical Committee. In the meantime, we were requested to forward to the Navy any we think will be helpful in formulating [illegible] In this regard, I have instructed [illegible] to work with the following alternate OPNAV [illegible]:

[illegible] products, the fibers are [illegible] binders to such [illegible] are not readily released [illegible] and application. However, there [illegible] containing products which [illegible] handling and [illegible] substitute [illegible] chanical manage- [illegible], and, if [illegible] asbestos-

A similar meeting was held on the following day with Captain K. D. Brooks, Deputy Commander for Facilities Acquisition. Previously, we were advised that Captain Brooks was strongly promoting the literal application of the NAVFAC Instruction. However, he reported at the meeting that he was not out to "kill uses for asbestos," but when medical personnel in certain facilities (e.g. China Lakes and Jacksonville) want asbestos products removed, they will not oppose it. Therefore, he suggested that we meet with the top personnel within the Navy's Bureau of Medicine and provide them with a similar presentation as was done with Commander Montoya and his staff. As a result of our conversations this week, it was agreed that you would attempt to meet with Admiral Arentzen, Surgeon General of the Navy, during your next trip to Washington to discuss naval policy on the use and presence of asbestos-containing products.

In closing, it should be noted that Bob Pigg of AIA has provided considerable and valuable assistance in [illegible] and coordinating the above meetings. [illegible] his direct contacts with various personnel within the Navy has facilitated the acceptance of our position during these meetings.

Richard T. Carter

RTC/lc

cc: D. Poutistine - 2-15
J. Reis - 2-14
J. Autry - Washington
R. C. Hanahan - CMS/MDC
E. M. Penner - 1-06
G. R. Trudell-2-10
R. H. Benceton - 2-12
R. G. Kinch - 3-06
A. C. Roush - 3-06
R. L. Olson - 3-06
L. D. Sorrentino - 1-06
[illegible] J. Gately - San Mateo
C. F. Skelly - CMS/MDC
R. J. Pigg - AIA
J. Jackson - ACPPA
D. J. Stinson - CMS/MDC