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UNION CARBIDE CORPORATION
ENGINEERING AND HYDROCARBONS DIVISION
CENTRAL ENGINEERING
SOUTH CHARLESTON, WEST VIRGINIA

RECEIVED
JUN 29 1981
JOHN A. FISHER

PLAINTIFF'S EXHIBIT
UC-3720

MEMORANDUM

June 26, 1981

TO:
Mr. I. P. Blackwood
Mr. V. H. Johnkoski
Mr. J. A. Leonard
Mr. J. B. Leverton
Mr. K. G. Morlock
Mr. T. P. Raby
Mr. R. A. Ream
Mr. A. M. Robertson
Mr. R. J. Taylor
Mr. J. L. Wyatt

SHARE MGRS.
Mr. T. L. Collins
Dr. R. E. Plevan
Mr. R. C. Wise

COPY TO:
[redacted]
Mr. W. J. Hansen
Mr. E. C. Powell, Jr.
Mr. H. W. Wegert

FROM: Mr. D. T. Watters

SUBJECT: Potential Health Risks
Insulation Materials

A March 17, 1981, E. C. Powell, Jr. memorandum to E. L. Adkins of Institute and a June 3, 1981, R. W. Cope letter to Component Health Managers and HS & EA Industrial Hygienists have described an insulation potential health risk. In response to these communications several of you have asked, *Are substitute materials (not asbestos) available where appropriate?*

Some background, our answer to the question, and proposed action is as follows.

1. The involved insulation, Insulation Specification 4 (copy attached), manufactured by Goodtemp Corporation and Celotex Corporation, is selected for ethylene oxide service because it gives a combination of the safest (i.e. highest) autoignition temperature to a laboratory simulated piping leak of ethylene oxide and excellent fire resistivity. The specification notes inhalation of perlite dust may cause irritations.

2. The complaints at Institute are the first to reach our attention during the past 3 - 4 years. The insulation vendors state no prior reports of health concerns. No other Locations have indicated excessive irritations.

3. Depending on ambient conditions, handling, and the amount of fitting required for the job, any insulation has the potential to create nuisance dust and irritations in some people. Respiratory protection in addition to good industrial hygiene practices can best be used where irritations seem to be isolated instances.

4. Some Locations are probably using the specifications beyond the specific need in ethylene oxide service. If this is the case, an alternate specification might be used on other than ethylene oxide fluids.

5. Based on the desired safety performance of Insulation Specification 4 in ethylene oxide fluid service, and the apparent infrequent complaints noted in the communications, we recommend continued use of Specification 4 with respiratory protection used as needed by individuals. Numerous autoignition tests have been run in the Safety Research Laboratory and it is clearly demonstrated that a substitute insulation is not readily available.

6. If your Location receives complaints similar to those described in the March 17 and June 3 communications, please pass them to the Central Engineering Department Insulation Technologist, Ernie Powell, Ext. 4419, plus other interested Division Safety/Health Managers. There is concern for the health of our employees and if additional complaints are received, it may be desirable to trade an increment of safety on the autoignition data, for improved insulation health characteristics. However, any insulation will give some degree of dusting.

If you have comment relative to the above six items, please let us know. We will request the subject be an agenda item at the next S/H Managers meeting.

D. T. Watters

DTW:abg