PLAINTIFF'S EXHIBIT

UC-2183

UNION CARBIDE

INTERNAL CORRESPONDENCE

SPECIALTY CHEMICALS DIVISION

Bldg. 82-902
South Charleston, WV 25303

TO: Attached Distribution List DATE: March 3, 1987

FROM: C. R. Rothhoff ORIG. DEPT: HS&EA
Personnel Safety
& Occupational Health

CC: Attached Distribution List SUBJECT: Asbestos Management

Division is:

HS&EA's guidance on Asbestos Management for the Specialty Chemicals

1) Complete encapsulation of serviceable asbestos insulation is a long term, viable and legitimate option (See Attachment A).
2) Damaged asbestos insulation should be replaced with non-asbestos containing materials.
3) Should complete removal of asbestos materials prove to be a viable economic approach, it should be undertaken in a planned program in strict accordance with existing regulations which have recently been revised and which, in-part, include these significant requirements.
   - Use of negative pressure enclosures during asbestos removal (See Attachment B).
   - Disposal of asbestos containing materials in a suitable waste landfill.
   - Labelling of asbestos waste containers (boxes, drums, bags, etc.)
   - Proper personnel protective equipment and the asbestos removal notification requirements must be fulfilled as before.

This correspondence provides the direction on two key asbestos issues - encapsulation and negative pressure enclosures. Attachments A, B & C are included with this correspondence because they provide the background information which is important to the understanding of the guidance provided for Asbestos Management. Your full understanding and acceptance of the guidance is necessary. Please contact me as needed (304) 747-2397 or 8* 721-2397.

Sincerely,

C. R. Rothhoff

CRR\rhw
2968K (3\04\87)

Attachments

UCC 007057A

ATTACHMENT "A"

UNION CARBIDE CORPORATION
CHEMICALS & PLASTICS GROUP
HEALTH, SAFETY & ENVIRONMENTAL AFFAIRS

P-2

39 OLD RIDGEBURY ROAD
DANBURY, CT 06817-0001

TO: D. Liebeskind

DATE: March 3, 1987

COPY: R. E. Bolfinger
D. R. Crowell
C. R. Rothhoff
B. L. White

SUBJECT: Encapsulation of Asbestos

Dave,

This is in response to your request for guidance on the likelihood that an Agency would sometime in the future mandate the removal of asbestos or asbestos-containing products from the workplace. You noted the importance of this issue in view of the resources that you plan to expend to encapsulate asbestos insulation in your facility. The response below reflects C&P H&EA's view, with the concurrence of Don Crowell and Betty Lynn White.

Recently I had the opportunity to meet Mr. Charles Adkins, Director of Health Standards Programs for OSHA, and was able to discuss this issue with him. While Mr. Adkins gave the expected caveat of "not being able to give total assurances as to what the Agency will or won't do years from now...." he firmly stated that he could not contemplate OSHA's ever requiring removal of in-place asbestos insulation. He noted that that activity would in fact create a greater hazard than merely leaving the insulation in-place. He further stated that OSHA's role in asbestos removal would be limited to setting standards when asbestos was to be removed based on other considerations.

You are, of course, aware that EPA also gets into the "asbestos business". The Asbestos Hazard Emergency Response Act of 1986 gives EPA authority to regulate containment and removal of asbestos in school buildings, and some interests are pushing for expansion to commercial buildings. EPA is also considering banning the use of asbestos *in certain* commercial products. While these possible actions do not apply to the (chemical) workplace, these are some circumstances *in* which EPA could, in the absence of an OSHA response to a hazardous situation in the workplace, take action. This, however, would appear to be highly unlikely here.

Accordingly, there would appear to be no reason not to proceed with your encapsulation program.

Sincerely,

R. E. Pievan

REP\pjm
0516Y
2957K, Wang received 3\3\87

UCC 007057B

ATTACHMENT "B"

UNION CARBIDE CORPORATION
OLD RIDGEBURY ROAD DANBURY CONN 06817
LAW DEPARTMENT

January 27, 1987

To: C. R. Rothhoff

From: D. R. Crowell II

Re: Use of Negative Pressure Enclosures for Asbestos Operations

After our telephone conversation yesterday, I spoke with Bob Ondocsin about the two issues you has raised, i.e., whether a negative pressure enclosure must always be used for reapplication of mastic to asbestos covered containers and whether a negative pressure enclosure is required where the use of wetting techniques reduces airborne concentrations below the action level of 0.1 fiber per cubic meter.

The clear intent expressed by OSHA has been that if asbestos is involved, there is a heavy burden on the employer to demonstrate the standard's inapplicability. With respect to the second issue, Bob agreed that his understanding of OSHA's position was that reductions below the action level by the use of wetting techniques or other procedures does not exempt such situations from the coverage of the asbestos standard.

Similarly, the first issue raises a presumption of the applicability of the standard's provisions for engineering controls. It is my understanding that the specific operation you had in mind was the application of mastic over existing mastic that encapsulates asbestos insulation on process vessels and pipelines. While the specific operation involved may have far less probability of resulting in impermissible airborne concentrations of asbestos than would other types of repair work, very detailed monitoring data will be required to demonstrate that the application of new mastic to repair cracks in the old mastic does not result in the action level being exceeded.

Unless monitoring demonstrates that the action level will not be acceded, engineering and administrative controls will be required for such operations, i.e., negative pressure enclosures and the associated decontamination areas, or for small jobs, glove bags.

Union Carbide trial exhibit UC-2183: C. R. Rothhoff to Distribution List on HS&EA Guidance on Asbestos Managem... Published by AsbestosClaims.Law
ACL Doc 17196 · Page 3 of 10 asbestosclaims.law/library/17196/3

OSHA has reiterated in public forums the breadth of coverage stated in the preamble to the standard, i.e., all "occupational exposures." Bob's memorandum and attachments of January 15, 1987 (copy attached) reflect OSHA's intention to broadly interpret the standard's coverage and strictly apply its protective provisions. These facts, coupled with the well-documented and well-recognized hazards associated with asbestos dictate that any determination that the standard is inapplicable be carefully scrutinized and scrupulously documented.

DRC\ce

Enclosure

cc: N. E. Bolton
S. E. Hine
M. G. Manetti
R. D. Ondocsin
B. L. White

Union Carbide trial exhibit UC-2183: C. R. Rothhoff to Distribution List on HS&EA Guidance on Asbestos Managem… Published by AsbestosClaims.Law
ACL Doc 17196 · Page 4 of 10 **asbestosclaims.law/library/17196/4**

ATTACHMENT "C"

FILE

OSHA ASBESTOS STANDARD

UNION CARBIDE

INTERNAL CORRESPONDENCE

CHEMICALS AND PLASTICS GROUP
HEALTH, SAFETY & ENVIRONMENTAL AFFAIRS

P-2
39 Old Ridgebury Road
Danbury, CT 06817-0001

TO: SEE ATTACHED DISTRIBUTION LIST DATE: January 15, 1987

COPY: SEE ATTACHED DISTRIBUTION LIST SUBJECT: ASBESTOS STANDARD

Below are clarifications of OSHA's Construction Asbestos Standard which were made by officials from OSHA's Office of Health Compliance Assistance at ORC's Asbestos Task Force Meeting on January 14, 1987. In addition to this communication, I am sending out immediately via Express Mail two letters of interpretation signed by John Miles, Director of Field Operations.

Unfortunately, the Field Compliance Instruction is still not available from OSHA but it was said to be in typing now and will distributed to OSHA field offices very soon (within two weeks) for last minute comments. As soon as it becomes available, I will forward it to you.

Three OSHA officials, Dave Smith, Joe Hopkins (primary spokesman) and Ray Gibbs provided the clarifications below:

1. Scope - The General Industry Standard covers primary and secondary producers of asbestos products, shipbuilding and automotive clutch and brake repair. All other activities are covered by the construction standard.

2. Negative Pressure Enclosures - Such enclosures are to be used on all removal, demolition or renovation operations where it is physically possible to establish them and which do not qualify as short duration, small scale operations. Inability or impracticality of enclosing structures within a single enclosure does not by itself mean that enclosures are infeasible. In such a case, the feasibility of several smaller enclosures must be considered. If it is physically possible to establish the smaller enclosures, then they are to be constructed and the removal is to be done section by section.

Hazards created by the presence of negative pressure enclosures can be taken into consideration in determining feasibility.

RECEIVED
JAN 15 1987
D. R. CROWELL

0894E

UCC 007057E

3. Short Duration Task - Definition of such tasks by length of time or amount of material were totally avoided by OSHA. Rather, maintenance activities (as opposed to removal operations) which can be controlled by employee isolation (such as glove bags) or wet methods are called short duration tasks. Note: if the short duration, small scale exemption from negative pressure enclosures is claimed, the requirements of Appendix G must be followed.

4. Hygiene Facilities - Decontamination areas are to be located adjacent to regulated areas where feasible. As with negative pressure enclosures, feasibility is interpreted to mean physical feasibility. The use of commercially available movable trailers which provide the decontamination area should be considered as an option. Each employee must follow the decontamination area exit procedures each time he leaves the regulated area, regardless of the time he spent in the area. This includes lunches and breaks.

5. Labels - The labelling requirements are primarily intended to apply to new products. Use of the prescribed label wording will not be required by OSHA on previously installed asbestos. Some sort of identification system such as color coded tags or signs, which identifies the material as asbestos, will meet the intent of the standard by alerting employees to the presence of asbestos. Employees need to be trained to recognize and understand such an identification system.

6. Medical Surveillance - Annual requirement may be discontinued for one-time exposures under certain conditions. OSHA letter of interpretation will explain more fully.

7. Competent Person - A specific number of days of training is not required but training content should be equivalent to the referenced EPA course. A Competent Person may delegate responsibilities but he must be the lead contact and retains ultimate responsibility.

I am hopeful that this telex together with the letters being sent via Express Mail which you should receive Friday morning will provide the additional clarification that you will need. Nevertheless, there will still probably be further detailed questions that you may have after you read this information. I will be in the office all day Friday, January 16 and through noon on Monday, January 19. Please call me on extension 5265 with further questions or to discuss any of the above information..

Robert D. Ondocsin

RDO:jmc
Attachments
0894E

UCC 007057F

MATERIAL SAFETY DATA SHEET

IDENTITY (As Used on Label and List)	NOTE: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.
Asbestos and Rubber Binder Sheet and Roll	

SECTION I — Distributed By

Manufacturer's Name	Emergency Telephone Number
Cincinnati Gasket	761-3458
Address (Number, Street, City, State, and ZIP Code)	Telephone Number for Information
40 Illinois Avenue	761-3458
Cincinnati (Reading), Ohio 45215	Date Prepared April 23, 1986
	Signature of Preparer (optional)

SECTION II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	%(optional)
Asbestos (Chrysotile) (each fibre to be 5 micrometers or longer)	.2 fibres/cc	.2 fibres/cc	.1 fibre/cc	---

SECTION III - Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H_2O = 1)	N/A
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water: Insoluble

Appearance and Odor: Light or dark colored depending upon binder - no odor

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
N/A	non-flammable	N/A	N/A

Extinguishing Media: use media suitable for type of surrounding fire

Special Fire Fighting Procedures: none

Unusual Fire and Explosion Hazards: none

Union Carbide trial exhibit UC-2183: C. R. Rothhoff to Distribution List on HS&EA Guidance on Asbestos Managem... Published by AsbestosClaims.Law
ACL Doc 17196 · Page 7 of 10 asbestosclaims.law/library/17196/7

SECTION V - Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	none

Incompatibility (Materials to Avoid) none

Hazardous Decomposition or Byproducts none

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will not Occur	X	none

SECTION VI - Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion? X

Health Hazards (Acute and Chronic)

Acute: skin irritation, respiratory irritation

Chronic: respiratory cancer, asbestosis } Of asbestos generally but not in this form

Carcinogenicity: NTP? Yes IARC Monographs? Yes OSHA Regulated? Yes

Applies to asbestos not to this product

Signs and Symptoms of Exposure

Medical Conditions
Generally Aggravated by Exposure respiratory diseases if airborne concentrations are high

Emergency and First Aid Procedures N/A to this product

SECTION VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

no special requirements

Waste Disposal Method normal land fill

Precautions to Be Taken in Handling and Storing

N/A to this product

Other Precautions no special requirements

SECTION III - Control Measures

Respiratory Protection (Specify Type) no special requirements

Ventilation	Local Exhaust	no special requirements	Special ---
	Mechanical (General)	no special requirements	Other ---

Protective Gloves | Eye Protection

Other Protective Clothing or Equipment no special requirements

Work/Hygienic Practices no special requirements

NOTE: The information provided herein is accurate to the best of our knowledge, but no warranty, express or implied, is made.

Union Carbide trial exhibit UC-2183: C. R. Rothhoff to Distribution List on HS&EA Guidance on Asbestos Managem... Published by AsbestosClaims.Law
ACL Doc 17196 · Page 8 of 10 asbestosclaims.law/library/17196/8

WA-079-#1

cc: T. Dottie

Form Approved
OMB No. 44-R1387

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
Various (Cincinnati Gasket Pkg. & Mfg., Inc.) (Distributed by)	(513) 761-3458
ADDRESS (Number, Street, City, State, and ZIP Code) 40 Illinois Ave., Cincinnati, OH 45215	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS asbestos & rubber binder sheet & roll
CHEMICAL FAMILY	FORMULA

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS		N/A	BASE METAL		N/A
CATALYST		N/A	ALLOYS		N/A
VEHICLE		N/A	METALLIC COATINGS		N/A
SOLVENTS		N/A	FILLER METAL PLUS COATING OR CORE FLUX		N/A
ADDITIVES		N/A	OTHERS		N/A
OTHERS		N/A			

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Various amounts of asbestos fibers are encapsulated by rubber binders. These materials do not come under the definition of a hazardous material, having none of the seven characteristics which define a hazardous material.		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N/A	SPECIFIC GRAVITY (H_2O=1)	N/A
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT, VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (_____ =1)	N/A
SOLUBILITY IN WATER	N/A		
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
N/A	N/A		

EXTINGUISHING MEDIA
water, foam, carbon dioxide, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES
when fire involves large quantities of product, self contained breathing apparatus would be desirable

UNUSUAL FIRE AND EXPLOSION HAZARDS
thick smoke produced

UCC 0070571

Union Carbide trial exhibit UC-2183: C. R. Rothhoff to Distribution List on HS&EA Guidance on Asbestos Managem… Published by AsbestosClaims.Law
ACL Doc 17196 · Page 9 of 10 asbestosclaims.law/library/17196/9

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
N/A

EFFECTS OF OVEREXPOSURE
N/A

EMERGENCY AND FIRST AID PROCEDURES
N/A

SECTION VI - REACTIVITY DATA

STABILITY		CONDITIONS TO AVOID
STABLE	X	
UNSTABLE		

INCOMPATABILITY (Materials to avoid)
N/A

HAZARDOUS DECOMPOSITION PRODUCTS
N/A

HAZARDOUS POLYMERIZATION		CONDITIONS TO AVOID
WILL NOT OCCUR	X	
MAY OCCUR		

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
N/A

WASTE DISPOSAL METHOD
Standard Land Fill

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
N/A

VENTILATION			
LOCAL EXHAUST	N/A	SPECIAL	N/A
MECHANICAL (General)	N/A	OTHER	N/A

PROTECTIVE GLOVES	N/A	EYE PROTECTION	N/A

OTHER PROTECTIVE EQUIPMENT
N/A

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
N/A

OTHER PRECAUTIONS
N/A

SECTION V - SUPPLEMENT

FIRST AID TREATMENT:
SKIN CONTACT

EYE CONTACT

INHALATION

ANTIDOTE AND TREATMENT FOR SWALLOWING

UCC 007057J