



DOW CHEMICAL U.S.A.

PLAINTIFF'S EXHIBIT

DOW-2093

TEXAS OPERATIONS
FREEPORT TEXAS 77541

OCTOBER 14, 1987

L.R. Cervenka, B-815

cc: W. Demain, B-101
J.L. Kiggans, B-101
A.L. McDowell, B-101

W.B. Long, B-815
D.W. Openshaw, B-815
C.L. Sandlin, B-101

IHS FILE # B8-3224 HAVEG PIPE REMOVAL AT MAGNESIUM III

Asbestos monitoring was conducted during the removal of a section of Haveg pipe. The survey was done on April 30, 1987 as required by OSHA 29CFR 1926.58.

The two workers wore full-face respirators with high efficiency particulate filters. Quantitative fit testing had been done within the previous 6 months. Hooded Tyvek disposable paper suits and rubber boots were also worn.

Both employees had a potential exposure of 0.04 fibers/cc, which is below the OSHA asbestos action level. (TABLE I)

Future Haveg pipe removals should be conducted in the same manner as the monitored job, except disposable coveralls will not be required. A half-face respirator may be substituted for the full-face respirator, if permitted by the plant, but a high efficiency particulate filter is still required.

Melanie D. Smyth
Industrial Hygiene Services

tlk

Attachments

AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY

**Quality
Performance**
Means More At Dow

ST0461139

ST0461139

FILE # B8-3224

TABLE I
SUMMARY OF ASBESTOS MONITORING

SAMPLE #	MASTER #	DATE	SAMPLE TIME MIN.	CONCENTRATION (FIBERS/CC)	8-HR TWA (FIBERS/CC)
MGB-1	109018	4/30/87	32	0.04	<0.01
MGB-2	134379	4/30/87	32	0.04	<0.01
MGB-3	BLANK	4/30/87	--	<0.6 fibers	--

ST0461140

ST0461140

Room: _____ Sample Number(s): _____

Building: B-1029 Address: B-1000

Evaluator: R.B. MARTIN Phone No.: 7625

Coated Area: Ceiling Wall(s) Structural Members Above Suspended Ceiling
Pipe Lagging Boiler Insul. Other: _____

Type of Ceiling: Concrete 3 Coat Plaster System Suspended Metal Lath
Concrete Joists and Beams Tile Suspended Lay-In Panels
Metal Deck Corrugated Steel Steel Beam or Bar Joists

Ceiling Height: _____ ft.

Ceiling Shape: Flat  Dome Other
 Folded Plate  Barrel
(draw):

Type of Wall (If Coated): Smooth Concrete Rough Concrete Masonry
Plasterboard Other: _____

Amount of Friable Material in Area being Evaluated: _____ sq. ft.

Description Fibrous Granular/Cementitious Concrete Like
of Coating: (highly friable) (soft) (hard)

Thickness: _____ inch(s) Is thickness uniform: Yes No

Coating debris on Floor/Furniture/Work Surfaces: Yes No

Curtains, expandable partitions, etc. being pulled across coating: Yes No

Type of Lighting: Surface Mounted Suspended Recessed

No. of Lights: _____ Type of Heating/Cooling Systems: _____

Type of Floor: Concrete Tile Wood Carpet Other: _____

What is above the room being evaluated? _____

Comments: TRANSITE SIDING INSIDE AND OUT
POSSIBLE ASBESTOS. SAMPLE T.W. LAB.

ST0461141

Room: _____ Sample Number(s): _____

Building: B 815 Address: B-800

Evaluator: R. D. MARTIN Phone No.: 7625

Coated Area: Ceiling Wall(s) Structural Members Above Suspended Ceiling
Pipe Lagging Boiler Insul. Other: _____

Type of

Ceiling: Concrete 3 Coat Plaster System Suspended Metal Lath
Concrete Joists and Beams Tile Suspended Lay-In Panels
Metal Deck Corrugated Steel Steel Beam or Bar Joists

Ceiling Height: _____ ft.

Ceiling Shape: Flat



Dome

Other

(draw):



Folded Plate



Barrel

Type of Wall (If Coated): Smooth Concrete Rough Concrete Masonry
Plasterboard Other: _____

Amount of Friable Material in Area being Evaluated: _____ sq. ft.

Description Fibrous Granular/Cementitious Concrete Like
of Coating: (highly friable) (soft) (hard)

Thickness: _____ inch(es) Is thickness uniform: Yes No

Coating debris on Floor/Furniture/Work Surfaces: Yes No

Curtains, expandable partitions, etc. being pulled across coating: Yes No

Type of Lighting: Surface Mounted Suspended Recessed

No. of Lights: _____ Type of Heating/Cooling Systems: _____

Type of Floor: Concrete Tile Wood Carpet Other: _____

What is above the room being evaluated? _____

Comments: TRANSITE Siding OUTSIDE COVERED WITH
P.V.C. siding

ST0461142

ST0461142

FOR: *Lon Martin*

ANALYST: *SPB*

DOW CHEMICAL U.S.A.
TEXAS DIVISION

ANALYTICAL SERVICES

FILE #1 *499*
DATE : *11/13/96*
CHARGE: *7052*

REPORT OF ANALYSIS

SAMPLE IDENTIFICATION *Insulation*

SAMPLE LOCATION: *(See Below)*

ASBESTOS PRESENT IN SAMPLE: YES _____ NO _____

METHOD OF ANALYSIS: A small portion of the sample, which contains both the binder and fibers, is placed in immersion oil on a microscope slide. The sample is covered with a coverslip, and the cover slip is moved to disperse the sample as evenly as possible. The sample is then placed on the Reichert microscope and examined at low (125X) magnification, by transmitted light. Fibers which are seen at low magnification are then examined at 500X with polarized light, to determine if the fibers are birefringent.

The morphology of asbestos is very distinctive. The analyst is trained to recognize these fibers by observing known standards, and comparisons of fibers to standards in the Particle Atlas.² A positive identification for asbestos is given when both the morphological and birefringence requirements are met.

COMMENTS:

#1: Wall Work Area B-1029 - Chrysotile Asbestos

#2: Ceiling Tile - Office Area B601 - Asbestos

#3 B603 Upstairs outside of Room - Chrysotile Asbestos
Pipe Insulation

ST0461143

² McCrone, W. C., Dally, John G., PARTICLE ATLAS, Vol II, Light Microscopy Atlas, Ann Arbor Science Publishers, Inc., Ann Arbor, Mich., 197

SIGNED *Barbara Buckhardt / CG*

ST0461143

Room: _____ Sample Number(s): _____
Building: B-807 B-808 Address: B-800
Evaluator: R. B. IMRATIN Phone No.: 7625
Coated Area: Ceiling Wall(s) Structural Members Above Suspended Ceiling
Pipe Lagging Boiler Insul. Other: _____

Type of Ceiling: Concrete 3 Coat Plaster System Suspended Metal Lath
Concrete Joists and Beams Tile Suspended Lay-In Panels
Metal Deck Corrugated Steel Steel Beam or Bar Joists
Ceiling Height: _____ ft.

Ceiling Shape: Flat  Dome Other _____
(draw):
 Folded Plate  Barrel

Type of Wall (If Coated): Smooth Concrete Rough Concrete Masonry
Plasterboard Other: _____

Amount of Friable Material in Area being Evaluated: _____ sq. ft.

Description of Coating: Fibrous Granular/Cementitious Concrete Like
(highly friable) (soft) (hard)

Thickness: _____ inch(s) Is thickness uniform: Yes No

Coating debris on Floor/Furniture/Work Surfaces: Yes No

Curtains, expandable partitions, etc. being pulled across coating: Yes No

Type of Lighting: Surface Mounted Suspended Recessed

No. of Lights: _____ Type of Heating/Cooling Systems: _____

Type of Floor: Concrete Tile Wood Carpet Other: _____

What is above the room being evaluated? _____

IMAG III CELL Building
Comments: Building HAVE BEEN EXAMINED by H.T.D.
SOME ASBESTOS LEFT IN BUILDING. MOST HAS
BEEEN REMOVED OR COVERED.

ST0461144