

Harbison-Walker Knowledge

garber lab document

Harbison Walker Compensation Claims

Date: September 27, 1976

Memo from: R. James

To: J. Gray

Subject: US Steel Homestead, A. P. Green

Quote:

"A. P. Green has advised Homestead that they have completely discontinued the use of asbestos in any form."

Plaintiff's Exhibit #HW-120

ID #F19

OSHA Violations of Harbison-Walker

Refractories

Safety Order From: Indiana Division of Labor

To: Harbison-Walker Refractories Division of Dresser Industries, Inc.

Regarding Inspection Made on February 17, 1977

Description of violation:

"Failure to sample at intervals no greater than 6 months as to represent the levels of exposure of the employees to airborne asbestos in the Metal Casing Department."
[emphasis added]

Plaintiff's Exhibit #HW-125

ID #F4912

Harbison-Walker Knowledge

Non-Compliance with Asbestos Regulations

Date: April 29, 1977

Memo From: J. V. Skendall

To: T. R. Leaman

Subject: Hammond Works Asbestos Exposure

Quote:

"On February 7, 1977 we were cited by IOSHA (Indiana Occupational Safety and Health Administration) for non-compliance with asbestos control regulations. The citation was non-serious and no penalty was involved. ... The IOSHA people are after us to advise them the approximate date when the use of asbestos will be discontinued ... I will try to hold off as long as possible giving them a definite reply."

Plaintiff's Exhibit #HW-126

ID #F209

Harbison-Walker

Response to Knowledge

Date: May 11, 1977

Memo From: K. W. Hansen

To: C. R. Hauth

Subject: Basic Brick Asbestos Exposure

Quote:

"We were not aware of the apparent problems with asbestos exposure at our Hammond plant. Can we assume that the same apparent problem exists at our Baltimore plant?"

We have not had a planned program to eliminate asbestos as relief for expansion and particularly in our package between the brick and the case." [emphasis added]

Plaintiff's Exhibit #HW-127

ID #F4566

Harbison-Walker

Response to Knowledge

Date: July 10, 1978

Memo From: J. Clark

To: J. V. Skendall, Pittsburgh Office

Subject: Asbestos - Baltimore Works

Quote:

"Art Nusser is indicating to me that our Local Union is pressuring him to pressure us to phase out the use of Asbestos. I have indicated to him that **we take precautions to avoid unnecessary exposure and that previous testing has indicated that we are within OSHA limitations.**" [emphasis added]

ID #F4567

Harbison-Walker

Response to Knowledge

Asbestos as an Economic Problem

Date: May 24, 1977

Memo From: C. R. Hauth

To: F. P. Shonkwiler

Subject: Basic Brick Asbestos Exposure

Quote:

"[Asbestos] represents over \$6 million in sales revenue, and Chuck states to date we have not found an economical substitute for the asbestos rollboard.

I, therefore, feel Harbison-Walker should reevaluate this situation as to whether it is our intention to cease furnishing asbestos or whether it **will be possible for us to make some OSHA accommodations to permit us to handle this \$6 million-plus in sales revenue.**"
[emphasis added]

Plaintiff's Exhibit #HW-129

ID #F202

Harbison-Walker Knowledge

Date: July 21, 1977

Letter From: Joseph B. Baker, Industrial Hygienist

To: John Skendall, Safety Director

Quote:

"[Asbestos] is capable of causing disabling lung disease (asbestosis), excess cancers of the lung and digestive tract and a unique cancer of the lining of the lung or gut called mesothelioma. **[M]esotheliomas are unrelated to smoking history. The digestive tract cancers occur not because people eat asbestos but because they normally swallow the material brought up from the lung by cilia.**"
[emphasis added]

"Recommendations

In light of the fact that unwaxed board was used in the past, all employees in the casing department should be given annual chest x-rays." [emphasis in original]

Plaintiff's Exhibit #HW-131

ID #F3746

Harbison-Walker Knowledge

Impact of Warning

Date: September 16, 1977

Memo From: D. F. Stock, Pittsburgh Office

To: A. L. Renkey, Garber Research Center

Subject: Expansion Inserts for OH Roof Brick

Quote:

"Asbestos has become a frightening word because of its association with potential health problems."

Plaintiff's Exhibit #HW-132

ID #F4353

Harbison-Walker Knowledge

Substitutes for Asbestos

Date: November 29, 1977

Memo From: C. H. Luffey, Iron & Steel Products

Subject: 1978 Research Marketing Status Report for Open Hearth

Quote:

"Due to the impact of OSHA concerning the use of asbestos, we secured through purchasing and direct mail **several different products that are being promoted as alternatives for asbestos.**" [emphasis added]

Plaintiff's Exhibit #HW-134

ID #F1109

Harbison-Walker
Response to Knowledge

Date: May 15, 1978

Handwritten Memo From: Art

To: Frank

Quote:

"In ALR's letter of Sept. 23 he states, '... we are, of course, searching for satisfactory alternatives.' It sounds like we have a program underway to search out, evaluate, and come up with a substitute. **Actually all we have is a rather limited testing program,** looking only at materials sent in by Chuck Luffey." [emphasis added]

Attachment to Plaintiff's Exhibit #HW-136

ID #F753

Harbison-Walker

Response to Knowledge

Date: May 18, 1978

Handwritten Memo From: WDM

To: K. W. Hansen

Re: U.S. Steel Corp. Fairless, Pa. OH Roof, Asbestos expansion

Quote:

"I advised Al we had no problems handling and installing asbestos as expansion allowance and therefore we would continue. Also, advised Al that we had done extensive testing **and least expensive acceptable substitute for asbestos was twice the cost of asbestos.**" [emphasis added]

Plaintiff's Exhibit #HW-137

ID #F170

Harbison-Walker Knowledge

Hazards of Asbestos Exposure

Date: October 9, 1936

Twenty-fifth National Safety Congress Session on Occupational Diseases

Speech titled "The Lesser Known Facts About Common Occupational Diseases"

by Dr. Robert B. Hunt

Quote:

"Although the actions of various dusts differ within the body, the **exposure to asbestos fibres**, present in the weaving and the grinding of dry asbestos material, **offers another type of dust which may cause fatalities among workers.**" [emphasis added]

Plaintiff's Exhibit #HW-170

Harbison-Walker Knowledge

Non-Compliance with OSHA

Special Report From: Norman C. Zeiser, Life Insurance Company of North America

To: Dresser Industries, Harbison-Walker Refractories

Regarding: Noise and Dust Survey conducted on July 19, 1972

Quote:

"Results indicate ... some of the workers in the Specialty Plant are exposed to asbestos dust in excess of OSHA limits during the production of special mixtures containing asbestos..."

"Dust-Asbestos and Clay: Subpart G, section 1910.93 of the Occupational Safety and Health Act of 1970 states, in part, that

exposures by inhalation, ingestion, skin absorption, or contact to any material or substance...in concentrations above those specified in Table G-3, shown below, shall be avoided, or protective equipment shall be provided and used."

ID #F3079

Harbison-Walker

DUTY

Special Report From: Norman C. Zeiser, Life Insurance Company of North America

To: Dresser Industries, Harbison-Walker Refractories

Regarding: Noise and Dust Survey conducted on July 19, 1972

Quote:

"Table II: Asbestos Dust Concentrations Specialty Plant (**Employee Exposure to Asbestos**): **8.55 fibers/cc** " [emphasis added]

"[T]hree areas of exposure that require immediate consideration [include] the asbestos dust in the Specialty Building... All exposed employees should be supplied with appropriate personal protection if not already available."

ID #F3083-F3084 **Harbison-Walker Knowledge**

Special Report From: Norman C. Zeiser, Life Insurance Company of North America

To: Dresser Industries, Harbison-Walker Refractories

Regarding: Noise and Dust Survey conducted on July 19, 1972

Quote:

"Asbestos Dust Recommendation: Install a local exhaust system above mixing chamber located on third floor of Specialty Building. Continue the use of U.S. Bureau of Mines approved respirators in areas where employees are exposed to asbestos dust."
[emphasis added]

ID #F3085

Harbison-Walker Knowledge
Hazardous Health Effects of Asbestos

Date: August 16, 1972

Memo From: D. R. Pflaumer

To: P. E. Fisch

Subject: Standards for Asbestos Dust

Quote:

"Harbison-Walker has been acutely aware

of the asbestos problem for many years."
[emphasis added]

Plaintiff's Exhibit #HW-104

ID #F4554

Harbison-Walker
Response to Knowledge

Date: January 15, 1975

Memo From: John V. Skendall

To: Mr. H. J. Johnson

Subject: Asbestos Dust Hazards

Quote:

"At Fulton, however, we were in excess of the allowable [OSHA] limit. I believe that present tests would show that we are still considerably in excess of the allowable limit."

"[I]t would be more economical to discontinue production of the products currently made at Fulton Works rather than to attempt conformance to the law. The latter would involve providing change rooms, special clothing, lockers, laundering, special record keeping, annual physicals, adequate ventilation, etc." [emphasis added]

Plaintiff's Exhibit #HW-108

ID #F4553

Harbison-Walker Knowledge

Date: October 30, 1975

Report titled Industrial Hygiene Survey, Harbison-Walker Refractories, Dresser Industries

From: The Continental Insurance Companies

Quote:

"Recommendations: When Chromepak G is being run, those individuals along the flow of materials who might be exposed to asbestos fiber in dumping, blending or bagging should wear an appropriate approved NIOSH USBM dust respirator."

Plaintiff's Exhibit #HW-110

ID #F3750

Harbison-Walker Knowledge

Fiber Type

Date: April 5, 1976

Handwritten Memo From C. F. Wenrich

To: C. H. Luffey

Quote:

"I believe dusting of asbestos is a function of decomposition under heat. You might check the file but I don't think a different form would solve the problem."

Plaintiff's Exhibit #HW-113

ID #F224

Harbison-Walker Knowledge

Date: September 1976

Handwritten Memo From: Chuck Luffey

To: Ken Hansen

Quote:

"The point that I was trying to make is not that we have a problem with our asbestos as furnished, but with the decomposition that occurs to the asbestos in service and how much of it gets into the air when they drop a used roof. **Thereby creating a health hazard for those working in the immediate**

area." [emphasis added]

Plaintiff's Exhibit #HW-114

Harbison-Walker

Duty

Date: April 1974

Memo From: J. V. Skendall

To: G. A. Garber

Subject: Asbestos Dust

Quote:

"[I]t is my recommendation, if at all possible, we discontinue the use of asbestos in Micracrete 7. If this is impractical, terminate the production of this product. If a satisfactory substitute cannot be found, we should provide adequate precautionary labeling. H-W Lightweight Castable 10 which contains 10% asbestos should also have adequate precautionary labeling."

Plaintiff's Exhibit #HW-360

ID #F3608

Harbison-Walker Knowledge

Date: March 15, 1972

Letter From: Martin R. Veater, Manager-Purchasing, Harbison-Walker Refractories

To: Mr. Cortwright, Sales Manager, Nicolet Industries, Inc.

Quote:

"Based on request of our customers it is necessary that we have the following information on the various types of asbestos rollboard supplied to us by both your Norristown, Pennsylvania and Hamilton, Ohio Plants.

1. **The percentage of asbestos.**
2. The percentage of dusting.
3. The type of binder used." [emphasis added]

Plaintiff's Exhibit #HW-92

ID #F3531

Harbison-Walker Knowledge

TLV Inadequate

Date: December 27, 1968

Letter From: A. D. Brandt

To: G. A. Moore, Jr.

Quote:

"...evidence is accumulating to indicate that **the threshold limit value in effect is too high - that is, permits a higher degree of exposure than is safe.**" [emphasis added]

Plaintiff's Exhibit #HW-316

ID #3876

Harbison-Walker Knowledge

TLV Inadequate

Date: December 15, 1976

Memo From: John F. Finklea, M.D. Director, National Institute for Occupational Safety and Health

To: The Assistant Secretary for Health, Department of Health, Education, and Welfare

Quote:

"Currently it is not possible to establish a safe exposure level for the carcinogenic activity of asbestos. Therefore, the exposure values now recommended by NIOSH are based on what NIOSH considers to be the lowest concentration at which asbestos fibers can be monitored reliably using phase-contrast fiber counting procedures." [emphasis added]

Attachment to Plaintiff's Exhibit #HW-124

ID #F3922

Harbison-Walker Knowledge

Date: April 8, 1963

Memo From: J. L. Thompson

To: A. R. Maune

Subject: H-W Castable 21-63

Quote:

"Mix:

15% Vermiculite(1)

30% Asbestos 6D(2)

20% High-Duty Bats, 10 mesh (bone dry)

35% Rolands Regular Cement"

[emphasis added]

Plaintiff's Exhibit #HW-310

ID #B6463

Harbison-Walker Knowledge

Substitutes

Date: May 22, 1975

Memo From: J. A. Garber

To: D. C. Skelly

Quote:

"Attached is F. P. Shonkwiler's letter of May 20 on asbestos replacement for specialties. Mr. Shonkwiler is recommending that

Micacrete 7 and H-W Lightweight Castable 10 can be eliminated and the material identified in D. F. Stock's letter of April 22 be substituted."

Plaintiff's Exhibit #HW-291

ID #F283

Harbison-Walker
Response to Knowledge

Date: July 17, 1975

Memo From: F. P. Shonkwiler

To: J. A. Garber

Subject: Asbestos Replacements for Specialties

Quote:

"We would suggest that the old product mix be continued long enough **to fully utilize all stocks of asbestos** so that this item can be completely eliminated from our manufacturing process as soon as possible."
[emphasis added]

Plaintiff's Exhibits #HW-332

ID #F286

Harbison-Walker Knowledge

Date: April 29, 1976

Memo From: C. H. Luffey

To: R. L. Wuske

Subject: Asbestos/OSHA, U.S. Steel Corporation

Quote:

"In February of this year, OSHA told U.S. Steel - Homestead to stop using hot-top side boards because of their asbestos fiber content. The next area OSHA plans to check is an open hearth roof. When an open hearth furnace has completed its campaign, the remaining brickwork is knocked in. When the roof is dropped, a large amount of dust is created. OSHA plans to measure this dust for asbestos fiber content since all Homestead roofs contain asbestos.

Preliminary discussions with GRC and C.D. Jamison indicates that OSHA will probably find asbestos fibers. Whether the amount they find is within limits, we won't know until the measurements are taken. However, if the amounts found are above acceptable limits, U.S. Steel will be ordered to discontinue this practice. This will mean all U.S. Steel shops." [emphasis added]

Plaintiff's Exhibit #HW-117

ID #F217

Harbison-Walker Knowledge

Substitutes

Date: May 15, 1978

Memo From: D. F. Stock

To: F. P. Shonkwiler

Subject: Expansion Inserts for Open Hearth Roof Brick

Quote:

"My interpretation of the report is that it calls out 3 materials as possibilities for replacing asbestos but does not specifically recommend any one. Such a decision would have to be based on costs, actual service trials, etc."

Plaintiff's Exhibit #HW-222

Harbison-Walker
Response to Knowledge

Date: May 15, 1978

Handwritten Memo From: Art

To: Frank

Quote:

"...I still believe that based on the importance of the Asbestos problem and the potential for a complete ban that we should identify a research project, define its objectives and search out the available commercial substitutes for evaluation."

Attachment to Plaintiff's Exhibit #HW-136

ID #F753

Harbison-Walker Knowledge

Substitutes

Date: January 25, 1979

Memo From: C. F. Wenrich

To: C. R. Hauth

Subject: Grooved Metalkase Brick

Quote:

"In addition, Baltimore shipped about \$2.5 million of grooved metal-encased basic brick primarily to Bethlehem, Sparrows Point and Hammond shipped an estimated \$3.0 million of grooved metal-encased Detrick roof brick to Inland."

Plaintiff's Exhibit #HW-141

ID #F2930

Harbison-Walker Knowledge

Substitutes

Date: March 30, 1979

Memo From: C. H. Luffey

Subject: O.H. Roofs, Grooved EXKASE/Asbestos

Quote:

"In 1973 the Grooved EXKASE design was developed in conjunction with Bethlehem Steel. The purpose was to eliminate the use of Asbestos and the associated future problems with OSHA on hazardous substances at Bethlehem Steel." [emphasis added]

Plaintiff's Exhibit #HW-143

ID #F118

Harbison-Walker Knowledge

Substitutes

Date: March 30, 1979

Memo From: C. H. Luffey

Subject: O.H. Roofs, Grooved EXKASE/Asbestos

Quote:

"While we pursued asbestos free substitutes, our competitors

have been using almost any type of asbestos free product up until approximately 12/78. Since that time they all are now marketing a case similar to the Grooved EXKASE concept. They can now supply the expansion allowance built into the case for roof, walls and uptake shapes." [emphasis added]

Plaintiff's Exhibit #HW-143

ID #F119

Harbison-Walker Knowledge

Substitutes

Date: April 29, 1980

Memo From: J. F. Ward

To: W. D. Meloy

Subject: U.S. Steel Fairless Exkase with R/B versus Grooved Case with no R/B

Quote:

"Al Mack told me that **we are the only supplier still using asbestos for roof keys** on M.H. Detrick shapes. All our competitors use Fiberfrax paper for the radial expansion of the roof keys and the one side of the DH-2 and DH-5 M.H. Detrick nose tile." [emphasis added]

Plaintiff's Exhibit #HW-148

ID #F2909

Harbison-Walker Knowledge

Substitutes

Date: January 7, 1977

Technical Data Sheet on Harbison-Walker Block Insulation

Quote:

"Mineral Wool Block Insulation

Thermal Conductivity:

Temperature (F)

200

400

600

800

1000

1200"

[emphasis added]

ID #RMC1192

Harbison-Walker Knowledge

*Technical Data Sheet on Harbison-Walker
Hard-Faced Block Insulation*

Quote:

"This product contains no asbestos."
[emphasis in original]

ID #RMC1194

No Asbestos Mentioned

*Technical Data Sheet on H-W Lightweight
Castable 10*

Quote:

"Uses: Replaces block type insulation in industrial furnace walls where a monolithic type construction is desired. Principally back-up insulation in varying industrial furnace and boiler settings; also for lining ducts, breeching and piping."

ID #RMC1068

Harbison-Walker Knowledge

Substitutes

Technical Data Sheet for H-W Block Insulation

Quote:

"Mineral Wool Block...is composed of long mineral wool fibers which are tightly interlaced and bonded forming a strong light, and resilient structure.

Most extensively used as a backing insulation for firebrick and monolithic refractory structures. Typical uses include boilers, kilns, blast furnace stoves, soaking pits, oil refinery processing equipment, etc.

Maximum Temperature Limit - 1900 F."

ID #RMC1168

Harbison-Walker

Response to Knowledge

Date: May 17, 1996

H-R Responses and Objections to Plaintiffs' Master Interrogatories

Attachment A: List of Products Containing Asbestos Fibers

Quote:

"H-W Lightweight Castable 10

Micacrete 7

Chromepak G

H-W Mineral Fiber Coating (**a purchased and relabeled product**)

H-W Rollboard (**a purchased and relabeled product**)" [emphasis added]

Harbison-Walker

Response to Knowledge

Date: May 17, 1996

H-W Responses and Objections to Plaintiffs' Master Interrogatories,

Quotes:

"...Harbison-Walker states that the following warning appeared on a label affixed to the packaging of H-W Rollboard, from approximately 1979 until sales were discontinued: 'WARNING: This product contains asbestos fiber. The Occupational Safety and Health Administration (OSHA), an agency of the U.S. Government, believes repeated inhalation of asbestos fiber is a health hazard and may cause various diseases, including cancer and asbestosis.'"

Harbison-Walker Knowledge

Date: May 17, 1996

*H-W Responses and Objections to Plaintiffs'
Master Interrogatories
Attachment C*

Quote:

"H-W Lightweight Castable 10:

Consisted of a blend of light weight aggregates and a hydraulic-setting cement, plus **10% 7M asbestos fibers.**" [emphasis added]

Harbison-Walker Knowledge

Report entitled "Experiences with Aluminum Dust Treatments - Silica Brick Industry"

By: C. W. Burger, Industrial Relations Representative, Harbison-Walker Refractories Company

Data Compiled: 1949-1951

Quote:

"[This report's] value will be in whatever

benefit other industries, confronted with a silica hazard, may glean from the experience that our company has had with a nine years' trial of aluminum dust treatments."

Plaintiff's Exhibit #HW-302

ID #F1723

Harbison-Walker Knowledge

Report entitled "Experiences with Aluminum Dust Treatments - Silica Brick Industry"

By: C. W. Burger, Industrial Relations Representative, Harbison-Walker Refractories Company

Data Compiled: 1949-1951

Quote:

"[I]n 1937, we decided that the potential liability was great enough to take precautionary measures to insure ourselves, insofar as possible, from inheriting already existing silicotics. We felt that pre-employment chest X-rays was one method of doing this, so beginning in January 1937 we required that each new employee submit to and pass a chest X-ray examination as a condition of employment."

Plaintiff's Exhibit #HW-302

ID #F1724

Harbison-Walker Knowledge

Report entitled "Experiences with Aluminum Dust Treatments - Silica Brick Industry"

By: C. W. Burger, Industrial Relations Representative, Harbison-Walker Refractories Company

Data Compiled: 1949-1951

Quote:

"[T]he Aluminum Treatment program was not inaugurated in our silica plants as a substitute for good industrial housekeeping, but to supplement it. It is point two in a two point program to combat the hazard."

Plaintiff's Exhibit #HW-302

ID #F1725

Harbison-Walker Knowledge

Report entitled "Experiences with Aluminum Dust Treatments - Silica Brick Industry"

By: C. W. Burger, Industrial Relations Representative, Harbison-Walker Refractories Company

Data Compiled: 1949-1951

Quote:

"At about this same time our Company took the progressive step of publishing an eight-page booklet entitled 'Silicosis - What It Is and How It Can Be Prevented.' This booklet was issued to the employees of our three silica works in an endeavor to overcome the seeming apathy regarding silicosis. "

Plaintiff's Exhibit #HW-302

ID #F1731

Harbison-Walker Knowledge

Report entitled "Experiences with Aluminum Dust Treatments - Silica Brick Industry"

By: C. W. Burger, Industrial Relations Representative, Harbison-Walker Refractories Company

Data Compiled: 1949-1951

Representatives of Harbison-Walker Refractories met with members of the County Medical Society to discuss the Aluminum Treatment program and how aluminum dust had become not only an industry problem, but a community problem as well.

Plaintiff's Exhibit #HW-302

ID #F1730