FILE NAME: International Harvester (INTH)

DATE: 1980 Feb 15

DOC#: INTH040

DOCUMENT DESCRIPTION: Report - EPA Inspection

Lsville Foundry

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

February 15, 1980

J. F. Mavri
Manufacturing Engineering Manager
Louisville Foundry
P.O. Box 21475
Louisville, Kentucky 40221

C.C. ALPHIGH 3-3-80

OFFICE OF WATER AND HAZARDOUS MATERIALS

Dear Mr. Mavri:

For your information, enclosed are the analytical results for the asbestos samples collected at the International Harvester Louisville Foundry in September of 1979, as part of the asbestos sampling program, Effluent Guidelines Division, U.S. Environmental Protection Agency.

These results, along with those of over 250 participating industrial facilities, will be used to determine the significance of the discharge of asbestos and the performance of possible treatment technologies. Since these results represent only screening-type analyses, interpretation should be primarily qualitative (i.e., indicative of the presence or absence of the chrysotile form of asbestos). The quantitative measures are estimates of concentration and should not be interpreted as absolute values. A larger number of facilities may be selected for future sampling to verify these initial results and to begin to compile a data base for the development of guidelines for allowable levels of asbestos fibers in industrial wastestreams.

The analytical technique used in counting the asbestos fibers is a transmission electron microscope procedure which uses selected area electron diffraction for identification of the fiber types. Asbestos fibers of the chrysotile variety have been selected as the screening parameter since chrysotile comprises approximately 95 percent of all commercial asbestos.

The attached sheet provides a synopsis of the analytical results from samples collected at your facility. In most cases where raw water samples were taken, the samples were prepared for analysis but held pending review of data from other sampling points. If these data show positive identification of chrysotile fibers in the wastestream, the raw water sample(s) will then be scheduled for analysis. You will receive a copy of these additional analytical results following Agency review.

A list of definitions is enclosed for your information. If you have any questions concerning the analytical results or their interpretation, please contact Priscilla Holtzclaw at 202/426-7770.

Sincerely,

Robert B. Schaffer
Director
Effluent Guidelines Division

Enclosures: a/s

Roger: Evidence of Asbestos was found in all Henry Taylor. I will Restrict circulation to Tom Diamond who is working on Gypsum case for us. Let me know if you need anything else. Joe Mavri 2-18-80

LVW0309

DEFINITIONS

Detection Limit: The calculated concentration in million fibers per liter (MFL) equivalent to one fiber above the background or blank count.

Ashing: A technique used to remove organic material from the sample when it occurs in sufficiently high levels to obscure fiber identification and counting.

Fiber: Any particle that has parallel sides and a length/width ratio greater than or equal to 3:1.

Fiber of Restricted Size: Any fiber with a length greater than or equal to 5.0 u and with a width less than or equal to 0.5 u.

Positive indication of chrysotile fibers: $\frac{\text{chrysotile fibers (MFL)}}{\text{detection limit (MFL)}} \geq 5$

ENVIRONMENTAL PROTECTION AGENCY

EFFLUENT GUIDELINES DIVISION

Asbestos Sampling Program

Interpretation of Analytical Results

Facility: Louisville Foundry/Intl. Harvester
Louisville, KY

✓ Positive indication of chrysotile fibers in wastestream. #0275

_____ Number of fibers counted is too low for positive interpretation.

_____ No indication of chrysotile fibers in wastestream.

✓ Raw water sample(s) collected at your facility have been scheduled for analysis. You will receive a copy of the analytical results as soon as they are available.

_____ Raw water sample(s) collected at your facility do not require analysis.

_____ Raw water sample(s) collected at your facility have been analyzed and the analytical results are enclosed.

_____ No raw water sample(s) were taken at your facility.

LVW0311

U.S. ENVIRONMENTAL PROTECTION AGENCY EGD Sample Control Center

ASBESTOS TRAFFIC REPORT

17 SEP RECD

(SELF-SAMPLING)

① SAMPLE NO. A 0272

② Foundry
Industrial Category

③ Date Sampled: 5 SEPT 13 1979

④ SAMPLE POINT DESCRIPTION:

X Raw Water (river, city, well)

___ Influent to Treatment (raw waste water)

___ Effluent from Treatment

___ Other ___ (Specify)

⑤ Ship To:

EMS Labs
12517 Crenshaw Blvd.
Hawthorne, California 90250

ATTN: Bernie Tooper
213/973-6694

⑥ RAW WATER

Sample pH: 6

⑦ SAMPLE POINT FLOW:

___ gal day

REMOVE APPROPRIATE LABEL AND PLACE ON SAMPLE CONTAINER

⑧ INDUSTRIAL FIRM SAMPLED:

International Harvester
Louisville, Kentucky

⑨ SAMPLING PERSONNEL:

(Name) T. STONE

(Title) Foundry EQ Des.

(Phone) 502-367-3231

⑩ ADDITIONAL SAMPLE POINT DESCRIPTION:
(See Section 130 of Asbestos Self-Sampling Protocol)

⑪ SHIPPING INFORMATION:

(name of shipper)

(address)

(phone) (airbill no)

(date shipped)

⑫ I, the undersigned, confirm that the above-described sample was taken as herein specified.

Signature

9-13-79
Date

LVW0312

U.S. ENVIRONMENTAL PROTECTION AGENCY EGD Sample Control Center

ASBESTOS TRAFFIC REPORT

17 SEP [illegible] (SELF-SAMPLING)

① A 0273

② Foundry
Industrial Category

③ Date Sampled: 9-13-79

④ SAMPLE POINT DESCRIPTION:
- ___ Raw Water (river, city, well)
- X Influent to Treatment (raw waste water)
- ___ Effluent from Treatment
- ___ Other ___ (Specify)

⑤ Ship To:
EMS Labs
12517 Crenshaw Blvd.
Hawthorne, California 90250
ATTN: Bernie Tooper
213/973-6694

⑥ Sample pH: 6.

⑦ SAMPLE POINT FLOW:
___ gal/day

REMOVE APPROPRIATE LABEL AND PLACE ON SAMPLE CONTAINER

⑧ INDUSTRIAL FIRM SAMPLED:
International Harvester
Louisville, Kentucky

⑨ SAMPLING PERSONNEL:
(Name) T. Stone
(Title) Foundry EQ Des.
(Phone) 502-367-3231

⑩ ADDITIONAL SAMPLE POINT DESCRIPTION:
(See Section 130 of Asbestos Self-Sampling Protocol)

WATER FROM CUPOLA SATURATORS PRIOR TO TREATMENT.

BALANCE TANK

⑪ SHIPPING INFORMATION:
(name of shipper)
(address)
(phone) (airbill no.)
(date shipped)

⑫ I, the undersigned, confirm that the above-described sample was taken as herein specified.

J. Mairs 9-13-79
Signature Date

LVW0313

058

Asbestos Monthly Report

PART D: DATA SUMMARY SHEET

79-10-5
Report Number

EMS Laboratories
Contractor

Page 13 of 30

A0273	Foundry	Influent to Treatment
Sample Number	Industrial Category	Sample Point Description

October 9 1979	3349	3349
Date Analyzed	Blank Number	Standard Number

ANALYSIS INFORMATION:

Detection Limit 61.8 MFL

Ashed sample ✓ yes ___ no

Amount of Water Filtered 0.1 mls. (of original sample)

Total Fibers* (all sizes): 123.5

Chrysotile fibers* (all sizes): -0-

Total fibers* (restricted sizes)//: -0-

Chrysotile fibers* (restricted sizes)//: -0-

Number of fibers counted: Chrysotile=0, Total=2

Total calculated mass (chrysotile only): -0-

* Concentrations should be in million fibers per liter (MFL).

// These fibers should meet the requirements of size as defined in the contract.

13 NOV

U.S. ENVIRONMENTAL PROTECTION AGENCY EGD Sample Control Center

ASBESTOS TRAFFIC REPORT

17 SEP RECD

(SELF-SAMPLING)

④ SAMPLE NO. A 0274

② Foundry
Industrial Category

③ Date Sampled: 9-13-79

④ SAMPLE POINT DESCRIPTION:
- ___ Raw Water (river, city, well)
- ___ Influent to Treatment (raw waste water)
- X Effluent from Treatment
- ___ Other ___ (Specify)

⑤ Ship To:
EMS Labs
12517 Crenshaw Blvd.
Hawthorne, California 90250

ATTN: Bernie Tooper
213/973-6694

⑥ Sample pH: 6

⑦ SAMPLE POINT FLOW:
___ gal/day

REMOVE APPROPRIATE LABEL AND PLACE ON SAMPLE CONTAINER

⑧ INDUSTRIAL FIRM SAMPLED:
International Harvester
Louisville, Kentucky

⑨ SAMPLING PERSONNEL:
(Name) T. STONE
(Title) FOUNDRY EQ DES.
(Phone) 502-367-3231

⑩ ADDITIONAL SAMPLE POINT DESCRIPTION:
(See Section 130 of Asbestos Self-Sampling Protocol)

WATER FROM TREATMENT RECIRCULATED TO CUPOLA SATURATORS.

DOAR-OLIVER

⑪ SHIPPING INFORMATION:
(name of shipper)
(address)
(phone) (airbill no)
(date shipped)

⑫ I, the undersigned, confirm that the above-described sample was taken as herein specified.

Signature 9/13/79 Date

LVW0315

Asbestos Monthly Report

PART D: DATA SUMMARY SHEET

79-10-5
Report Number

EMS Laboratories
Contractor

A0274
Sample Number

Foundry
Industrial Category

Effluent from Treatment
Sample Point Description

October 10, 1979
Date Analyzed

3349
Blank Number

3349
Standard Number

ANALYSIS INFORMATION:

Detection Limit 1.2 MFL

Ashed sample ✓ yes ___ no

Amount of Water Filtered 5 mls. (of original sample)

Total Fibers* (all sizes): -0-

Chrysotile fibers* (all sizes): -0-

Total fibers* (restricted sizes)//: -0-

Chrysotile fibers* (restricted sizes)//: -0-

Number of fibers counted: -0-

Total calculated mass (chrysotile only): -0-

* Concentrations should be in million fibers per liter (MFL).

// These fibers should meet the requirements of size as defined in the contract.

13 NOV RECD

U.S. ENVIRONMENTAL PROTECTION AGENCY EGD Sample Control Center

ASBESTOS TRAFFIC REPORT

17 SEP RECD (SELF-SAMPLING)

① A 0275

② Foundry
Industrial Category

③ Date Sampled: 9-13-79

④ SAMPLE POINT DESCRIPTION:
- ___ Raw Water (river, city, well)
- X Influent to Treatment (raw waste water)
- ___ Effluent from Treatment
- ___ Other ___ (Specify)

⑤ Ship To:
EMS Labs
12517 Crenshaw Blvd.
Hawthorne, California 90250
ATTN: Bernie Tooper
213/973-6694

⑥ Sample pH: 6

⑦ SAMPLE POINT FLOW:
___ gal/day

REMOVE APPROPRIATE LABEL AND PLACE ON SAMPLE CONTAINER

⑧ INDUSTRIAL FIRM SAMPLED:
International Harvester
Louisville, Kentucky

⑨ SAMPLING PERSONNEL:
(Name) T. STONE
(Title) FOUNDRY EQ DES.
(Phone) 502-367-3231

⑩ ADDITIONAL SAMPLE POINT DESCRIPTION:
(See Section 130 of Asbestos Self-Sampling Protocol)

FROM WET DUST COLLECTORS & CUPOLA SLAG SLUICE TO SETTLING TANK

#4 SETTLING TANK.

⑪ SHIPPING INFORMATION:
(name of shipper)
(address)
(phone) (airbill no)
(date shipped)

⑫ I, the undersigned, confirm that the above-described sample was taken as herein specified.

Signature J. Mavis Date 9-13-79

LVW0317

Asbestos Monthly Report

PART D: DATA SUMMARY SHEET

79-10-5
Report Number

EMS Laboratories
Contractor

Page 15 of 30

A0275
Sample Number

Foundry
Industrial Category

Heavy Tank
Influent to Treatment
Sample Point Description

October 11 1979
Date Analyzed

3349
Blank Number

3349
Standard Number

ANALYSIS INFORMATION:

Detection Limit 123.5 MFL

Ashed sample ✓ yes ____ no

Amount of Water Filtered 0.05 mls. (of original sample)

Total Fibers* (all sizes): 247.0

Chrysotile fibers* (all sizes): 123.5

Total fibers* (restricted sizes)//: 123.5

Chrysotile fibers* (restricted sizes)//: 123.5

Number of fibers counted: Chrysotile = 1 ; Total = 2

Total calculated mass (chrysotile only): 4.5 ng/l

Note: Realizing that the final volume used on this sample was extremely small another concentration was examined to check the validity of this report. A volume of 0.5 ml was found to contain an extremely large amount of inorganic (clay). Although this grid was uncountable, it was examined in random areas and found to contain some fibers that were definitely identified as

* Concentrations should be in million fibers per liter (MFL).

// These fibers should meet the requirements of size as defined in the contract.

Chrysotile. We feel, therefore, that the results reported here are reasonable.

LVW0318

9 NOV REC'D

U.S. ENVIRONMENTAL PROTECTION AGENCY EGD Sample Control Center

ASBESTOS TRAFFIC REPORT (SELF-SAMPLING)

17 SEP RECD

① A 0276

② Foundry
Industrial Category

③ Date Sampled: 9-13-79

④ SAMPLE POINT DESCRIPTION:
- ___ Raw Water (river, city, well)
- ___ Influent to Treatment (raw waste water)
- ✓ Effluent from Treatment
- ___ Other ___ (Specify)

⑤ Ship To:
EMS Labs
12517 Crenshaw Blvd.
Hawthorne, California 90250

ATTN: Bernie Tooper
213/973-6694

⑥ Sample pH: 6

⑦ SAMPLE POINT FLOW:
___ gal/day

REMOVE APPROPRIATE LABEL AND PLACE ON SAMPLE CONTAINER

⑧ INDUSTRIAL FIRM SAMPLED:

International Harvester
Louisville, Kentucky

⑨ SAMPLING PERSONNEL:
(Name) T. STONE
(Title) FOUNDRY EQ. DES.
(Phone) 502-367-3231

⑩ ADDITIONAL SAMPLE POINT DESCRIPTION:
(See Section 130 of Asbestos Self-Sampling Protocol)

EXCESS WATER — OVERFLO FROM SETTLING TANKS TO SANITARY SEWER.
(CUPOLA SLAG SLUICE WATER & WET DUST COLLECTOR WATER)

⑪ SHIPPING INFORMATION:
(name of shipper)
(address)
(phone) (airbill no)
(mode shipped)

⑫ I, the undersigned, confirm that the above-described sample was taken as herein specified.

Signature 9-13-79
Date

LVW0319

Asbestos Monthly Report

PART D: DATA SUMMARY SHEET

77-10-S
Report Number

EMS Laboratories
Contractor

Page 16 of 30

A0276
Sample Number

Foundry
Industrial Category

Effluent from Treatment (Holding Tank
Sample Point Description

October 11, 1979
Date Analyzed

3349
Blank Number

3349
Standard Number

ANALYSIS INFORMATION:

Detection Limit 12.4 MFL

Ashed sample ✓ yes ___ no

Amount of Water Filtered 0.5 mls. (of original sample)

Total Fibers* (all sizes): 24.7

Chrysotile fibers* (all sizes): -0-

Total fibers* (restricted sizes)//: -0-

Chrysotile fibers* (restricted sizes)//: -0-

Number of fibers counted: Chrysotile = 0; Total = 2

Total calculated mass (chrysotile only): -0-

* Concentrations should be in million fibers per liter (MFL).

// These fibers should meet the requirements of size as defined in the contract.

LVW0320

19 NOV REC