

PROFESSIONAL SAFETY CONSULTANTS
INCORPORATED
235 BEAR HILL RD. • WALTHAM, MASS. 02154



April 23, 1973

Mr. Peter F. Kozlowski
Plant Manager
A. W. Chesterton Co.
9 Forbes Road
Woburn, Massachusetts 01801

Re: Air Sampling, 28 March and 17 April, 1973.

Dear Mr. Kozlowski:

Attached are the results of the air samplings taken at your plant on the above indicated dates. I hope to be able to provide some pictures of the slides shortly. If you have any questions concerning the sampling, fiber counts, or solutions to fiber problems, please call.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Henry A. Eschenbach".

Henry A. Eschenbach

HAE:emb

Attachments

Air Sampling - A. W. Chesterton Co.

Summary and Comments

The samples taken for this report were collected on Millipore MAWPO37A0, .8 micron porosity membrane filters mounted on open-face holder. Bendix Micronaire Personal Sampling Pumps were used. Fiber determinations were made using a Bausch & Lomb Phase Contrast Microscope at 430X.

With the exception of two areas, the 1500 Room and the Winding Room, all samples were well below the present Threshold Limit Value (TLV) for asbestos fibers which is 5 fibers per cubic centimeter. In fact, excepting the above and the round braiders, all were below the 1976 TLV of 2 fibers per cubic centimeter. OSHA is presently using 1 fiber/cc as the point above which X-Ray and pulmonary function tests are required.

The winding room levels could be considerably reduced by providing ventilation. Bag type collectors are usually quite effective when used with fibers, and the possibility of using make-up air from the plant and returning it, filtered, to the plant should be considered.

Local ventilation probably will be the best solution to the high levels in the 1500 room. The fan could be used during charging with asbestos which appears to be the main producer of airborne fibers.

While exhaust ventilation will solve many fiber problems, there are some pitfalls. The Environmental Protection Agency is developing rather stringent standards concerning asbestos, so one can no longer exhaust without considering their requirements. In addition, indiscriminate use of exhaust ventilation can result in a negative pressure situation which ultimately defeats the purpose of the equipment.

REPORT OF

AIR SAMPLING

At

A. W. CHESTERTON CO.
9 Forbes Road
Woburn, Mass.

By

Professional Safety Consultants, Inc.
235 Bear Hill Road
Waltham, Mass.

Henry A. Eschenbach
Consultant

Air Sampling - A. W. Chesterton Co.

<u>Operation Sampled</u>	Fibers per cubic centimeter greater than 5 microns in length	
	<u>3-28-73</u>	<u>4-17-73</u>
1500Room	18.8	
12 " Braiders	0.8, 1.1	0.9
18 " Braiders	1.9	
Round Braiders	2.6	1.5
Cleaner		0.8
Lattice	0.9	
375 Braider	0.3	
Twisters	0.5	0.9, 0.4
Parachute	Trace	
Folding -	0.6	
Winding Room	13.2	
Coiling		0.04

Plant Location A.W. CHESTERSON Date of Sampling 28 MAR 73 Type Contaminant Sampled ASBESTOS FIBERS

SAMPLING CONDITIONS: OUTSIDE

INSIDE DRAFT

VISIBLE DUST

HOUSEKEEPING

Clear

None

None

VERY GOOD

Cloudy

Slight

Slight

Rain

Moderate

Moderate

Snow

Excessive

Heavy

REMARKS

SAMPLING DATA & EVALUATION

Pump Type & No.	Flow Rate	Sample No.	Employee	Operation/Area	Pump Off	Pump On	Sampling Time	Operating Volume	Remarks	Lab Evaluation
1072		AW1	D. CARTER	1500 ROOM	1005	1001	4 min	8	RESPIRATOR WORK	10.8
5691		AW2	D. GAGLIARDI	12" BRIDGES	1041	1011	30	60	"	0.8
5691		AW3	A. BIRCHER	12" "	1040	1010	30	60	"	1.1
1072		AW4	M. ROSS	15" "	1116	1042	34	68	"	1.9
5691		AW5	A. HANCOCK	ROUNDS	1115	1041	31	62	"	2.6
1072		AW6	C. SPINA	LADITTE	1201	1121	40	80	"	0.9
5691		AW7	A. HANCOCK	BRATHER 375	1159	1124	35	70	NO RESP.	0.3
1072		AW8	N. WILSON	PARACHUTE	1335	1305	30	60	"	TRACE
5691		AW9	L. BIRD	FOLDING	1337	1307	30	60	"	0.6
5691		AW10	J. BARRASS	TWISTERS	1412	1342	30	60	"	0.5
1072		AW11	M. CIGUE	WINDING ROOM	1413	1343	30	60	RESP. WORK	13.2

Sampling By R. Zachmarch

Laboratory Evaluation By R. Zachmarch

Date 29 March 73

TELEPHONE: AREA CODE 617
898-4517

PROFESSIONAL SAFETY CONSULTANTS
INCORPORATED
235 BEAR HILL RD. • WALTHAM, MASS. 02154

September 17, 1973

Mr. Peter F. Kozlowski
Plant Manager
A.W. Chesterton Co.
9 Forbes Road
Woburn, Massachusetts 01801

Re: Air Sampling, 11 September 1973

Dear Peter:

Attached are the results of the air samplings taken at your plant on the above indicated dates. I hope to be able to provide some pictures of the slides shortly. If you have any questions concerning the sampling, fiber counts, or solutions to fiber problems, please call.

Very truly yours,



Henry A. Eschenbach
Industrial Hygienist

HAE:mh

Attachments

AIR SAMPLING - A.W. CHESTERTON CO.

Summary and Comments

The samples taken for this report were collected on Millipore MAWP037A0, .8 micron porosity membrane filters mounted on open-face holders. Bendix Micronaire Personal Sampling Pumps were used. Fiber determinations were made using a Bausch & Lomb Phase Contrast Microscope at 430X.

Fiber levels in almost all areas were comparable or slightly lower than at the time of our previous sampling. The level at the 1500 operation was greatly reduced by the new asbestos preparation and handling techniques. The use of a respirator is probably no longer necessary here. Unfortunately, there was a dramatic increase in levels at the lattice braiders. The high sample was taken on Titcomb who was working with blue asbestos. The sample filter indicated that the origin of the airborne fibers was the blue crocidolite rather than chrysotile. An investigation of Titcomb's activities is suggested to determine if an unusual occurrence resulted in this high count.

Plant Location A. K. CHESTERTON Date of Sampling 11 SEP 73 Type Contaminant Sampled FIBERS

SAMPLING CONDITIONS: OUTSIDE

Clear

Cloudy

Rain

Snow

INSIDE DRAFT

None

Slight

Moderate

Excessive

VISIBLE DUST

None

Slight

Moderate

Heavy

HOUSEKEEPING

Good

REMARKS

SAMPLING DATA & EVALUATION

Pump Type & No.	Flow Rate	Sample No.	Employee	Operation/Area	Pump Off	Pump On	Sampling Time	Operating Volume	Remarks	Lab Evaluation
BENDIX 10842	1.5	CH 1	BUSHEY	12" BRAIDERS	1030	1000	30	45		.6
5675	"	CH 2	HAWKES	PRESSING	1042	1003	40	60		TRACE
5694	"	CH 3	GAGLIARDI	WINDING ROOM	1026	1006	20	30		13.5
10737	"	CH 4	BIRD	FOLDING	1050	1008	42	63		0.2
5694	"	CH 5	PONTI	1500 (RT.)	1040	1034	6	9		0.8
10842	"	CH 6	"	1500 (LT.)	1040	1034	6	9		0.8
10842	"	CH 7	BARRASSO	TWISTING	1132	1049	44	66		0.2
5694	"	CH 8	ROSS	BRAIDING ROOM	1116	1046	30	45		0.5
5675	"	CH 9	BOODOO	CLEANING	1127	1053	34	51		0.1
10737	"	CH 10	TREMPER	LATTICE (BLUE)	1212	1132	40	60		13.3
5694	"	CH 11	HAYDEN	375 BRIDER	1158	1120	38	57		0.4
5675	"	CH 12	McHANNIS	SOAKING	1210	1130	40	60		0.1

Sampling By AE

Laboratory Evaluation By AE

Date 14 Sep 73

Plant Location	Date of Sampling	Type Contaminant Sampled
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SAMPLING CONDITIONS:

INSIDE DRAFT

VISIBLE DUST

HOUSEKEEPING

Clear

None

None

Cloudy

Slight

Slight

Rain

Moderate

Moderate

Snow

Excessive

Heavy

REMARKS

SAMPLING DATA & EVALUATION

[illegible]

Sampling By

Laboratory Evaluation By

Date