

Georgia-Pacific



intracompany memo

to Mr. G. E. Wilson
Mr. E. B. Hollingsworth
from Harry W. Scharf
subject O. S. H. A. Inspection Report

location Portland
Wilmington
location Milford
date 12-1-75

Attached you will find a copy of our OSHA Inspection Report which was issued as a result of an inspection made at our plant during October, 1975.

H. W. S.
H. W. S.

cc: Mr. J. R. Hurd - Portland
Mr. H. W. Peele - Wilmington
Mr. Ken Gipson - Portland
Mr. J. W. Hart - Wilmington
Mr. T. W. Richards - Tigard

OCT 19 1981

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Chicago
 Name Environmental
 Title ---

Date 10/27/75
 Pump Serial No. B-06-0305
 Sampled by George Fowler
 Signature _____

LOCATION	Ready mix mixing area	Packing area	Whore- house	GRY Plant area						
FILTER NO.	253	244	255	245						
FLOW:										
Pump Setting	6	6	6	6						
Liter/min (R)	1.8	1.8	1.8	1.8						
TIME:										
On	7:15	8:54	1:00	2:30						
Off	8:54	1:00	2:30	3:30						
ELAPSED TIME (min) (t)	99	246	90	60						
VOLUME, Liters (t x r)	173	443	162	108						
REMARKS										
CONCENTRATION (F) fibers/ml	.59	.13	.30	.61						

Total Sample Time (T) 495 mins.

Time Weight Av. Concentration = $\frac{(t_1 F_1) + (t_2 F_2) + (t_3 F_3) + \dots}{T}$

RECEIVED
 NOV 03 1975

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Chicago

Date 10/27/75

Name

Pump Serial No. B-02-0490

Title Lead Man

Sampled by George Fowler

Signature George Fowler

LOCATION	Ready mix wet area	-	Dry blend area	Ready mix area	-					
FILTER NO.	249	254	235	250	248					
FLOW:										
	Pump Setting	6	6	6	6					
	Liter/min (R)	1.7	1.7	1.7	1.7					
TIME:	On	7:13	8:48	11:15	1:20	1:35				
	Off	8:48	11:15	1:20	1:35	3:25				
ELAPSED TIME (min) (t)	95	147	95	15	110					
VOLUME, Liters (t x r)	162	250	162	25.5	187					
REMARKS			off for 30 min lunch							
CONCENTRATION (F) fibers/ml	.26	.22	1.32	.70	.29					

Total Sample Time (T) 462 mins.

Time Weight Av. Concentration = $\frac{(t_1 F_1) + (t_2 F_2) + (t_3 F_3) + \dots}{T}$

$$\begin{aligned}
 C_{avg} &= \frac{(95 \times .26) + (147 \times .22) + (95 \times 1.32) + (15 \times .70) + (110 \times .29)}{462} \\
 &= \frac{25 + 32 + 125 + 11 + 32}{462} = \frac{225}{462} \\
 &= .49
 \end{aligned}$$

RECEIVED
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AIRBORNE ASBESTOS FIBER SAMPLING

Plant Chicago

Date 10/22/75

Name _____

Pump Serial No. R-74-0799

Title POWER Plant Driver

Sampled by George Fowler

Signature George Fowler

LOCATION	All OVER Plant	All OVER Plant	-	-	-					
FILTER NO.	224	247	256	240	251					
FLOW:										
Pump Setting	6	6	6	6	6					
Liter/min (R)	1.9	1.9	1.9	1.9	1.9					
TIME:										
On	7:10	8:50	11:29	1:30	1:45					
Off	8:50	11:28	1:30	1:45	3:22					
ELAPSED TIME (min) (t)	100	158	92	15	97					
VOLUME, Liters (t x r)	190	300	175	28.5	184					
REMARKS			off for 20 min lunch							
CONCENTRATION (F) fibers/ml	.46	.28	.53	1.39	0.25					

Total Sample Time (T) 462 mins.

Time Weight Av. Concentration = $\frac{(t_1 F_1) + (t_2 F_2) + (t_3 F_3) + \dots}{T}$

$$\begin{aligned}
 &= \frac{(100 \times .46) + (158 \times .28) + (92 \times .53) + 15 \times 1.39 + (97 \times .25)}{462} \\
 &= \frac{46 + 44 + 49 + 21 + 24}{462} = \frac{184}{462}
 \end{aligned}$$

= .39

RECEIVED
NOV 03 1975

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Chicago

Date 10/27/75

Name _____

Pump Serial No. B-06-0422

Title Ready Mix Mixer

Sampled by George Fowler

Signature George Fowler

LOCATION	WET mix	WET mix	DRY mix	—	WET mix					
FILTER NO.	243	242	239	246	241					
FLOW:										
Pump Setting	6	6	6	6	6					
Liter/min (R)	1.7	1.7	1.7	1.7	1.7					
TIME:										
On	7:05	8:57	11:30	1:35	1:50					
Off	8:51	11:30	1:35	1:50	3:20					
ELAPSED TIME (min) (t)	106	159	95	15	90					
VOLUME, Liters (t x r)	180	270	162	255	153					
REMARKS			off for 30 min lunch							
CONCENTRATION (F) fibers/ml	.75	.17	.27	.17	.21					

Total Sample Time (T) 465 mins.

Time Weight Av. Concentration = $\frac{(t_1 F_1) + (t_2 F_2) + (t_3 F_3) + \dots}{T}$

$$Conc = \frac{(106 \times .75) + (159 \times .17) + (95 \times .27) + (15 \times .17) + (90 \times .21)}{465}$$

$$= \frac{80 + 27 + 26 + 2.6 + 19}{465} = \frac{154.6}{465}$$

$$= .33$$

RECEIVED
NOV 03 1975

Date: 11-24-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 224

ELAPSED TIME (t) 100 mins.

FLOW RATE 1.9 l/min

VOLUME (V) 100 liters

FIELD AREA (a) 100 mm²

BLANK COUNT (b) - fibers/field

FILTER AREA (A) 855 mm²

AV. FIBER COUNT (f) 1.6 fibers/field

0	1	1	1	1	1
	2	1	1	1	1
	-	1	-	-	-
	-	-	1	-	-
	-	1	-	-	-
5	1	-	-	-	-
	-	1	-	1	-
	-	1	-	-	-
	-	-	-	-	3
	-	-	-	-	2
10	1	1	-	-	-
	-	1	-	-	-
	-	-	1	-	-
	-	-	2	2	-
15	1	-	-	1	1
	1	1	-	-	1
	-	1	-	-	1
	-	1	-	-	1
	-	-	2	-	1
20	-	-	-	-	-

SUBTOTALS

TOTAL 12

$$\text{Constant } k = \frac{A}{1000 a}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

Date: 11-26-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 239
FLOW RATE 1.7 l/min
FIELD AREA (a) _____ mm²
FILTER AREA (A) 855 mm²

ELAPSED TIME (t) 95 mins.
VOLUME (V) 162 liters
BLANK COUNT (b) — fibers/field
AV. FIBER COUNT (f) _____ fibers/field

0	/	—	/	—	—
	/	—	—	—	—
	—	—	—	—	—
	/	/	—	—	—
	—	/	—	—	/
	—	—	—	/	/
5	/	/	—	—	—
	—	—	—	/	—
	/	—	—	—	/
	—	—	/	—	—
	/	/	—	—	/
10	—	/	—	—	—
	/	2	—	—	—
	—	—	—	—	—
	—	—	—	—	—
15	—	/	—	—	—
	—	—	—	—	—
	—	/	—	—	—
	—	—	—	—	—
	—	—	—	—	—
20	—	—	/	—	—

SUBTOTALS

TOTAL 22

Constant $k = \frac{A}{1000 a}$

Fiber Concentration (F) = $\frac{k (f-b)}{V}$

$\frac{198(.22)}{162} = .27$

Date: 11-18-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 256

ELAPSED TIME (t) 92 mins.

FLOW RATE 1.9 l/min

VOLUME (V) 175 liters

FIELD AREA (a) .00432 mm²

BLANK COUNT (b) _____ fibers/field

FILTER AREA (A) 855 mm²

AV. FIBER COUNT (f) .47 fibers/field

0	—	—	—	1	1
	—	—	—	—	1
	—	1	—	—	1
	1	—	—	—	—
	1	—	—	—	—
	—	—	1	—	—
5	3	—	—	—	2
	—	—	1	—	—
	—	1	—	—	2
	—	—	—	1	2
	1	2	1	—	—
10	2	1	—	1	—
	1	1	1	—	—
	1	1	—	1	—
	—	1	—	3	—
15	1	—	—	—	—
	—	1	1	—	—
	—	1	1	—	—
	1	—	—	—	1
	—	1	—	1	—
20	12	11	6	3	1
SUBTOTALS					TOTAL <u>47</u>

$$\text{Constant } k = \frac{A}{1000 a}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

$$\frac{19.2 (.47)}{175} = .52$$

Date: 11-18-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 242ELAPSED TIME (t) 159 mins.FLOW RATE 1.7 l/minVOLUME (V) 270 litersFIELD AREA (a) 0.432 mm²BLANK COUNT (b) — fibers/fieldFILTER AREA (A) 855 mm²AV. FIBER COUNT (f) 23 fibers/field

0	1	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	2	—	—	—
	1	—	—	—	—
5	—	—	1	1	1
	—	—	—	—	—
	—	—	—	—	—
	—	2	1	2	1
	2	—	—	1	—
	—	—	2	—	—
10	—	1	—	1	—
	2	—	1	—	—
	—	—	—	—	—
	—	—	—	—	—
15	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	1	—	—	—
	1	—	—	—	—
20	—	—	—	—	—
SUBTOTALS	5	6	5	5	2
TOTAL					23

$$\text{Constant } k = \frac{A}{1000 a}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

$$= \frac{198 (.23)}{270} = .17$$

Date: 11-14-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 235ELAPSED TIME (t) 95 mins.FLOW RATE 1.7 l/minVOLUME (V) 162 litersFIELD AREA (a) 0.0432 mm²

BLANK COUNT (b) _____ fibers/field

FILTER AREA (A) 855 mm²AV. FIBER COUNT (f) 1.08 fibers/field

		1	1	2	-	2	
0		1	1	-	1	3	
		2	-	-	-	-	
		1	1	1	2	2	
		2	1	1	1	-	
		1	2	2	1	-	
5		1	2	1	1	-	
		3	3	2	2	1	
		3	-	1	2	-	
		2	1	2	2	-	
		1	-	2	1	3	
10		2	-	-	1	-	
		1	1	-	2	-	
		-	2	-	2	1	
		1	-	-	1	1	
15		-	1	1	-	1	
		2	-	2	-	-	
		-	1	2	2	2	
		1	2	2	1	2	
		1	-	-	-	2	
20							
SUBTOTALS		26	19	21	22	20	TOTAL <u>108</u>

$$\text{Constant } k = \frac{A}{1000 a}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

$$\frac{108 (1.08)}{162} = 1.32$$

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 254ELAPSED TIME (t) 147 mins.FLOW RATE 1.7 l/minVOLUME (V) 250 litersFIELD AREA (a) 0.0432 mm²BLANK COUNT (b) — fibers/fieldFILTER AREA (A) 855 mm²AV. FIBER COUNT (f) 120 fibers/field

0	2	—	1	—	1
	—	—	2	—	—
	—	—	—	1	—
	—	1	1	1	—
	—	—	—	—	1
5	1	—	—	—	—
	—	—	—	—	—
	—	—	1	1	—
	1	1	—	—	1
	—	—	—	—	—
10	—	—	—	1	—
	—	—	—	—	—
	—	1	—	—	—
	—	—	—	1	—
	1	—	—	—	—
15	—	1	2	—	—
	—	—	—	—	—
	2	—	—	—	—
	—	—	—	—	—
	—	—	—	1	1
20					
SUBTOTALS	7	4	7	6	4

TOTAL 21

$$\text{Constant } k = \frac{A}{1000 a}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

$$\frac{198 (.25)}{250} = .22$$

Date: 11-14-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 241

ELAPSED TIME (t) 90 mins.

FLOW RATE 1.7 l/min

VOLUME (V) 153 liters

FIELD AREA (a) .00432 mm²

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm²

AV. FIBER COUNT (f) .16 fibers/field

0	—	—	1	—	—
	1	—	—	—	—
	2	—	—	—	—
	—	—	—	1	—
	—	—	—	1	—
	—	—	—	—	—
5	—	—	—	—	—
	1	—	—	—	—
	—	—	—	—	1
	—	—	—	—	—
	—	—	—	—	—
	—	—	1	—	—
	—	—	—	—	—
10	—	—	—	—	—
	1	—	—	—	—
	—	—	1	—	—
	1	—	—	—	—
	—	1	—	—	—
15	—	—	—	—	—
	—	—	—	—	—
	1	—	—	—	—
	—	—	—	—	1
	2	—	1	1	—
	—	—	—	—	—
20	—	—	—	—	—
SUBTOTALS	7	1	—	2	1
TOTAL <u>16</u>					

$$\text{Constant } k = \frac{A}{1000 \text{ a}}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V} = \frac{19.8 \times .16}{153} = .21$$

Date: 11-19-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 248ELAPSED TIME (t) 110 mins.FLOW RATE 1.7 l/minVOLUME (V) 187 litersFIELD AREA (a) .00432 mm²BLANK COUNT (b) — fibers/fieldFILTER AREA (A) 855 mm²AV. FIBER COUNT (f) .27 fibers/field

0	—	1	—	—	—
	—	—	3	—	1
	1	—	—	1	—
	—	—	—	—	1
	—	—	—	1	—
5	1	—	1	—	1
	—	1	—	—	—
	—	1	—	—	1
	—	—	—	1	—
	—	—	—	—	—
	—	—	—	—	1
10	—	—	—	—	—
	—	—	—	—	—
	1	1	—	—	—
	—	1	—	1	—
15	—	—	—	—	—
	1	—	—	—	—
	1	—	—	1	—
	—	—	1	—	—
20	—	1	1	—	—
SUBTOTALS	5	6	6	5	4
TOTAL					

$$\text{Constant } k = \frac{A}{1000 \text{ a}}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

$$\frac{1.7 \times .27}{187} = .29$$

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 245ELAPSED TIME (t) 60 mins.FLOW RATE 1.8 l/minVOLUME (V) 108 litersFIELD AREA (a) .00432 mm²BLANK COUNT (b) — fibers/fieldFILTER AREA (A) 855 mm²AV. FIBER COUNT (f) 33 fibers/field

0	—	1	1	—	—
	—	—	—	—	—
	—	1	1	—	—
	—	1	2	1	—
	—	—	—	—	—
5	2	1	1	—	—
	—	—	—	—	1
	—	—	—	—	—
	1	1	—	—	—
	—	1	—	1	1
10	—	—	—	2	1
	1	—	—	1	—
	—	—	—	—	—
	—	—	—	1	—
15	—	1	—	—	—
	—	1	—	1	—
	1	—	—	—	1
	—	1	—	1	—
	—	—	—	—	2
20	—	—	—	—	—
SUBTOTALS	5	9	5	8	6
TOTAL					33

$$\text{Constant } k = \frac{A}{1000 \text{ a}}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

$$\frac{(48 \times .33)}{108} = .61$$

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 243ELAPSED TIME (t) 106 mins.FLOW RATE 1.7 l/minVOLUME (V) 180 litersFIELD AREA (a) .00432 mm²BLANK COUNT (b) — fibers/fieldFILTER AREA (A) 855 mm²AV. FIBER COUNT (f) .68 fibers/field

	0	1	2	1	—	—
		1	—	—	3	2
		—	—	—	2	1
		—	—	—	—	—
		—	—	—	—	3
		—	3	1	—	—
5		1	—	1	—	—
		1	—	—	1	—
		1	1	1	—	1
		—	1	1	1	—
		1	—	—	1	1
10		1	1	2	—	1
		1	—	1	1	1
		—	—	1	1	—
		3	1	2	—	—
15		1	—	—	3	—
		—	1	1	2	—
		1	—	—	1	—
		1	—	1	1	—
		2	1	—	1	—
20						
SUBTOTALS		16	11	13	18	10
TOTAL <u>68</u>						

$$\text{Constant } k = \frac{A}{1000 \text{ a}}$$

$$\text{Fiber Concentration (F)} = \frac{k(f-b)}{V}$$

$$\frac{195(.68)}{180} = .75$$

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 255ELAPSED TIME (t) 90 mins.FLOW RATE 1.8 l/minVOLUME (V) 162 litersFIELD AREA (a) 0.0432 mm²

BLANK COUNT (b) _____ fibers/field

FILTER AREA (A) 855 mm²AV. FIBER COUNT (f) 2 fibers/field

0	1	1	1	1	1
	—	—	1	—	—
	—	—	1	1	—
	—	—	1	—	—
	1	—	1	—	—
	—	—	—	1	—
5	1	—	—	—	—
	—	—	—	1	1
	—	—	—	—	—
	—	1	1	—	—
	—	1	—	—	1
10	1	—	—	1	—
	—	—	—	1	1
	—	—	—	2	—
	—	2	—	—	—
15	—	—	1	—	1
	1	—	—	—	—
	—	—	1	—	—
	—	—	—	—	—
	—	—	—	—	—
20	—	—	—	—	—
SUBTOTALS	6	5	5	6	4
TOTAL					21

$$\text{Constant } k = \frac{A}{1000 \text{ a}}$$

$$\text{Fiber Concentration (F)} = \frac{k(f-b)}{V}$$

$$\frac{198(.25)}{162} = .30$$

Date: NOV. 24, 1975

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 240

ELAPSED TIME (t) 95 mins.

FLOW RATE 1.7 l/min

VOLUME (V) 162 liters

FIELD AREA (a) 10432 mm²

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm²

AV. FIBER COUNT (f) .2 fibers/field

0	1	1	—	—	—
	—	—	—	—	—
	—	—	/	—	—
	—	/	/	—	—
	—	—	—	—	—
	—	—	—	—	—
5	—	—	—	—	—
	—	—	/	—	—
	—	/	—	—	—
	/	—	—	—	/
	2	—	—	—	—
	—	—	—	—	—
10	/	/	—	—	—
	/	—	—	/	/
	/	—	—	—	—
	—	—	/	—	—
15	—	—	/	—	—
	—	—	/	—	—
	—	/	—	—	/
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
20	—	—	—	—	—

SUBTOTALS

TOTAL 21

$$\text{Constant } k = \frac{A}{1000 a}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V} = \frac{195 (.21)}{162} = .26$$

Date: 11-25-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 250

ELAPSED TIME (t) 15 mins.

FLOW RATE 1.7 l/min

VOLUME (V) 25.5 liters

FIELD AREA (a) .00432 mm²

BLANK COUNT (b) - fibers/field

FILTER AREA (A) 855 mm²

AV. FIBER COUNT (f) 109 fibers/field

0	2	1	—	—	—
	1	—	—	—	—
	—	—	—	1	—
	—	—	—	—	—
5	—	1	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
10	—	—	—	—	1
	—	—	—	—	—
	—	—	—	1	—
	—	—	—	—	—
	—	—	—	—	—
15	1	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
20	—	—	—	—	—

SUBTOTALS

TOTAL 9

$$\text{Constant } k = \frac{A}{1000 a} = 193$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

$$\frac{193 \times 109}{25.5} = 810$$

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 247ELAPSED TIME (t) 158 mins.FLOW RATE 1.9 l/minVOLUME (V) 30 litersFIELD AREA (a) 10432 mm²BLANK COUNT (b) — fibers/fieldFILTER AREA (A) 855 mm²AV. FIBER COUNT (f) 43 fibers/field

0	1	—	1	—	1
	1	—	1	1	—
	—	—	2	—	—
	—	1	1	—	—
	1	—	1	1	—
5	1	2	1	—	—
	1	—	—	—	2
	—	—	—	1	—
	—	—	—	1	—
	—	—	2	—	—
	—	1	—	1	1
10	—	—	—	—	—
	1	—	—	—	—
	1	1	—	1	—
	—	—	—	1	—
15	—	1	1	—	—
	—	—	—	1	1
	1	1	1	—	—
	1	—	1	—	1
	—	—	—	—	1
20	—	—	—	—	1
SUBTOTALS	9	7	12	8	7

TOTAL 43

$$\text{Constant } k = \frac{A}{1000 a}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V} = \frac{198 (.43)}{30} = .28$$

Date: 11-24-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 253ELAPSED TIME (t) 99 mins.FLOW RATE 1.8 l/minVOLUME (V) 178 litersFIELD AREA (a) .00432 mm²BLANK COUNT (b) — fibers/fieldFILTER AREA (A) 855 mm²AV. FIBER COUNT (f) .53 fibers/field

0	—	—	—	2	—
	—	1	—	1	1
	—	—	—	—	—
	2	—	—	—	1
	1	—	—	—	3
	—	2	—	—	1
5	—	—	—	—	—
	—	1	—	1	1
	—	1	1	—	—
	1	2	3	—	—
	—	1	2	—	—
10	—	1	2	—	—
	—	—	—	1	1
	—	—	—	—	—
	—	1	1	1	—
15	2	—	1	2	2
	1	—	2	—	1
	2	—	—	—	—
	—	1	—	—	1
	—	1	—	1	—
20	9	11	12	9	12
SUBTOTALS	9	11	12	9	12

TOTAL .53

$$\text{Constant } k = \frac{A}{1000 a}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V} = \frac{192 (.53)}{178} = .59$$

Date: 11-25-73

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 251ELAPSED TIME (t) 97 mins.FLOW RATE 1.9 l/minVOLUME (V) 184 litersFIELD AREA (a) 1,02432 mm²BLANK COUNT (b) — fibers/fieldFILTER AREA (A) 855 mm²AV. FIBER COUNT (f) .23 fibers/field

0	—	—	—	—	—
	1	2	—	1	—
	—	—	—	—	—
	—	—	—	1	—
	—	—	—	—	—
	—	—	—	—	—
5	—	—	—	—	—
	—	—	1	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
10	2	—	1	1	—
	—	—	—	1	—
	1	—	—	—	—
	—	—	1	—	—
	—	—	—	—	—
15	—	—	—	—	1
	—	—	—	—	—
	—	—	—	—	—
	1	—	—	1	—
	—	—	—	—	—
	—	—	—	—	1
20	—	1	—	—	—

SUBTOTALS

TOTAL 23

$$\text{Constant } k = \frac{A}{1000 a} = 195$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V} = \frac{195 (.23)}{184} = .23$$

Date: 11-25-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 246

ELAPSED TIME (t) 106 mins.

FLOW RATE 1.7 l/min

VOLUME (V) 180 liters

FIELD AREA (a) 432 mm²

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm²

AV. FIBER COUNT (f) .15 fibers/field

0	—	—	—	1	—
	—	—	—	—	1
	—	—	—	1	—
	1	—	—	1	—
	—	—	1	—	—
	—	—	—	1	1
5	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	1	—	—
	—	—	1	—	—
10	—	—	—	—	—
	1	—	—	—	—
	1	—	—	—	—
	—	—	—	—	1
	—	—	—	—	—
15	—	—	—	—	—
	—	—	—	—	—
	—	1	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
20	—	—	—	—	1

SUBTOTALS

TOTAL 15

$$\text{Constant } k = \frac{A}{1000 a} = \frac{855}{(432)(1000)} = .198$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V} = \frac{.198 (15)}{180} = .17$$

Date: 11-26-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 244

ELAPSED TIME (t) 246 mins.

FLOW RATE 1.8 l/min

VOLUME (V) 443 liters

FIELD AREA (a) 0.0432 mm²

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm²

AV. FIBER COUNT (f) .29 fibers/field

0	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
5	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
10	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
15	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
20	—	—	—	—	—

SUBTOTALS

TOTAL 29

$$\text{Constant } k = \frac{A}{1000 a} = 198$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

$$\frac{198 (.29)}{443} = .13$$

Date: 11-26-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 240

ELAPSED TIME (t) 15 mins.

FLOW RATE 1.9 l/min

VOLUME (V) 28.5 liters

FIELD AREA (a) 0.432 mm²

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm²

AV. FIBER COUNT (f) — fibers/field

0	—	1	—	—	—
	—	—	1	1	1
	—	—	1	—	—
	—	1	—	—	—
	—	—	—	—	2
5	—	—	—	—	1
	3	—	1	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	1	—
10	1	—	—	—	1
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
15	—	—	—	—	—
	—	1	—	—	—
	—	—	—	—	—
	—	—	—	—	1
	—	1	—	1	—
20	—	—	—	1	—

SUBTOTALS

TOTAL 20

$$\text{Constant } k = \frac{A}{1000 a}$$

$$\text{Fiber Concentration (F)} = \frac{k (f-b)}{V}$$

$$\frac{148 (.20)}{28.5} = 1.39$$