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CertainTeed Corporation
PO Box 860
Valley Forge, PA 19482-0101
215 341-7000

CertainTeed

March 11, 1987

Mr. B. J. Pigg, President
Asbestos Information Association
1745 Jefferson Davis Highway
Crystal Square 4, Suite 509
Arlington, Virginia, 22202

Dear Mr. Pigg:

Attached per your request is a completed Dust Measurement Record - Workplace (DMR.1) for our two A/C pipe plants for the calendar year 1986.

If you have any questions or need further information, please contact me.

Sincerely,

Janis L. Woodson
Industrial Hygiene Specialist

JLW/lh

Attachment

PLAINTIFF'S EXHIBIT

CT-676

CTD026147

DUST ADVISORY PANEL OF THE A.I.A.

DUST MEASUREMENT RECORD - WORKPLACE (DMR.1)

Year 1986

1 - Country/Association USA AIA

2 - Name and address of coordinator Hills

3 - Product Group :

Mining	Milling	Asb.Cement	Friction	Textile	Seals	Millboard
Other (specify) :						

4 - Number of factories 1 Hills

5a) - Total workforce (to include all personnel on pay roll) ~~89~~ 76

5b) - Workforce involved in any asbestos process (raw asbestos and subsequent processes) ~~89~~ 66

6 - Membrane filter method in use : RTM.1 [*✓] Other (Specify) [ ]

7 - Sampling duration :

Typical sampling duration : 219 min, Range (mini-maxi) 32 - 520 min per sample

8 - Data :

		Numbers	Dust Concentrations (*) - C (f/cm3)				
			C ≤ 0,5	0,5 < C ≤ 1	1 < C ≤ 2	2 < C	
Number of monitored sampling locations	P	42	41	1			
	S	0	0	0			
Number of workers under survey		~~89~~ 66	65	1			
Number of samples taken over the year	P	309	303	6			
	S	0		P = personal		S = static	

(*) Calculated as TWA/8 h basis

*

CTD026148

DUST ADVISORY PANEL OF THE A.I.A.

DUST MEASUREMENT RECORD - ~~WORKPLACE~~ (DMR.1)

Year 1986

1 - Country/Association _____

2 - Name and address of coordinator _____

_____

3 - Product Group :

Mining	Milling	Asb.Cement	Friction	Textile	Seals	Millboard
Other (specify) :						

4 - Number of factories Rubber

5a) - Total workforce (to include all personnel on pay roll) 107

5b) - Workforce involved in any asbestos process (raw asbestos and subsequent processes) 90

6 - Membrane filter method in use : RTM.1 [✓] Other (Specify) [ ]

7 - Sampling duration :

Typical sampling duration : 236 min Range (mini-maxi) 17-494 min

8 - Data :

		Numbers	Dust Concentrations (*) - C (f/cm3)				
			C ≤ 0,5	0,5 < C ≤ 1	1 < C ≤ 2	2 < C	
Number of monitored sampling locations	P	38	38				
	S	0	0				
Number of workers under survey		90	90				
Number of samples taken over the year	P	236	236				
	S						

P = personal S = static

(*) Calculated as TWA/8 h basis

OBS	JOB POSITION	EMPLOYEE NAME	SMPL DATE	TTL MIN	NATLSCO CONCEN A METH	TWA
1	BOILER OPERATOR	JONES, C.	860806	249	0.00	0.011464
2	BOILER OPERATOR	JONES, C.	860806	216	-0.00	0.011464
3	BOILER OPERATOR	PAYNE, J.	860806	212	-0.00	0.018145
4	BOILER OPERATOR	PAYNE, J.	860806	229	0.02	0.018145
5	BOILER OPERATOR	WILSON, J.	860805	211	-0.00	0.015866
6	BOILER OPERATOR	WILSON, J.	860805	203	-0.00	0.015866
7	BORING MILL #2 OPERATOR	COASTER, A.	860806	335	0.02	0.023916
8	BORING MILL #2 OPERATOR	COASTER, A.	860806	150	0.01	0.023916
9	BORING MILL #3 OPERATOR	BROWN, C.	860806	339	0.00	0.090174
10	BORING MILL #3 OPERATOR	BROWN, C.	860806	146	0.06	0.090174
11	BULK CEMENT UNLOADER	HARRIS, R.	860804	218	-0.00	0.023105
12	BULK CEMENT UNLOADER	HARRIS, R.	860804	180	0.02	0.023105
13	CEMENT DRIVER	SUSTALA, R.	860805	362	0.00	0.017984
14	COUPLING CUT OFF OPERATOR	BANIK, R.	860805	335	0.09	0.157194
15	COUPLING CUT OFF OPERATOR	BANIK, R.	860805	184	0.10	0.157194
16	COUPLING STACKER	BREWER, K.	860806	276	0.01	0.032082
17	COUPLING STACKER	BREWER, K.	860806	188	0.00	0.032082
18	COUPLING TESTER SMALL OPERATOR	SELLERS, B.	860805	340	0.01	0.049768
19	COUPLING TESTER SMALL OPERATOR	SELLERS, B.	860805	182	0.03	0.049768
20	COUPLING TESTER SMALL OPERATOR	VENABLE, JR., C.	860805	347	0.02	0.025482
21	COUPLING TESTER SMALL OPERATOR	VENABLE, JR., C.	860805	176	-0.00	0.025482
22	CRUSHER OPERATOR	HARRIS, C.	860804	227	0.10	0.157785
23	CRUSHER OPERATOR	HARRIS, C.	860804	241	0.08	0.157785
24	ELECTRICIAN	GIDLEY, R.	860805	255	0.00	0.022283
25	ELECTRICIAN	GIDLEY, R.	860805	215	0.02	0.022283
26	ELECTRICIAN	RUTH, M.	860804	233	0.02	0.044085
27	ELECTRICIAN	RUTH, M.	860804	236	0.03	0.044085
28	EQUIPMENT OPERATOR	HUGHS, JR., J.	860806	241	0.01	0.018459
29	EQUIPMENT OPERATOR	HUGHS, JR., J.	860806	258	-0.00	0.018459
30	EQUIPMENT OPERATOR	STRICKLAND, R.	860804	224	-0.00	0.013621
31	EQUIPMENT OPERATOR	STRICKLAND, R.	860804	241	0.00	0.013621
32	FITTINGS MAKER	BROWN, T.	860805	333	-0.00	0.024939
33	FITTINGS MAKER	BROWN, T.	860805	187	0.00	0.024939
34	FM LATHE MULTI 1/4 OPERATOR	HORNACK, A.	860805	345	0.01	0.028302
35	FM LATHE MULTI 1/4 OPERATOR	HORNACK, A.	860805	184	-0.00	0.028302
36	FM LATHE SINGLE 1/2 OPERATOR	POSTON, W.	860811	241	0.02	0.006431
37	FM LATHE SINGLE 1/2 OPERATOR	POSTON, W.	860811	245	0.00	0.006431
38	HYDROTESTER #1 OPERATOR	SONNENBURG, L.	860813	236	0.01	0.000000
39	HYDROTESTER #1 OPERATOR	SONNENBURG, L.	860813	249	0.02	0.000000
40	HYDROTESTER OPERATOR	HUMPHREY, L.	860805	291	0.01	0.049248
41	HYDROTESTER OPERATOR	HUMPHREY, L.	860805	223	0.11	0.049248
42	INSPECTOR	BROOKS, B.	860805	65	.	0.032337
43	INSPECTOR	BROOKS, B.	860805	268	0.01	0.032337
44	INSPECTOR	BROOKS, B.	860805	187	0.07	0.032337
45	JANITOR	FERGUSON, M.	860806	254	0.00	0.045724
46	JANITOR	FERGUSON, M.	860806	195	-0.00	0.045724
47	LAB TECHNICIAN	MCPHERSON, D.	860806	348	0.00	0.014865
48	LAB TECHNICIAN	MCPHERSON, D.	860806	172	-0.01	0.014865
49	LATHE OPERATOR, HEAD	NELSON, O.	860806	342	0.05	0.041430
50	LATHE OPERATOR, HEAD	NELSON, O.	860806	142	0.03	0.041430
51	LATHE OPERATOR, TAIL	FLAHERTY, C.	860805	336	0.03	0.029364
52	LATHE OPERATOR, TAIL	FLAHERTY, C.	860805	187	-0.00	0.029364
53	LOADER	CLINARD, T.	860804	218	0.00	0.025045
54	LOADER	CLINARD, T.	860804	242	0.01	0.025045

OBS	JOB POSITION	EMPLOYEE NAME	SMPL DATE	TTL MIN	NATLSCO CONCEN A METH	TWA
55	LOADER	LACY, R.	860804	228	.	0.014874
56	LOADER	LACY, R.	860804	237	-0.00	0.014874
57	MACHINE TENDER	BASON, S.	860806	228	0.02	0.033624
58	MACHINE TENDER	BASON, S.	860806	222	0.04	0.033624
59	MACHINE TENDER	OWENS, J.	860806	260	0.03	0.065446
60	MACHINE TENDER	OWENS, J.	860806	220	0.02	0.065446
61	MACHINE TENDER	SULAK, G.	860805	204	0.04	0.068777
62	MACHINE TENDER	SULAK, G.	860805	268	0.04	0.068777
63	MACHINIST	CAGLE, J.	860805	220	0.01	0.001403
64	MACHINIST	CAGLE, J.	860805	231	-0.00	0.001403
65	MACHINIST	HUTYRA, P.	860804	230	0.00	0.012167
66	MACHINIST	HUTYRA, P.	860804	233	0.00	0.012167
67	MACHINIST	PEDERSON, D.	860804	504	0.00	0.008904
68	MANDREL HANDLER	COOK, M.	860806	252	0.01	0.041651
69	MANDREL HANDLER	COOK, M.	860806	219	0.03	0.041651
70	MANDREL HANDLER	SHUFFIELD, D.	860806	221	0.00	0.013852
71	MANDREL HANDLER	SHUFFIELD, D.	860806	231	0.01	0.013852
72	MANDREL HANDLER	WOODARD, C.	860805	203	0.01	0.085546
73	MANDREL HANDLER	WOODARD, C.	860805	286	0.04	0.085546
74	MECHANIC	ANDERSON, L.	860804	521	0.00	0.004452
75	MECHANIC	MILLER, JR., W.	860814	238	0.01	0.015527
76	MECHANIC	MILLER, JR., W.	860814	242	0.01	0.015527
77	MECHANIC	ROUSEY, M.	860804	457	0.00	0.000000
78	MECHANIC	SIMECEK, B.	860805	529	0.06	0.149320
79	MECHANIC	WOODRUFF, T.	860804	520	0.00	0.000000
80	MECHANIC/SHIFT	EDDLEMAN, T.	860806	214	-0.00	0.033782
81	MECHANIC/SHIFT	EDDLEMAN, T.	860806	230	0.01	0.033782
82	MECHANIC/SHIFT	HILL, F.	860910	228	0.02	0.022134
83	MECHANIC/SHIFT	HILL, F.	860910	227	0.01	0.022134
84	MECHANIC/SHIFT	MACH, E.	860806	247	0.01	0.015108
85	MECHANIC/SHIFT	MACH, E.	860806	210	.	0.015108
86	MECHANIC/SHIFT	MEADOR, C.	860805	207	0.04	0.023725
87	MECHANIC/SHIFT	MEADOR, C.	860805	276	0.01	0.023725
88	MECHANIC/TRUCK	TITSWORTH, W.	860814	238	0.01	0.013783
89	MECHANIC/TRUCK	TITSWORTH, W.	860814	241	0.00	0.013783
90	MIXER OPERATOR	BOURLAND, D.	860806	258	0.02	0.062379
91	MIXER OPERATOR	BOURLAND, D.	860806	213	0.08	0.062379
92	MIXER OPERATOR	CHAMBERS, J.	860805	204	0.00	0.029616
93	MIXER OPERATOR	CHAMBERS, J.	860805	279	0.02	0.029616
94	MIXER OPERATOR	COX, H.	860808	248	0.18	0.086743
95	MIXER OPERATOR	COX, H.	860808	214	.	0.086743
96	PIPE HANDLER	FARRIS, C.	860805	336	0.03	0.030844
97	PIPE HANDLER	FARRIS, C.	860805	188	0.02	0.030844
98	PIPE HANDLER	RODRIGUEZ, R.	860805	333	0.01	0.065574
99	PIPE HANDLER	RODRIGUEZ, R.	860805	183	0.04	0.065574
100	PIPE HANDLER	RODRIGUEZ, S.	860805	282	0.01	0.018863
101	PIPE HANDLER	RODRIGUEZ, S.	860805	217	-0.00	0.018863
~~102~~	~~PLANT PERIMETER (B)~~	~~AREA~~	~~860807~~	~~168~~	~~.~~	~~0.005974~~
~~103~~	~~PLANT PERIMETER (C)~~	~~AREA~~	~~860807~~	~~160~~	~~.~~	~~0.005974~~
104	PRESS OPERATOR	PAVELKA, R.	860807	268	0.02	0.071932
105	PRESS OPERATOR	PAVELKA, R.	860807	257	0.02	0.071932
106	PRESS OPERATOR	RODRIGUEZ, R.	860805	211	0.01	0.065574
107	PRESS OPERATOR	RODRIGUEZ, R.	860805	272	0.03	0.065574
108	PRESS OPERATOR	WOOTEN, J.	860827	225	0.08	0.116346

OBS	JOB POSITION	EMPLOYEE NAME	SMPL DATE	TTL MIN	NATLSCO CONCEN A METH	TWA
109	PRESS OPERATOR	WOOTEN, J.	860827	242	0.06	0.116346
110	PRODUCTION SUPERINTENDENT	CLEMENTS, J.	860805	263	0.02	0.013670
111	PRODUCTION SUPERINTENDENT	CLEMENTS, J.	860805	155	-0.00	0.013670
112	RELIEF OPERATOR	HAWKINS, JR., D.	860828	242	0.01	0.032097
113	RELIEF OPERATOR	HAWKINS, JR., D.	860828	227	0.01	0.032097
114	RELIEF OPERATOR	RODECKER, R.	860806	32	-0.01	0.070285
115	RELIEF OPERATOR	SALINAS, C.	860806	221	0.00	0.010527
116	RELIEF OPERATOR	SALINAS, C.	860806	229	-0.00	0.010527
117	REWORK SAW OPERATOR	FOSTER, J.	860805	332	0.06	0.070405
118	REWORK SAW OPERATOR	FOSTER, J.	860805	182	0.02	0.070405
119	SUPERINTENDENT	LANDRUM, J.	860806	294	0.00	0.027653
120	SUPERINTENDENT	LANDRUM, J.	860806	176	0.00	0.027653
121	SUPERVISOR	CLEMENTS, B.	860828	237	0.00	0.023603
122	SUPERVISOR	CLEMENTS, B.	860828	227	0.00	0.023603
123	SUPERVISOR	COLE, B.	860806	216	.	.
124	SUPERVISOR	COLE, B.	860806	231	.	.
125	SUPERVISOR	ETTER, L.	860806	256	0.02	0.043483
126	SUPERVISOR	ETTER, L.	860806	216	0.00	0.043483
127	SUPERVISOR	KINERT, J.	860804	230	0.00	0.016239
128	SUPERVISOR	KINERT, J.	860804	222	0.00	0.016239
129	SUPERVISOR	LENART, B.	860804	518	0.00	0.007308
130	SUPERVISOR	MAREK, F.	860827	230	0.00	0.055591
131	SUPERVISOR	MAREK, F.	860827	242	0.04	0.055591
132	SUPERVISOR	WESTMORELAND, T.	860805	326	-0.00	0.029631
133	SUPERVISOR	WESTMORELAND, T.	860805	174	0.01	0.029631
134	SUPERVISOR - WALL	SLOVAK, J.	860806	342	0.02	0.036000
135	SUPERVISOR - WALL	SLOVAK, J.	860806	146	0.02	0.036000
136	SWEEPER OPERATOR	EAGANS, R.	860804	228	0.08	0.101829
137	SWEEPER OPERATOR	EAGANS, R.	860804	238	0.01	0.101829
138	TOOL GRINDER	COVEY, R.	860806	320	0.00	0.031871
139	TOOL GRINDER	COVEY, R.	860806	160	0.02	0.031871
140	TRAY LOADER	GOODMAN, M.	860805	493	-0.00	0.002369
141	TRAY LOADER	GREER, J.	860806	245	0.02	0.014279
142	TRAY LOADER	GREER, J.	860806	215	0.00	0.014279
143	TRAY LOADER	RUSSELL, J.	860806	215	0.00	0.021231
144	TRAY LOADER	RUSSELL, J.	860806	225	0.01	0.021231
145	TRUCK DRIVER - FINISHING LINE	BLEDSOE, L.	860805	337	0.01	0.018208
146	TRUCK DRIVER - FINISHING LINE	BLEDSOE, L.	860805	181	0.00	0.018208
147	TRUCK DRIVER - FINISHING LINE	SHAW, JR., L.	860805	282	0.00	0.009467
148	TRUCK DRIVER - FINISHING LINE	SHAW, JR., L.	860805	214	-0.00	0.009467
149	TRUCK DRIVER - WALL OPERATION	SEBIK, A.	860805	335	0.01	0.014941
150	TRUCK DRIVER - WALL OPERATION	SEBIK, A.	860805	185	0.00	0.014941

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ASBESTOS RESULTS
Hillsboro
AS OF Wed Feb 18 1987

POSITION/ LOCATION	NAME	DATE	SMP MIN	F/CC	TWA MIN	TWA
120 HYSTER DRIVER #1	CORTINAS, R	01/15/ 86	192	.02		
120 HYSTER DRIVER #1	CORTINAS, R	01/15/ 86	233	.02		
120 HYSTER DRIVER #1	CORTINAS, R	01/15/ 86			425	.02
180 HYSTER DRIVER	STRICKLAND, R	01/27/ 86	183	.02		
180 HYSTER DRIVER	STRICKLAND, R	01/27/ 86	231	.01		
180 HYSTER DRIVER	STRICKLAND, R	01/27/ 86			414	.02
180 HYSTER DRIVER #1	BLEDSOE, L	01/14/ 86	172	.01		
180 HYSTER DRIVER #1	BLEDSOE, L	01/14/ 86	185	.006		
180 HYSTER DRIVER #1	BLEDSOE, L	01/14/ 86			357	.01
200 HYSTER DRIVER	BLEDSOE, L	05/06/ 86	269	.0036		
200 HYSTER DRIVER	BLEDSOE, L	05/06/ 86	188	.012		
200 HYSTER DRIVER	BLEDSOE, L	05/06/ 86			457	.006
60 HYSTER DRIVER	SEBIK, A	01/22/ 86	282	.006		
60 HYSTER DRIVER	SEBIK, A	01/22/ 86	153	.02		
60 HYSTER DRIVER	SEBIK, A	01/22/ 86			435	.01
80 HYSTER DRIVER	SEBIK, A	05/08/ 86	295	.0037		
80 HYSTER DRIVER	SEBIK, A	05/08/ 86	144	.0089		
80 HYSTER DRIVER	SEBIK, A	05/08/ 86			439	.006
BANDER - YARD	HUGHES, J	01/27/ 86	188	.009		
BANDER - YARD	HUGHES, J	01/27/ 86	153	.006		
BANDER - YARD	HUGHES, J	01/27/ 86			341	.008
BORING MILL #1 OPERA	COASTER, A	01/20/ 86	178	.01		
BORING MILL #1 OPERA	COASTER, A	01/20/ 86	245	.02		
BORING MILL #1 OPERA	COASTER, A	01/20/ 86			423	.02
BORING MILL #3 OPERA	BROWN, C	05/07/ 86	98	.06		
BORING MILL #3 OPERA	HORNAK, A	01/15/ 86	187	.02		
BORING MILL #3 OPERA	HORNAK, A	01/15/ 86	231	.02		
BORING MILL #3 OPERA	HORNAK, A	01/15/ 86			418	.02
BORING MILL #4 OPERA	COASTER, A	05/07/ 86	158	.0075		
BORING MILL #4 OPERA	COASTER, A	05/07/ 86	172	.027		
BORING MILL #4 OPERA	COASTER, A	05/07/ 86	117	.03		
BORING MILL #4 OPERA	COASTER, A	05/07/ 86			447	.022
CPLG CUT OFF OPERATO	HILL, L	01/20/ 86	180	.05		
CPLG CUT OFF OPERATO	HILL, L	01/20/ 86	244	.06		
CPLG CUT OFF OPERATO	HILL, L	01/20/ 86			424	.05
CPLG CUT OFF OPERATO	HUMPHREY, L	05/07/ 86	96	.083		
CPLG PALLETIZER	BREWER, A	01/20/ 86	181	.04		
CPLG PALLETIZER	BREWER, A	01/20/ 86	189	.05		
CPLG PALLETIZER	BREWER, A	01/20/ 86			370	.05
CPLG PALLETIZER	BREWER, K	05/08/ 86	236	.027		
CPLG SAW LG OPERATOR	FOSTER, J	05/07/ 86	27	.149		
CPLG SAW LG OPERATOR	HUMPHREY, L	01/21/ 86	86	.69		
CPLG SAW LG OPERATOR	HUMPHREY, L	05/06/ 86	160	.045		
CPLG SAW LG OPERATOR	HUMPHREY, L	05/06/ 86	197	.032		
CPLG SAW LG OPERATOR	HUMPHREY, L	05/06/ 86	116	.052		
CPLG SAW LG OPERATOR	HUMPHREY, L	05/06/ 86			473	.042
CPLG TESTER SMALL OP	BANIK, R	05/07/ 86	96	.07		
CPLG TESTER SMALL OP	WOODARD, C	01/21/ 86	214	.02		
CPLG TESTER SMALL OP	WOODARD, C	01/21/ 86	237	.05		
CPLG TESTER SMALL OP	WOODARD, C	01/21/ 86			451	.04
FM LATHE SINGLE 1/2	POSTON, W	01/21/ 86	209	.02		

ASBESTOS RESULTS
Hillsboro
AS OF Wed Feb 18 1987

POSITION/ LOCATION	NAME	DATE	SMP MIN	F/CC	TWA MIN	TWA
FM LATHE SINGLE 1/2	POSTON, W	01/21/ 86	238	.03		
FM LATHE SINGLE 1/2	POSTON, W	01/21/ 86			447	.03
FM LATHE SINGLE 1/2	POSTON, W	05/08/ 86	180	.002		
FM LATHE SINGLE 1/2	POSTON, W	05/08/ 86	72	.01		
FM LATHE SINGLE 1/2	POSTON, W	05/08/ 86			252	.004
HYDROTESTER #1	HUMPHREY, L	01/14/ 86	169	.04		
HYDROTESTER #1	HUMPHREY, L	01/14/ 86	252	.11		
HYDROTESTER #1	HUMPHREY, L	01/14/ 86			421	.08
HYDROTESTER #1	SONNENBERG, L	05/07/ 86	163	.061		
HYDROTESTER #1	SONNENBERG, L	05/07/ 86	202	.039		
HYDROTESTER #1	SONNENBERG, L	05/07/ 86	80	.035		
HYDROTESTER #1	SONNENBERG, L	05/07/ 86			445	.047
HYDROTESTER #3	SONNENBERG, L	05/06/ 86	151	.017		
HYDROTESTER #3	SONNENBERG, L	05/06/ 86	169	.018		
INSPECTOR #1	BROOKS, B	01/14/ 86	169	.03		
INSPECTOR #1	BROOKS, B	01/14/ 86	251	.07		
INSPECTOR #1	BROOKS, B	01/14/ 86			420	.06
INSPECTOR #1	BROOKS, B	05/07/ 86	169	.014		
INSPECTOR #1	BROOKS, B	05/07/ 86	203	.06		
INSPECTOR #1	BROOKS, B	05/07/ 86	80	.034		
INSPECTOR #1	BROOKS, B	05/07/ 86			452	.04
INSPECTOR #3	BROOKS, B	05/06/ 86	169	.023		
INSPECTOR #3	BROOKS, B	05/06/ 86	196	.014		
INSPECTOR #3	BROOKS, B	05/06/ 86	89	.027		
INSPECTOR #3	BROOKS, B	05/06/ 86			444	.018
JANITOR	EAGANS, R	02/20/ 86	212	.01		
JANITOR	EAGANS, R	02/20/ 86	193	.004		
JANITOR	EAGANS, R	02/20/ 86			405	.008
LAB TECHNICIAN	MCPHERSON, D	01/27/ 86	210	.01		
LAB TECHNICIAN	MCPHERSON, D	01/27/ 86	166	.02		
LAB TECHNICIAN	MCPHERSON, D	01/27/ 86			376	.02
LAB TECHNICIAN	MCPHERSON, D	05/08/ 86	170	.0022		
LAB TECHNICIAN	MCPHERSON, D	05/08/ 86	239	.0096		
LAB TECHNICIAN	MCPHERSON, D	05/08/ 86			409	.0065
LATHE #1 HEAD	FLAHERTY, C	01/13/ 86	185	.03		
LATHE #1 HEAD	FLAHERTY, C	01/13/ 86	245	.02		
LATHE #1 HEAD	FLAHERTY, C	01/13/ 86			430	.02
LATHE #1 HEAD	NELSON, O	05/07/ 86	160	.0047		
LATHE #1 HEAD	NELSON, O	05/07/ 86	197	.007		
LATHE #1 HEAD	NELSON, O	05/07/ 86	86	.017		
LATHE #1 HEAD	NELSON, O	05/07/ 86			443	.009
LATHE #1 TAIL	FLAHERTY, C	05/07/ 86	160	.011		
LATHE #1 TAIL	FLAHERTY, C	05/07/ 86	200	.009		
LATHE #1 TAIL	FLAHERTY, C	05/07/ 86	83	.0089		
LATHE #1 TAIL	FLAHERTY, C	05/07/ 86			443	.009
LATHE #1 TAIL	NELSON, O	01/13/ 86	185	.02		
LATHE #1 TAIL	NELSON, O	01/13/ 86	245	.008		
LATHE #1 TAIL	NELSON, O	01/13/ 86			430	.01
LATHE #3 HEAD	FLAHERTY, C	05/06/ 86	168	.0065		
LATHE #3 HEAD	FLAHERTY, C	05/06/ 86	195	.004		
LATHE #3 HEAD	FLAHERTY, C	05/06/ 86	86	.04		

ASBESTOS RESULTS
Hillsboro
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POSITION/ LOCATION	NAME	DATE	SMP MIN	F/CC	TWA MIN	TWA
LATHE #3 HEAD	FLAHERTY, C	05/06/ 86			439	.012
LATHE #3 TAIL	NELSON, O	05/06/ 86	172	.00		
LATHE #3 TAIL	NELSON, O	05/06/ 86	195	.0048		
LATHE #3 TAIL	NELSON, O	05/06/ 86	88	.0085		
LATHE #3 TAIL	NELSON, O	05/06/ 86			455	.004
MACHINE TENDER	BASON, S	01/09/ 86	179	.02		
MACHINE TENDER	BASON, S	01/09/ 86	249	.02		
MACHINE TENDER	BASON, S	01/09/ 86			428	.02
MACHINE TENDER	BASON, S	05/06/ 86	217	.034		
MACHINE TENDER	BASON, S	05/06/ 86	178	.205		
MACHINE TENDER	BASON, S	05/06/ 86			395	.11
MACHINE TENDER	SULAK, G	02/18/ 86	199	.12		
MACHINE TENDER	SULAK, G	02/18/ 86	225	.13		
MACHINE TENDER	SULAK, G	02/18/ 86			424	.12
MANDREL HANDLER	GREER, J	01/09/ 86	191	.002		
MANDREL HANDLER	GREER, J	01/09/ 86	246	.01		
MANDREL HANDLER	GREER, J	01/09/ 86			437	.01
MANDREL HANDLER	SHUFFIELD, D	05/06/ 86	206	.011		
MANDREL HANDLER	SHUFFIELD, D	05/06/ 86	184	.016		
MANDREL HANDLER	SHUFFIELD, D	05/06/ 86			390	.015
MANDREL HANDLER	WARD, B	02/19/ 86	198	.17		
MANDREL HANDLER	WARD, B	02/19/ 86	252	.07		
MANDREL HANDLER	WARD, B	02/19/ 86			450	.11
MECHANIC	CAGLE, J	01/28/ 86	183	.--		
MECHANIC	CAGLE, J	01/28/ 86	151	.02		
MECHANIC	MILLER, W	01/22/ 86	149	.02		
MECHANIC	MILLER, W	01/22/ 86			435	.007
MECHANIC	RATLIFF, B	02/21/ 86	207	.10		
MECHANIC	RATLIFF, B	02/21/ 86	219	.09		
MECHANIC	RATLIFF, B	02/21/ 86			426	.07
MECHANIC (FINISHING)	MILLER, J	05/08/ 86	219	.0018		
MECHANIC (FINISHING)	MILLER, J	05/08/ 86	212	.008		
MECHANIC (FINISHING)	MILLER, J	05/08/ 86			431	.005
MECHANIC FINISHING	MILLER, W	01/22/ 86	286	.003		
MECHANIC, SHIFT	RATLIFF, B	01/10/ 86	182	.--		
MECHANIC, SHIFT	RATLIFF, B	01/10/ 86	251	0.07		
MECHANIC, SHIFT	RATLIFF, B	01/10/ 86			251	0.07
MECHANIC, SHIFT	RATLIFF, B	02/20/ 86	120	.06		
MIXER OPERATOR	CHAMBERS, J	01/08/ 86	188	.12		
MIXER OPERATOR	CHAMBERS, J	01/08/ 86	238	.37		
MIXER OPERATOR	CHAMBERS, J	01/08/ 86			426	.26
MIXER OPERATOR	CHAMBERS, J	02/19/ 86	198	.11		
MIXER OPERATOR	CHAMBERS, J	02/19/ 86	245	.06		
MIXER OPERATOR	CHAMBERS, J	02/19/ 86			443	.08
MIXER OPERATOR	COX, H	01/28/ 86	181	.08		
MIXER OPERATOR	COX, H	01/28/ 86	239	.11		
MIXER OPERATOR	COX, H	01/28/ 86			420	.10
MIXER OPERATOR	HEBERT, C	05/06/ 86	179	.00		
PIPE HANDLER	RODRIGUEZ, R	01/15/ 86	188	.007		
PIPE HANDLER	RODRIGUEZ, R	01/15/ 86	235	.02		
PIPE HANDLER	RODRIGUEZ, R	01/15/ 86			423	.02

ASBESTOS RESULTS
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AS OF Wed Feb 18 1987

POSITION/ LOCATION	NAME	DATE	SMP MIN	F/CC	TWA MIN	TWA
PIPE HANDLER #1	SELLERS, B	05/07/ 86	164	.013		
PIPE HANDLER #1	SELLERS, B	05/07/ 86	205	.027		
PIPE HANDLER #1	SELLERS, B	05/07/ 86	77	.00		
PIPE HANDLER #1	SELLERS, B	05/07/ 86			446	.017
PIPE HANDLER #3	RODRIQUEZ, R	05/06/ 86	145	.018		
PIPE HANDLER #3	RODRIQUEZ, R	05/06/ 86	198	.019		
PIPE HANDLER #3	RODRIQUEZ, R	05/06/ 86	84	.03		
PIPE HANDLER #3	RODRIQUEZ, R	05/06/ 86			427	.022
PRESS OPERATOR	RODRIGUEZ, R	01/08/ 86	184	.04		
PRESS OPERATOR	RODRIGUEZ, R	01/08/ 86	243	.05		
PRESS OPERATOR	RODRIGUEZ, R	01/08/ 86			437	.04
PRESS OPERATOR	RODRIGUEZ, R	02/18/ 86	703	.19		
PRESS OPERATOR	RODRIGUEZ, R	02/18/ 86	226	.09		
PRESS OPERATOR	RODRIGUEZ, R	02/18/ 86			429	.14
PRESS OPERATOR	WOOTEN, J	05/06/ 86	218	.027		
PRESS OPERATOR	WOOTEN, J	05/06/ 86	177	.01		
PRESS OPERATOR	WOOTEN, J	05/06/ 86			385	.021
RELIEF OPERATOR	GOODMAN, M	01/09/ 86	181	.006		
RELIEF OPERATOR	GOODMAN, M	01/09/ 86	254	.02		
RELIEF OPERATOR	GOODMAN, M	01/09/ 86			435	.01
RELIEF OPERATOR	RODECKER, R	02/19/ 86	191	.04		
RELIEF OPERATOR	RODECKER, R	02/19/ 86	255	.04		
RELIEF OPERATOR	RODECKER, R	02/19/ 86			446	.04
RELIEF OPERATOR	SALINAS, C	05/06/ 86	175	.017		
RELIEF OPERATOR	SALINAS, C	05/06/ 86	197	.015		
RELIEF OPERATOR	SALINAS, C	05/06/ 86			372	.02
REWORK SAW OPERATOR	FOSTER, J	01/10/ 86	196	.02		
REWORK SAW OPERATOR	FOSTER, J	01/10/ 86	228	.10		
REWORK SAW OPERATOR	FOSTER, J	01/10/ 86			424	.06
REWORK SAW OPERATOR	FOSTER, J	05/07/ 86	60	.04		
REWORK SAW OPERATOR	FOSTER, J	05/07/ 86	285	.034		
REWORK SAW OPERATOR	FOSTER, J	05/08/ 86	208	.017		
SUPERVISOR	CLEMENTS, B	05/06/ 86	224	.004		
SUPERVISOR	CLEMENTS, B	05/06/ 86	164	.013		
SUPERVISOR	CLEMENTS, B	05/06/ 86			388	.007
SUPERVISOR	COLE, B	01/08/ 86	178	.03		
SUPERVISOR	COLE, B	01/08/ 86	248	.007		
SUPERVISOR	COLE, B	01/08/ 86			426	.02
SUPERVISOR	COLE, B	02/18/ 86	202	.25		
SUPERVISOR	COLE, B	02/18/ 86	222	.11		
SUPERVISOR	COLE, B	02/18/ 86			424	.17
SUPERVISOR	LENART, B	01/28/ 86	183	.002		
SUPERVISOR	LENART, B	01/28/ 86	165	.004		
SUPERVISOR	LENART, B	01/28/ 86			348	.003
SUPERVISOR	WESTMORELAND, T	01/13/ 86	187	.03		
SUPERVISOR	WESTMORELAND, T	01/13/ 86	243	.004		
SUPERVISOR	WESTMORELAND, T	01/13/ 86			430	.01
SUPERVISOR	WESTMORELAND, T	05/08/ 86	235	.012		
SUPERVISOR	WESTMORELAND, T	05/08/ 86	231	.0017		
SUPERVISOR	WESTMORELAND, T	05/08/ 86			466	.006
SUPERVISOR (WALL)	SLOVAK, J	01/22/ 86	284	.009		

ASBESTOS RESULTS
Hillsboro
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POSITION/ LOCATION	NAME	DATE	SMP MIN	SMP F/CC	TWA MIN	TWA TWA
SUPERVISOR (WALL)	SLOVAK, J	01/22/ 86	153	.04		
SUPERVISOR (WALL)	SLOVAK, J	01/22/ 86			447	.02
SUPERVISOR (WALL)	SLOVAK, J	05/08/ 86	217	.012		
SUPERVISOR (WALL)	SLOVAK, J	05/08/ 86	227	.02		
SUPERVISOR (WALL)	SLOVAK, J	05/08/ 86			444	.015
TRAY LOADER	GOODMAN, M	02/20/ 86	198	.004		
TRAY LOADER	GOODMAN, M	02/20/ 86	240	.008		
TRAY LOADER	GOODMAN, M	02/20/ 86			438	.006
TRAY LOADER	RODECKER, R	01/10/ 86	196	.002		
TRAY LOADER	RODECKER, R	01/10/ 86	235	.003		
TRAY LOADER	RODECKER, R	01/10/ 86			431	.003
TRAY LOADER	RODECKER, R	05/08/ 86	220	.0017		
TRAY LOADER	RODECKER, R	05/08/ 86	224	.008		
TRAY LOADER	RODECKER, R	05/08/ 86			444	.005

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RECORDS SELECTED 00218

ASBESTOS RESULTS
Riverside
AS OF Wed Feb 18 1987

107 Total # employees

POSITION/ LOCATION	NAME	DATE	SMP MIN	F/CC	TWA MIN	TWA
BAG OPENER		04/10/ 86	26	.03		
BAG OPENER		04/10/ 86	72	.05		
BAG OPENER		04/10/ 86	36	.04		
BAG OPENER		04/10/ 86	26	.19		
BAG OPENER		04/10/ 86	72	.09		
BAG OPENER		04/10/ 86	36	.15		
BORING MILL #1 OPERA	DOBBS, P.	04/10/ 86	486	.08	486	.08
BORING MILL 42" OPER	JAMES, J.	04/08/ 86	472	.05	472	.05
CPLG CUT OFF		04/10/ 86	59	.09		
CPLG CUT OFF OPERATO	COOLEY, D.	03/27/ 86	365	.25	365	.25
CPLG CUT OFF OPERATO	COOLEY, D.	04/08/ 86	194	.39		
CPLG CUT OFF OPERATO	COOLEY, D.	04/08/ 86	17	.37		
CPLG CUT OFF OPERATO	COOLEY, D.	04/08/ 86	264	.27		
CPLG CUT OFF OPERATO	COOLEY, D.	04/08/ 86			475	.32
CPLG CUT OFF OPERATO	COOLEY, D.	04/10/ 86	58	.21		
CRUSHER OPERATOR	SILVA, T.	04/10/ 86	436	.--		
FM LATHE OPERATOR	BIVENS, J.	04/08/ 86	465	.21	465	.21
GENERAL HELPER	EATON, R.	04/08/ 86	452	.03	452	.03
HYDROTESTER #2 OPERA	FOOSE, D.	04/07/ 86	196	.13		
HYDROTESTER #2 OPERA	FOOSE, D.	04/07/ 86	231	.11		
HYDROTESTER #2 OPERA	FOOSE, D.	04/07/ 86			427	.12
INSPECTOR-FITTINGS	WILSON, C.	04/10/ 86	481	.09	481	.09
INSPECTOR #2	GARCIA. M.	04/07/ 86	435	.04	435	.04
LATHE #2 ASST. OPERA	COOPER, H.	04/07/ 86	193	.12		
LATHE #2 ASST. OPERA	COOPER, H.	04/07/ 86	228	.04		
LATHE #2 ASST. OPERA	COOPER, H.	04/07/ 86			421	.08
LATHE #2 OPERATOR	EVANS, G.	04/07/ 86	200	.02		
LATHE #2 OPERATOR	EVANS, G.	04/07/ 86	228	.01		
LATHE #2 OPERATOR	EVANS, G.	04/07/ 86			428	.01
LATHE 1/4 OPERATOR	SUAREZ, A.	04/08/ 86	--	.--		
LATHE 1/4 OPERATOR	SUAREZ, A.	04/08/ 86	130	.04		
LATHE 1/4 OPERATOR	SUAREZ, A.	04/08/ 86	230	.15		
LATHE 1/4 OPERATOR	SUAREZ, A.	04/08/ 86			360	.11
MACHINE TENDER	AESCHLIMAN, K.	03/14/ 86	241	.10	241	.10
MACHINE TENDER	MARRON, D.	04/04/ 86	347	.08	347	.08
MACHINE TENDER	MORALES, D.	04/09/ 86	451	.08	451	.08
MACHINE TENDERS AREA		04/10/ 86	184	.16		
MANDREL HANDLER	BRYANT, B.	04/09/ 86	435	.12	435	.12
MECHANIC	GEORGE, A.	04/10/ 86	494	.--		
MIXER OPERATOR	CONTRERAS, J.	04/04/ 86	343	.09	343	.09
MIXER OPERATOR	REYES, P.	03/14/ 86	341	.16	341	.16
MIXER OPERATOR	STEWARD, R.	04/09/ 86	455	.18	455	.18
MUNSON MIXER #2		04/10/ 86	183	.52		
MUNSON MIXER #4		04/10/ 86	185	.13		
PIPE HANDLER #2	LOLIE, K.	04/07/ 86	438	.03	438	.03
PRESS OPERATOR	BRADY, J.	03/27/ 86	357	.08	357	.08
PRESS OPERATOR	CASAS, J.	04/09/ 86	421	.18	421	.18
PRESS OPERATOR	SALAS, J.	03/14/ 86	343	.08	343	.08
RELIEF OPERATOR	RICHARDSON, J.	04/09/ 86	424	.03	424	.03
SAW #1 OPERATOR	MEIER, S.	04/08/ 86	140	.17		
SAW #1 OPERATOR	MEIER, S.	04/08/ 86	16	.38		

ASBESTOS RESULTS
Riverside
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POSITION/ LOCATION	NAME	DATE	SMP MIN	F/CC	TWA MIN	TWA
SAW #1 OPERATOR	MEIER, S.	04/08/ 86	324	.18		
SAW #1 OPERATOR	MEIER, S.	04/08/ 86			480	.19
SUPERVISOR	VOIGHLANDER, C.	04/09/ 86	456	.06	456	.06
TRAY LOADER	ANAYA, M.	04/09/ 86	423	.03	423	.03
WET TESTER	ATENCIO, S.	04/10/ 86	494	.09	494	.09
WET TESTER	PADRON, M.	04/08/ 86	467	.05	467	.05

RECORDS SELECTED 00057

OBS	JOB POSITION	EMPLOYEE NAME	SMPL DATE	TTL MIN	NATLSCO CONCEN A MATH	TWA
1	ASSISTANT LATHE OPERATOR	COOPER, H.	860820	230	0.03	0.046814
2	ASSISTANT LATHE OPERATOR	COOPER, H.	860820	188	0.02	0.046814
3	ASSISTANT LATHE OPERATOR	HAMPTON, C.	860819	196	0.02	0.045895
4	ASSISTANT LATHE OPERATOR	HAMPTON, C.	860819	243	0.09	0.045895
5	BOILER OPERATOR	GRZYBCZYK, R.	860818	242	0.01	0.018084
6	BOILER OPERATOR	GRZYBCZYK, R.	860818	210	0.02	0.018084
7	BOILER OPERATOR	RAMIREZ, G.	860820	283	0.03	0.015853
8	BOILER OPERATOR	RAMIREZ, G.	860820	175	0.02	0.015853
9	BOILER OPERATOR	VANDERTWEEL	860820	289	0.00	0.018820
10	BOILER OPERATOR	VANDERTWEEL	860820	170	0.03	0.018820
11	COUPLING CUT-OFF OPERATOR	COOLEY, D.	861112	212	0.48	0.885689
12	COUPLING CUT-OFF OPERATOR	COOLEY, D.	861112	232	0.08	0.885689
13	CRUSHER OPERATOR	JAMES, J.	860820	264	0.27	0.164502
14	CRUSHER OPERATOR	JAMES, J.	860820	226	0.01	0.164502
15	CRUSHER OPERATOR	SILVA, T.	861106	205	0.34	0.294994
16	CRUSHER OPERATOR	SILVA, T.	861106	225	0.28	0.294994
17	ELECTRICIAN	CARON, A.	860819	301	0.04	0.034685
18	ELECTRICIAN	CARON, A.	860819	175	0.03	0.034685
19	ELECTRICIAN	SWANK, K.	860819	259	0.04	0.013179
20	ELECTRICIAN	SWANK, K.	860819	217	0.01	0.013179
21	FITTINGS	HAMILTON, C.	860820	148	0.10	0.096506
22	FITTINGS	HAMILTON, C.	860820	182	0.05	0.096506
23	FITTINGS	HAMILTON, C.	860820	154	0.21	0.096506
24	FITTINGS INSPECTOR	WILSON, C.	860820	272	0.10	0.137219
25	FITTINGS INSPECTOR	WILSON, C.	860820	219	0.21	0.137219
26	FM LATHE OPERATOR	GIL, L.	860820	269	0.03	0.044949
27	FM LATHE OPERATOR	GIL, L.	860820	222	0.02	0.044949
28	HYDROTESTER	BEY, G.	860818	239	0.06	0.074749
29	HYDROTESTER	BEY, G.	860818	195	0.08	0.074749
30	HYDROTESTER OPERATOR	FOOSE, D.	861113	216	0.14	0.195152
31	HYDROTESTER OPERATOR	FOOSE, D.	861113	222	0.07	0.195152
32	INSPECTOR	GARCIA, M.	860818	268	0.03	0.074502
33	INSPECTOR	GARCIA, M.	860818	187	0.06	0.074502
34	INSPECTOR	GOODWIN, L.	860820	272	0.09	0.108384
35	INSPECTOR	GOODWIN, L.	860820	226	0.12	0.108384
36	LAB INSPECTOR	GRANILLO, B.	860820	257	0.03	0.035394
37	LAB INSPECTOR	GRANILLO, B.	860820	216	0.03	0.035394
38	LATHE OPERATOR	EVANS, G.	860819	231	0.02	0.100663
39	LATHE OPERATOR	EVANS, G.	860819	238	0.12	0.100663
40	LATHE OPERATOR	PASILLAS, D.	860818	235	0.05	0.069944
41	LATHE OPERATOR	PASILLAS, D.	860818	200	0.10	0.069944
42	LIFT TRUCK OPERATOR	CORRAL, R.	861030	472	0.03	0.026618
43	LIFT TRUCK OPERATOR	MORGAN, J.	861030	476	0.01	0.010835
44	LOADER	BIVENS, J.	860820	198	0.01	0.062576
45	LOADER	BIVENS, J.	860820	287	0.06	0.062576
46	LOADER	RENFRO, E.	861104	442	0.04	0.038713
47	MACHINE TENDER	AESCHLIMAN, K.	860820	275	0.07	0.120986
48	MACHINE TENDER	AESCHLIMAN, K.	860820	181	0.21	0.120986
49	MACHINE TENDER	MARRON	860820	202	0.13	0.182742
50	MACHINE TENDER	MARRON	860820	190	0.11	0.182742
51	MACHINE TENDER	MORALES, D.	860819	255	0.13	0.134142
52	MACHINE TENDER	MORALES, D.	860819	208	0.07	0.134142
53	MACHINIST	MCFANN, J.	860819	293	0.02	0.018667
54	MACHINIST	MCFANN, J.	860819	181	0.01	0.018667

OBS	JOB POSITION	EMPLOYEE NAME	SMPL DATE	TTL MIN	NATLSCO CONCEN A METH	TWA
55	MANDREL HANDLER	BRYANT, B.	861104	207	0.03	-0.005632
56	MANDREL HANDLER	BRYANT, B.	861104	205	0.02	-0.005632
57	MANDREL HANDLER	CANTRELL	860820	237	0.04	0.039740
58	MANDREL HANDLER	CANTRELL	860820	189	0.08	0.039740
59	MANDREL HANDLER	PLAZA, M.	860818	238	0.09	0.153569
60	MANDREL HANDLER	PLAZA, M.	860818	218	0.18	0.153569
61	MECHANIC	DARNELL, W.	860819	297	0.04	0.049119
62	MECHANIC	DARNELL, W.	860819	182	0.07	0.049119
63	MECHANIC	GEORGE, A.	860820	210	0.04	0.022293
64	MECHANIC	GEORGE, A.	860820	274	0.01	0.022293
65	MECHANIC	MCGREGOR, P.	860819	287	0.03	0.070054
66	MECHANIC	MCGREGOR, P.	860819	182	0.12	0.070054
67	MECHANIC	MOJESKE, J.	860819	257	0.04	0.031491
68	MECHANIC	MOJESKE, J.	860819	217	0.02	0.031491
69	MECHANIC	STEEN, T.	861106	433	0.00	0.009085
70	MECHANIC	STUCKEY, J.	860820	248	0.03	0.038999
71	MECHANIC	STUCKEY, J.	860820	145	0.03	0.038999
72	MIXER OPERATOR	BRADY	860820	214	0.08	0.084564
73	MIXER OPERATOR	BRADY	860820	169	0.09	0.084564
74	MIXER OPERATOR	MARTINEZ, P.	860819	251	0.10	0.074141
75	MIXER OPERATOR	MARTINEZ, P.	860819	190	0.06	0.074141
76	MIXER OPERATOR	REYES, P.	870107	240	0.03	0.000000
77	MIXER OPERATOR	REYES, P.	870107	190	0.02	0.000000
78	OILER	PERRY, D.	861204	234	0.02	0.000000
79	OILER	PERRY, D.	861204	234	0.03	0.000000
80	PIPE HANDLER	AMARO, R.	860818	268	0.03	0.053239
81	PIPE HANDLER	AMARO, R.	860818	188	0.08	0.053239
82	PIPE HANDLER	ASKEW, W.	861113	215	0.02	0.043569
83	PIPE HANDLER	ASKEW, W.	861113	221	0.05	0.043569
84	PIPE HANDLER	AVERY, A.	860819	210	0.10	0.103171
85	PIPE HANDLER	AVERY, A.	860819	234	0.11	0.103171
86	PIPE HANDLER	LOLIE, K.	860819	207	0.04	0.049480
87	PIPE HANDLER	LOLIE, K.	860819	241	0.06	0.049480
88	PIPE HANDLER	NEWPRASIT	860819	245	0.16	0.125077
89	PIPE HANDLER	NEWPRASIT	860819	224	0.07	0.125077
90	PIPE HANDLER	RODRIQUEZ, J.	860818	233	0.05	0.029754
91	PIPE HANDLER	RODRIQUEZ, J.	860818	197	0.02	0.029754
92	PIPE HANDLER	ZARAGOZA	860818	233	0.18	0.114103
93	PIPE HANDLER	ZARAGOZA	860818	199	0.09	0.114103
94	PLASTIC COUPLING	ATENCIO, S.	860820	275	0.03	0.024330
95	PLASTIC COUPLING	ATENCIO, S.	860820	218	0.02	0.024330
96	PRESS OPERATOR	LOYER	860820	199	0.24	0.226706
97	PRESS OPERATOR	LOYER	860820	188	0.17	0.226706
98	PRESS OPERATOR	LOYER, D.	861204	235	0.05	0.000000
99	PRESS OPERATOR	LOYER, D.	861204	189	0.02	0.000000
100	PRESS OPERATOR	PADRON, M.	860818	235	0.13	0.133855
101	PRESS OPERATOR	PADRON, M.	860818	223	0.14	0.133855
102	PRESS OPERATOR	SALAS, J.	861208	242	0.30	0.000000
103	PRESS OPERATOR	SALAS, J.	861208	224	0.04	0.000000
104	PRESS OPERATOR	VILLALPANDO, A.	860820	292	0.04	0.029958
105	PRESS OPERATOR	VILLALPANDO, A.	860820	105	0.04	0.029958
106	PRESS OPERATOR	VILLALPANDO, A.	860820	61	0.12	0.029958
107	RELIEF OPERATOR	CASAS	860820	196	0.07	0.048217
108	RELIEF OPERATOR	CASAS	860820	194	0.07	0.048217

OBS	JOB POSITION	EMPLOYEE NAME	SMPL DATE	TTL MIN	NATLSCO CONCEN A METH	TWA
109	RELIEF OPERATOR	RICHARDSON, J.	860820	149	0.05	0.040428
110	RELIEF OPERATOR	RICHARDSON, J.	860820	137	0.07	0.040428
111	RELIEF OPERATOR	RICHARDSON, J.	860820	111	0.07	0.040428
112	RELIEF OPERATOR	RICHARDSON, J.	860820	59	0.03	0.040428
113	SAW OPERATOR	CLAUSON, J.	860820	262	0.14	0.106303
114	SAW OPERATOR	CLAUSON, J.	860820	190	0.09	0.106303
115	SAW OPERATOR	MEIER, S.	860819	245	0.15	0.109869
116	SAW OPERATOR	MEIER, S.	860819	231	0.07	0.109869
117	SHIFT MECHANIC	BASTIANAS, H.	860820	283	0.00	0.011841
118	SHIFT MECHANIC	BASTIANAS, H.	860820	184	0.01	0.011841
119	SHIFT MECHANIC	SATHORNKICH	860820	291	0.02	0.285828
120	SHIFT MECHANIC	SATHORNKICH	860820	170	0.66	0.285828
121	SHIFT MECHANIC	SATORKICH, J.	861113	212	0.00	-0.007513
122	SHIFT MECHANIC	SATORKICH, J.	861113	182	0.00	-0.007513
123	SHIFT MECHANIC	WHITTAKER, W.	860820	226	0.05	0.053743
124	SHIFT MECHANIC	WHITTAKER, W.	860820	171	0.04	0.053743
125	STOREKEEPER	WALL, F.	860820	215	0.02	0.042642
126	STOREKEEPER	WALL, F.	860820	141	0.09	0.042642
127	STRIPPER OPERATOR	EATON, D.	860819	260	0.03	0.019860
128	STRIPPER OPERATOR	EATON, D.	860819	189	0.04	0.019860
129	STRIPPER OPERATOR	SONCRANT	860820	193	0.00	0.005207
130	STRIPPER OPERATOR	SONCRANT	860820	180	0.00	0.005207
131	STRIPPER OPERATOR	WILLIAMS, B.	860818	236	0.01	0.025751
132	STRIPPER OPERATOR	WILLIAMS, B.	860818	218	0.02	0.025751
133	SUPERVISOR	BEESON, J.	861105	422	0.01	0.007585
134	SUPERVISOR	BIXLER, G.	860820	218	0.00	0.015143
135	SUPERVISOR	BIXLER, G.	860820	161	0.04	0.015143
136	SUPERVISOR	DRISKILL, G.	860819	286	0.02	0.028175
137	SUPERVISOR	DRISKILL, G.	860819	184	0.03	0.028175
138	SUPERVISOR	GARCIA, E.	860819	249	0.05	0.114174
139	SUPERVISOR	GARCIA, E.	860819	190	0.13	0.114174
140	SUPERVISOR	GLOVER, D.	860819	194	0.01	0.011134
141	SUPERVISOR	GLOVER, D.	860819	267	0.01	0.011134
142	SUPERVISOR	HERRERA, J.	860819	224	0.03	0.021450
143	SUPERVISOR	HERRERA, J.	860819	226	0.00	0.021450
144	SUPERVISOR	PRICE, L.	861105	431	0.00	0.007273
145	SUPERVISOR	SCHIELKE, R.	860818	227	0.02	0.018045
146	SUPERVISOR	SCHIELKE, R.	860818	189	0.01	0.018045
147	SUPERVISOR	VOIGHTLANDER, C.	861104	206	0.06	0.061694
148	SUPERVISOR	VOIGHTLANDER, C.	861104	212	0.01	0.061694
149	TRAY LOADER	ANAYA, M.	860820	215	0.03	0.028182
150	TRAY LOADER	ANAYA, M.	860820	174	0.01	0.028182
151	TRAY LOADER	HEUTON, D.	860818	238	0.01	0.003793
152	TRAY LOADER	HEUTON, D.	860818	213	0.02	0.003793
153	TRAY LOADER	LEDFORD, J.	870107	239	0.00	0.004477
154	TRAY LOADER	LEDFORD, J.	870107	190	0.01	0.004477
155	TRAY LOADER	RUSSELL, R.	860819	300	0.00	0.003582
156	TRAY LOADER	RUSSELL, R.	860819	137	0.00	0.003582
157	TRAY LOADER/TRUCK DRIVER	COLE	860820	217	.	.
158	TRAY LOADER/TRUCK DRIVER	COLE	860820	172	.	.
159	TRAY LOADER/TRUCK DRIVER	SANIGA, E.	860819	258	.	.
160	TRAY LOADER/TRUCK DRIVER	SANIGA, E.	860819	189	.	.
161	TRAY LOADER/TRUCK OPERATOR	COLE, H.	861204	352	0.00	0.000000
162	TRAY LOADER/TRUCK OPERATOR	COLE, H.	861204	66	0.01	0.000000

OBS	JOB POSITION	EMPLOYEE NAME	SMPL DATE	TTL MIN	NATLSCO CONCEN A METH	TWA
163	TRAYLOAD/TRUCK OPERATOR	SANIGA, G.	861113	220	0.00	-0.005006
164	TRAYLOAD/TRUCK OPERATOR	SANIGA, G.	861113	195	0.01	-0.005006
165	TRUCK DRIVER	GALVIN, D.	860820	266	0.05	0.041998
166	TRUCK DRIVER	GALVIN, D.	860820	225	0.03	0.041998
167	TRUCK MECHANIC	CHUTE, R.	860819	252	0.01	0.016025
168	TRUCK MECHANIC	CHUTE, R.	860819	164	0.02	0.016025
169	TRUCK OPERATOR	SANDERS, A.	860820	272	0.01	0.039500
170	TRUCK OPERATOR	SANDERS, A.	860820	221	0.03	0.039500
171	TRUCK OPERATOR	STANFIELD, R.	860818	275	0.02	0.013798
172	TRUCK OPERATOR	STANFIELD, R.	860818	177	0.01	0.013798
173	WET TESTER	CONTRERAS, J.	861211	315	0.38	0.098049
174	WET TESTER	CONTRERAS, J.	861211	98	0.50	0.098049
175	WET TESTER	GASH, D.	860820	261	0.01	0.064441
176	WET TESTER	GASH, D.	860820	224	0.11	0.064441
177	WET TESTER	STEWARD, R.	860820	262	0.03	0.030050
178	WET TESTER	STEWARD, R.	860820	222	0.03	0.030050
179	1/4 LATHE OPERATOR	SUAREZ, A.	861113	216	0.34	0.254084
180	1/4 LATHE OPERATOR	SUAREZ, A.	861113	221	0.12	0.254084
181	42" MILL	DOBBS, P.	860820	263	0.06	0.130359
182	42" MILL	DOBBS, P.	860820	221	0.09	0.130359

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ASBESTOS INFORMATION ASSOCIATION
NORTH AMERICA
1745 Jefferson Davis Highway, Crystal Square 4, Suite 509
Arlington, Virginia 22202 • (703) 979-1150

February 10, 1987

Memorandum For: AIA/NA MEMBERS (less Canadian Producers)

Subject: Dust Measurement Record - Workplace (DMR 1) (Asbestos International Association)

Please find enclosed a copy of the Asbestos International Association's (AIA) memorandum of February 3, 1987 and attachments thereto.

You will recall from previous efforts of this nature that the AIA, with approval of its Governing Council, has collected information on dust levels in factories and mines and mills from companies belonging to national associations that are members of the Asbestos International Association. Surveys were conducted for 1983, 1984, and 1985. This survey applies to 1986.

It is understood that the asbestos producers in Canada will be submitting their information as coordinated by The Asbestos Institute.

Accordingly, AIA/NA members (less Canadian producers) are requested to give close attention to the enclosures at your earliest convenience. Return of the DUST MEASUREMENT RECORD - WORKPLACE (DMR 1) to this office by April 1, 1987 would allow for collation of the information and transmission to the AIA within the timeframe requested. Presentation of this data on a world-wide basis is planned during the AIA Biennial Conference scheduled for May 19-22 in Montreal.

Thank you in advance for your assistance on this project.

B. J. Pigg
President

Enclosures

cc: Gary Nash, AI (less encls)
Sir Neville Stack, AIA (less encls)

ASBESTOS INTERNATIONAL ASSOCIATION

(Limited by Guarantee)

68 GLOUCESTER PLACE, LONDON W1H 3HL, ENGLAND

MEMORANDUM

To:	Member Associations	In reply please quote:	AIA/20/2/12/HAS
From:	Director General	Your Ref:	
Subject:	See below	Date:	3 February 1987

Subject: Dust Measurement Record - Workplace (DMR 1)

Please find enclosed an AIA Dust Measurement Record form for Workplaces (DMR 1).

You will remember that last year (our memo AIA/20/2/12/HAS dated 31 January 1986) we requested you to arrange for the completion of these forms in your area for the year 1985.

The Governing Council, on receipt of the results of the survey, were keen for the survey to be repeated for 1986. The lessons learnt from the 1983,1984 and 1985 surveys have been put to use in slightly re-designing the form for 1986.

Would you kindly send copies of the form to your Members asking them to record the information in such a way that data from plants in the same branch are on one form.

In turn, could you collate the information received from different firms by branch (without any identities being divulged) and return the forms to AIA by 10 April next, so that the total results can be drawn up by the Dust Advisory Panel.

It is hoped to send you soon a copy of the Dust Evaluation Report for 1985.

T R Stack

Director General

cc Executive Committee
Dust Advisory Panel

NOTES FOR GUIDANCE ON COMPLETING THE DUST MEASUREMENT RECORD FOR THE WORKPLACE (DMR 1)

-=-=-=-=-

These notes are a guide to the completion of the AIA Dust Measurement Record submitted to each Member Association. It is required that each country should nominate a co-ordinator who will be responsible for the return of the completed forms to AIA. The source of information may vary from company to company since some will have a central dust counting service and others will carry out such work independently at each individual factory. The final aim is is to have one Dust Measurement Record for each product group branch in a country.

1 - Country Association

This is self evident. If an Association covers more than one country, there should be a separate return for each country.

2 - Name and address of co-ordinator

It is necessary to supply the name and address of a technically qualified co-ordinator who can be contacted to answer any queries about the filled-in forms.

3 - Product Group

If there is more than one product group on the same factory site, separate forms should be completed for each product branch. Please, circle the appropiate product group.

4 - Number of Mines/Mills/Factories

The number of individual production units is to be recorded.

5.a) Total Workforce

This figure should include all personnel on the pay roll at the time of completing the record - office, medical, service, etc. The figures recorded in Section 8 (table) should be restricted to the number of workers who are included in the monitoring survey.

.../

5.b Workforce involved in an asbestos process

This figure should include only those workers who, at some stage, during an asbestos manufacturing process, have to deal with raw asbestos or any product containing it. This figure should be less than the total workplace figure but may well be greater than the figure for the number of workers under survey (see 8.2)

6 - Method in use

Only membrane filter results should be reported.

Please state the method used if different to the standard RIM 1; even small deviations from RIM 1 should be reported. If more than one method is used please specify.

7 - Range of sampling time

By reporting the range and typical sampling times used one can ascertain whether the determined values of dust concentrations between different countries and/or measuring centres are comparable, since the sampling times determine the detection limit.

8 - Data

8.1 - Number of monitored sampling locations

In reporting the dust concentrations, the results of personal and static sampling (calculated as time weighted averages on an 8 hours basis) should be reported separately. For each monitored sampling location the annual, mean value has to be entered if more than one measurement took place in this location over the year. These mean values indicate to which concentration columns the respective monitored sampling locations have to be allocated. The number of monitoring sampling locations in the respective concentration ranges must then be entered into these columns.

8.2. Number of workers under survey

Report the number of workers under survey in each dust concentration category (number should include workers of all shifts). The numbers needed here are those directly working in the monitored sampling locations.

8.3 Number of samples taken over the year

Here the total number of samples (personal/static) taken over the year have to be entered.

DUST ADVISORY PANEL OF THE A.I.A.

DUST MEASUREMENT RECORD - WORKPLACE (DMR.1)

Year _____

1 - Country/Association _____

2 - Name and address of coordinator _____

_____

3 - Product Group :

Mining	Milling	Asb.Cement	Friction	Textile	Seals	Millboard
Other (specify) :						

4 - Number of factories _____

5a) - Total workforce (to include all personnel on pay roll)_____

5b) - Workforce involved in any asbestos process
(raw asbestos and subsequent processes) _____

6 - Membrane filter method in use : RTM.1 [ ] Other (Specify) [ ]

7 - Sampling duration :

Typical sampling duration : _____min Range (mini-maxi)_____min

8 - Data :

			Dust Concentrations (*) - C (f/cm3)			
		Numbers	C ≤ 0,5	0,5 < C ≤ 1	1 < C ≤ 2	2 < C
Number of monitored sampling locations	P					
	S					
Number of workers under survey						
Number of samples taken over the year	P					
	S					

P = personal S = static

(*) Calculated as TWA/8 h basis

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