

INTRACOMPANY CORRESPONDENCE

R-98 (Rev. 1-68)



FROM:	Ronald E. Benton - Industrial Hygiene, GOR
TO:	K. W. MURPHREE - SAN PATRICIO
COPY:	Dr. R. D. Gamble , Terry Carter - San Patricio; H. V. Helton, T. H. Brown, D. E. Thrasher, J. R. McGill, W. A. Wright, D. B. Mortimer, Dr. E. C. Irby - EXO; B. J. Sasser - Koger; Allen Hill - San Patricio
DATE & SUBJECT:	ASBESTOS SURVEY, 1981 June 15 SAN PATRICIO REDUCTION PLANT

PLAINTIFF'S
EXHIBIT

RMC-406

At the direction of the Industrial Hygiene Department, Mr. Allen G. Hill, chemist at the San Patricio plant, evaluated employee exposure to asbestos fibers, while removing insulation material from the #9 anode paste mixer, 1981 April 16 and 20. Results indicate compliance with current OSHA guidelines concerning asbestos. Medical surveillance, however, is necessary for all employees involved in the demolition/removal of asbestos-containing material.

Personal samples for asbestos were collected on three millwrights involved in the above mentioned job. Samples were collected on open-faced Millipore Type AA membrane filters, using MSA Model G. sampling pumps operated at 2.0 lpm. The employees involved in this procedure were supplied with protective head coverings, disposable coveralls, boots, and gloves, and either the American Optical R1050 or MSA Dustfoe 88 respirator. Asbestos fiber counts were determined by phase contrast microscopy (NIOSH P&CAM 239) at the Metallurgical Research Division Industrial Hygiene Laboratory, in Richmond. Results appear in the attached table.

As can be seen from the data, all exposures were well below the current 8-hour time-weighted average, as well as ceiling value standard. It should be noted, however, that all three millwrights' 8-hour time-weighted exposures were above 0.1 fibers/cc, which is the action level for medical surveillance. Consequently, all employees involved in this insulation material removal job should be followed medically--annual chest x-ray and pulmonary function tests. In addition, monitoring of employee exposure to asbestos should continue for any future demolition/removal operation involving asbestos-containing material.

If I may be of any further assistance, please contact me.

Ronald E. Benton
Ronald E. Benton

REB/mjm

Att.

RMC0800260000554

SAN PATRICIO REDUCTION PLANT

ASBESTOS SAMPLING STUDY

1981 April 16 & 20

SAMPLE NUMBER & DESCRIPTION	TIME		ASBESTOS CONC. ¹ (Fibers/cc)	8-Hr. TWA ² CONC.
	ON	OFF		
MILLRIGHTS - Removing insulation material from #9 carbon plant mixer 01/04/16				
SPA20 Vanderslice, R.	7:46a	8:22a	0.39	0.22
25 "	8:22a	8:30a	1.18	
27 "	9:32a	9:49a	1.67	
29 "	9:49a	10:00a	0.86	
33 "	10:00a	10:43a	0.15	
37 "	12:58p	1:06p	1.58	
39 "	1:06p	1:12p	2.89	
41 "	1:12p	1:43p	0.10	
46 "	2:21p	2:55p	0.05	
SPA22 Wilbanks, R.	7:50a	8:20a	1.16	0.35
24 "	8:20a	8:29a	2.98	
28 "	9:34a	9:50a	3.75	
30 "	9:50a	9:56a	3.68	
32 "	9:56a	10:02a	2.37	
34 "	10:02a	10:44a	0.08	
38 "	12:59p	1:33p	0.45	
43 "	1:39p	1:48p	0.18	
47 "	2:27p	2:56p	0.05	
SPA21 Witzche, L.	7:48a	8:19a	0.41	0.20
23 "	8:19a	8:29a	2.05	
26 "	9:37a	9:53a	0.69	
31 "	9:53a	10:35a	0.19	
35 "	10:35a	10:42a	2.71	
36 "	12:58p	1:07p	0.35	
40 "	1:07p	1:13p	1.05	
42 "	1:13p	1:34p	0.45	
44 "	1:41p	1:47p	0.53	
45 "	2:20p	2:53p	0.05	
01/04/20				
SPA49 Vanderslice, R.	7:37a	8:11a	0.42	0.04
53 "	8:11a	8:22a	0.29	
SPA48 Wilbanks, R.	7:35a	8:10a	0.09	0.007
52 "	8:10a	8:23a	0.00	
SPA50 Witzche, L.	7:45a	8:09a	0.13	0.007
51 "	8:09a	8:22a	0.00	

¹OSHA standard for asbestos is 10 fibers/cc, 15-minute ceiling value.

²OSHA standard for asbestos is 2 fibers/cc, 8-hour time-weighted average exposure.

INTRACOMPANY CORRESPONDENCE

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*Young*
Please see me
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FROM: R. E. Benton, Industrial Hygiene, GOR

TO: K. W. MURPHY - SAN PATRICIO PLANT

COPY: Dr. R. D. Gamble - San Patricio; T. N. Brown, H. V. Helton, D. E. Thrasher, J. R. McGill, W. A. Wright, Dr. E. C. Irby, D. B. Mortimer - EXO; B. J. Sasser, Koger;

DATE & SUBJECT: 1981 February 19 SAN PATRICIO REDUCTION PLANT - ASBESTOS SAMPLING STUDY

At the direction of the Industrial Hygiene Department, Mr. Allen G. Hill, chemist at San Patricio evaluated employee exposure to asbestos fibers while removing insulation material from the exhaust stack and fan housing of the #34-651-640 carbon plant ball mill on 1980 November 19. Personal samples for asbestos were collected on two millwrights involved in the above mentioned operation. Samples were collected on Millipore Type AA membrane filters using MSA Model G sampling pumps operated at 2.0 lpm. It should be noted that employees involved in this job were required to wear cloth head coverings, disposable coveralls, disposable rubber boots and gloves, and the 3M 9910 respirator. Asbestos fiber counts were determined by phase contrast microscopy (NIOSH Method P & CAM 239) at the Metallurgical Research Division Industrial Hygiene Laboratory. Results appear in the attached table.

As can be seen from the data all exposures were well below the current OSHA 8-hour time-weighted average as well as ceiling value standard. It should be noted, however, that Mr. Witzsche's 8-hour time-weighted exposure was above 0.1 fibers/cc, which is the action level for medical surveillance. Mr. Garcia's exposure was only slightly below that level at 0.06 fibers/cc. Consequently, all employees involved in the above mentioned job should be followed medically - annual chest X-Ray and pulmonary function tests.

If I can be of any further assistance in this area, please feel free to contact me at any time.

Ronald E. Benton

Ronald E. Benton

REB:jct

Attachment

RECEIVED
MAR 20 1981
PERSONNEL DEPT.
SAN PATRICIO PLANT

RMC0800260000556

SAN PATRICIO REDUCTION PLANT

ASBESTOS SAMPLING STUDY

1980 November 19

<u>Sample No. & Description</u>		<u>Time (min.)</u>	<u>8-hour TWA Asbestos Conc. (Fibers/cc)¹</u>	<u>Asbestos Conc. (Fibers/cc)²</u>
SPA-1	, Millwright Shovelling & bagging wet insulation material from floor area	21	0.00	0.06
SPA-4	, Removing duct & fan housing insulation	15	0.11	
SPA-5	, Removing duct & fan housing insulation	15	0.63	
SPA-8	, Removing duct & fan housing insulation	11	0.00	
SPA-9	, Removing duct & fan housing insulation	15	0.11	
SPA-12	, Removing duct & fan housing insulation	15	0.42	
SPA-14	, Removing duct & fan housing insulation	15	0.53	
SPA-16	, Wetting down duct & fan housing Shovelling & bagging of wet insulation material on floor	30	0.00	
SPA-18	, Shovelling & bagging wet insulation material on floor	71.5	0.02	

SAN PATRICIO REDUCTION PLANT

ASBESTOS SAMPLING STUDY

1980 November 19

<u>Sample No. & Description</u>		<u>Time (min.)</u>	<u>Asbestos Conc. (Fibers/cc)¹</u>	<u>8-hour TWA Asbestos Conc. (Fibers/cc)²</u>
SPA-2	, Millwright Shovelling & bagging wet insulation material from floor area	18.5	0.09	0.11
SPA-2	, Removing duct & fan housing material	15	0.00	
SPA-6	, Removing duct & fan housing material	15	0.74	
SPA-7	, Removing duct & fan housing material	11	0.14	
SPA-10	, Removing duct & fan housing material	15	0.84	
SPA-11	, Removing duct & fan housing material	15	0.32	
SPA-13	, Wetting duct & fan housing & material on floor. Continuing removal of material from floor	15	0.74	
SPA-17	, Removal of material from floor. Wetting down material on floor. Shovelling & bagging wet material on floor	30	0.11	
SPA-19	Shovelling & bagging wet insulation material on floor	71.5	0.09	

(1) OSHA ceiling value for asbestos is 10 fibers/cc as measured over a 15 minute time period.

(2) OSHA standard for asbestos is 2 fibers/cc, 8-hour time-weighted average.