

Department of Environmental Sciences

September 11, 1980

M. O. Varner
Manager

Mr. George Sidlo
CAPCO Pipe Co. - Ragland Plant

Industrial Hygiene Air Sample Results

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I have reviewed the results of the special asbestos sampling conducted at the Ragland Plant during June 17-18, 1980. These results were reported to you previously via telephone by Frank Burton. These results merit some comments.

Considerable variation between results of samples taken at the same location or on the same worker are evident. The apparent magnitude of samples taken on the dust collector tender during shakedown of the baghouse are considerably lower than other results obtained during normal production conditions, opposite the results one would normally expect under these circumstances. In addition, it is quite puzzling to note that the results of the concomitant samples taken on Mr. Daffron (while wearing the Racal A-3 air-purifying system and helmet) would indicate the asbestos concentrations in the breathing zone inside the Racal helmet to be about 245 times that concentration apparently measured on the lapel outside the helmet. This is also completely opposite the results one would expect.

Mr. Frank Burton has examined the filter cassettes, rechecked the labels, and recounted the fibers on another section of each of the following samples:

Name	Date	Cassette No.	Original Value (fibers/cc)	Recount of 9/9/80 (fibers/cc)
L. Daffron	6/17/80	R-5	6.02	5.23
L. Daffron	6/18/80	R-10	4.53	4.38
L. Daffron	6/18/80	R-12	<0.022	<0.022
L. Daffron	6/18/80	R-13	5.39	9.75
Batch Mix Area	6/17/80	R-9	<0.015	<0.015
Batch Mix Area	6/17/80	R-7	6.92	5.35

Mr. Burton showed these cassettes to the undersigned and we noted some loose particulates (lint-like) in filter cassettes R-5 and R-13, but not in the other cassettes. This leads us to inquire if these samples were possibly inadvertently mis-

labelled or somehow contaminated. In summary, I am at a loss to definitively interpret or explain these results. I recognize, as emphasized by Mr. Burton, that the NIOSH method used to count the fibers has many deficiencies, i.e., is not very reproducible or accurate (see repeat values above), the filters can be easily contaminated even during the analytical procedure, etc.

The apparent anomalies observed in these results may be caused by several different factors which cannot be easily isolated. Therefore, it is recommended that repeat sampling be given serious consideration. D.O.E.S. stands ready to assist in any way we can.

In closing, I want to express my gratitude for the extraordinary southern hospitality shown me during the environmental survey in August at the Ragland Plant. I am impressed by the fine job you and your associates are doing and I look forward to a continued beneficial relationship.



Lowell D. White, Ph.D.
Senior Environmental Scientist

LDW/cah
Attach.

cc: SGLeyshock (w. attach.)
KWNelson "
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ASARCO INC.
RAGLAND
PERSONAL MONITOR SAMPLING RESULTS
(FOR COMPANY USE ONLY)

NAME S.S. NUMBER	JOB TITLE (RESP. TYPE)	1980 DATE & TIME SHIFT	SAMPLING TIME (MIN.)	ANAL- YSIS	CONC'N. (f1/cc)
A/C PRODUCTION					
JONES 418560044	BATCH MIXER 7	6/17 D	24	ASB	.50
JONES 418560044	BATCH MIXER 7	6/17 D	62	ASB	.24
JONES 418560044	BATCH MIXER 2	6/17 D	67	ASB	.72
JONES 418560044	BATCH MIXER 7	6/17 D	69	No asbestos fibers found	
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/17 D	56	ASB	6.02
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/17 D	57	No asbestos fibers found	
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/17 D	59	No asbestos fibers found	
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/18 D	37	ASB	4.53
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/18 D	36	No asbestos fibers found	
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/18 D	30	ASB	5.39

C. P.

ASARCO INC.
 RAGLAND
 STATIONARY SAMPLER RESULTS
 (FOR COMPANY USE ONLY)

SAMPLE LOCATION	1980 DATE	SAMPLING TIME (MIN.)	ANAL- YSIS	CONC'N. (fi/cc)
A/C PRODUCTION				
BATCH MIX AREA(WHITE ROOM)	6/17	60	ASB	6.92
BATCH MIX AREA(WHITE AREA)	6/17	57	No asbestos fibers found	
DUST COLLECTOR AREA	6/18	39	ASB	.22
DUST COLLECTOR AREA	6/18	57	No asbestos fibers found	

ASARCO INC.
RAGLAND
PERSONAL MONITOR SAMPLING RESULTS
(FOR COMPANY USE ONLY)

NAME S.S. NUMBER	JOB TITLE (RESP. TYPE)	1980 DATE & TIME SHIFT (MIN.)	SAMPLING ANAL- CONC'N. YSIS (fl/cc)
A/C PRODUCTION			
JONES 418560044	BATCH MIXER 7	6/17 24 D	ASB .50
JONES 418560044	BATCH MIXER 7	6/17 62 D	ASB .24
JONES 418560044	BATCH MIXER 2	6/17 67 D	ASB .72
JONES 418560044	BATCH MIXER 7	6/17 69 D	No asbestos fibers found
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/17 56 D	ASB 6.02
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/17 57 D	No asbestos fibers found
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/17 59 D	No asbestos fibers found
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/18 37 D	ASB 4.53
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/18 36 D	No asbestos fibers found
DAFFRON 420540596	DUST COLLECTOR TEND 7	6/18 30 D	ASB 5.39

C. P.