

**AMERICAN SMELTING AND REFINING COMPANY**

DEPARTMENT OF ENVIRONMENTAL SCIENCES

3422 SOUTH - 700 WEST, SALT LAKE CITY, UTAH 84119

M. O. VARNER
Manager

April 16, 1975

MEMORANDUM TO: M. O. Varner

FROM: J. B. Richardson

RE: INA Inspection at CAPCO Ragland

PLAINTIFF'S EXHIBIT

ASA-491

On Tuesday, April 8, 1975 the writer accompanied Wayne Limbaugh (Quality Control - Ragland Plant), Alan Jurisich (Industrial Hygienist for the Insurance Company of North America, or INA) and Alan Segnar (INA-Industrial Hygiene Trainee) on an industrial hygiene inspection of the Ragland facility. Following a walk-through of the plant, preparations were made to begin air sampling. The INA procedure for air sampling initiated a discussion on calibration technique. Mr. Jurisich has traditionally taken an initial rotameter reading only on the M.S.A. sampling pump. His assumption had heretofore been that no battery fatigue occurs over sampling time and the rotameter reading remains the same. It was demonstrated that in three of the four personal monitors the rotameter will drop as much as 20% in a sampling period of four to five hours. (One of the pumps maintained its original rotameter reading). Although the practice of taking an initial rotameter reading only would have biased the sampling results in our favor in three of the four samples, it was pointed out that it is not in our best interest to obtain "low" readings. As a result of the demonstration Mr. Jurisich agreed to take a final rotameter reading and average both initial and final readings to obtain an average air flow.

Mr. Jurisich gave assurance that D.O.E.S. will receive a full report of his survey. A description of the types of sampling conducted is as follows:

I. Asbestos Sampling:

Four M.S.A. Model G pumps were equipped with open-face millipore filters. These personal monitors were used to collect samples of airborne asbestos fibers in the breathing zones of the following employees:

- A. Batch operator
- B. Cut-off saw operator
- C. Tap Coupling operator
- D. Pipe lathe operator

ASARCO ALV 0000938

Each operator wore a personal monitor for about five hours. Filters were changed approximately every hour to prevent excess fiber loading.

II. Sound Level Measurements:

A General Radio octave band analyzer was used to measure sound levels at various locations throughout the plant. Before and after sampling the instrument was calibrated with a standard noise source. Locations of sound level measurements are listed below:

- A. Pipe Lathe
- B. Coupling Lathe
- C. Cut-off Saw (99 dBA level for about one hour per shift)
- D. Batch Area (92 dBA)
- E. Finishing Line - Pumps (93 dBA)
- F. M.O.A. Lathes
- G. Coupling Cut-off Lathe (91 dBA)
- H. Coupling Lathe (94-95 dBA level for about one hour per shift)
- I. Hydraulic Pump for Pipe Lathe (98 dBA)

All areas without notations had measured sound levels of less than 90 dBA. Mr. Jurisich indicated that there appeared to be no serious noise problems. Many areas (D,E,G,H) are borderline when compared to the 8-hour, 90 dBA OSHA standard. It will probably be recommended that the noise sources in items E and I be enclosed.

III. Ventilation:

No ventilation measurements were taken. A smoke tube (TiCl_4) and squeeze bulb were used to demonstrate capture velocities on several hoods. The conceptual plans for an up-graded plant-wide ventilation system were shown and explained by Jim Wright, Plant Engineer. Three additional baghouses are scheduled to be on line in a matter of weeks. Marginal local exhaust ventilation found presently at several pipe finishing stations should improve measurably with the adjunct of the new system. Mr. Jurisich was impressed with the over-all plans. He expressed confidence that the additional

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ventilation could very well reduce airborne asbestos levels below the 2 fiber limit (effective July 1976) at stations B,C, and D noted under Asbestos Sampling.

John B. Richardson

John B. Richardson
Environmental Specialist

JBR/ms

cc: JCarpenter
MLMessel
DHSoutar
KWNelson
AJGillespie, Jr./ JPStetson
EHHaug
RCBeckstead.
Dr. CHHine

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