

FILE NAME: Ameron (AME)

DATE: 1972 May 5

DOC#: AME004

DOCUMENT DESCRIPTION: Unpublished Internal Report – Air Sampling
for Asbestos at Ameron Plant



HEALTH SCIENCE ASSOCIATES

TECHNICAL AND ADVISORY SERVICES: OCCUPATIONAL HEALTH • RADIATION SAFETY

10710 FELSON CIRCLE, CERRITOS, CALIF. 90710
TELEPHONE: (213) 867-4100 • 372-8931

AIR SAMPLING FOR ASBESTOS

at

Ameron Corrosion Control Division
201 North Berry
Brea, California 92621

for

Ameron, Incorporated
400 South Atlantic Boulevard
Monterey Park, California 91754

on

May 5, 1972

By: D. A. Kandel
Certified Industrial Hygienist (CIH)

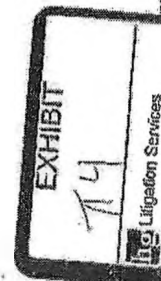
Approved:



Howard B. Spielman, CIH, CSP
HSA Principal

June 19, 1972

LICENSING • CALIBRATION • LEAK TESTING • SURVEYS • X-RAY SHIELDING DESIGN • INDUSTRIAL SAFETY
TOXIC MATERIAL CONTROLS • ADMINISTRATIVE GUIDES • NOISE SURVEYS • PERSONNEL TRAINING



48

AMER-MEL 00232

INTRODUCTION

Pursuant to verbal authorization from Mr. G. M. "Bill" Torres, Corporate Safety Manager, on May 5, 1972 air samples were collected at four work stations in the Bondstrand building. The air was sampled using Millipore type AA filters in conjunction with Mine Safety Appliances (MSA) Monitaire pumps. The asbestos fibers on each filter were counted at 450 magnification using phase contrast illumination.

RESULTS

Table I, below, shows the sample locations, sampling times, air flow rates and atmospheric concentrations of asbetos fibers.

TABLE I
ASBESTOS FIBER COUNTS

<u>SAMPLE LOCATION</u>	<u>TIME</u> <u>(Min.)</u>	<u>FLOW</u> <u>(liters/min)</u>	<u>NO. FIBERS/</u> <u>cc AIR</u>
Batch mixing compound for fittings - OBZ*	60	1.75	51.2
Batch mixing area near resin mixer--General area sample	40	1.75	18.9
Pattern Cutting - OBZ	60	1.94	3.4
Wrapping asbestos liner on mandrel - OBZ	60	2.18	3.4
Cutoff saw - OBZ	25	2.08	1.9
*Operator's breathing zone			

STANDARDS

On June 7, 1972 OSHA published its permanent standard for exposure to asbestos dust (copy attached). Table II, summarizes the permissible exposure standards.

TABLE II
PERMISSIBLE EXPOSURE TO AIRBORNE
CONCENTRATION OF ASBESTOS FIBERS

<u>Effective Date</u>	<u>Exposure Condition</u>	<u>No. Fibers/cc Air</u>
July 7, 1972	8 hr. time-weighted average	5.0
July 7, 1972	Ceiling concentration	10.0
July 1, 1976	8 hr. time-weighted average	2.0

REMARKS

The determinations of airborne concentrations of asbestos fibers were made in accordance with the requirements of Section 1910.93 a (e) of the new OSHA standard.

The sampling periods were such that the samples are representative of the 8 hour time-weighted average.

The batch mixing process produced dense clouds of particulates during several operations of the mixing cycle of both the large and small batches. There was no local exhaust ventilation and the air movement was such that outdoor air flowed through the mixing area into other areas of the building. It appeared that this contamination caused general asbestos concentrations in the entire work area adjacent to the mixing area.

The liner layout, cutoff, and pattern cutting operations did not appear to produce the type of asbestos contamination that would account for the levels that were measured. Therefore, it is assumed that the fiber counts at these operations represented general contamination caused by the batch mixing process and did not necessarily represent exposures specifically due to asbestos handling in these operations.

RECOMMENDATIONS

1. Relocate the batch mixing process to an isolated area or isolate the present work area from the rest of the work areas.
2. Provide local exhaust ventilation and dust collection for the mixing process.
3. Provide approved respiratory protective devices until ventilation and collection systems are installed, and limit batch

RECOMMENDATIONS (Continued)

mixing to periods when other employees are not present (such as another shift, Saturday, etc.).

4. Provide medical examinations for workers in the batch mixing area.

5. Institute periodic environmental monitoring of all operations where airborne concentrations of asbestos may reach the breathing zone of employees. The periodicity should be not less than every six months.