



Interoffice Communication

To A. H. Sather
From J. V. Uptain
Date March 31, 1978
Subject CHEMICAL EXPOSURE MONITORING SUMMARY
FIRST QUARTER

This is the first issue of the Aberdeen Chemical Exposure Monitoring Summary, which is to be issued quarterly. Monitoring results are tabulated in Tables I, II and III.

The current thrust of the Aberdeen monitoring effort is to adequately define exposures related to the 50, "Class A, Type I" materials used in the plant. These chemicals are those known to cause serious bodily damage and for which exposure standards exist.

I. COMPOUND AREA HIGH VOLUME AIR SAMPLING

A Color Weigh Room

Based on the results of "high-volume" air sampling in the Compound areas last year, it was concluded that exposures in this room were possibly excessive. To be more definitive, some 13 samples were taken between 1/31/78 and 2/27/78, using a high volume sampler and cellulose filter paper. Samples were taken by placing the sampler as close to the workman as possible during his routine color weighing tasks. The samples were then forwarded to Ponca City for emission spectrophotometry.

At writing, six (6) samples have been analyzed. The pertinent results are shown in Table I (attached).

As can be seen in Table I, the results indicate excessive airborne concentrations of Antimony, Barium, Cadmium, Lead, and Total Particulates.

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I. COMPOUND AREA HIGH VOLUME AIR SAMPLING (Cont.)

B. Other Compound Areas

At writing, 19 (33% of anticipated) other high volume air samples have been taken at selected locations throughout the compound production areas. Although the samples have not yet been analyzed for heavy metals content, the total particulate concentrations are shown in Table II (attached).

These preliminary results indicate that particulate limits are approached or exceeded on the dry blend mezanine just above the 2nd floor.

Emission spectrophotometry of the samples, which will follow the color weigh room sample analysis, will disclose any excursions above tin limits.

II. DETECTOR TUBE-TYPE SAMPLING

Some nine (9) of the Aberdeen "Class A, Type I" materials are being measured using Drager-type chemical detector tubes. The results of monitoring (which is complete except for two (2) additional methanol samples) are shown in Table III (attached).

The results indicate no significant exposure problems with these chemicals, except for methanol. The "Brittle Point" test procedure used in the lab is obviously in need of modification to preclude further overexposures to this toxic material.



Gerald V. Uptain

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Attachments

- c. G. Draper
- Department Heads
- D. Kuhn - Houston
- J. Hall - Houston
- O. Steffey - Ponca City
- E. Solomon