

As pointed out in our previous reports, the eight hour time weighted average exposure limit established by OSHA will be reduced from 5 fibers/ml to 2 fibers/ml on July 1, 1976. During this survey, a total of 60 personal samples, representing 83% of all samples collected, exceeded this projected exposure limit. The plant should anticipate the 1976 reduction of the permissible limit. Plans for expansion of existing exhaust ventilation systems or provision of additional engineering controls should be based on the projected 2 fiber limit.

Analysis of the personal samples for lead disclosed no concentrations exceeding the proposed or "intended" threshold limit of .15 mg/M³. In most instances, a number of samples from each of the designated work areas were tested. None contained more than trace concentrations of lead. Control of exposure to airborne lead appears to be adequate at the present time.

DISCUSSION

Block Preform samples were collected on both the first and second shifts. As indicated, highest concentrations were encountered at Block Preform Machine No. P-4 operated by D. Jeffries. (Refer to sample numbers 45, 52, and 56.) Three samples were collected in series over three short time intervals to avoid filter loading and resultant masking of the fibers during analysis. This work station was selected for short term sampling because of the poor personal hygiene exhibited by the operator. Spillage, scattering, and generation of airborne particulates was most noticeable at this location.

Excessive concentrations encountered in the Block Preform Department may be partially attributed to the personal work habits and housekeeping practices of the individual operators. However, local exhaust systems at all work stations should be improved to affect maximum capture of airborne contaminants. Present design at each Block Preform unit consists of a flared exhaust hood suspended above the preform bench. Although face velocity is adequate, the design and location of the hood permits capture of only a fraction of the airborne material being generated during the preform cycle. In addition, an open, branch exhaust trunk is connected to the ventilation duct above the flared hood, but is serving no useful purpose at the present time. No ventilation is provided for the adjacent mix bin and weigh scale where a large share of the manual operations are conducted..