

Discussion:

The values found from the samples taken and evaluated for airborne dust (dust samples 1 and 2) indicated the dust hazard is only marginal; however, with poor operating techniques, the situation could be changed drastically. It is important that close supervision be given to this area at all times.

It was noted that when the asbestos weigh hopper was discharged, moderate amounts of dust (not necessarily asbestos) did escape from the openings in the weigh hopper. The holes were apparently the results of damage or mechanical modification.

The exhausts on the Lancaster mixer were checked and found, in some instances, to be dirty (large collections of material around opening) and damaged. The dust count obtained in the breathing zone of the operator when transferring the asbestos from the asbestos hoppers to the mixers (Sample #4) was possibly caused by the dust generated by the #2 Lancaster. A mix was dumped at #2 Lancaster during the sampling.

The exhaust system for the weigh hopper loading operations on the wet compounding lines consisted of hand operated dampers or valves which sometimes were left closed when material was being weighed out and others not in use left open. Some were not properly operated due to damaged linkages.

The situation, perhaps, can be corrected by some form of automatically opening and closing devices, similar to that used on the dry compounding lines.

The individual operating the vacuum transferring apparatus and transferring lead was exposed to excessively high concentrations of lead during the period of transfer.

It was also found that the discharge from the vacuum transferring apparatus contained an extremely high concentration of airborne lead and added to the overall contamination within the compounding department.

Until an improved method can be arranged for the transfer to this material, the operator should be equipped with an approved respirator for lead and the exhaust from the vacuum cleaner should be delivered to an exhaust system duct which will transfer it out of the building.

Dry Compounding - Conclusions:

1. The airborne lead from one sample, taken during the loading of the weigh hopper, in the dry compounding operation was found to be quite high. This was surprising since little or no lead was used for this batch; however, a high result from one sample is not too significant.
2. The airborne asbestos dust produced in the weighing operation of the dry compounding line is being adequately controlled.
3. The dust concentration at the dumping position of the dry line at the No.3 mixer on the first floor is just at the hygienic guide figure. However, the worker is not present for long periods of time so that this exposure is not particularly significant.