

AIRBORNE LEAD

Air sampling was conducted in the Strip Finishing, Compounding, Rolling, Brakeblok and Book Press Departments. This phase of the study was conducted to evaluate the exposure of the workers to airborne lead during drilling, grinding, dusting, champering, cut-off, rolling, pre-forming and compounding. The results of this investigation are summarized as follows:

CONCLUSIONS

Compounding:

1. A serious health hazard exists during lead weighing on the dry line in compounding. The airborne lead concentration was 4.33 milligrams per cubic meter; this exceeded the threshold limit of 0.2 milligrams. *High Pb. 4.33 mg/m³ - 0.2 mg/m³ threshold limit*
2. A borderline health hazard may exist at mixer No.1 when the batch material is discharged to the cart. An increase in the inward draft on the hood is indicated.
3. Airborne lead concentrations during dumping from blender to hammermill No.1 indicates a borderline health hazard may exist.
4. The exposure to airborne lead during lead handling on line No.2 and weighing is not considered a health hazard. Batch weighing and blender loading did not produce excessive airborne lead on the Dry Line.

Rolling:

5. Minimal concentrations of airborne lead existed at the rolling machines except backing machine No.6. At the rolling position the airborne lead level was 0.16 milligrams per cubic meter.

Strip Finishing:

6. Airborne lead did not exceed 0.1 milligrams per cubic meter at the operations in Coil or Industrial Strip Finishing Department.
7. Close surveillance on the exhaust systems is required where the higher lead contamination existed (0.1 milligrams). This consists of Automatic Champer No.2, back grinder No.3 and the exhaust of the Torit Collector for the automatic strip grinder.

Brakeblok:

8. Airborne lead in the finishing and preforming operations did not exist in sufficient concentrations to be considered a health hazard.