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LEAD-BEARING BAG HOUSE DUST

Ref.: Letter C. E. Dailey to J. A. Zapp, Jr., 1/3/74

From the information available, the dust from the lead recovery system might not meet the criteria of a "poisonous" dust. The inorganic lead halide compounds are definitely not Class A poisons and good information for classifying the dust as a Class B poison is lacking.

On the means of exposure and the toxicity of lead chloride and lead bromide:

- (1) These lead compounds are probably not Class B poisons by the skin absorption route as it is highly unlikely they will be absorbed through the skin.
- (2) By the oral route, lead chloride is only slightly toxic. Its approximate or minimum lethal dose for guinea pigs is 1500-2000 mg/kg. [Ref. Merck Index and Arch. Hygiene (German)]. The order of toxicity is similar when there have been studies performed on the same elemental bromide or chloride compound. Therefore, it could probably be said that by the oral route lead chloride and lead bromide are both only slightly toxic and would not be Class B poisons by this route.
- (3) There is no information on inhalation toxicity but it is the main means of lead poisoning because of the greater ease and rapidity of absorption when compared to the gastrointestinal route. Factors that affect the toxicity are solubility of the compound