THRESHOLD LIMIT VALUE FOR TETRAETHYL LEAD

(1967) 0.075 mg/m^3

(1968) Downward revision?

Basis for current (1967) TLV:

1. See attached documentation.

Basis for removal of TLV for TEL:

1. Industrial practice for the control of the toxic hazard due to TEL does not rely upon the principles inherent in the TLV, i.e., time-weighted average or ceiling concentration for "eight hour day", "breathing-zone" exposure of workers.

2. Thus the TLV value cannot be supported by industrial practice and there are no other data to support a different value.

3. Industrial practice has worked in a satisfactory manner for many years to prevent intoxication due to TEL. The maintenance of concentrations of TEL in air at an average of 0.075 mg/m^3 has been part of this practice. However, workers enter this environment on an irregular and intermittent time schedule.

4. If a worker was actually exposed to 0.075 mg/m^3 for eight hours per day (as the TLV would suggest would be safe), there are no data to support whether or not his absorption of TEL would be dangerous. Thus the current TLV may be misleading.

Basis for retaining a TLV for TEL:

1. Industrial hygienists, both in industry and government, are responsible for inspection of industrial processes involving TEL. These processes are under direct supervision, for safety purposes, by the manufacturers of TEL. However most industrial hygienists will want to have an independent means for estimation of the safety of the operation. Air measurements relative to the TLV are the traditional procedures.

2. Thus a meaningful TLV for use by industrial hygienists outside of the TEL manufacturers is desired.

Comments:

The TEL industry is faced with a request for data which will support a meaningful TLV. These data are not required by the industry itself, but rather by those who may want to inspect operations involving TEL.

This situation is somewhat novel in industrial hygiene circles, but is certainly no different from current practice in the drug and chemical additive industry. It is proper that industry not only be responsible for its own procedures for control and safety, but that it also establish the techniques by which these procedures may be inspected by health officials outside of the industry.