## DIRECTOR OF INDUSTRIAL HYGIENE AT CORPORATE LEVEL 1952 to 1973

## MR. MORSE CIRCULATED 1958 TLVS IN 1959 AND STATED:

The enclosed list of "Threshold Limits" are known under a variety of names, such as "maximum allowable concentrations, "toxic limits", etc. They are not exact delineations between hazardous and no-hazardous conditions, since they are derived from a variety of sources. Some are based upon studies with human subjects, others upon opinions derived by interpolating from animal experimental data, while still others are based merely upon unsupported opinions from industrial medical and hygiene authorities. Therefore, in actual practice, it is important to maintain air concentrations of these gases, vapors, dusts or mists within such levels where possible or protect workers by approved respiratory devices. It is our opinion that short-term exposures also should also should be maintained within such limits where practicable, because of the absence of good data on safe concentrations for preventing acute (sudden) poisoning. This approach is considered to be the best course of action because the human body does not respond in a direct arithmetic relationship with the amount of contaminant in the air. In other words, it would not be prudent to expose an individual for one hour to eight times the values shown in the enclosed table without respiratory protection".

6. MR. MORSE SPOKE AT THE USS SECOND ADMINISTRATIVE MEDICAL MEETING DECEMBER 1957 AND ADDRESSED THE FOLLOWING:

At 9:00 a.m. Wednesday, December 4, 1957 the meeting reconvened.

Mr. K.M. Morse presented "Environmental Health in the Speel Industry - II," covering the newer knowledge of the effect of industrial dusts on employees' lungs. He spressed the fact that free silica was no longer the only dust to be concerned about, but that any dust in sufficient amounts over sufficient time could impair lung function. Especially a combination of irritant gases, heat and dust is cause for concern. He cited a recent case in which a very reputable chest consultant in Pittsburgh, who has in the past examined many cases at company request, considered that the pulmonary fibrosis and emphysema he found in a soaking-pit crane operator was caused by the combination of dust, heat, and sulfur-dioxide fumes to which he had long been exposed. He described the old and new concepts of the term "pneumoconiosis" and indicated that while silica and asbestos were considered the sole causes in the past, now talc and diatomaceous earth had been added, and Shaver's Disease from the fusion of artificial abrasives, and more recently coal miners' pneumoconiosis.

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