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DR. PHILIP BOYD
Chief Medical Officer

OUR REF. MU/K.1.

YOUR REF.

June 27, 1958.

Dr. R.A. Kehoe,
University of Cincinnati,
The Kettering Laboratory,
College of Medicine,
Eden Avenue,
CINCINNATI 19,
Ohio,
U.S.A.

Dear Dr. Kehoe,

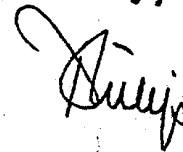
I thought you might like to see a copy of a letter sent to me by Dr. Lebedev of the Soviet Ministry of Health in Moscow. This letter is one of several in a correspondence which I have been having in relation to hygienic standards in the lead industry, and I think his views might be of interest to you.

The significance of this is not exactly unimportant, as I have already been approached by various German doctors on the standards set by the Russians in the light of atmospheric pollution with lead from automobile exhausts. There is the possibility that we may find German, Swiss and other authorities trying to sell the idea that the lead figures found in congested city areas represent a material hazard to health.

If you have time, I would be grateful for any comments you may wish to make on this matter.

With kindest personal regards,

Yours sincerely,



Encl.
PRB/jmr

KE 0010176

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TRANSLATION OF LETTER FROM THE SOVIET MINISTRY OF HEALTH, MOSCOW.

121-9/8-314

13th June, 1958.

Dear Dr. Boyd,

I hope you will forgive me for the delay in answering your letter in which you enquired for more specific information regarding the limiting admissible concentration of lead. I am very sorry, but I was engaged on service duties for a long time. I am glad to be able to give you the following information.

The limiting admissible concentration established in the Soviet Union for lead and its inorganic compounds in the atmosphere of industrial plants is 0.01 mg./cu. metre. This is 15 times lower than the corresponding figure established in the U.S.A. You were correct in this.

The figure of 0.01 mg. /cu. metre for lead was established on the basis of data obtained from the literature and from material collected in industrial observations, according to which this concentration does not produce any harmful effect on the human body. Recently, however, some observations have shown that prolonged exposure of experimental animals to lead aerosol in the concentration of 0.01 mg./cu. metre produced disturbance of the upper nervous activity, porphyrin metabolism, accumulation of lead in the bones and also pathologico-anatomical changes in organs and tissues, especially the brain and spinal cortex. This now appears to us to be a subject of some concern.

Apart from the figure referred to above, we in the Soviet Union have also established a limiting concentration for the atmosphere of populated zones; this is 0.0007 mg./cu. metre and represents a reliably safe concentration. This is due to the fact that the inhabitants, especially children, infirm persons and old people, may be within the zone for whole days. Employees in a plant where lead enters the atmosphere are allowed a six-hour working day.

It must be remarked that no direct correlation has been observed between the lead concentrations to which the body is exposed and lead elimination via the urine, since this latter is dependent on the general condition of the body: metabolism, nervous system, endocrine glands, etc. Lead-in-urine figures can have a decisive significance only when taken in conjunction with other clinical symptoms.

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(Contd).

COPY

I also wish to inform you that the limiting value for lead sulphide established by us is 0.5 mg./cu. metre.

I shall be glad to be of help in answering any further questions.

Yours sincerely,

Signed: Yu. D. Lebedev.

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