

JOHN U. BUCHANAN, M.D.
NORTH PHELPS STREET
YOUNGSTOWN, OHIO

May 16, 1939.

Dr. Robert A. Kehoe
Kettering Laboratory,
University of Cincinnati,
Cincinnati, Ohio.

Dear Dr. Kehoe:-

I am returning the copy of your Journal of Industrial Hygiene Vol. XV, No. 5 which you so kindly let me have.

We have not had a meeting yet to determine what we are going to have done about the lead problem. It may be, that after the officials have read the article, which is well written, by Edwin Dudley Martin, Assistant Chief Metallurgist of the Inland Steel Co., which appeared in part in the Metal Progress for May 1939, they will not feel so scared. A paragraph is as follows:

"The threshold value of, say 3.0 mg. in 10 cu. m. of air means that a man may be considered to be in surroundings not hazardous to his health if he is exposed during 8 hours out of every 24 to atmosphere containing lead in the average concentration of 3.0 mg. in 10 cu. m. During the 8 hours he may be exposed for a short time to a higher concentration, but this must be balanced by a sufficient period of exposure to lower concentration.Associated with lead there is likely to be a health hazard, but in the manufacture of lead-bearing steels there is a much lower exposure, and therefore less a health hazard than that which exists in many other industries.".....

If you are interested in reading this, and you cannot obtain a copy I will be glad to send you one.

Very truly yours,

Dr. John U. Buchanan

JUC/AGF

KE 0005084

N 7446

May 19, 1939

Dr. John U. Buchanan
North Phelps Street
Youngstown, Ohio

Dear Doctor Buchanan:

Thanks for returning the
series of articles which I loaned you.

I had already seen the article by Martin which appeared in Metal Progress. The article was well prepared and I was already familiar with its contents. However I do not believe one can afford to be too sanguine about the information given in this article since it does not cover enough experience to give the facts as they might develop if large quantities of such metal were to be manufactured and handled. Moreover I am disposed to be somewhat dubious of the threshold value of 3 milligrams per 10 cubic meters of air when dealing with metal fumes. As I have indicated to the Inland Steel people I should not want to see values in excess of 1-1/2 mgs. per 10 cubic meters in the air of these plants as the result of the volatilization of metallic lead. One might perhaps stretch a point and regard 2 mgs. per 10 cubic meters as reasonably safe. Even here, however, it would be advisable to be somewhat skeptical if the concentrations were much in excess of this figure periodically, and for shorter periods of time. Frankly I do not believe anything is to be gained by cultivating the point of view that this situation is less dangerous than it might at first appear to be. Although it is likely that this is the case, it is a matter of such doubt as to be the wrong point of view from which to start in the consideration of this type of hazard. I am not an alarmist, as you probably have observed, but in matters of this sort, it is necessary to go quite slowly until one has a considerable background of practical experience behind him.

Very truly yours,

RAK:is

Robert A. Kehoe, M.D.

KE 0005085

N 7446.01