

May 10, 1949

Mr. Manfred Bowditch,
Lead Industries Association,
420 Lexington Avenue,
New York City 17.

Dear Manfred:

I shall respond to your two letters of April 20 and 29 at this one time. The story on one [REDACTED] is that he was engaged in welding the exhaust stacks of airplanes on a goodly number of occasions. For reasons which I pointed out in my previous letter, this can give rise to significant exposure to lead. Mr. [REDACTED] had some type of illness, which, from his complete history may have been a mild type of lead poisoning. This is by no means certain, but it cannot be excluded. He then resorted to the use of a respirator in the performance of his work. He was seen by one of my associates some weeks later and subjected to a complete examination. Analyses of the urine and blood were carried out and at that time the concentrations of lead in blood and urine gave very scanty evidence of occupational lead exposure. The analytical results were at the upper edge of normal values. Moreover, there was no evidence at that time, of illness referable to lead absorption. He was advised to continue the precautionary measures in the conduct of his work.

With reference to the problem of orange and yellow orange crayons, and their possible relationship to hydrogen sulfide poisoning, I cannot say that I can arrive at a definite conclusion. However, I am more than a little skeptical. First, I see no reason to suppose that such exposure would give rise to a blueness of appearance, presumably cyanosis. Persons with hydrogen sulfide asphyxia, generally speaking, develop cyanosis and they do not develop sulphide hemoglobinemia until after the blood has ceased to circulate. In other words, the color, through the formation of this compound, is a post-mortem affair. I do not know anything about these crayons, but it would seem to me possible that some of them at least have dyes in them and that the latter might be at the bottom of the trouble. Aniline and its compounds, as you know, have a very prompt effect of this type.

I know of no way of answering the question raised without determining definitely whether anyone has ever carried out experiments of this type. I know of no such experiments, but that does not mean that they have not been done. If they have not been done, one would have to try them out. I have never seen or heard of anyone being poisoned by lithopone.

Sincerely yours,

Robert A. Kehoe, M. D.