December 21, 1948

Dr. F. B. Lanahan,
The Electric Storage Battery Co.,
Allegheny Avenue and 19th Street,
Philadelphia 32, Pennsylvania.

Dear Doctor Lanahan:

I send you herewith the analytical results on the three samples of water forwarded to us in connection with your letter of December 3. You will notice the variation in the results, and it would be my guess that this variation is an expression of some very slight degree of contamination of two of the three samples. In general, City drinking water contains lead to about the extent of the first sample reported here, and while the other two are quite within safe limits, they appear to be a little higher than I would anticipate in the case of water directly from the City water mains. So long as you do not have contamination beyond the point indicated by these analyses, you have very little reason for concern. However, water contaminated much beyond this point might be regarded as an unnecessary contribution to your existing problem. You are probably aware of the fact that the Public Health Service regards 0.10 mg. per liter as a safe level. On the other hand, I see no point whatever in giving one's self the handicap of that order of magnitude in relation to occupational lead exposure. Certainly the limits represented by these analyses, however, are satisfactory. Also I might point out that it is a decided advantage to maintain the urinary excretion of lead at a normal level, by making sure that satisfactory drinking water is available conveniently to your workmen. Since this is important, I should regard a very slight contamination, such as that represented here, as being no very great handicap.

In the matter of the milk, I think the problem is often a little different. I have seen milk bottles in working areas, with their caps contaminated with considerable quantities of lead-bearing dust. The quantities here may be quite significant, and, in my opinion, the use of milk as a beverage does not involve any advantage that is sufficient to offset this additional exposure. There is a suggestion which could be made which would solve this problem satisfactorily, if the men could be instructed and induced to follow proper instructions for the avoidance of lead ingestion. Each milk bottle could be covered with an overall cap instead of the inside cover, and with the removal of the proper kind of a cap with reasonable care on the part of the workmen to avoid contamination of the top of the bottle, there would be no necessity for any lead ingestion in this way.

I think you are probably aware of my opinion that there is nothing in milk, per se, which operates against lead absorption or which tends in any way to provide an antidote against lead intoxication.

I am speaking here, of course, of individuals who are adequately fed. If their nutrition is bad, milk will be of help, obviously, in combatting malnutrition. Otherwise it is of no value or of no greater value than any other food in relation to occupational lead absorption. This is an old idea which never had any scientific foundation. Our observations have demonstrated clearly that there is nothing in it. I realize perfectly, however, that it will be difficult to dispense with a time-honored practice. All I can tell you is that I have never sanctioned this procedure, and I have never been responsible for its performance with respect to any group for whom I had medical responsibility. The use of milk is an exceedingly poor substitute for adequate control of lead exposure. As such, it is only a psychic measure, and therefore is not to be encouraged.

With kindest personal regards,

Sincerely yours,

Robert A. Kehoe, M. D.

RAK ef

Enc.

Material: Drinking Water

Submitted: 12-9-48 by Dr. Lanahan, Electric Storage Battery Company, Allegheny Avenue and 19th Street, Philadelphia 32, Pa.

Required: Lead Analyses

WATER (Ironclad - center of floor)

Analysis Number	- 48A-10789
Volume	- 138 ml.
Mg. Pb/Sample	- 0.0013
Mg. Pb/Liter	- 0.009

WATER (Pasting Hand - west end)

Analysis Number	- 48A-10790
Volume	- 140 ml.
Mg. Pb/Sample	- 0.0043
Mg. Pb/Liter	- 0.03

WATER (Pasting Hand - east end)

Analysis Number	- 48A-10791
Volume	- 160 ml.
Mg. Pb/Sample	- 0.0065
Mg. Pb/Liter	- 0.04

Samples Collected: 12-2-48
Samples Received: 12-9-48
Samples Reported: 12-16-48

KE 0004398

N 6856.01

Robert A. Kehoe, M. D.
College of Medicine Eden Avenue
Cincinnati 19, Ohio

December 17, 1948

The Electric Storage Battery Co.,
Allegheny Avenue and 19th St.,
Philadelphia 32, Pennsylvania.

Attention: Dr. F. B. Lanahan

Analysis of Water Samples for Lead

Ironclad - center of floor

Pasting Hand - west end

Pasting Hand - east end $ 15.00