

February 2, 1962

Dr. A. Judd
Price Battery Corporation
General Offices and Factories
Hamburg, Pennsylvania

Dear Doctor Judd:

I send you herewith two (2) copies of the report of the analyses of the urine and blood of the selected group of employees of Price Battery Corporation. These results, as I anticipated, provide adequate evidence of the hazardous conditions, with respect to exposure to lead, in this plant. There are several matters on which I should comment, I believe.

First, with respect to the group of men in their entirety, as representative of the plant on a whole. For reasons based on experience, we regard it as essential to maintain the mean or average level of the urinary concentration of lead below (or at least not above) 0.15 mg. of lead (Pb) per liter. The average value in this instance, involving eight categories of employment, is somewhat in excess of 0.17 mg. per liter (actually 0.175). This, obviously, in our terms, signifies that this plant is in a presently dangerous state.

Second, any level of lead concentration in the blood of an individual man which is even slightly above the threshold value of 0.08 mg. per 100 grams, is indicative of immediate danger. Any man in this situation may develop symptoms of intoxication at any time, and is reasonably likely to do so promptly if his exposure increases in severity for any reason. This does not mean that any man will certainly become ill within a definite or predictable period of time, but it does mean that he is likely to do so, and in any group of considerable size, someone in such a group is almost certain to do so within a reasonable period of time. Accordingly it is our practice to advise the prompt removal from exposure (cessation of work involving exposure to lead) of any man whose blood contains 0.08 or more mg. per 100 grams. I shall speak of this point later in making suggestions for action.

Third, if you will examine, as I have, the different occupations in the plant, using the employed men as indicators of its safety or danger, you will note that no occupation represented in the eight categories is safe. In every one of them except "formation" (only one man) there is at least one individual who has a potentially dangerous concentration of lead in the urine or blood, and as a rule in both. In fact, only

KE 0018673

N19712

three of these men [1 in Tiegel - 1 (the only one) in Formation, and 1 in Maintenance] have blood levels within the limits of safety; all other men are now in danger. As I suspected, there is no safe work in this plant, for the reason that no place in which people work is truly isolated (free of dust).

Fourth, no man in the Smelter group, is in a state of safety. You may remember that I said, when I was there, that I did not see how any man could work there for longer than a month (under the conditions which I observed) without having absorbed a potentially dangerous quantity of lead. It seems that I was not far wrong.

Fifth, is the recognition of the fact that one of the maintenance men has absorbed more lead than anyone else in the group. This, in my view, is not surprising.

Now as to what to do about this situation. I do not suppose that your people will consider closing down operations until the exposure to lead can be brought under control. I would not advise this, for it might be disastrous, and would certainly upset the workmen, economically and psychologically, to a much greater extent than they will be because of the occurrence of some cases of lead poisoning among them. Some of them will probably become ill, but no one is likely to die or to be totally or permanently disabled by continuing at work for the next several months, provided some improvement in conditions can be achieved.

1. Environmental Considerations

The employees should however be put on notice that they must reduce their individual and collective exposure to lead, through the use of respirators continuously, until such time as their restriction is removed after the elimination of certain types of exposure in certain areas. They must also be supervised closely to make sure that their performance is satisfactory.

Meanwhile, a thorough job of house cleaning is to be done (according to my memorandum) and provision made to keep finely divided lead out of the air of working places and areas in which this can well be controlled by proper methods of cleaning and working. There are areas, notably the Smelter, in which this is not possible, and unless and until this can be redesigned and brought under control, the men in this area must wear respirators continuously.

Just where we go from here in the improvement of the physical conditions, will depend upon the well-considered plans of the management.

2. Medical Considerations.

The employees should be kept under careful medical supervision in the clinical sense. This does not mean the cultivation of an alarmed attitude among the men. Rather, it means that you should be on the lookout for the onset of low-grade (or more severe) lead intoxication, and that you will remove men from further exposure when clinical evidences of intoxication appear. I do not mean that you need change your procedure. I believe, however, that you should spend more time at the plant, make yourself more readily available to the men, and cultivate their confidence in your ability and willingness to protect them by your every effort of clinical supervision. The men should not be alarmed, but they should know that their attention, to avoid exposure, is an essential part of their job.

I trust that your managerial associates can and will begin at once to do the things that are necessary to bring the exposure to lead under control, and that they will continue in this effort until that goal has been achieved.

Sincerely yours,

Robert A. Kehoe, M. D.

RAK:ss

Enclosures - analytical reports.

cc: Lee H. Miller, M.D. ✓

KE 0018675