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NATIONAL ZINC COMPANY, INC.

BARTLESVILLE, OKLA.

November 16, 1954

Robert A. Kehoe, M. D.
The Kettering Laboratory
College of Medicine-Eden Avenue
Cincinnati 19, Ohio

Dear Dr. Kehoe:

We will in the near future begin submitting additional specimens of blood and urine for determinations of lead. They will be from men working in areas of known high exposure.

Our purpose in including the men from No. 18 furnace is to check on the effectiveness of our respirators. The material handled there is Laurel Hill concentrate. Analyses on this material taken on every shipment show zinc 46.7-58.8% and lead 12.6-19.4% during the past year.

The use of respirators is compulsory. The respirator furnished is Mine Safety Appliance Co. "Comfo" Metal Fume Respirator with metal fume filter. Bureau of Mines Approved #2139.

We appreciate your opinion regarding the importance of air analyses as a guide in taking corrective measures to improve the working environment. To give you a better idea of our situation may I outline to you briefly what our corrective program is and of our progress to date.

We have recently replaced our old Herreshoff roaster kilns with fluo-solids reactors supplied by the Dorr Company. Scheduled to follow this is complete overhaul of our sintering machines and adjacent area.

The activity attendant upon the fluo-solids installation has released considerable accumulations of dust to the atmosphere in both the reactor and sintering areas. This has for a time increased the toxicity in both. Numerous unexpected difficulties in getting the reactors into operation have thrown us behind schedule. To alleviate in part the conditions in the sintering area we have overhauled one machine hoping we could get along for awhile with the one. Unfortunately, we have not been able to do as we hoped and have been forced to use a machine which needs some further attention.

In recent weeks, however, the new roasting equipment has settled down and air samples there show a great improvement. As further safeguard we have enclosed the control mechanism in an air-conditioned room where the operators can remain for most of their shifts. The same sort of improvement is expected in the sintering area where machine overhaul and an enclosed control room are both scheduled.

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Robert A. Kehoe, M.D. , Kettering Laboratory, Cincinnati 19, Ohio

The way now seems clear for early completion of this next step in our program. Mean time, respirators are our chief defense. In view of this unexpected delay we want to check this group of workers and they will be included in the specimens we are submitting. We will, therefore, need to increase our order for containers to fifty, that is, an additional twenty-five.

Thank you for your help and advice.

Very truly yours,

Wm. M. Aldredge, M.D.

Wm. M. Aldredge, M. D.
Company Surgeon

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