

MORaine PRODUCTS DIVISION

GENERAL MOTORS CORPORATION

DAYTON, OHIO, U.S.A.

July 17, 1942.

Mr. Robert A. Kehoe,
Kettering Laboratory,
Eden & Bethesda Avenue,
Cincinnati, Ohio.

Dear Mr. Kehoe:

You may recall that you visited our plant at one previous time for the purpose of conferring with us on the question of toxicity of lead which we contemplated handling in powder form. We have another problem at the present time which is somewhat different and which Mr. Siebenthaler of the local Ethel Gasoline Office has advised me to again take up with you.

This problem involves the maintaining of a bath of molten lead in a pot 12" wide by 12" deep by 4' long at a temperature of 1700°F. covered with a reducing atmosphere consisting of partially burned natural gas. In operating a lead bath at this temperature of course lead is partially volatile and the lead fumes must be taken care of. We have done this by covering the hood which maintains the reducing gas over the lead bath with another hood connected to an exhaust fan to carry the lead fumes out of the building.

We have taken the matter up from the standpoint of lead toxicity with Dr. Snow here who has examined several of the employees engaged in this work and has found negative results as far as tests for lead are concerned. For that reason we believe we have adequate exhaust systems for the lead fumes. This check, however, will be continued to make sure that these conditions are maintained.

Our other problem involves the disposition of the lead fumes on the roof of the building to make sure that they do not blow back into the building through windows on the roof. The operation we are contemplating may become considerably larger and, therefore, the concentration of the lead

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fumes might become greater and need other treatment.

I am interested in the question of whether some sort of collecting system can be provided on the roof to remove the lead fumes, which, I believe, end up as fine lead oxide, from the air so that it isn't distributed over the countryside as well as back through the windows of the plant.

If you could indicate some method of taking care of this problem I would appreciate hearing from you.

Very truly yours,

MORaine PRODUCTS DIVISION
General Motors Corporation



R. P. Koehring
Metallurgist

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