cc: Dr. G. Edgar

ETHYL GASOLINE CORPORATION

CHEMICAL RESEARCH LABORATORY

1600 WEST EIGHT MILE ROAD

DETROIT, MICHIGAN

June 4, 1941

Dr. Willard Machle
Kettering Laboratory of Applied Physiology
Eden Avenue
University of Cincinnati
Cincinnati, Ohio

Dear Bill:

With reference to your letter of March 27, my "Department for the Verification of Quantitative Statements" advises me that at a 20:1 air-fuel ratio by weight, 1 cc. of gasoline will require about 12 liters of air. Unless, therefore, you were figuring on a 10:1 excess of air over that needed for combustion, your first statement should apparently read 11 liters instead of 110 liters. On that basis the tentative specification of 0.06 cc. TEL/gal. as permissible at the burner would be on the assumption that the combustion products are diluted 10:1. I will thank you to confirm or correct the above statement.

We are in any case, going ahead with our experimental work on that basis, and the data will be submitted to you for comments before we contact any outside agencies, such as the Army.

Very sincerely yours,

George Calingaert

C:C

cc: Dr. G. Edgar

ETHYL GASOLINE CORPORATION

CHEMICAL RESEARCH LABORATORY

1600 WEST EIGHT MILE ROAD

DETROIT, MICHIGAN

June 2, 1941

Dr. Willard Machle
Kettering Laboratory of Applied Physiology
Eden Avenue
University of Cincinnati
Cincinnati, Ohio

Dear Bill:

I note with interest, your calculations on the suggested maximum permissible lead content of gasoline used in stoves. We will work for the time being, on your safest figure of 0.06 cc. TEL per gallon.

The method we are studying now, and which shows great promise, is the removal of the lead from the liquid gasoline at room temperature, by filtering through a bed of activated clay. In this case, there would be no question of thermal decomposition and filtration of the lead.

Very sincerely yours,

George Calingaert

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