

Copy to Dr. Machle

May 23, 1941

Re: QM 095 C-ED
(Builders Iron Foundry)

War Department
Office of the Quartermaster General
Washington, D. C.

Attn: Howard A. Starret, Major, Q.M.C. Assistant

Dear Major Starret:

I have received a communication from Builders Iron Foundry, 20 Vesey Street, New York City transmitting your inquiry of May 10th concerning the use of proportioning equipment in mixing Ethyl Fluid with gasoline to obtain 100 octane fuel. As the Medical Director of Ethyl Gasoline Corporation, it has been one of my duties in conjunction with the safety engineering service of Ethyl Gasoline Corporation to consider various types of equipment for mixing Ethyl Fluid with gasoline from the point of view of primary and remote safety. Accordingly representatives of Builders Iron Foundry considered it desirable to pass on the inquiry to me, although they themselves have every willingness and wish to carry out your request at the earliest possible time. Indeed I have in my hands at the moment information which they prepared for the purpose of answering your letter, and which they asked me to release at the earliest possible time.

As a representative of Ethyl Gasoline Corporation in this matter, and also on my own responsibility, I am anxious to be of any possible service to you, and in this connection it has seemed the better part of wisdom to point out that the Ethyl Gasoline Corporation has made available one of its staff of safety engineers, who has been cooperating in every detail in the working out of suitable mixing equipment for governmental use. The problem of providing suitable mixing equipment is not a simple one. Representatives of Ethyl Gasoline Corporation have had more than fifteen years of experience with all of the problems that have presented themselves, and I believe will be in position to give you such assistance as will save a great deal of time and inconvenience. The equipment in which Builders Iron Foundry and Proportioners Incorporated are interested has been under experimental study for some time, and observations are nearing completion which

will enable us to say whether or not this principle of mixing can be applied with satisfactory results. The issue here is not only one of safety in dealing with an exceedingly hazardous material, but equally importantly from your point of view, it must be established beyond any doubt that it will deliver finished gasoline in very accurate relationship to any specifications. The role of the Ethyl Gasoline Corporation in dealing with this equipment is that of an experienced group who find it necessary to see that the purposes both of safety and accurate mixing are served. All equipment which is in use in this country and elsewhere for this purpose, has been designed or developed or critically examined, and it is understood by all of the oil companies that no equipment can be used which has not been approved by the Ethyl Gasoline Corporation. It is for this reason, therefore, that your communication to C. S. Teitsworth and also your communication to Builders Iron Foundry has come through my hands.

It would be my immediate suggestion that Mr. Oscar Lewis of the Ethyl Gasoline Corporation should get in touch with you promptly through such means as you may suggest for a complete discussion of what has been done, and also of what it is feasible to do through the use of the type of equipment you have in mind. One of my associates and I are meeting on Friday of this week with engineers of the Ethyl Gasoline Corporation who have been supervising the observations carried out on the proportioning equipment. The data which will be made available to us in that meeting should determine whether or not this equipment is ready for use in its present form, or whether it will have to be subjected to additional modifications. I am sure you will wish to have the advantage of this information, since I am quite certain you will not wish to deal with any type of equipment which is in the experimental stages.

If you will let me know at your early convenience how I can best serve your wishes in this matter, I shall be glad to see that suitable arrangements are made promptly for providing you with complete information.

Very truly yours,

RAK:is

Robert A. Kehoe, M.D.

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