

Morris, Dr. M. R.,
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TELEPHONE 82107.
HOURS 2-4.
SATS. BY APPOINTMENT.

21, Idrone Terrace,
Blackrock,
Co. Dublin.
15/II/47.

Dr. Robert Keohoe,
Associated Ethyl Co. Ltd.
Artillery House, Artillery Row,
London S.W.1.

Dear Dr. Keohoe,

I must thank you for your interesting
and instructive letter re loaded gasoline.

I have noted your remarks re storage tanks
etc.

I shall be delighted to meet you when opportunity
takes you to Dublin.

In the meantime please allow me to thank you for
privilege of writing you direct re any difficulties
arising at my end,

Yours sincerely,

M. R. Morris

KE 0013475

Dr. Kehoe's copy

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Dr. M. R. Morris, 21 Idrone Terrace, Blackrock, Co. Dublin, Eire. 5th November 1943.

In view of your recent exchanges of letters with Mr. Bevan, which he has been good enough to bring to my attention at the time of my present visit to London, I am taking advantage of the opportunity to write to you directly, and to send you certain items of published information. It will be apparent to you that you should have had these some time ago, and therefore I wish to offer you my apologies, since I share to some extent in the responsibility for failing to keep you informed. I shall undertake to keep in closer touch with you in the future.

Let me call your attention first to a booklet which among others is being forwarded to you, entitled "GENERAL ADVICE TO MEDICAL CONSULTANTS OF ETHYL EXPORT CORPORATION". The name of the company is now obsolete, but the advice is not, although some supplementary information should now be given in connection with the cleaning and repairing of gasoline storage tanks and mobile tanks. The regulations covering work of this type have recently been redrafted, and a copy of them will be forwarded to you.

Next in importance comes the "REGULATIONS FOR HANDLING AND MIXING ETHYL FLUID", which supersede those now in your hands. In relation to your recent correspondence, it should be pointed out that there are no special precautions for handling leaded gasoline. The experience of the past twenty years, and the experimental work done on this aspect of the hygienic problem, (some of which are described in the reports which are being sent to you), have demonstrated that the handling of leaded gasoline in a normal manner as a motor fuel is not to be regarded as hazardous from the viewpoint of lead absorption. There are, however, certain features of the misuse of such gasoline which require a word of comment.

Gasoline of any kind can be handled badly and carelessly in enclosed places for the cleaning of tools, for degreasing engine parts or other machinery, for cleaning automobiles, and for similar purposes for which it is not intended. It can also be introduced into barrels or tins in a manner which permits excessive spillage and evaporation. There is no doubt that under these conditions of bad handling persons can be exposed to excessive concentrations of both gasoline and lead vapours in the air they breathe. So long as the lead concentration in the gasoline is kept within proper limits, there will be no important danger of absorbing lead out of the gasoline through the skin. Such absorption does not occur significantly as the result of skin contact. The important thing, therefore, is to prevent excessive spillage and excessive vapourisation of the gasoline.

A second point of importance is that the leaded gasoline should not be used

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in lamps, blow-torches and stoves. Not only will such fuel do damage to such equipment by causing the orifices of the burners to be plugged, but also combustion may result in contaminating the air in the vicinity of the burners with significant quantities of lead fumes, and at the same time will contaminate any food cooked directly over the flame. For these reasons, unleaded gasoline should be used in equipment of this type. If in emergency leaded fuel must be used, there must be ample ventilation of the space in which the equipment is used.

As you will recognise from the above facts, there is good reason for continuing the practice of marking all containers and pumps in which leaded gasoline is dispensed so as to indicate to the public the need for care in its use.

There is another matter to which I have referred briefly before, about which some emphasis is justified, - namely the problem of cleaning gasoline storage tanks. By reason of the war the use of leaded gasoline has become widespread. This great use of the leaded product means that a very much larger number of tanks will be used for the storage of leaded gasoline. On this account it will be necessary to emphasise the serious dangers associated with the cleaning and repair of these tanks, and to make sure that the regulations for the protection of the workmen are everywhere enforced. If the regulations are carried out thoroughly and consistently, there will be no trouble. If they are neglected, there will certainly be bad results. I cannot, in this letter, give you the background of experience and knowledge that has been developed on this subject, but when I return home I will endeavour to send you one article which gives a fairly adequate discussion of it.

I trust I may have an opportunity to visit you one day and to discuss these and many other matters of mutual interest. Meanwhile, if you should wish to write to me about any of your difficulties, do not hesitate to do so. My home address is given below.

Cordially yours,

ROBERT A. KEHOE.

Home address:

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