

into a storage tank which is an integral part of the mixing plant. Certain other types of mixing plants are under investigation and consideration and may prove to be highly advantageous. On the other hand there are valid reasons for the avoidance of mixing into mobile equipment, as barges, tank cars, and trucks, not only because of the possibility of shipping gasolines dangerously high in their lead content, but also because of remote dangers associated with the cleaning and repair of such equipment. Some such method may one day be devised which is not only safe in itself, but is actually safer than present methods and it would be unfortunate to close the door upon such procedure. We have such a method under consideration at this time. Under such restrictions as we have suggested it will have to prove itself beyond peradventure, and that, I think, is highly desirable.

We have made no recommendations for a code of regulation on finished gasoline. The only points worthy of consideration refer to lead concentration, color, and the use of signs on pumps and containers. No other regulation is necessary, and, in our opinion, none other should be or could be attempted without casting great doubt on the sincerity and validity of the entire code of regulations. Moreover this matter is not an important problem at present. Obviously, however, any regulations developed now in this field should avoid the use of the word "Ethyl Gasoline", since this is a patented name and, therefore, will not apply to other gasolines containing lead tetraethyl.

I send along a copy of material which we think could be used advantageously in the form of a new letter.

There is one other matter which I should point out. The large memorandum, one copy of which is enclosed for your use and information, would probably be regarded as containing a considerable amount of information obtained by me in a highly confidential relationship. I could not justify withholding this information from you, but by the same token I must ask you to regard it as confidential. I believe our mutual purposes would best be served by your using it for your information, returning it and also the one I handed you on Friday, when it has served your purpose. If you wish to make some notes for your own use, do so, but have them in your own words as you might do as the result of personal conference, rather than in mine.

Finally, if anything develops out of this matter now or in the future, in which I can be of assistance to you as a source of information, please do not hesitate to call on me.

Sincerely yours,

RAK:is

Robert A. Kehoe, M.D.

Suggested Draft of News Letter

For the past fifteen years the manufacture of lead tetraethyl has not been a source of great concern in relation to public or industrial health. During that time manufacturing operations have been carried out in only two states and under effective hygienic control. However, in the past month, as a consequence of attempts to manufacture lead tetraethyl without proper safe guards, the attention of the Public Health Service has been called to this problem, when several cases of poisoning were reported in connection with a plant that had been in continuous operation only two weeks. Two men had serious illness with delirium and mania, one lost forty pounds in weight in the two weeks and the others, who had little opportunity for exposure, were only moderately ill.

The seriousness of the problem created by plants of this type, which, incidentally, operate in contravention of existing patent rights, cannot be overestimated, when it is considered that in the case in question no precautions of any kind were taken in carrying out improved methods of manufacture, and no attempt was made to see that the product was transported, stored, or mixed with gasoline in such a manner as to avoid serious danger to the persons involved. The possible consequences of the failure to color the product itself or the gasoline mixed therewith, and to control the concentration of lead tetraethyl in the gasoline, concern not only those immediately involved in the manufacture of lead tetraethyl and in the preparation and distribution of gasoline, but also the general public.

Available information indicates that the construction of plants of this type is being promoted in several states in complete disregard of the dangers entailed, and in fact, that assurances have been given by the promoter that the operation is without danger. Unsuspecting people are thereby induced to expose themselves and others to risks, which they would certainly avoid if they were informed.

In view of these facts, and in recognition of the likelihood that similar manufacturing plants may be promoted and operated in other states, recommendations are being prepared, setting forth the minimum requirements for the hygienic control of lead tetraethyl manufacturing plants and for dealing with the problems associated with their operation.