

September 24, 1937

Mr. A. S. Oliver
Ethyl Gasoline Corporation
502 Bay Street
Toronto 2, Canada

Dear Mr. Oliver:

With reference to your

brief note of September 22nd and its appended information concerning the contamination of a well with leaded gasoline, as reported by Mr. Mitchell of the Shell Oil Company, I am glad to inform you that we have had some experience with this problem. Obviously, conclusions as to the significance of the matter in this instance must depend upon the manner and degree of the contamination. If, for example, the gasoline spread through the earth from a leaking pipe and entered the water at some distance from the well, most of the lead would probably have been removed along with the color by the process of filtration. Under these circumstances, if the quantity of gasoline was considerable, the water will continue to be contaminated with gasoline to some degree for quite a period of time. Even slight contamination of drinking water with gasoline is serious in that the water tastes bad and in that gasoline ingested in even small doses produces everything from gastro-intestinal discomfort to ulceration and hemorrhage, dependent upon the magnitude of the dose.

If, on the other hand, the gasoline was merely spilled into the water, it can be removed almost entirely by emptying the well, and there should be no further difficulty.

You will note that I have made no reference to the potential poisonous effects of lead in the water. This is not an omission on my part but is rather deliberate, since no toxic effects from the lead are to be expected under these circumstances. Actually the quantity of gasoline which can be ingested without serious illness is the limiting factor. Thus it would be impossible to ingest a significant quantity of lead without having serious effects from the ingestion and absorption of gasoline.

I suggest that in this instance it is necessary to make a thorough investigation of the facts, and to report them to us in detail for interpretation. We have seen several cases of acute gasoline intoxication from the contamination of drinking water, and in as much as the gasoline contains lead, one can be fairly certain that the cause of illness in such cases will be misinterpreted, not only by the persons involved, but also by their physicians.

Very truly yours,

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Robert A. Kehoe, M.D.

CC Mr. Lewis