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bcc: D. F. Smith - DSMIT

December 5, 1963

Mr. George Kellis
Sinclair Refining Company
600 Fifth Avenue
New York, New York

Dear Mr. Kellis:

Our New York Office has asked me to forward, in writing, the comments concerning Pydraul AC which were relayed to you by telephone recently.

The problem, as it was described to me, involved the use of air from compressors lubricated with Pydraul AC to move potable water. I am not sure whether your question indicated that, in this application, you had already noted tastes and odors in the water or whether or not you were concerned about the potential of such a problem.

In limited tests which we have conducted analyzing the air streams from a compressor using Pydraul AC, we found no detectable levels of vapor of the lubricant. In this particular case, with this particular compressor and the conditions under which it was operating, we felt assured that no lubricant was being carried along with the compressed air stream. It is conceivable that with other compressors operating at different temperatures or with different degrees of wear of parts of the compressor some minute amounts of the lubricant could be present in the compressed air. Because of this possibility, we have already recommended that if the compressed air is to be used for industrial air-supplied masks or other breathing equipment, a filter should be incorporated in the line to remove any vapors or other foreign matter. We would suggest that similar precautions be taken regardless of the type of lubricant--synthetic or otherwise.

It is logical to assume in your case you may be talking about volumes of air that could not be economically filtered with activated charcoal or other absorbing devices. In such a case then, one would raise the question

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of the toxicity hazard of any Pydraul AC in the potable water. Our animal toxicity data indicate that, from an acute standpoint, it would be difficult for a human to ingest sufficient Pydraul to cause serious illness. The data is such, however, that we could not recommend that anyone drink, on a daily basis, water containing a fixed or "safe" amount of such a contaminant. From a practical standpoint, it appears to us that any water sufficiently contaminated to cause any toxic effect would be so unpalatable because of taste and odors that people would refuse to drink it. The real problem then becomes one of aesthetics rather than potential toxicity.

If I have misunderstood your question or problem or if I can provide any further evidence, please do not hesitate to let me know.

Sincerely,

Elmer P. Wheeler, Manager
Environmental Health
Medical Department

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cc: New York Sales Office

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