

December 28, 1937

Mr. J. C. Taylor
Ethyl Gasoline Corporation
Chrysler Building
New York, New York

Attention Mr. O. B. Lewis

Dear Mr. Lewis:

In reply to your letter of December 20 referring to permeability of hose of air-line respirators, I wish to advise that both the Davis and M. S. A. hoses have been approved by the Bureau of Mines (Schedule 19, April 28, 1927, Bureau of Mines) which means that they will withstand soaking in gasoline for six hours before more than 0.01% of gasoline vapor will appear in the air that is being passed through them at a rate of eight liters per minute. Actually our own experience indicates that both of these hoses exceed the requirements of the Bureau of Mines considerably as both of them will withstand gasoline for more than twenty hours.

In so far as the hose you mentioned is concerned, I should say that it had outlived its usefulness. We should not consider any hose safe that has been wet with gasoline for more than twenty hours, and in any event, the hose that is two years old is close to the end of its life. Much depends upon the care and use to which the hose has been put, but I should say that at the end of two years "checking" and cracking would begin to appear and one should consider replacing the hose.

The fact that objectionable odors of gasoline are given off by the hose used by the Socony Vacuum Company, is sufficient evidence that new hose is needed and they can be advised accordingly. For our own information and test I would appreciate it if you would send us the section of hose which you now have.

With kindest regards and best wishes for the new year,
I am

Very truly yours,

WFM:vr

Willard F. Machle, M. D.