

August 16, 1955

Letter No. CSE-56-55

Subject: Air Line Mask Hose

TO CHIEF SAFETY ENGINEERS

COPY FOR

Mr. Kehoe

Gentlemen:

On several occasions over the past year, it was noted that air coming through some air line mask hoses was contaminated with significant quantities of lead. Several sections of hose were sent to Kettering Laboratory for further tests. The results of these tests did not produce sufficient information to completely evaluate the nature of this problem.

Dr. Kehoe has requested that this matter be pursued further. It is obvious that we should not do anything which would alarm our field staff, customer companies and tank cleaning contractors who engage in cleaning leaded gasoline tanks. It is for this reason that the following program is suggested for testing our air line mask hoses.

In order that a very few be engaged in this work, it is suggested that a schedule be determined at each regional office for the return of air line mask hoses from the men in the field. When these hoses have been received at the regional office, only one or two men should be used to make the necessary lead-in-air determinations. In this manner, only a few men will be involved and they can be thoroughly instructed not to discuss this subject until all of the facts have been determined. Also this would have the advantage of more uniform testing.

The test work on the hoses should consist of:

1. Take a four cubic foot sample from each section just as the hose is received; record the results.
2. Connect each section of hose to an air line mask blower and operate the blower as this would be done in the field to clear the lines. With the blower in normal operation, take another four cubic foot sample and determine the lead content of the air so sampled. Record the results.
3. Connect all of the sections of hose from each individual field air line hose mask and with the blower operating as though the equipment was supplying a man with a mask, collect another four cubic foot sample. Record the results.

By taking an air sample from each section of hose as received (Sample No. 1), the air velocity will be quite small and not likely to pick up particulate matter which may be distributed along the interior surfaces of the hose. The results of this test provide one type of information.

COPY
ALL

August 16, 1955

By taking a sample from each section with the blower in operation (Sample No. 2), after the hose had been blown out as is normally done in the field, a measure of possible lead contamination of the air from one section of hose is determined.

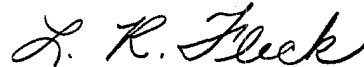
The test with all sections, from each air line hose mask set, connected together (Sample No. 3), would determine the accumulated amount of lead, if present, which would issue into a mask under normal operating conditions where all lengths of hose are required.

After the above test work has been done, any section of hose which shows a lead content in excess of 4 mg. per cubic foot with the blower in normal operation (Sample No. 2), should be sent to Kettering Laboratory.

Will you please inform us by letter, and two carbon copies, of the hose sent to Cincinnati, and of the results of all three (3) lead tests made on each section of hose. Each section of hose should be identified by region and a number, followed by the initials of the man who had the hose in his possession. Sections sent to Cincinnati should be identified by this same number on a tag. We, in turn, will pass the information on to Dr. Kehoe.

We would also like to have as much history as possible on the sections of hose sent to Cincinnati. This history should include the date the hose was purchased, the amount of use the hose received and the date when the hose was used last. Any unusual cleaning techniques or other information which might affect the lead contamination of this hose should also be noted. We realize this will entail a considerable amount of work for some of your men. However, we are sure its importance is obvious to you.

Very truly yours,



L. R. Fleck

LRF:ems

cc: Regional Managers

KE 0010475