

ETHYL CORPORATION

C. B. MYERS, M. D.

INTER-OFFICE

SEP 07 1978

To W.C. Strader

ADDRESS BRP

FROM Thomas L. Roberts

ADDRESS BRT

SUBJECT Revised 1978 Routine Lead and Vinyl
Chloride Monitoring Schedule

DATE Aug. 29, 1978

Introduction

As discussed in your meeting of June 29, 1978, we have developed a revised personal monitoring schedule for both lead and vinyl chloride. It is attached for your review. Over the past year and a half, we have collected a great deal of data in the TEL and VCL areas relating to employee exposures during all operations. This revised personal monitoring schedule is based on our professional assessment of these data and represents a more realistic approach to industrial hygiene evaluation. The following discussion summarizes my interpretation of the data in developing the monitoring frequency.

Discussion

When a specific government standard is available my interpretation is based on the requirements of the regulation; i.e., vinyl chloride. When a standard is not available, I use a "common sense" approach based on the objective of the monitoring. A more detailed explanation of this concept follows:

Vinyl Chloride

The attached VCL personal monitoring represents a reduction in the number of routine samples presently collected. This schedule is based on our interpretation of the OSHA standard 1910.1017 which reads as follows:

- 1) Monitoring "may be discontinued for any employee only when at least two consecutive monitoring determinations, made not less than five working days apart, show exposures for that employee at or below the action level."
- 2) Monitoring "shall be repeated not less than quarterly where employee is exposed, without regard to the use of respirator, in excess of the action level" (yet not exceeding the TLV)
- 3) Monitoring "shall be repeated at least monthly where any employee is exposed, without the use of respirator, in excess of the permissible exposure limit" (1.0 ppm)

As Item #1 above states, monitoring "may be discontinued", but this will not be done. At this point in our program all jobs

will be monitored at least annually. Due to this method of scheduling the amount of monitoring may have a tendency to change from month to month. However, over a period of time I anticipate it to stabilize.

Organic Lead

There is no formal OSHA procedure for scheduling personal monitoring. This allows a logical sampling schedule to be devised.

- 1) Monitoring shall be repeated annually for all employees when at least two consecutive samples show exposures at or below the permissible limit of $75 \mu\text{g}/\text{M}^3$.
- 2) Monitoring shall be repeated not less than monthly when at least one of the last two sample results show an exposure in excess of the permissible limit.

This schedule represents an increase over the present routine program but I expect it to reduce the sampling frequency over the next several months. It will concentrate effort on problem areas. A part of the objective is to allow us to put more effort in other areas of the plant. These samples are based on unmasked values.

Inorganic Lead

OSHA is presently reviewing the latest proposed standard for inorganic lead. This schedule is based on the new proposed TLV ($100 \mu\text{g}/\text{M}^3$). The current TLV is $200 \mu\text{g}/\text{M}^3$.

- 1) Monitoring shall be repeated annually for all employees when at least two consecutive samples show exposures below the permissible limit of $100 \mu\text{g}/\text{M}^3$.
- 2) Monitoring shall be repeated not less than monthly when at least one of the last two sample results shows an exposure in excess of the permissible limit.

A number of inorganic lead evaluations were discontinued based on previous data. These are labeled with an "N" in the right hand column of the attached inorganic lead schedule.

Conclusion

As previously mentioned, the purpose of this revised schedule is to ultimately provide more extensive industrial hygiene coverage in all areas of the Baton Rouge plant. All organic and inorganic lead sampling frequencies are based on unmasked values.

Your comments will be appreciated.



Thomas L. Roberts
Industrial Hygienist

TLR:sbb
File:Oper. BR(VC1)(Lead)

W.C. Strader/Thomas L. Roberts
Aug. 29, 1977

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