



Air Products and Chemicals
INC.

ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

To: Distribution

Date: 16 July 1979

Copies:

From: W. J. Stueben

Re: Blood Test For Vinyl Chloride Exposure

Dr. Beidleman has informed us that the SMA 12 blood test called for in the emergency procedures manual is no longer adequate. The blood test to be given is a Liver Profile with additional tests for SPGT, GGPT and LAP.

Please review this with your personnel immediately. The Emergency Procedures Manual will be changed accordingly.

W. J. Stueben
W. J. Stueben

WJS:j sf

Distribution:

R. E. Gilbert
L. W. Allen
J. M. Diamond
R. L. Duggan
☒ A. E. Greene
T. J. Regan
Good/Lay/Middlebrooks
C. W. Brooks
B. M. Mize

RECEIVED
JUL 17 1979
A. E. GREENE

AP00042158



Air Products and Chemicals
INC.

ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

cc R. L. DUGGAN

To: ~~W. J. Stueben~~

Date: 19 September 1979

From: J. G. Tolar

Copies:

Re: *OSHA*
VCM Personnel
Monitoring Requirement

L. W. Allen
J. M. Diamond
K. J. Femrite
L. S. Forester

llb → Please clarify if there is an OSHA requirement for 15 minute ceiling exposures for VCM personnel monitoring. If there is, does it apply to mechanics as well as operators?

J. G. Tolar

J. G. Tolar

JGT:ms

YES!
15 minute exposure limit
more than

RECEIVED
SEP 24 1979
R. L. DUGGAN

AP00042159



Air Products and Chemicals
INC.

ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

To: R. L. Duggan

Date: 11 July 1979

From: L. W. Allen

Copies: R. E. Gilbert
T. J. Regan
W. J. Stueben
A. E. Greene
J. Benson
T. Nichols
J. M. Diamond

Re: Vinyl Chloride Area
Monitoring System

Program modifications are being made to the area monitoring system to allow the horns to be activated at 5 ppm and above. Audio alarms, in addition to colored lights, will provide the necessary warning to personnel as to what action must be taken to eliminate the chance of vinyl chloride exposure.

L. W. Allen
L. W. Allen

LWA:bg

RECEIVED
JUL 17 1979
R. L. DUGGAN

AP00042160



Air Products and Chemicals
INC.

ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

Roy
What do you
suppose it
means
RD

To: R. Duggan

Date: 13 June 1979

From: J. Diamond

Copies: T. Regan
W. Stueben
E. Ray
K. Femrite
L. Allen
R. Gilbert
A. Greene

Re: VCM Monitoring

F. C. S.
H. S.
W. S.

We have received two fifteen minute personnel monitoring sample analyses with readings of 21.07 PPM and 1.01 PPM. Both of the above samples were taken while Donald Gunter and Roy Curry were in the PVC CRT room. We feel these analyses were not valid and more attention should be put on the method of analyzing our monitoring samples.

John Diamond
John Diamond

JMD:s1

AP00042161



Air Products and Chemicals
INC.

ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

To: J. M. Diamond

Date: 20 June 1979

From: J. G. Tolar

Copies:

Re: VCM Monitoring -
Unusual Results 5 June 1979

L. Allen
R. Duggan
L. Forester
A. Greene
K. Femrite
R. Gilbert
E. Ray
T. Regan

Your memo (attached) blames unusually high results of VCM monitoring of two fifteen minute personnel monitoring samples in the CRT room on analytical problems. It is understandable that analysis would be suspected under the circumstances. Fortunately, the two samples had been saved, therefore, the analysis was repeated and the same results were obtained. In addition, the samples were also analyzed on different GC's and GC columns, and similar results were obtained. All data indicates there is not an analytical problem related to these high values.

I believe that either:

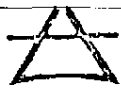
- (a) The sample tubes, not necessarily the personnel, were exposed to the VCM level as indicated. This was during a period that a lot of VCM samples were being taken and analyzed. Exposure may have come from an area other than the CRT room, in the QA lab, for example. The possibility of a high level in the CRT room during this period, due to all of the work with VCM is not as remote as one might think.
- (b) Sample tubes could have been switched or samples mixed up.
- (c) It is conceivable, but unlikely, the personnel were exposed to another chemical which would have the same GC retention time as VCM. We are working on this possibility now.

In the future, if a bad analysis is suspected, K. J. Femrite or I should be notified immediately so that it can be resolved as soon as possible without involving others until facts are known.

J. G. Tolar

JGT:ms

AP00042162



Air Products and Chemicals
INC.

ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

To: R. Duggan

Date: 13 June 1979

From: J. Diamond

Copies: T. Regan
W. Stueben
E. Ray
K. Femrite ✓
L. Allen
R. Gilbert
A. Greene

Re: VCM Monitoring

6/5/79

We have received two fifteen minute personnel monitoring sample analyses with readings of 21.07 PPM and 1.01 PPM. Both of the above samples were taken while Donald Gunter and Roy Curry were in the PVC CRT room. We feel these analyses were not valid and more attention should be put on the method of analyzing our monitoring samples.

John Diamond
John Diamond

JMD:sl

AP00042163



Air Products and Chemicals
INC.

ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

To: J. Diamond

Date: 28 June 1979

From: K. Femrite

Copies:

Re: VCM Monitoring - Unusual
Results of 5 June 1979
Reference: A - J. Diamond
to R. Duggan

L. Allen
R. Duggan
L. Forester
A. Greene
R. Gilbert
E. Ray
T. Regan

Due to your concern in reference A about two ceiling exposure determinations taken in the PVC CRT room the sample which showed 21.1 ppm VCM was reanalyzed to confirm the original level of VCM and to determine if the GC peak believed to be VCM was indeed VCM.

Reanalysis at standard conditions showed 16.6 ppm VCM which is still well above the ceiling exposure limit of 5 ppm. Lower levels of VCM were not unexpected as the sample vial septum had been punctured several times which leads to a loss of VCM in the desorbing solution.

The sample was then evaluated on two different columns to determine if two or more chemicals may comprise the GC peak believed to be VCM. Both columns failed to separate the GC peak into any component peaks with the retention time of the peak matching that of VCM in standards.

From this data I can only conclude that the original analysis of 21.1 ppm was valid and the GC peak was indeed VCM.

K. Femrite

KF:ms

AP00042164



Air Products and Chemicals
INC.

ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

To: Jim Tolar

Date: 28 November 1979

From: Larry Allen

Copies: A. E. Greene
T. J. Regan
R. E. Gilbert
W. J. Stueben
R. L. Duggan
E. A. Ray
R. A. Scott
J. M. Diamond

Re: Personnel Monitoring Program
for Vinyl Chloride

In light of the recent testing problems found with the personnel monitoring program, the writer surveyed several companies to find out what methods they are using.

Borden Chemical

They are using the Bendix Flasher tube with the Bendix pump. These tubes are carbon and can be regenerated. Their life is approximately one year.

Conoco Chemicals

Conoco uses badges manufactured by Risner Environmental Laboratory. They are also evaluating 3M and DuPont badges. Their major concern with 3M and DuPont badges is their capacity. This problem can, however, be solved by adding additional wafers to the badge. In the beginning they used the carbon tube and pump. They were not able to get satisfactory analytical results. A switch was then made to bags and pumps (Method 106). They feel their present badge system is the best and most reliable to date.

Diamond Shamrock

Diamond presently uses Bendix Flasher tubes and pumps. They are currently evaluating 3M badges.

Georgia Pacific

They have been using 3M badges for about ten months. The present badge program is much more reliable and cheaper than their previous carbon tube and pump program.

B. F. Goodrich

B.F.G. uses the Flasher tube and pump made by Bendix. They evaluated the 3M Badges and were not able to get satisfactory correlation with the

NOV 30 1979

A. E. GREENE

AP00042165

Jim Tolar

28 November 1979

Page 2

Personnel Monitoring Program
for Vinyl Chloride

B. F. Goodrich (continued)

carbon tube. Their main efforts are directed towards eliminating the program. They plan to correlate the area monitoring data and specific operating jobs to show personnel exposure. Their people feel OSHA will allow this substitution.

Stauffer Chemical Company

Stauffer uses the 3M Badge for their personnel monitoring program. They feel the program is more reliable than the pump and bag method.

In conclusion, half the companies contacted use badges and the other half use Bendix Flasher Tubes and pumps. A major point of interest is that the biggest PVC producer is channeling their efforts in the direction of eliminating the present type of personnel monitoring equipment used by all companies.

Larry W. Allen

Larry W. Allen

LWA:bg

AP00042166