PPG INDUSTRIES

INTER-OFFICE CORRESPONDENCE

Date: December 19, 1977

From: P. J. Snyder

To: Mark Wood

Location: 10 West - G.O.

Subject: Vinylidene Chloride Monitoring - Lake Charles

A recent review of Lake Charles' Vinylidene Chloride Personnel Monitoring Data collected and on file since July 1, 1976, (Attachment I), as well as a walkthrough of the plant areas covered by the Vdc Workpractice Guideline, have highlighted a few items which I would like to bring to your attention.

First, the job catagories of Edc Operator, Mc Operator, and Mc Aux Operator continue to be the particular job catagories with greatest vinylidene chloride exposure. The summary attached indicates that exposures in excess of 1.0 ppm, (8 hour twa), can be routinely anticipated for employees assigned to the latter two occupation groups. As you are aware, this observation is in agreement with earlier summaries. Question: Based on the day-to-day follow-up of overexposures, have the primary sources of employee exposure been identified? It has been suggested that this information and the required preventive measures be incorporated into the applicable operation manuals.

Secondly, there has been a notable increase in the amount of twa monitoring data available in this area since the time of my March correspondence (Attachment II). However, there still exists a need to assess what peak exposures may be considered "typical" of the affected operations. As you may remember, this type of exposure information was requested within the context of the Vdc workpractice which was issued last May.

From the standpoint of "utility", it is invisioned that this monitoring data be relied upon in evaluating what type of respiratory protection is to be used during specific procedures, as well as the adequacy of particular control efforts in use or being implemented. It is therefore again recommended that this type of peak exposure information be developed as part of the overall personnel monitoring program.

If sources of exposure have not been previously identified, this will perhaps require an initial set of consecutive 15 minute determinations over the majority of a routine workday. This air sampling should include the collection of process control samples and their analysis in the Edc/Mc laboratory. Based on conversations with department personnel, the first round of sample collection during the day shift appears to be one with the greatest potential for exposure, (Attachment III). As I understand the procedures involved, this collection and subsequent analysis process normally requires approximately 45 minutes.

Another item associated with the Vinylidene Chloride Workpractice Guideline are the ventilation systems in use, e.g., the ventilation hood in the Edc/Mc laboratory. Are these systems checked for adequacy on some routine basis, annually for example? Are these air flow/Sp measurements documented?

Lastly, the summary provided, (Attachment I) shows the Edc Operator catagorized under the department titles of Edc Liquid Phase and Triethane - Vdcm - Mc. The two samples recorded under the latter department appear to be miscatagorized and should be deleted and resubmitted under Edc Liquid Phase. It would be appreciated if these worksheets be identified as such when they are resubmitted.

I recognize that this letter is somewhat lengthy, and I appreciate you bearing with me. If you have any questions, do not hesitate to call.

P. J. Snyder

P. J. Snyder

PJS/eh

Attachments

cc: Z. G. Bell
F. C. Dehn
W. J. Peard

SL 088366

VINYLIDENE CHLORIDE
PERSONNEL MONITORING DATA

Job Category	No. Measurements TWA	INVEST.	STEL	No. Measurements Greater than Std.*	Maximum Meas.Recorded
(EDC Liquid Phase)					
EDC Opr.	12			3	9.7 ppm
(Triethane-VDCM-MC)					
EDC Opr.	2			0	.61
Triethane Opr.	17			7 (12/17 > 1.0)	45.4
Triethane Aux.Opr.	18	3		14 (16/18 > 1.0)	18.5
Triethane Lead Opr.	4			0	1.1
(Ethyl Chloride)					
EC CH1 Opr. Pro.	8	1		0	.39
(OHC-ECD)					
Machinist	0	1		0	ND
OCH Aux.Opr.	5			0	.13
OHC Opr.	5			0	ND
Tetra Opr.	5			0	ND
(Per/Tri-Tetra)					
P/T Lead Opr.	1	1		0	.27
P/T RX Opr.	6	2		0	.90
P/T Still Opr.	8			1	3.7
P/T Aux.Opr.	8	4		1	2.6 (91 minutes)
Pipefitter	2			0	.95
Shift Repr.man		1		0	.11
Welder		1		0	.10
(Shipping)					
Loader	5	1	2	0	1.0
Loader Helper	4	1	2	2	2.8 (TWA) (3.0 STEL)
(Technical)					
Lab. Assoc.	1		1	0	ND
Lab Sr. Analyst	2			0	.05
Lab Analyst	2			0	.10

SL 088367

(Vinyl Chloride)

EC HCL Opr	3		0	.11
Opr-VCM-FURN	15		0	.10
Opr-VCM-PROC	17	1	0	.29

*PPG Chemical Group Internal Standard established May 1977 at 2.5 ppm (8 hr TWA), 10 ppm (15 min. ceiling)

SL 088368