

ETHYL CORPORATION

INTER-OFFICE

To B.J. Lentz ADDRESS BRP

FROM R.F. Cope, Jr. ADDRESS BRT

SUBJECT Vinyl Chloride Personnel Monitoring Data DATE June 20, 1975
Quality Control Laboratory - Baton Rouge Plant

Attached are the subject data which has been obtained from 2/28/75 to 5/21/75. The data is presented in five tables. A summary of all personnel monitoring data for the laboratory is shown in Table 1 while individual exposure data is presented in Tables 2 through 5.

VCl Analytical Lab Technicians

As indicated by the data, there were 5 out of 8 samples greater than the action level of 0.5 parts per million (ppm). Three of these five excursions were over the 1.0 ppm VCl standard.

Fractometer Operator

Personnel exposure to VCM in this job function was minimal due to not handling any VCM during the time periods in which monitoring was conducted.

Stock Room Operator

No VCM sample containers were handled during the periods in which monitoring was conducted.

VCl Laboratory Supervisor

Exposure to VCM was minimal in this job function when monitoring was conducted.

General Comments

As indicated, there are some excessive VCM exposures occurring rather frequently in the analytical lab technician job function. It is difficult to pin point the reason, or combination of reasons, for these excursions. However, these excursions do occur often enough to warrant a more thorough look for possible reasons. Possibilities for these exposures may be poor, or inadequate, capture velocity of the laboratory hood, turbulent air flow in the face of the hood, accidental release of VCM samples when someone is engaged in analysis, and personnel may be exposed outside the laboratory (i.e. when going to the hydrocarbon plant to get samples).

Other job functions in the laboratory that handle VCM should be monitored whenever they are actually working with vinyl chloride. Perhaps this can be arranged in the near future.

2, { Routine VCM monitoring efforts by Corporate Medical Department personnel at the Baton Rouge Plant is expected to continue on a monthly basis--particularly in those areas and job functions where VCM exposure values are equal to or greater than the action level (0.5 ppm). Even though this is a continuing monitoring program it should also be viewed as an intergral part of the overall industrial hygiene activity at this facility.

If questions or comments arise about the exposure data or the monitoring program, just let me know and I will be happy to discuss them anytime.

R. F. Cope, Jr.
R.F. Cope, Jr.
Industrial Hygienist

RFC:daw

cc: D.E. Park
W.E. Rinehart, Sc.D.
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Table 1

Summary of Personnel Monitoring Values for VCM - Quality Control Laboratory - Baton Rouge, Louisiana

<u>Job Function</u>	<u>Dates</u>	<u>No. of Samples</u>	<u>Average (ppm)</u>	<u>Range (ppm)</u>	<u>Comments</u>
VCI Analytical Lab Technician	2/28-5/21/75	8	0.8	<0.1-2.0	No obvious reason noted for excursions
Fractometer Operator	2/28-5/21/75	8	0.1	<0.1-0.2	Below action level.
Stock Room Operator	2/28-4/18/75	5	0.1	<0.1-0.2	Below action level.
VCI Laboratory Supervisor	4/14-5/21/75	6	0.1	<0.1-1.0	No obvious reason noted for excursions

EC 3853

Note: Respirators are worn in areas where exposures are anticipated.

Table II

<u>Job Title and Name</u>	<u>Date</u>	<u>Rate & Duration</u>	<u>Conc. (ppm)</u>	<u>Comments</u>
<u>VCl Analytical Lab Technician</u>				
Murray - Employee #4711	2/28/75	1.5 l/min X 242 min.	0.5	Lab work and got samples in hydro-carbon area.
Gianelloni - Employee #5617	4/14/75	1.6 l/min X 241 min.	0.3	In lab most of time.
New-Employee #4709	4/16/75	1.5 l/min X 249 min.	1.6	In lab most of time. Out of lab ~ 1.0 hrs. to make gas test.
Handy - Employee #5506	4/17/75	1.5 l/min X 254 min.	0.6	Most of time in lab. In Change House ~ 45 min.
Whithead - Employee #5646	4/18/75	1.75 l/min X 243 min.	2.0	In lab most of time. Went to cafeteria ~ 30 min.
Major - Employee #5619	5/19/75	1.55 l/min X 241 min.	<0.1	In lab and VCl area.
Drago - Employee # 5584	5/20/75	1.55 l/min X 237 min.	<0.1	In lab most of time.
Drago - Employee #5584	5/21/75	1.55 l/min X 122 min.	1.1	VCl leak from sample container (bombs) Valve had apparently stuck.

EC 3854

Note: Respirators are worn in areas where exposures are anticipated.

Table III

<u>Job Title and Name</u>	<u>Date</u>	<u>Rate & Duration</u>	<u>Conc. (ppm)</u>	<u>Comments</u>
<u>Fractometer Operator</u>				
Karns - Employee #4710	2/28/75	1.60 l/min X 241 min.	0.2	No VC1 samples run during monitoring period.
Karns - Employee #4710	4/14/75	1.75 l/min X 242 min.	<0.1	No VC1 samples run during monitoring period.
Karns - Employee #4710	4/16/75	1.5 l/min X 243 min.	<0.1	No VC1 samples run during monitoring period.
Karns - Employee #4710	4/17/75	1.75 l/min X 245 min.	<0.1	No VC1 samples run during monitoring period.
Karns - Employee #4710	4/18/75	1.50 l/min X 249 min.	<0.1	No VC1 samples run during monitoring period.
Karns - Employee #4710	5/19/75	1.55 l/min X 240 min.	<0.1	No VC1 samples run during monitoring period.
Karns - Employee #4710	5/20/75	1.55 l/min X 237 min.	<0.1	Routine operation
Karns - Employee #4710	5/21/75	1.6 l/min X 122 min.	0.2	Routine operation

Note: Respirators are worn in areas where exposures are anticipated.

Table IV

<u>Job Title and Name</u>	<u>Date</u>	<u>Rate & Duration</u>	<u>Conc. (ppm)</u>	<u>Comments</u>
<u>Stock Room Operator</u>				
Aydell - Employee #4719	2/28/75	1.55 l/min X 244 min.	<0.1	No handling of sample containers.
Browning - Employee #4708	4/14/75	1.5 l/min X 235 min.	0.1	No handling of sample containers.
Browning - Employee #4708	4/16/75	1.75 l/min X 242 min.	0.2	No handling of sample containers.
Mixon - Employee #4833	4/17/75	1.5 l/min X 244 min.	0.1	No handling of sample containers.
Browning - Employee #4708	4/18/75	1.5 l/min X 247 min.	<0.1	No handling of sample containers.

EC 3856

Note: Respirators are worn in areas where exposures are anticipated.

Table V

<u>Job Title and Name</u>	<u>Date</u>	<u>Rate & Duration</u>	<u>Conc. (ppm)</u>	<u>Comments</u>
<u>VCl Laboratory Supervisor</u>				
Faller - Employee #6944	4/14/75	1.5 l/min X 240 min.	<0.1	Routine work
Bonaventure - Employee #7259	4/16/75	1.5 l/min X 240 min.	0.1	Routine work
Bonaventure - Employee #7259	4/17/75	1.5 l/min X 240 min.	<0.1	Routine work
Bonaventure - Employee #7259	4/18/75	1.5 l/min X 203 min.	<0.1	Routine work - Left lab
Bonaventure - Employee #7259	5/20/75	1.6 l/min X 242 min.	<0.1	Routine work
Bonaventure - Employee #7259	5/21/75	1.55 l/min X 121 min.	0.1	Leak in VCl sample container. Slight exposure.

EC 3857

Note: Respirators are worn in areas where exposures are anticipated.