Air Products and Chemicals, Inc.

PUT IT IN WRITING

Date 9 August 1974

To H. L. Watson - V.F. Subject VINYL CHLORIDE MONOMER LEVELS AT THE EMULSION PLANT

From E. J. Steck - C.C.

( ) Take Action ( ) For Your Approval ( ) For Your Info ( ) Discuss With Me
( ) For Your Comments ( ) As Requested ( ) File ( ) Note & Return

Concerning the recent report which I forwarded to you on Wednesday, 7 August, one particular point needs to be stressed. The earlier samples, previous to 14 May, were analyzed with the Century organic vapor analyzer which indicates total organics. Samples checked since 14 May were analyzed by gas chromatograph which separates the Vinyl Chloride, Vinyl Acetate, and Acetaldehyde and therefore indicates lower Vinyl Chloride monomer levels.

As you will notice on the report of 24 July, our plant atmosphere is usually less than 3 ppm unless some part of the ventilation system is inoperable. The C.E. for process area ventilation will cover the one trouble spot, the west door on the first floor.

Analysis to date indicates Vinyl Chloride levels in the final product to range around 16 to 26 ppm. However, more data will be needed to establish a better fix on this range. A production specification based on the limited data available could prove disastrous.

E. J. Steck

E. J. STECK

EJS/bc

cc: H. M. Konrad
J. D. Kramer
C. G. MacDonald
M. H. Stermon

Corrected Copy

Air Products and Chemicals, Inc.

PUT IT IN WRITING

Date 27 August 1974

To H. J. Zorman/E. J. Steck
Calvert City

Subject EMULSION PLANT - VINYL CHLORIDE
TESTING STATUS 8/23/74

From C. G. MacDonald/Calvert City

( ) Take Action ( ) For Your Approval ( ) For Your Info ( ) Discuss With Me
( ) For Your Comments ( ) As Requested ( ) File ( ) Note & Return

Laboratory testing of the Airflex #3 system was continued with the results tabulated below. It is noted that during the period 8/8 to 8/18, the samples were taken during the 4½-hour monomer delay portion of the batch. On 8/19 and 8/20, the timing was modified to be twice a day, regardless of the batch status at those hours.

The one high test result occurred when both doors were open at the north side, rendering the exhaust system ineffective.

	PPM VCl		
Date/Time	1st Floor W. Door	2nd Floor Sple. Point	3rd Floor Reactor
8/8/1700	296.	4.3	3.8
8/9/1000	0.5	0.3	0.3
8/10/0005	0.3	1.25	0.3
8/16/1600	0.7	0.8	1.12
8/18/1400	1.3	0.66	1.1
8/19/1600	<0.5	<0.5	<0.5
8/20/0900	<0.5	<0.5	<0.5

Other tests were run as follows:

A. Emulsion Control Room 8/11 - 19 ppm VCl - after blown reactor at PVC
Emulsion Control Room 8/13 - 1.2 ppm VCl - after vented reactor at PVC.
Emulsion Control Room 8/14 - <1.0 ppm VCl - after blown reactor at PVC.

B. Product Storage Tank #20 - Vapor Space - 68 ppm VCl 8/14.
Liquid Product UH 55 - 21 ppm VCl, 43 ppm acetate, 0.42% VAc on 8/17.
Liquid Product UH 66 - 18 ppm VCl, 48 ppm acetate, 0.41% VAc on 8/21.

C. G. MacDonald

C. G. MACDONALD

CGM:sl

cc: L. Dranikoff/Piscataway
H. M. Konrad
J. D. Kramer
M. H. Stermon
H. L. Watson/Valley Forge

AP00043339

Air Products and Chemicals, Inc.

PUT IT IN WRITING

Date 2 October 1974

To E. J. ~~Steck/Calvert City~~ Subject EMULSION PLANT - VINYL CHLORIDE

From C. G. MacDonald/Calvert City TESTING - STATUS 1 OCTOBER 1974

( ) Take Action ( ) For Your Approval ( ) For Your Info ( ) Discuss With Me
( ) For Your Comments ( ) As Requested ( ) File ( ) Note & Return

Testing of the Airflex No. 3 system was continued during A-728 runs, with results as shown below:

	PPM VCl			
Date/Time	1st Floor W. Door	2nd Floor Sple. Point	3rd Floor Reactor	
9/6/?	2.6	0.9	1.4	
9/7/1300	1.1	1.3	0.6	
9/8/?	0.8	1.2	0.5	
9/9/1000	0.7	<0.5	<0.5	
9/17/?	0.9	1.2	<0.5	
9/17/1945	3.2	1.8	0.8	
	---	36.*		
9/18/1100	4.8	2.6	0.7	(W. fire door open)
9/19/?	2.6	1.8	1.1	

*Taken while pulling reactor sample at sample point.

Also 9/19 - personal samples taken over 15-minute period:

5.0 ppm VCl - J. Burkhead - just walking around
1.7 ppm VCl - T. Story - control board
2.5 ppm VCl - E. Hardin - shotgun work

Product samples 8/30/74 - A-728:

Tank 20 - Vapor - 41 ppm VCl
(VH-101) Tank 20 - Liquid- 31 ppm VCl
38 ppm acetaldehyde
0.51% vinyl acetate

C. G. MacDonald

C. G. MACDONALD

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cc: L. Dranikoff/Piscataway
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