

VC
Murray

Mr. R. N. Wheeler

December 10, 1971

VINYL CHLORIDE VAPOR IN AIR
Dispersion Resin Unit
Vinyl Resin Area
SOUTH CHARLESTON PLANT

Dear Nick:

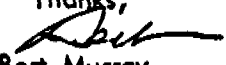
Attached are results of additional air samples that you requested for determining vinyl chloride vapor in air throughout the vinyl resin area.

In the general atmosphere all breathing level samples showed concentrations less than 100 ppm.

Nick, to support the concentrations obtained with the Drager Detector tube, we collected bag samples at a few spot locations. The Gas Chromatographic results were as follows:

Sampling Conditions	Gas Chromatograph ppm	Drag r tube ppm
BREATHING LEVEL - General atmosphere		
(J) No. 31 Autoclave top manhole open washing autoclave	30	<100
No. 33 Autoclave - normal operation		
No. 35 Autoclave - normal operation		
BREATHING LEVEL- General atmosphere		
(J) No. 32-34-36-47-48-49-45-50 Autoclaves in operation	20	<100
BREATHING LEVEL- General atmosphere		
(K) No. 37-39-41-43 Autoclaves in operation	9	<100
BREATHING LEVEL-General atmosphere		
(K) 38-40-42-44 Autoclaves in operation except No.44	12	<100

Let us know if further sampling is necessary

Thanks,

Bert Murray

UCC
035284

VINYL CHLORIDE VAPOR IN AIR
DISPERSION RESIN UNIT
SOUTH CHARLESTON PLANT

Sample No.	Date 1971	Time	Autoclave No.	Sampling Condition	Drager Detector Tube PPM
(K) 1	12/2	9:05a.m.	43	BREATHING LEVEL Autoclave in operation	<100 x
(K) 2	12/2	9:15a.m.	41	18" inside top manhole 1/2 full of product - pumping to No. 38 autoclave	1500 *
(K) 3.	12/2	9:20a.m.	44	BREATHING LEVEL Autoclave in operation	<100 *
(F) 4.	12/2	10:00a.m.	38	BREATHING LEVEL Manhole open - Autoclave 2/3 full of product from autoclave No. 38	<100 x
(K) 5.	12/2	10:15a.m.	38	18" inside top manhole 2/3 full of product from autoclave No. 41	>3000 *
(K) 6.	12/2	10:25a.m.	40	BREATHING LEVEL Autoclave in operation	<100 x
(L) 7	12/2	10:30a.m.	33	BREATHING LEVEL Autoclave in operation	<100 x
(J) 8	12/2	10:40a.m.	35-36-45	BREATHING LEVEL Autoclaves in operation	<100 u
9	12/2	10:45a.m.	32-46-47-49	BREATHING LEVEL Autoclaves in operation	<100 "
(P) 10.	12/2	10:50a.m.	43	Near bottom drain Washing autoclave	>3000 x
(E) 11.	12/2	11:10a.m.	37-43	BREATHING LEVEL 6'-8' from bottom drain	<100 ✓
(F) 12.	12/2	11:15a.m.	37	BREATHING LEVEL AT top manhole Washing autoclave	200 ✓
(J) 13.	12/2	11:20a.m.	43	BREATHING LEVEL At top manhole Before washing autoclave	600 *
(K) 14.	12/2	11:25a.m.	43	BREATHING LEVEL At top manhole - Washing started Washing started	<100 ✓

Sample No.	Date 1971	Time	Autoclave No.	Sampling Condition	Drager Detector Tub PPM
(K) 15	12/2	2:55pm.	41	10" above open manhole 1/2 full of product transferring product	220 x
(K) 16	12/2	3:00p.m.	41	10" above open manhole approx 1/2 full of product transferring product	330 ✓
(K) 17	12/2	3:10p.m.	41	10" above open manhole full of product -transferring	1000 ✓
18	12/6	8:50a.m.	Building 153	BREATHING LEVEL OPERATOR TAKING SAMPLE	125
19	12/6	8:55 a.m.	Building 153	Breathing LEVEL pacing north-south in control room	<100
(K) 20	12/6	10:35a.m.	42	15" inside open manhole Before wqshing and airing	1500 x
(K) 21	12/6	2:50 p.m.	42	15" inside open manhole Before washing and airing	875 ✓
(K) 22	12/8	11:05a.m.	42	BREATHING LEVEL Inside autoclave at bottom	450 ✓
(K) 23	12/8	11:10a.m.	42	BREATHING LEVEL Inside autoclave at bottom Liquid oozing from resin as it was chipped off.	875 ✓
(L) 24	12/10	8:45a.m.	35	18" inside top manhole in operation -agitator on	1500 ✓
(L) 25	12/10	8:50 a.m.	31-33-35	BREATHING LEVEL No. 31 autoclave manhole open No. 33-35 in normal operation	<100 ✓

NOTE: ALL MEASUREMENTS IN OPERATORS' CONTROL ROOM BUILDING 190
WERE LESS THAN 100 ppm. The same levels for Building 152 and 154.....