



Diamond Shamrock

fe DP PVC
Ind. Hyg.

Interoffice Correspondence

To: D. E. Frey
From: E. L. Payne
Date: December 3, 1981

Subject: Safety, Environmental and VCM Reduction Report - November, 1981

D 118-D

cc: R. Becker/R. Beadle/F. Sacks - Las Colinas
~~R. Beadle/L. Beadle/R. Adams/R. Stannard~~ - Pasadena
D. Henderson/G. Clark - Safety
R. B. Kitchen/M. L. Pulley
M. Labovitz/R. A. Paradis - Concord
B. Lochridge/C. Schock/W. Mott
D. Lull/R. Stellenberg/D. Bobish - Delaware City
J. Semancik - Concord
R. Nagy - Las Colinas
J. Worthington - Dallas
D. P. Tech File 16.03b (2)

I. Personnel VCM Exposure

There were no ceiling values above 5 ppm out of 45 samples. There was one TWA value above 1 ppm out of 48 samples. A mask was worn during the TWA exposure.

Ceiling Exposure (ppm)

<u>Department</u>	<u>High</u>	<u>Low</u>	<u>Avg.</u>	<u>Samples</u>
Resins #1/2	.78	0.05	0.53	10
Resins #3/4	1.69	0.04	1.02	7
Resins #5	2.65	0.38	1.13	7
LP&S	0.51	0.02	0.24	5
Compound	1.68	0.03	0.69	3
Labs	1.88	0.24	1.06	2
Maintenance	1.57	0.60	1.27	6
Tech & Adm. Plt. Supv.	4.30	0.47	1.58	5
Overall Plant	4.30	0.02	0.92	45

TWA Exposure (ppm)

Resins #1/2	0.41	0.10	0.26	11
Resins #3/4	0.38	0.09	0.22	7
Resins #5	3.71	0.02	0.63	7
LP&S	0.07	0.01	0.03	5
Compound	0.05	0.04	0.04	3
Labs	0.22	0.01	0.12	2
Maintenance	0.24	0.02	0.08	7
Tech & Adm. Plt. Supv.	0.22	0.03	0.16	6
Overall Plant	3.71	0.01	0.23	48

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II. <u>Residuals</u>	<u>High</u>	<u>Low</u>	<u>Avg.</u>	<u>Samples</u>
<u>Product</u>	<u>High</u>	<u>Low</u>	<u>Avg.</u>	<u>Samples</u>
PVC 426	80.80	0.01	6.16	80
PVC 450 #1/4	1.36	0.01	0.30	26
PVC 470	3.65	0.01	0.50	25
PVC 500	6.60	0.01	0.78	49
PVC 550	0.19	0.01	0.08	8
Exp. & OG Resin	1.62	0.01	0.75	9
All Paste	1.92	0.04	0.41	19
All Compound	2.67	0.01	0.46	22

III. Environmental Air

- A. The highest reading at the Plastics battery limit was 0.01 ppm.
The highest reading at the Deer Park Works boundary was 0.01 ppm.

B. Leak Patrol

A total of 2194 points were checked. There were 12 new leaks detected. There were 10 leaks repaired with 3 leaks remaining to be repaired from the current and previous audits.

- C. There was 1 reportable VCM release during the month. On November 19, 1981, a release occurred at the waste water stripping surge tank when the relief valve lifted, releasing 225 pounds VCM. The tank became overpressured as the result of some liquid vinyl being drained along with the water from #5 Plant's reclaim decanter.

- D. There were no reactor openings above the standard.

IV. Environmental Water

- A. The highest level of VCM in plant effluent to the ship channel was 0.02 ppm. The highest level of VCM in the storm sewer was 1.00 ppm.
- B. There were no samples from the #4 Outfall above the NPDES permit limits.

Values above NPDES limits:	<u>Month</u>	<u>YTD</u>
	0	3

C. Wastewater Stripping

There were no waste water daily averages above the standard this month.

Values above standard:	<u>Month</u>	<u>YTD</u>
	0	10

V. Reclaim System/Flare

Flare Use in Hours	<u>Month</u> 0	<u>Permit</u> <u>YTD</u> 16.5*
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* Permit Year: 2/1 to 2/1

VI. Environmental Statistics

A. Suspension Stripping

Daily Average (ppm)	<u>Month</u> 89.00	<u>YTD</u> 82.16
Days Above Standard Limits	0	3

B. Dispersion Stripping

Daily Average (ppm)	716.50	656.53
Days Above Standard Limits	0	4

C. Waste Water Stripping

Daily Average (ppm)	0.99	1.79
Days Above Standard Limits	0	10

D. Reactor Openings

Number of Charges	2,243	28,390
Number of Reactors Sampled	42	409
Number Above Standard Limits	0	6
Percent Above Standard Limits	0	1.5%
West Plant Charges/Opening	1/1	
East Plant Charges/Opening	2/1	

E. EPA Reportable VCM Releases

Number of Releases	1	5
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F. Total Reportable VCM Releases

Number of Releases	1	8
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G. Outfall 004

Number of Samples Above NPDES Permit	0	3
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VII. Total VCM Emissions from Stripping and Reactor Openings

A. <u>Suspension Resin Stripping</u>	<u>Month</u>	<u>YTD</u>
EPA Permitted Emission-lbs.	10,247	121,638
Texas Permitted VCM Emission-lbs.	5,550*	61,050
Actual VCM Emissions - lbs.	2,280	24,984
Over/(Under) - lbs. (Texas)	(3,270)	(36,066)

*Permitted based on 555 MM lbs/yr. production (permitted by the state of Texas).

B. <u>Dispersion Resin Stripping</u>	<u>Month</u>	<u>YTD</u>
EPA Permitted VCM Emission-lbs.	940	27,816
Texas Permitted VCM Emission-lbs.	1,167*	12,837
Actual VCM Emission - lbs.	337	9,131
Over/(Under) - lbs. (Texas)	(830)	(3,706)

*Permitted based on 20 MM lbs./yr. production (permitted by the State of Texas).

C. <u>Reactor Openings</u>		
Permitted VCM Emissions - lbs.	522	6,359
Actual VCM Emission - lbs.	232	3,668
Over/(Under) - lbs. (Texas)	(290)	(2,691)

D. <u>Totals</u>		
EPA Permitted VCM Emission - lbs.	11,709	155,813
Texas Permitted VCM Emission-lbs.	7,239	80,246
Actual VCM Emission - lbs.	2,849	37,783
Over/(Under) - lbs. (Texas)	(4,390)	(42,463)
% of Permitted Emission (Texas)	39%	47%

VIII. Injury Report

	<u>Lost Time Cases</u>		<u>Lost Workday Cases</u>		<u>Recordable Cases</u>		<u>First Aid Cases</u>	
	<u>Month</u>	<u>YTD</u>	<u>Month</u>	<u>YTD</u>	<u>Month</u>	<u>YTD</u>	<u>Month</u>	<u>YTD</u>
#1/2 Resin	0	0	0	0	0	1	0	10
#3/4 Resins	0	0	0	0	0	1	0	13
#5 Resins	0	0	0	0	0	1	0	5
Compound	0	0	0	0	0	0	0	0

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VIII. Injury Report (cont'd)

	Lost Time Cases		Lost Workday Cases		Recordable Cases		First Aid Cases	
	Month	YTD	Month	YTD	Month	YTD	Month	YTD
Maintenance	0	0	0	0	0	0	1	18
Labs	0	0	0	0	1*	1	0	4
LP&S	0	1	0	1	0	2	0	18
Tech.-Admin.	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL PVC	0	1	0	1	1	6	1	68

* A senior lab technician suffered a laceration to the middle finger of his left hand, which required sutures, while feeding mill stock to the mill rolls.

E. L. Payne
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ELP:sg