To: File: TRI Report - 2001
From: KTD
Date: 23-May-02

CY 2001 VCM Total Annual Reportable Amount Calculations	
Fugitive Emissions Calculations:	
Leaks, lbs[1]	100
Fugitive Emissions, lbs[2]	4,555
Batch Water Strippers	
2001/1995 PVC production ratio:	1.19
1995 BWS fugitive VCM, lbs:	43.6
2001 BWS fugitive VCM, lbs:	52
Railcar unloading	
$\frac{838440905 \text{ lb VCM} \times 1 \text{ R/C} \times .043 \text{ lb VCM (residual)}}{180{,}000 \text{ lb VCM} \times 1 \text{ R/C}}$	200
Total Fugitive Emissions:	**4907**
Stack or Point Emissions[3]***:***	
Total emissions, lbs:	**24,243**
Discharges to POTW:	
VCM at Outfall 001, lbs:	**0**
Total Annual Reportable Amount:	**29,150**

Removal Efficiency of Incinerator:

Avg. incinerator run time, hr/day: 17.6

Flow rate of influent, SCFH: 219

Influent VCM concentration, ft^3 VCM/ft^3: 0.404

Influent VCM concentration, lb/yr:

$$\frac{500\ ft^3}{hr} \times \frac{17.6\ hrs}{day} \times \frac{365\ days}{yr} \times \frac{.4\ ft^3\ VCM}{ft^3} \times \frac{62.5\ lb\ VCM}{379\ ft^3\ VCM} = 93565$$

Effluent VCM concentration, ppm: 1.8

Effluent VCM concentration, lb/yr:

$$\frac{1.77272727272727\ ppm \times 93565\ lb\ VCM/yr}{1000000} = 0.166$$

Removal efficiency:

$$\frac{93565\ lb\ VCM - 0.17\ lb\ VCM}{93565\ lb\ VCM} \times 100\% = \mathbf{100.00\%}$$

Removal Efficiency of Ponds:

Average monthly flow from vinyl (3/4 of total flow), gpm: 695

Total VCM entering waste water treatment system from Pond 1, lbs:

$$\frac{638\ parts}{1\ billion} \times \frac{695\ gal}{min} \times \frac{8.3\ lbs}{gal} \times \frac{525600\ min}{year} = 1{,}933$$

Total VCM at Outfall 001, lbs: 0

Removal efficiency:

$$\frac{1933 - 0}{1933} \times 100\% = \mathbf{100.00\%}$$

Outfall 001 VCM		
Date	*VCM*	*Units*
3/1/00	0.0	ppb
AVERAGE	0.0	ppb
YEARLY	0.0	lbs

Pond 1 VCM (monthly in-house GC results)	
Month	*VCM (ppb)*
Jan-01	592
Feb-01	3938
Mar-01	584
Apr-01	254
May-01	392
Jun-01	212
Jul-01	111
Aug-01	39
Sep-01	189
Dec-01	70
AVERAGE	638