POTENTIAL COST IMPROVEMENT

Assumptions: (1) Solid Aroclor will debottleneck each year to the sales forecast for that year.

(2) Yield = $\frac{1969}{85}$ $\frac{1970}{90}$ $\frac{1971}{90}$ $\frac{1972}{90}$

Chlorination cycle = 11 hours

Cl_2 quality = 90%

O.S.T. = $\frac{1969}{85}$ $\frac{1970}{90}$ $\frac{1971}{90}$ $\frac{1972}{90}$

(3) Production

	1969	1970	1971	1972
$\bar{M}$ lbs./yr.	11.66	13.15	14.33	15.02

	1969	1970	1971	1972
Gross Profit	87,000	109,000	86,200	50,400
Reduction in Fixed and Budgeted Direct and Indirect Costs	31,500	36,920	24,400	15,000
Improved Yield (Category I)	24,500	17,100	-	-
Process Improvements	64,000	64,000	-	-
Total:	$207,000	$227,020	$110,600	$65,400

Cost Improvement directly attributed to polyphenyl effects =

$$(\text{Gross profit} + \text{Reduction in D/Ind. costs}) \times \frac{85}{90} \frac{\text{o.s.t.}}{\text{o.s.t.}} + \text{Imp. yield}$$

Therefore:

1969 = $(87,000 + 31,500) \times \frac{85}{90} + 24,500$ = $136,500

1970 = $(199,000 + 24,400) \times \frac{85}{90} + 17,100$ = $154,900

1971 = $(86,200 + 24,400) \times \frac{85}{90}$ = $104,500

1972 = $(50,400 + 15,000) \times \frac{85}{90}$ = $ 61,800

Total Cost Imp. Attributed to Polyphenyl Study $457,700

PCB-ARCH-EXT0377917