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NAME & LOCATION) Sauget, Ill.

June 27, 1968

cc: Messrs. J. R. McClain

J. W. Molloy

Start-up Expense Budget for
Aroclor Expansion Project (CEA 1800)

R. D. Williams

R. S. Yates

R. M. Kountz

Mr. W. A. Kuhn (2)
General Offices

Attached for your approval is the Start-up Expense Budget for the Aroclor Expansion Project including estimates of Preparation Expense and Operation Expense. These estimates have been prepared to conform to policy given in Controller's Bulletin 12-06 and Organic Division Bulletin No. OA 5-1.

The totals for Preparation Expense and Operation Expense are summarized below.

Preparation Expense	-	\$82,000
Operation Expense	-	<u>\$33,000</u>

Total Start-up Expense-\$115,000

The total start-up Expense of \$115,000 is approximately 7½% of the estimated capital provided on CEA 1800 for this project. The basis for the timing of the start-up is Revision No. 5 of the Master Project Schedule dated 5/20/68.

The attached pages give a detailed break-down of expense estimates by type and an estimate basis for major expense items.

Service Account Number 916.55 will be used to collect Preparation Expense charges. These charges will be closed out to the division start-up account (715.00) monthly.

Starting in July, a variance report comparing actual start-up expenses with budget will be sent to you monthly.

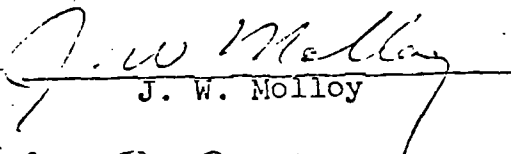

H. F. Ray

Mfg. Representative

Start-up
Budget

ghw

Approval


J. W. Molloy

7/68 { C. E. Anastopoulos
 H. K. Smith

DSW 330081

Preparation Expense Budget

Aroclor Expansion (CEA 1800)

Job No. 916.55

<u>Budget Item</u>		<u>3rd</u> <u>Qtr.</u> <u>1967</u>	<u>4th</u> <u>Qtr.</u> <u>1967</u>	<u>1st</u> <u>Qtr.</u> <u>1968</u>	<u>Phase I</u> <u>June</u> <u>1968</u>	<u>2nd</u> <u>Qtr.</u> <u>1968</u>	<u>Phase I</u> <u>July</u> <u>1968</u>	<u>Phase I</u> <u>Aug.</u> <u>1968</u>	<u>Phase II</u> <u>Sept.</u> <u>1968</u>	<u>3rd</u> <u>Qtr.</u> <u>1968</u>	<u>Phase II</u> <u>Oct.</u> <u>1968</u>	<u>4th</u> <u>Qtr.</u> <u>1968</u>
<u>Factory Expense</u>	<u>Totals</u>											
Chemicals (505)	7,000	0	0	0	0	0	0	0	0	0	7000	7000
Utilities	5,150	0	0	0	1000	1000	1000	0	0	1000	3150	3150
Mfg. Wages (570)	5,790	0	0	0	100	100	965	0	0	965	4725	4725
Mfg. OH (578)	810	0	0	0	15	15	140	0	0	140	655	655
Salaries (575)	16,450	600	900	1500	1200	2200	1200	1650	4200	7050	4200	5200
Salaries OH (578)	2,950	100	150	250	200	350	200	300	650	1150	650	300
Factory Supplies (590)	8,000	0	0	0	0	0	1000	2000	3000	6000	2000	2000
Laboratory (610)	3,300	0	0	0	0	0	1000	1000	1300	3300	0	0
Clothing & Laundry (614)	2,900	0	0	0	0	0	100	0	0	100	2800	2800
Safety Equipment (613)	400	0	0	0	0	0	100	0	100	200	200	200
TSD (621)	3,000	0	0	500	500	500	1000	0	1000	2000	0	0
Mech. Expense (694)	20,000	0	0	0	0	0	1000	1000	8000	10000	10000	10000
Sub-Total -	75,750											
<u>Other Expense</u>												
Vendor Fees (715)	5,000	0	0	0	0	0	0	1000	1000	2000	3000	3000
Meetings (798)	1,000	0	0	0	0	0	0	0	500	500	500	500
Office Supplies (864)	250	0	0	0	0	0	100	0	100	200	50	50
Sub-Total -	6,250											
TOTAL -	82,000											

STLCOPCB4055890

DSW 330082

Estimated Preparation Expense
for
Aroclor Expansion (CEA 1800)
Job No. 916.55

1. Chemicals \$7,000

Phase I

Since only storage tanks and associated equipment are involved, it is anticipated no start-up cost for chemicals will be incurred. \$0

Phase II

Process simulation on new process equipment using Aroclor 1242 -10,000G. @ \$0.70/gal. \$7,000

2. Utilities \$5,150

Phase I

	6/68	7/68
Steam @ 15% Std. -	\$900	\$900
Electricity @ 10% Std. -	\$100	\$100
	<u>\$1000</u>	<u>\$1000</u>

Phase II

	10/68
Steam @ 40% Std. -	\$2500
Electricity @ 25% -	250
Purchased Water @ 50% Std.	\$400
	<u>\$3150</u>

3. Mfg. Wages \$5,790

Phase I

	No.	Rate	Hours	Cost
Repairman	2	3.705	24	90
Second Operator	5	3.540	180	635
Std. Operator	2	3.405	48	165
Swingman	1	3.855	12	45
				<u>935</u>
Vac. & Hol. @ 12.824% -				130
				<u>\$1065</u>

Phase II

Premium Operator	4	3.660	240	880
Still Operator	4	3.620	480 (1)	1735
Second Operator	4	3.540	48	170
Swingman	1	3.855	60	230
Swingman	1	3.620	320 (1)	1160
				<u>\$4175</u>
Vac. & Hol. @ 12.824% -				550
				<u>\$4725</u>

(1) New classifications. Will receive training on straight time. All others are regular department personnel and will be trained on overtime.

4. Mfg. Wages O.H. (13.993%) \$810

5.	<u>Salaries</u> (Training, Start-up Planning, Preparation for Start-up)	<u>\$16,450</u>
	<u>Phase I</u>	
	a. Mfg. Representative \$300/mo. - 8/67 thru 12/67, \$500/mo. 1/68 thru 8/68 -	\$5,500
	b. Production Supervisor \$250/mo. 6/68 thru 8/68	\$750
	c. Production Foreman \$450/mo. 6/68 thru 7/68	\$900
		\$7,150
	<u>Phase II</u>	
	a. Mfg. Representative \$500/mo. 9/68 thru 10/68	\$1,000
	b. Start-up Foreman \$900/mo. 8/68 thru 10/68	\$2,700
	c. Production Supervisor \$250/mo. 9/68 thru 10/68	\$500
	d. Shift Supervision 3 men \$850/mo. 9/68 thru 10/68	\$5,100
		\$9,300
6.	Salaries OH (17.75%)	<u>\$2,950</u>
7.	<u>Factory Supplies</u>	<u>\$8,000</u>
	a) Housekeeping Equipment	
	b) Safety Signs	
	c) Equipment Tags	
	d) Safety Equipment	
	e) Laboratory Equipment	
	f) Miscellaneous Start-up Supplies	
8.	<u>Laboratory</u>	<u>\$3,300</u>
	a) Develop routine methods for electrical property measurement based on Organic Research Work.	
	b) Analyst Training	
9.	<u>Clothing & Laundry</u> (5% of Wages)	<u>\$2,900</u>
10.	<u>Safety Equipment</u>	<u>\$400</u>
11.	<u>Technical Services</u>	<u>\$3,000</u>
	a) Training Assistance	
	b) Materials Engineer	
	c) IFO Review	

12.	<u>Mechanical Expense</u>	<u>\$20,000</u>
	Phase I -	\$ 2,000
	<u>Phase II -</u>	<u>\$18,000</u>
		\$20,000

Includes:

- a) Equipment, Instrument and Electrical checkout prior to start-up (beyond nominal service provided by Engineering).
- b) Alterations to equipment prior to and during process simulation (water batching).
- c) Maintenance coverage during start-up.

13.	<u>Vendor Fees</u>	<u>\$5,000</u>
14.	<u>Meetings</u>	<u>\$1,000</u>
15.	<u>Office Supplies</u>	<u>\$250</u>
	\$50/mo. - 6/8 thru 10/68	

Total - \$82,000

DSW 330085

Operation Expense Budget

Aroclor Expansion

(Over-and-Above Standard)

<u>Budget Items</u>	<u>Totals</u>	<u>Phase I</u> <u>Aug. '68</u>	<u>Phase I</u> <u>Sept. '68</u>	<u>3rd Qtr.</u> <u>'68</u>	<u>Phase I</u> <u>Oct. '68</u>	<u>Phase II</u> <u>Nov. '68</u>	<u>Phase II</u> <u>Dec. '68</u>	<u>4th Qtr.</u> <u>1968</u>
Utilities	3,000	1000	1000	2000	1000	0	0	0
Salaries	5,100	0	0	0	0	2,550	2,550	5,100
Salaries OH	900	0	0	0	0	450	450	900
Factory Supplies	2,000	0	0	0	0	1,000	1,000	2,000
Laboratory	2,000	0	0	0	0	1,000	1,000	2,000
Mechanical Expense	20,000	0	2000	2000	0	9,000	9,000	18,000
TOTAL -	33,000							

DSW 330086

STLCOPCB4055894

Estimated Operation Expense
for
Aroclor Expansion (CEA 1800)
(Over-and-Above Standard)

Following is the basis for estimating Operation Expense for the Aroclor Expansion Project. These costs are for over and above standard costs for chemical operation. All other costs were assumed at standard.

<u>Utilities</u> (Tank farm on line prior to Mfg. Plant)	<u>\$3,000</u>
<u>Phase I</u>	
Steam @ 15% Std. - 900	
Elec. @ 10% Std. - 100	
1000/mo. 8/68, 9/68, 10/68	
<u>Salaries</u> (Shift supervision on start-up)	<u>\$5,100</u>
<u>Phase II</u>	
Shift Supervision	
3 men @ \$850/mo. 11/68 & 12/68	
<u>Salaries OH</u> (17.750%)	<u>\$900</u>
<u>Factory Supplies</u>	
\$1000/mo. over-and-above standard 11/68 & 12/68	<u>\$2,000</u>
<u>Laboratory</u>	
\$1000/mo. over-and-above standard 11/68 & 12/68	<u>\$2,000</u>
<u>Mechanical Expense</u>	<u>\$20,000</u>
Phase I - \$2,000	
Phase II - \$18,000	
\$20,000	

Includes: All mechanical expense required for minor modifications and correction of facilities to obtain smooth and trouble free operation at design rate, quality and cost.

TOTAL - \$33,000

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