Monsanto

L. W. Miller

FROM (NAME & LOCATION) J. C. Landwehr - Anniston Plant

File

DATE : January 20, 1971

PCB Control

SUBJECT : ANNISTON - 1971 AROCLOR WASTE COSTS

cc: ~~J. L. Corder~~
A. G. Hill
G. L. Jessee

REFERENCE : 12/24/70, JRS/JCL

TO : J. R. Savage

General Offices

This revises estimates of my 12/15/70 memo for 1971 Aroclor Waste expenses. The rough numbers discussed with you on 1/18/71 have been further reviewed with some additional reductions being made. Expenditures under items 1-3 have been previously approved and are within approved budgets. Item 4 expenditures will be made only if necessary after review with the Production Superintendent concerned on a case basis.

1a) Completion of Limestone Pit Upgrade to give Anniston two pits for switch operation with demonstrated capability not to exceed 2 lbs./day PCB on a monthly average basis with 6 pH without phosphoric acid or 4.5 pH with.
(TSD - $3000, Mech. - $7000): 1971 Expense $10,000

1b) Limestone Pit Cleanout - same as in past except cleanouts to two/year from four due to sludge pumpout technique, improved design, and less discharge of HCl.
(TSD - $1600, 10 pumpouts - $4000, 2 cleanouts $20,000) $26,000

1c) Regular Limestone Consumption & Misc. Expense (Based on '71 Aroclor forecast and 73% overall HCl recovery) $20,000

Total estimated to 914.24 $56,000

1971 Budget $68,712

With present practice for distributing 914.24 based on chlorine usage, only 2% of this cost center will go against Liquid Aroclor.

We proposed that a 20% distribution of developmental expenses be made to other locations benefiting from this technology; 20% of 1a) + 1b)..... $7200*

2) Reactor - Clarifier Pilot Study

AFE 3715 ($11 M total, $4 M spent in 1970) - $ 7,000

PR&D, 100 mandays	10,000	
TSD, 30 mandays	2,400	
Sustaining mechanical expense	2,000	
Analytical, 500 samples @ $17	8,500	
	$29,900	$30,000*

DSW 552100

Item 2 - continued

It is proposed that this expense be distributed 100% to other benefiting locations.

NOTE: Full scale Reactor-Clarifier facility for Anniston is deferred due to low liquid Aroclor production. A later decision would be governed by 1) levels of PCB persisting as result of solid Aroclor operation and leaching out, 2) attitude of Alabama Water Improvement Commission or its successor, 3) effectiveness of reactor-clarifier on chlorinated terphenyls and need to reduce terphenyl discharge. To establish point 3), a trace analysis for PCT is under development. Until this is available, pilot unit samples extracted with hexane will be retained for later PCT analysis.

3. Biological Consultants, Residue and Plant Effluent Control

3 Surveys in 1971 @ $4350	$13,050
250 Residue analyses of target species @ $56 -	13,300
(2 Year contract will include 4 surveys in 1972 and 1 in 1973)	26,350
1 Daily effluent for AWIC @ $17 -	6,200
4/Week inside plant and 3/week specials @ $17 -	6,200
	$12,400

This work can be done within 1971 916.07 budget of $39,048. Since 2/3 of this work is development of knowledge of ecological effects, we proposed distributing 50% to other locations.
50% of $38,750..... $19,400*

4. Projected business protection type work which will exceed budget and will be done only on Production Superintendent's approval on a case basis.

a) Dump control - manage dump and transportation to minimize PCB escape

TSD 20 mandays	$1600	
Analytical 12 mud @ $34	410	
30 H_2O @ $17	540	
Mech. expense	10,550 max.	$2,500 min.
	$13,100 max. -	$5,000 min.

DSW 552101

Item 4 - continued

b) Leaching problems - storm drain, pit bypass, ground water under Aroclor department, and abandoned dumps.

TSD, 10 mandays	$800		
Analytical	500		
Mech. expense	2,000 max.		0 min.
	$3,300 max.	-	0 min.

c) Clean up Snows Creek and Area Monitoring
PCB removal from any area from our fence to Choccolocco - avoid if possible, but be prepared for action;

For investigation:

TSD, 12 mandays	$1,000		
Analytical, included in 3.	-		
Mech. expense	2,000 max.		
	$3,000 max.		0 min.

d) Disposal of Scrap and Spent Carbon-PCB containing materials, collect and dispose; expense related to projects or investigations:

TSD, 50 mandays	$4,000	-	$2,000 min
Mech. expense	1,000 max.		0 min.
	$5,000 max.	-	$2,000 min.

e) Customer consultation and contingency $4,000 max. - 0 min.

TOTAL POTENTIAL BUDGET OVERRUN $28,400 max. - $7,000 min.

J. C. Landwehr

:kd

DSW 552102