W. F. Waychoff - St. Louis General Offices

December 6, 1968

SOLID AROCLOR FORECASTS

JES to WFW 12/3/68

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Regarding the increase in forecasts, there are several causes in this dynamic field. The revised forecasts are basically correct.

The sales forecast of 8/15/68 which was based on 1969 budget numbers has been changed for the following reasons.

1. We expected substantial growth of Aroclor 5460 in hot melt adhesives to take place after we got FDA approval. This growth has developed earlier than expected. (Tables 4, 5 and 7)

2. Dramatic increase in sales through distributors (Tables 4 and 5)

3. Presstite has gained new automotive business, utilizing Aroclor 4465 which could mean their total purchases in 1969 will reach 1 [illegible] lbs. This only became known to us in October.

4. The International budget is low by about 850 M lbs. for 1969. (Table 6)

Because of the supply-demand problem that we agree exists in 1969 and the need for giving CED the best estimates we can, we evaluated the entire solid Aroclor market after receiving your memo. Some minor changes have been made--particularly in 1969.

1. Solid Aroclor sales world-wide have increased 109% in the last 5 years (Table 1 attached) Revised forecast for the next 5 years is included.

2. Aroclor 5460 sales world-wide have increased 119% in the last 5 years (Table 2 attached).

3. Aroclor 5460 accounts for 83-84% of all solid Aroclor sales.

4. 74% of Aroclor 5460 sales are accounted for by:

Re-sale by distributors	36%
Hot melt adhesives	24%
Export	14%

(Table 4)

Forecast revisions reducing 1969 and modifying subsequent years will be made.

C. PATON

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TABLE I

SALES HISTORY - ALL SOLID AROCLORS

	Domestic (M Lb.)	Export (M Lb.)	Total (M Lb.)
1963	4.7	0.5	5.2
1964	5.3	0.7	6.0
1965	5.9	0.6	6.5
1966	7.6	0.7	8.3
1967	7.8	1.1	8.9
1968 (est)	9.5	1.4	10.9
1969 (revised forecast)	12.4	2.0	14.4
1970 (revised forecast)	15.1	2.2	17.3
1971 (revised forecast)	16.7	2.4	19.1
1972 (revised forecast)	18.0	2.6	20.6
1973 (revised forecast)	19.4	2.8	22.2

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TABLE II

SALES HISTORY - AROCLOR 5460

	Domestic (M Lbs.	Export (M Lb.)	Total (M Lb.)
1963	3.8	0.4	4.2
1964	4.3	0.6	4.9
1965	4.9	0.5	5.4
1966	6.3	0.6	6.9
1967	6.4	1.0	7.4
1968 (est.)	7.9	1.3	9.2
1969	9.9	1.9	11.8
1970	12.2	2.1	14.3
1971	13.4	2.3	15.7
1972	14.6	2.5	17.1
1973	15.6	2.6	18.2

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TABLE III

SALES HISTORY - AROCLOR 2565/4465/5060/5442/1268

	Domestic (M Lb.)	Export (M Lb.)	Total (M Lb.)
1963	0.9	0.1	1.0
1964	1.0	0.1	1.1
1965	1.0	0.1	1.1
1966	1.3	0.1	1.4
1967	1.4	0.1	1.5
1968 (est)	1.6	0.1	1.7
1969	2.5	0.1	2.6
1970	2.9	0.1	3.0
1971	3.3	0.1	3.4
1972	3.4	0.1	3.5
1973	3.5	0.1	3.6

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TABLE IV

MARKET FOR AROCLOR 5460

	1968	1967
Resale by distributors	36%	31%
Hot melt adhesives	24%	16%
Export	14%	13%
Wax cpd. for wire coating	9%	11%
"Lost" wax compounds	6.5%	9%
Coatings	5%	7%
Rubber modifiers	1%	3%
Miscellaneous	4.5%	10%

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TABLE V

ANALYSIS OF AROCLOR 5460 SALES (M LB.)

	1967 (12 mo.)	1968 (10 mo.)	1969 (est.)
Distributors	2.30	2.75	3.30
Hot melt adhesives	1.25	1.80	2.20
Export	1.00	1.10	1.30
Wax cpd. for wire coating	0.80	0.70	0.80
"Lost" wax compounds	0.65	0.50	0.60
Coatings	0.50	0.40	0.50
Rubber modifiers	0.20	0.10	0.10
Miscellaneous	0.70	0.35	0.40
	7.40	7.70	9.20

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TABLE VI

ANALYSIS OF AROCLOR 5460 EXPORT SALES

	1967	1968 (est)	1969 (forecast)
Africa/India	12 M lb.	7 M lb.	25 M lb.
Asia Pacific	19	12	25
Australia	298	260	350
Canada	189	360	400
Europe	386	600	800
Japan	20	30	90
Latin America	82	60	100
	1,006 M lb.	1,329 M lb.	1,870 M Lb.

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TABLE VII

HOT MELT ADHESIVE ACCOUNTS

	1967	1968 (est)	(Without FDA) 1969 (fore)	(With FDA) 1969 (fore)
Colonial Press	120	180	200	200
H. B. Fuller	84	190	250	
Illinois Adhesives	200	220	250	250
National Starch	160	260	300	
Swift	657	950	1,500	
United Shoe Machinery	60	90	150	300
United Resins	34	210	250	
Borden *	0	0	100	100
Evans Adhesives	0	0	0	100
Franklin Glue	0	0	0	100
Amsco	0	0	P	P
Essex Chemical	0	0	P	P
Stein Hall	0	0	P	P
Others	0	100	120	150
	1,315	2,200	3,120	4,000

P= potential business for Aroclor 5460.

* Borden is building a plant at Middlesex, N.J. for hot melt adhesives based on EVA. It will start up in August, 1969. 1970 usage of Aroclor 5460 is estimated at 1.5 M lb. if we get FDA approval rising to 2-3 M lb. in 1972. Borden predicts they will be selling 10-12 M lb. hot melt adhesives in 1972 compared to zero in 1968.

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TABLE VIII

1969 AROCLOR 5460 SALES FORECAST (M LB.)

	1967	1968 (est)	1969 (forecast)
Distributors	2.3	3.3	3.9
Hot melt adhesives	1.25	2.2	3.2
Export	1.0	1.3	1.9
Wax cpd. for wire coating	0.8	0.8	0.9
"Lost" wax compounds	0.65	0.6	0.6
Coatings	0.5	0.5	0.6
Rubber modifiers	0.2	0.1	0.2
Miscellaneous	0.7	0.4	0.5
	7.40	9.2	11.8

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