EFFECT OF PCB PHASE OUT

HEAT TRANSFER

(1) Spell
Hold harmless
a possibility
Licensee
Like oil

FINANCIAL

Loss of $1.3M per annum sales

Loss of $0.8M per annum gross profit (2)

Disposal PCB fluid $1.0M (estimated)

CUSTOMER REACTION

- 685 customers using PCB heat transfer fluids
- 62 of these customers major companies and customers for other Monsanto products

EXAMPLES

GOODYEAR: Monsanto 1971 sales est. $21M
Uses PCB's in 150,000 gallon system in Applegrove, West Virginia--polyester plant. Reaction to immediate cut off will be violent and could have significant effect on tire cord and rubber chemical sales.

Recommend we allow Goodyear 3 months to changeover

BURLINGTON INDUSTRIES: Monsanto 1971 sales est. $25M
Has three systems: Altavista, Virginia; Cheraw, S.C.; Greensboro, N.C. All systems used to heat ovens for fabric finishing. Immediate cut off will interrupt production and result in violent reaction. Could result in reduced sales.

Recommend we allow 2 months changeover.

DSW 338581

Don't we have to be
prepared for longer periods?

GENERAL MOTORS: Monsanto 1971 sales est. $12M
Has six systems--uses include heating of plastic extruders and heating asphalt lines for battery production. Immediate cut off would interrupt production and result in strong reaction.

Recommend we allow 2 months changeover.

FIRESTONE: Monsanto 1971 sales est. $27M
Has three systems including press heating for tank treads and auto parts. Immediate cut off will result in violent reaction and will probably affect rubber chemical sales and textiles.

Recommend we allow 2 months changeover.

LEVER BROTHERS: Monsanto 1971 sales est. $30M
Three systems used in soap manufacture. Proposal already made to convert to non-PCB fluid--favorable reaction but no action to date. Immediate cut off will result in very strong reaction. Sales could be affected.

Recommend we allow 2 months changeover.

RECOMMENDATION

IN ALL CASES WHERE PCB HEAT TRANSFER SYSTEM IS PART OF PRODUCTION OPERATIONS WE SHOULD ALLOW A CHANGEOVER PERIOD TO AVOID SHUTDOWNS AND INTERRUPTION OF PRODUCTION.

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2) SALE OF PCB FLUIDS FOR TRANSFORMER OR CAPACITOR USE WILL BE DEPENDENT UPON THE RECEIPT FROM CUSTOMERS OF DOCUMENTS ACCEPTABLE TO MONSANTO, HOLDING MONSANTO HARMLESS FROM LEGAL LIABILITY ASSOCIATED WITH THE USE OF PCB'S IN TRANSFORMERS AND CAPACITORS. AS A SERVICE TO SUCH CUSTOMERS MONSANTO WILL AGREE TO ACCEPT THE RETURN OF USED OR SURPLUS PCB FOR REUSE OR DESTRUCTION ACCORDING TO ITS USUAL FEE SCHEDULE.

1) Law Department drafting proposed "hold harmless" document acceptable to Monsanto.

2) H. S. Bergen/J. Mason to visit Westinghouse and General Electric at Vice President level for discussions on Monsanto requirements, indicating contents of probable "hold harmless" document.

3) Follow up visits will be made with Monsanto Law Department to finalize agreement.

4) Visit smaller customers with "hold harmless" letter and attempt to obtain agreement without Law Department visits.

5) General Electric is a $9 Million customer of Monsanto; Westinghouse is a $4 Million customer of Monsanto. Negotiations will require very careful handling.

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EFFECTS OF THIS APPROACH

ACCEPTANCE WILL RESULT IN:

1972 SALES	$ 8.7M
GROSS PROFIT	$ 3.1M*

* Termination of polychlorinated terphenyl business will result in a $2.1M increase in manufacturing costs for Dielectric Aroclors; the gross profit figure quoted assumes we are successful in obtaining a 6¢ per pound price increase.

NON-ACCEPTANCE WILL RESULT IN:

1)	Complete loss of all Dielectric sales	$ 8.7M
2)	Complete loss of Biphenyl, HB-40, and associated product sales	$ 6.0M
	TOTAL	$14.7M
3)	Loss of gross profit from (1) & (2)	$ 5.6M
4)	Total write-off of all Biphenyl-Liquid & Solid Aroclor facilities U.S.A. & U.K.	GROSS..... $19.3M NET..... $ 8.7M

CUSTOMER REACTION

Major customers:

WESTINGHOUSE (Monsanto sales 1971 $4M est.), and GENERAL ELECTRIC (Monsanto sales 1971 $9M est.) will require careful handling and will resist strongly when asked to sign "hold harmless".

Smaller customers:

Will claim they are unable to sign and claim that G.E. and Westinghouse will have an unfair advantage.

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3) IMMEDIATELY IMPLEMENT A PLAN TO TERMINATE ALL SALES OF POLYCHLORINATED TERPHENYLS; 75% OF SUCH SALES WILL BE TERMINATED BY MARCH 31, 1972. THE REMAINDER WILL BE TERMINATED NO LATER THAN JUNE 30, 1972.

A) PLASTICIZERS

Advise all customers by letter December 1, 1971, that we are phasing out of polychlorinated terphenyls and that no sales will be made after March 31, 1972. Orders for material for the period December 1, 1971, through March 31, 1972, must not exceed 1/3rd of the total quantity purchased during the preceeding 12-month period.

Many polychlorinated terphenyl customers are major customers for other plasticizers and will need careful handling by Marketing.

B) HYDRAULIC FLUIDS

1) Advise customers individually that we are removing polychlorinated terphenyls from Pydraul formulations by June 30, 1972.

2) As rapidly as possible supply all refill and top-up orders with Phosphate/Oil blends (timing dependent on NC Phosphate Ester availability--project anticipates need for $500M MT).

3) Assist customers in changeover and keep the lowest possible profile to avoid further undesirable publicity.

DSW 338585

EFFECT OF POLYCHLORINATED TERPHENYL PHASE OUT

FINANCIAL

PLASTICIZERS

Loss of $3.4M sales
Loss of $[redacted] gross profit

HYDRAULIC FLUIDS

Loss of $5.5M sales
Loss of $[redacted] gross profit

Subject to an orderly phase out we should regain 60% of this business with phosphate ester/oil replacement products, resulting in:

1973 sales	$3.0M
1973 gross profit	$1.0M

CUSTOMER REACTION

PLASTICIZERS - Emotional, but with adequate turnover time should be able to hold other plasticizer business.

HYDRAULIC FLUIDS - Emotional, changeover time is vital--otherwise we will be unable to retain business.

EXAMPLES

Texas Eastern Gas Transmission Co. uses Turbinol 153 in 18 gas turbines, supplying major part of East Coast natural gas needs. Turbines were run in on Turbinol 153 and have used product for 14 years. Immediate withdrawal of product would be disastrous and could expose Monsanto to significant law suit.

Major steel companies such as Armco, Inland, Republic use Pydraul 150 in continuous casting plants (5,000-20,000 gallon systems). Change to alternate fluids will take 3-6 months. Immediate withdrawal could idle facilities with investments of $50-$100M.

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