CH-1174

DU PONT

ESTABLISHED 1802

E. I. DU PONT DE NEMOURS & COMPANY
INCORPORATED
NEWPORT, DELAWARE 19804

CHEMICALS, DYES AND PIGMENTS DEPARTMENT

CC: P. A. Hopkins - C&P Wilmington
P. A. Wriede - " Jackson Lab.
D. J. Willette - " Newport
J. P. Henderson - " "
J. C. Chaney - " "
J. L. Deming - " "
M. W. Williams - " "
D. M. Kafka - " "
A. E. Andrejko - " "
I. A. Berkemeier - " "
G. H. Hull - " "

Mike Williams - Newport
Please comment on R+D items in this report

April 20, 1983

DU PONT CONFIDENTIAL - SPECIAL CONTROL

C. R. OWEN
C & P Department
Wilmington

COST REDUCTION FORECAST/ACCOMPLISHMENT REPORT

1983 YEAR TO DATE

NEWPORT PLANT

Attached is subject report.

J. L. BALASQUIDE
CONTROL SUPERVISOR

JLB:ejp
Attach.

NEWPORT PLANT
COST REDUCTION FORECAST/ACCOMPLISHMENT
FIRST QUARTER - 1983
$M

		SAVING FORECAST		
	Realized Year to Date	Committed	Goal Total	Current Estimates
Ingredients	16	185	380	180
Labor and Salaries	200	1165	1235	2066
Energy	135	600	890	647
Other	138	480	1010	651
GRAND TOTAL:	489	2430	3515	3544
1983 Cost Reduction Index	6.1	7.4	10.4	10.5

NEWPORT PLANT
COST REDUCTION FORECAST/ACCOMPLISHMENT
FIRST QUARTER - 1983
$M

	Rsp'y	Realized Year to Date	SAVING FORECAST Committed	Goal Total	Current Estimates	Notes
Area - QA						Comments please
Ingredients						
· Reduced sodium methylate	QA/R&D	6	40	60	50	
· Reduced "sitol" consumption	QA/R&D	-	-	75	? -	
Delayed due to priorities. There is no basis for this. No lab work has been done.						
· "Dowtherm" mixing	QA/R&D	-	75	75	60	
· "Dowtherm" recovery	QA/R&D	-	-	100	? -	
Coalescer—MCN to be authorized in Sept ($60M)						
· Replace acetic acid		-	-	-	-	
SUB-TOTAL:		6	115	310	110	
Labor and Salaries						
· Reduced exempt from 16 to 12	QA	-	105	105	155	(1)
· Reduced wage from 41 to 39	QA	-	40	40	60	(1)
· Reduced tech. assistance:						
Exempt reduced by 2 ?	R&D	-	70	70	78	(1)
Wage reduced by 1 See CPC	R&D	-	30	30	30	(1)
N/E reduced by 1	R&D	-	10	10	25	(1)
SUB-TOTAL:		-	255	255	348	

There are the VTI people from Nov. 1982 split evenly over CPC & QA

Exempt: Ira Hall
Paul Griswold
Joe Adams
Ernie Greene

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NEWPORT PLANT
COST REDUCTION FORECAST/ACCOMPLISHMENT
FIRST QUARTER - 1983
$M

Area - QA	Rsp'y	Realized Year to Date	SAVING FORECAST Committed	Goal Total	Current Estimates	Notes
Energy						
• Steam	QA	9	140	200	150	
• Electricity - save 35M KW/Mo.	QA	5	10	40	20	
• Water	QA	-	-	10	10	
SUB-TOTAL:		14	150	250	180	
Others						
• Improve yields	QA	0	175	225	175	
• Reduced substandard	QA/R&D	-	-	10	10	
• Waste neutralization	QA	63	90	150	125	
• ~~Rework~~ REWASH Gamma QA - Delayed due to heavy production scheduling and installation of H_2O softener.	QA/R&D	-	-	200	-	?
• Miscellaneous	QA	29	50	100	100	
SUB-TOTAL:		92	315	685	410	
QA TOTAL:		112	835	1500	1048	

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NEWPORT PLANT
COST REDUCTION FORECAST/ACCOMPLISHMENT
FIRST QUARTER - 1983
$M

Area - CPC	Rsp'y	Realized Year to Date	SAVING FORECAST Committed	Goal Total	Current Estimates	Notes
Ingredients						
• Reduced kerosene from .75 to .60 #/#	CPC	10	70	70	70	
• Reduced phthalic anhydride from 118.26 to 117.00 # Use/100#	CPC	-	-	-	-	
SUB-TOTAL:		10	70	70	70	
Labor and Salaries						
• Reduced Exempt	CPC	-	70	70	117	(1)
• Reduced Wage	CPC	-	30	30	60	(1)
• Reduced tech. assistance						
See QA → Exempt reduced by 2	R&D	-	75	75	78	(1)
Wage reduced by 2	R&D	-	60	60	60	(1)
N/E reduced by 1	R&D	-	25	25	25	(1)
'SUB-TOTAL:		-	260	260	340	

VTI
Wage roll: D. Ferrari
R. Campbell
F. Figge

N/E: L. Seymour
A. Taylor

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NEWPORT PLANT
COST REDUCTION FORECAST/ACCOMPLISHMENT
FIRST QUARTER - 1983
$M

Area - CPC	Rsp'y	Realized Year to Date	SAVING FORECAST Committed	Goal Total	Current Estimates	Notes
Energy						
• Powerhouse economizer	CPC	63	80	80	80	
• Steam - save 1.1MM Lb./Mo.	CPC	-	-	100	-	
• Water - save 14.9MM Gal./Mo.	CPC	-	65	65	65	
• Improve Powerhouse insulation	CPC	2	-	25	2	
SUB-TOTAL:		65	145	270	147	
Other						
• Reduced comp. air usage from 14.4 to 12.0 MCF	CPC	-	10	10	10	
• Reduced substandard from 30M to 20M Lb.	R&D	-	-	20	-	
• Cost reduction by supv.	CPC	-	-	25	-	
• Reduced crude yield from 93.1 to 95%	CPC	7	-	-	-	
SUB-TOTAL:		7	10	55	10	
CPC TOTAL:		82	485	655	567	

NEWPORT PLANT
COST REDUCTION FORECAST/ACCOMPLISHMENT
FIRST QUARTER - 1983
$M

Area - Mechanical	Rsp'y	Realized Year to Date	SAVING FORECAST Committed	Goal Total	Current Estimates	Notes
Labor and Salaries						
• Reduced Exempt from 24 to 19	Mech.	-	100	100	194	(1)
• Reduced Wage from 101 to 87	Mech.	-	225	225	417	(1)
• Planning and scheduling	Mech.	3	40	80	40	
• Use Del. Valley Shops	Mech.	8	10	20	20	
• Work analysis productivity	Mech.	2	10	20	20	
• Reduced temporary supv.	Mech.	1	0	2	2	
• Miscellaneous	Mech.	13	20	28	30	
• Reduced manpower	Mech.	159	-	-	280	
SUB-TOTAL:		186	405	475	1003	
Energy						
• Improved steam trap program	Mech.	13	250	300	200	
• Use energy efficient gear trains and lights	Mech.	7	5	10	20	
• Improve insulation	Mech.	8	10	20	20	
• Improve doors and windows close building	Mech.	17	40	40	40	
• Miscellaneous	Mech.	11	-	-	40	
SUB-TOTAL:		56	305	370	320	

NEWPORT PLANT
COST REDUCTION FORECAST/ACCOMPLISHMENT
FIRST QUARTER - 1983
$M

Area - Mechanical	Rsp'y	Realized Year to Date	SAVING FORECAST Committed	Goal Total	Current Estimates	Notes
Others						
• Increased use of reconditioned matls.	Mech.	-	30	40	20	
• Improved equip. design	Mech.	4	5	10	10	
• Better contracts and more bid packages	Mech.	4	20	40	30	
• Increase SMD sales	Mech.	-	20	25	20	
• Expand uses of protective coatings	Mech.	-	10	20	10	
• Improved matls. of construction to increase equip. life	Mech.	9	10	20	30	
• Remove obsolete mech. bldg. - reduce maintenance	Mech.	-	5	10	10	
• Undefined items	Mech.	7	50	90	40	
SUB-TOTAL:		24	150	255	170	
MECH. TOTAL:		266	860	1100	1493	

NEWPORT PLANT
COST REDUCTION FORECAST/ACCOMPLISHMENT
FIRST QUARTER - 1983
$M

			SAVING FORECAST			
Employee Relations and Control	Rsp'y	Realized Year to Date	Committed	Goal Total	Current Estimates	Notes
• Reduced N/E from 3 to 2	ER	-	41	41	25	(1)
• Reduced Exempt from 5 to 4	SH&E	14	54	54	54	(1)
• Reduced Wage from 6 to 5	SH&E	-	30	30	30	(1)
• Reduced Exempt from 13 to 9	Control	-	70	70	155	(1)
• Reduced N/E from 22 to 20	Control	-	25	25	51	(1)
• Reduced Wage from 14 to 12	Control	-	25	25	60	(1)
SUB-TOTAL:		14	245	245	375	
Other						
• Reduce phones from 9.8M to $9.4M	Control	1	2	2	2	
• Reduce copier		-	3	3	3	
• Reduce M&L charges from 192M to $136M		14	-	10	56	
SUB-TOTAL:		15	5	15	61	
ER & CONTROL TOTAL:		29	250	260	436	

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NEWPORT PLANT

COST REDUCTION FORECAST/ACCOMPLISHMENT

FIRST QUARTER 1983

NOTES

(1) Scheduled to start Second Quarter 1983.

ACID & AROMATIC PRODUCTS DIVISION

Hydrazine Hydrate - 85%: Late in 1982, we qualified Otsuka of Japan as a second source. At a price of $1.32/lb. and with 90 day consignment versus Olin's price of $1.90/lb., we awarded them 50% of the business. In March, Olin lowered their price to $1.35/lb. delivered; savings will be $40M/yr. (AF)

Sulfur

Supply: Despite an increase in sulfur demand of up to 45% at our northeast plants and curtailment of sulfur production by local refineries, we were able to meet needs. It was necessary to use Canadian sulfur to supplement domestic supplies. Current plans are to bring in a barge or ship load of sulfur from the Gulf Coast to provide a protective stock in case of further local refinery cutbacks.

Savings: The prices for domestic and Canadian sulfur were renegotiated downward several times via competitive bidding. Rail and truck rates also were reduced by scrutiny of existing schedules. As a result, as of April 1, we are paying $1.5MM/yr. less than we were on January 1.

Tank Car Fleet: All Du Pont leased sulfur tank cars are now in active service and accumulating mileage and rebate credits to offset leasing charges. (LZ)

COLORED PIGMENT PRODUCTS DIVISION

Aceto Acet-o-Anisidine: Late in 1982, we qualified a Chinese supplier at a price of $2.45/lb. with consignment versus the domestic price of $2.70/lb., and awarded them 50% of the business. In February, we opened the remaining 50% for bids. American Hoechst, matching the Chinese price and agreeing to consignment, will receive the remaining 50%. Savings will be $30M/yr. (AF)

BON: American Hoechst is pressing to become a supplier for Newark. We have approved a sample and have 3,000 lbs. at the plant for commerical evaluation. They are offering a price of $1.95/lb. consigned, which equals the price of our current suppliers, Ueno of Japan. (AF)

Dry Alum: We have been working with Delta Chemical on bulk containers to improve handling, reduce dusting and decrease bag handling. We advised Allied, our 100% supplier, of this activity and they immediately lowered their price $20/ton. Savings will be $55M/yr. (AF)

"Sitol": We have completed a secrecy agreement and forwarded technical information to Upjohn which we are considering as a second supplier. With the current shutdown timetable for "Ponsol" of mid-1984, we plan to complete contract negotiations before year-end. (AF)

Sodium Chromate: We have completed negotiating with American Chrome for a 20% reduction in price for 100% of our business. Savings will total $600M/yr. (AF)

Sodium Dichromate: With the loss of the chromate business, Allied and Diamond Shamrock lowered their respective prices of dichromate 15% to retain 50% of that business. Savings will be $110M/yr. (AF)

In February, Lonza supplied a spot purchase of 19,000 lbs. at $1.95/lb. for a one-time savings of $9500. (AF)

Zinc Oxide: We set up an annual purchase contract and awarded 100% of the requirement to St. Joe in return for a lower price. Savings will be $13M/yr. (AF)

METHANOL PRODUCTS DIVISION

Methanol Catalyst: United Catalyst, Inc. supplied defective G-90B catalyst to Beaumont causing losses of $200,000 from unusable catalyst and $300,000 because of start up delay. United Catalyst has rejected our claim for reimbursement. We plan to invite United Catalyst to Beaumont to see for themselves the validity of our claim and to determine how badly they want to retain our business at Beaumont and other locations. To further strenghten our bargaining position, we have determined that Katalco Catalyst 23-1 is equivalent in performance and cost and therefore interchangeable with G-90B. Further, Katalco is extremely interested in obtaining the departments business. (WJB)

Silver Formaldehyde Catalyst: The Belle plant has received 9,290 Troy ounces of heat treated silver needles from Metz Metallurgical. We believe that by the end of the second quarter, Metz will be confirmed as quality supplier.

In an effort to win back silver refining business and stave off a loss of needle supply, Engelhard has lowered their silver refining charge to 0¢/Troy ounce and 99.5% of assay, compared to Metz 6¢/Troy ounce. The key variable not mentioned is yield. The Metz yield is 1-2% higher than Engelhard's past performance. This is worth 11-22¢/Troy ounce at current silver prices. The offer is sufficiently encouraging that we plan to send a test lot to Engelhard. (WJB)

Deer Park Vanadium Sludge: Lake Chemical should reach a decision by the end of April on the timing of the receipt of our sludge (most likely about July 1). Because of reduced demand by Du Pont for

(AC #9) as an alternate which will save $100M/yr. (It has been successfully used at Johnsonville.) (LEK)

Dichlorobutanes: Johnsonville is looking into the use of dichlorobutanes (DCB) from the Pontchartrain plant which incinerates this material. Savings will be ~$1MM/yr. with an additional $1.7MM corporate benefit accruing because disposal costs would be eliminated. Haskell Laboratory has been asked to define safety considerations. A procedure for a plant test is being developed. Also, new facilities will be needed since the heating value of the DCB is about one half that of present fuels. (LEK)

Coal

Quality: The vendors of coal to Johnsonville appear to be giving increased attention to size specification. The plant had no powerhouse opacity violations due to coal quality in February. We will continue to monitor their performance. (LEK)

Alternate Source & Routing: A quotation has been negotiated for less expensive coal to be barged to Port Bienville (near DeLisle) and then trucked to the plant. A trial shipment is being arranged for April. Savings will be about $500M/yr. It is anticipated that the use of this barge/truck arrangement also will enable us to reduce freight costs for coke shipments to the plant. (LEK)

DEPARTMENTAL GENERAL

Lime: In order to forestall price increases, we are meeting with vendors to define minimum specifications, favorable freight rates and sufficient reliable supply, especially for Chambers Works and Edge Moor. (LZ)

Sand: Negotiations have been undertaken with several vendors to insure continuity of high quality sand for normal and electronic grade silicates. (LZ)

O_2/N_2 Contracts: Several contract revisions are being negotiated.

Chambers Works - Airco gave notice of cancellation of the existing contract for nitrogen as of 4/23/82. ? A new proposal has been approved by the Subcommittee on Purchases and Sales and contract details are being negotiated.

Niagara Falls - AGA Burdox gave notice that they are cancelling their contract for nitrogen supply and plan to dismantle their plant this year. A new contract for pipeline supply has been negotiated with Union Carbide. Savings under this contract will be \$40M/yr. The Subcommittee on Purchases and Sales has approved and final contract details are being negotiated.

DeLisle - The O_2/N_2 contract is being modified to increase oxygen capacity to 260 T/D to meet requirements for full plant capacity. Also, the existing air separation plant is being modified to meet required dewpoint levels for nitrogen. While contract details are being negotiated, Air Products has agreed to credit us for operation of the plant dryers (to meet the dewpoint) from 11/81, until their dryers are on stream (expected 7/83). Savings will be ~\$28M.

Johnsonville - The Air Products contract is being renegotiated to consolidate the control rooms of the two air separation plants, thus reducing the number of operators required. Savings will be
\$100M/yr. (LEK)

"Dowtherm A" - Du Pont Mixing: Based on our experience and savings at Newport with mixing Biphenyl and Biphenyl Oxide to make "Dowtherm A", the M&L Department has proposed that Du Pont contract out the remainder of the company needs. Additional potential savings to Du Pont are \$635M/yr. (AF)

Refining General: Heraeus - Midland in Pomona, NY, processes all of Photo Products film (6MM lbs./yr.). They recently suffered a fire that completely leveled their plant. They plan to rebuild with new technology and should be operational by early 1984. This is important because Photo Products needs will put a strain on available refining capacity and could delay recovery of our material, thus increasing our on-plant inventories.

SIPI in Chicago had a flashback processing some of our organic contaminated catalyst from Memphis. The injured employee (minor burns) was grossly violating plant safety procedures. Even so, SIPI is reluctant to continue refining this material for us and we are therefore terminating business with them.

Parkaws Internationnal Inc., Houston, TX, has been recovering base metal catalyst for Du Pont and recently expressed interest in the organic contaminated catalyst business from Memphis. We are pursuing tests with them. Also, they remove the organics, not by burning, but by high temperature distillation. Thus, we may be in a position to recover both solvents and quinones for reuse by Memphis. (WJB)

Consignment/Vendor Stocking Activity: Activities during the quarter included:

- Consigned Chemicals - \$254M

    Newark Plant - \$217M

    Chambers Works - \$37M