



E. I. DU PONT DE NEMOURS & COMPANY  
INCORPORATED  
WILMINGTON, DELAWARE 19898

CHEMICALS AND PIGMENTS DEPARTMENT

PERSONAL AND CONFIDENTIAL

September 28, 1981

TO: H. B. CLARK  
P. Z. LARSON  
P. M. NORLING, ES  
R. S. WEIS, JL  
J. G. ISHIKAWA

FROM: A. W. BAUER *AWB*

1981 ANNUAL REPORT

MAJOR COST CONTAINMENT PROGRAMS

A copy of the preliminary subject table is attached. Only programs exceeding \$8MM cumulative PTE (1982-6) have been included, with the exception of the long range hydrogen peroxide CR&DD program. In the Annual Report, these tables probably will be consolidated into a single table.

Please call me (774-6197) by September 30 if you desire any changes. This preliminary table will be submitted to Departmental Plans by October 1, and the final by October 9.

AWB:dsb  
Attach.

N 26947

MAJOR COST CONTAINMENT PROGRAMS

| Program<br>Title                                                                                                                    | 1982<br>Manpower | Forecast Pretax Savings Incentive |               |           |                   | Investment   |                              |
|-------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------------|---------------|-----------|-------------------|--------------|------------------------------|
|                                                                                                                                     |                  | Cumulative<br>1982-1986 (\$MM)*   | Continuing    |           | % Factory<br>Cost | \$MM<br>Year | On Construction<br>Forecast? |
|                                                                                                                                     |                  |                                   | First<br>Year | \$MM/Year |                   |              |                              |
| Nonalkaline wash; reduce<br>treatment cost by reducing<br>process water by recycle                                                  | 2                | 9                                 | 1985          | 3         | 2                 | 1981-4       | Yes                          |
| Dehydrating nitration;<br>reduce processing cost<br>by eliminating dilute<br>sulfuric acid generation<br>and need for concentrating | 3                | 11                                | 1985          | 5         | 4                 | 1982         | Yes                          |

All dollars on a current year basis.

JB:dsb  
'28/81

N 26947.01

MAJOR COST CONTAINMENT PROGRAMS

|                                                                                                                     | 1982<br>Marpower | Forecast Pretax Savings Incentive |               |            |                   | Investment |                              |
|---------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------------|---------------|------------|-------------------|------------|------------------------------|
|                                                                                                                     |                  | Cumulative<br>1982-1986 (\$MM)*   | First<br>Year | Continuing |                   | \$MM       | On Construction<br>Forecast? |
|                                                                                                                     |                  |                                   |               | \$MM/Year  | % Factory<br>Cost |            |                              |
| <u>Program</u>                                                                                                      |                  |                                   |               |            |                   |            |                              |
| <u>Initiatives</u>                                                                                                  |                  |                                   |               |            |                   |            |                              |
| Improved nitrotoluenes<br>yield/reduced energy                                                                      | 1.0              | 9                                 | 1983          | 1.3        | 3.0               | 0.4        | 1982 Yes                     |
| Improved nitrochloro-<br>benzenes isomer ratio and<br>material utilization;<br>reduced dinitro formation<br>in MNCB | 3.5              | 10                                | 1982          | 1.5        | 16.5              | 0.1        | 1985 Yes                     |

All dollars on a current year basis.

3:dsb  
28/81

MAJOR COST CONTAINMENT PROGRAMS

|                                            | 1982<br>Marpower | Forecast Pretax Savings Incentive |               |                         | Investment        |              |                              |
|--------------------------------------------|------------------|-----------------------------------|---------------|-------------------------|-------------------|--------------|------------------------------|
|                                            |                  | Cumulative<br>1982-1986 (\$MM)*   | First<br>Year | Continuing<br>\$MM/Year | % Factory<br>Cost | \$MM<br>Year | On Construction<br>Forecast? |
| <u>Program</u>                             |                  |                                   |               |                         |                   |              |                              |
| <u>formaldehyde</u>                        |                  |                                   |               |                         |                   |              |                              |
| Recycle water<br>from formaldehyde process | 5                | 10                                | 1986          | 7                       | 5                 | 13.2 1984    | Yes                          |

All dollars on a current year basis.

B:dsb  
28/81

MAJOR COST CONTAINMENT PROGRAMS

|                                                                                                           | 1982<br>Manpower | Forecast Pretax Savings Incentive |               |                         | Investment        |               |                              |
|-----------------------------------------------------------------------------------------------------------|------------------|-----------------------------------|---------------|-------------------------|-------------------|---------------|------------------------------|
|                                                                                                           |                  | Cumulative<br>1982-1986 (\$MM)*   | First<br>Year | Continuing<br>\$MM/Year | % Factory<br>Cost | \$MM<br>Year  | On Construction<br>Forecast? |
| <u>Program</u>                                                                                            |                  |                                   |               |                         |                   |               |                              |
| <u>Hydrogen Peroxide</u>                                                                                  |                  |                                   |               |                         |                   |               |                              |
| Cheaper and more selective catalysts, lower cost quinone system, non-reactive solvent, new hydrogen plant | 12               | 48                                | 1987          | 20                      | 26                | 14 1982       | Yes                          |
| New Process 25% lower investment for 80MM ppy plant                                                       | 2<br>(CR&D)      | -                                 | 1991          | 10                      | 25                | - Not defined | -                            |

All dollars on a current year basis.

B:dsb  
28/81

MAJOR COST CONTAINMENT PROGRAMS

|                                                 | 1982<br>Marpower | Forecast Pretax Savings Incentive |               |           |                   | Investment   |                              |
|-------------------------------------------------|------------------|-----------------------------------|---------------|-----------|-------------------|--------------|------------------------------|
|                                                 |                  | Cumulative<br>1982-1986 (\$MM)*   | Continuing    |           | % Factory<br>Cost | \$MM<br>Year | On Construction<br>Forecast? |
|                                                 |                  |                                   | First<br>Year | \$MM/Year |                   |              |                              |
| Program                                         |                  |                                   |               |           |                   |              |                              |
| thylamines                                      |                  |                                   |               |           |                   |              |                              |
| Energy reduction yield,<br>catalyst improvement | 10               | 24                                | 1986          | 6.9       | 6                 | 3.3 1982-84  | 75% on F/C                   |

All dollars on a current year basis.

B:dsb  
28/81

MAJOR COST CONTAINMENT PROGRAMS

|                                                                                     | 1982<br>Manpower | Forecast Pretax Savings Incentive |               |           |                   | Investment |      |                              |
|-------------------------------------------------------------------------------------|------------------|-----------------------------------|---------------|-----------|-------------------|------------|------|------------------------------|
|                                                                                     |                  | Cumulative<br>1982-1986 (\$MM)*   | Continuing    |           | % Factory<br>Cost | \$MM       | Year | On Construction<br>Forecast? |
|                                                                                     |                  |                                   | First<br>Year | \$MM/Year |                   |            |      |                              |
| Program                                                                             |                  |                                   |               |           |                   |            |      |                              |
| ethanol                                                                             |                  |                                   |               |           |                   |            |      |                              |
| Beaumont ammonia<br>steam export                                                    | 0.5              | 14                                | 1985          | 6         | 1.3               | 0.7        | 1982 | No                           |
| Beaumont process<br>optimization post<br>modernization and<br>incremental expansion | 2                | 32                                | 1986          | 13        | 4.0               | 22         | 1984 | Yes (50%)                    |
| Deer Park process<br>optimization                                                   | 11               | 83                                | 1982          | 12        | 7.5               | 7.0        | 1982 | Yes (35%)                    |

All dollars on a current year basis.

B:dsb  
28/81

MAJOR COST CONTAINMENT PROGRAMS

|                                                   | 1982<br>Marpower | Forecast Pretax Savings Incentive |               |                         |                   | Investment |                              |
|---------------------------------------------------|------------------|-----------------------------------|---------------|-------------------------|-------------------|------------|------------------------------|
|                                                   |                  | Cumulative<br>1982-1986 (\$M)*    | First<br>Year | Continuing<br>\$MM/Year | % Factory<br>Cost | \$MM       | On Construction<br>Forecast? |
| <u>anum Dioxide</u>                               |                  |                                   |               |                         |                   |            |                              |
| Coke cost reduction                               | 3                | 20                                | 1982          | 1.6                     | 0.4               | 0.5<br>1.3 | Yes<br>Yes                   |
| Finishing area energy<br>savings                  | 3                | 19                                | 1982          | 0.7                     | 0.2               | 2.1        | Yes                          |
| TiO <sub>2</sub> recovery through<br>flocculation | 1                | 10                                | 1982          | 1.4                     | 0.4               | 0.6        | Yes                          |
| TiCl <sub>4</sub> yield improvement               | 1                | 10                                | 1982          | 1.0                     | 0.3               | 0.1        | Yes                          |

all dollars on a current year basis.

3:dsb  
28/81