



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

CHEMICALS AND PIGMENTS DEPARTMENT

cc: KRMedley-M&L-D-2068  
LPHeinold-GS-D-2094  
CHMuendel-C&P-Chestnut Run  
TABartolec  
LRGattman  
TRPriebe  
CRAntonson  
REYoung/SORogers  
CACHaplin

February 21, 1983

T. J. WELLMAN - C&P - NEW YORK OFFICE  
J. N. LONG - C&P - WYNNEWOOD OFFICE  
W. W. GREER

WEEHAWKIN, NJ TiO<sub>2</sub> SLURRY  
TERMINAL ALTERNATIVE

Attached is the cost comparison of delivering TiO<sub>2</sub> slurry (R-940) ex Hudson Tank, X-Rail, and New Johnsonville. Summarizing this information:

| <u>Ship Point</u>               | <u>Net Freight Costs</u><br>(M\$) | <u>Tank Car Requirements</u> |
|---------------------------------|-----------------------------------|------------------------------|
| Hudson Tank - Weehawkin, NJ     | 323.2                             | 4                            |
| X-Rail - Newark, NJ             | 278.4                             | 6                            |
| New Johnsonville - Direct Truck | 308.4                             | -                            |

Our present tank lease contract with Hudson Tank will be up for renewal on 6/30/83 with 90 days notice of cancellation. With the lower R-940 volume and early 1982 phase-out of R-941, the terminal costs do not justify renewing the tank lease. In addition to costs, the terminal does not schedule the truck carrier or fill out monthly stock reports (SOC does this now). Also, the terminal does not promptly communicate invoicing information following shipments resulting in poor invoicing lag time.

An alternative that has been discussed with the district is direct trucking ex New Johnsonville. The truck freight costs are lower than shipping through Hudson Tank and tank car requirements would be eliminated; however, there are several concerns. Additional lead time on orders will be required (approximately seven days). Also, the truck rates ex New Johnsonville are at its proper level and, therefore, no freight reduction can be expected (currently negotiating rail and truck rates ex terminal).

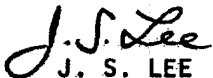
Physical Distribution recommends starting up a rail-to-truck transloading operation at X-Rail, Newark, NJ. X-Rail handled this business prior to Hudson Tank but was replaced when higher slurry forecasts dictated shipping out of storage tanks. This operation will be similar to our other TiO<sub>2</sub> slurry terminals in Houston, TX

and Portland, OR. Tank cars will be circulated on a regular basis to keep the solids suspended. Tank trucks will be loaded direct from these tank cars. Laboratory services will remain the same as used at Hudson Tank. Cost reduction will be approximately \$45M/year.

Unless there are significant objections/changes to this proposal, the timetable for establishing this terminal is as follows:

| <u>Action</u>                                          | <u>Responsibility</u>    | <u>Timing</u>       |
|--------------------------------------------------------|--------------------------|---------------------|
| Finalize operating contract with X-Rail                | JSL/CAC                  | 3/7/83              |
| Ship T/C of slurry to terminal for test shipments      | JSL/CAC/SOC              | 3/10/83             |
| Set up ship point code for terminal                    | SOC                      | 3/14/83             |
| Review operating manual, procedures, etc., with X-Rail | JSL/CAC/<br>Chestnut Run | when T/C<br>arrives |
| Coordinate first truck loading                         | JSL/CAC/SOC              | 3/28/83             |
| Inform Hudson Tank of intent to cancel contract        | LPH                      | 3/31/83             |
| Inform customers of pending terminal change            | Field Sales              | 6/83                |

If there are any questions or comments, please contact me on 774-3308.

  
J. S. LEE  
PHYSICAL DISTRIBUTION

JSL:dlw  
Attachment

PRODUCT:  $\text{TiO}_2$  SLURRY (R-940)  
 LOCATION: WEEHAWKIN, NJ  
 SHIP POINT CODE: 255 (FKJ)  
TERMINAL CONTRACTOR: HUDSON TANK TERMINALS

Alternate Facility - Basis: EAR = 6MM lbs.  $\text{TiO}_2$  (commodity)  
 32 tank cars/year  
 133 trucks/year

|                                                                                   | <u>Hudson Tank</u>                                         | <u>X-Rail</u>                                                                   |
|-----------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------|
| Handling Costs:                                                                   | Contract = \$66.0M/year                                    | .25/cwt x 6MM lbs. = \$15.0M                                                    |
| Recirculation:                                                                    | Included in handling costs                                 | \$15.00/hour/car x 4 hrs./week<br>x 52 weeks/year x 2 car<br>inventory = \$6.2M |
| Track Storage:                                                                    | None, if less than 7 days                                  | \$4.00/day/car x 14 days avg.<br>hold time x 32 cars = \$1.8M                   |
| Sample Taking:                                                                    | \$5 x 165 samples = \$.8M                                  | \$10 x 165 samples = \$1.7M                                                     |
| Sample Delivery:                                                                  | \$14.50 x 165 samples = \$2.4M                             | No change - \$2.4M                                                              |
| Sample Analyses:                                                                  | \$25.00 x 165 samples = \$4.1M                             | No change - \$4.1M                                                              |
| Preparation of bills<br>of lading, weighing,<br>inventory control and<br>reports: | \$12.0M/year for clerical time<br>(not currently done)     | \$5/truck x 133 trucks = \$.7M                                                  |
| Rail Car Costs:                                                                   | 32 days turnaround<br>= 4 cars x \$4M/car/year<br>= \$16.0 | 46 days turnaround<br>= 6 cars x \$4M/car/year<br>= \$24.0                      |
| Terminal Costs =                                                                  | \$101.3M                                                   | \$ 55.9M                                                                        |
| Rail Freight Costs =                                                              | \$151.8M                                                   | \$151.8M                                                                        |
| Truck Freight Costs =                                                             | <u>\$ 70.7M</u>                                            | <u>\$ 70.7M</u>                                                                 |
| TOTAL COSTS                                                                       | \$323.2M                                                   | \$278.4M                                                                        |

Direct Truck ex New Johnsonville

| <u>Customer</u>     | <u>Truck Rate</u><br>(\$/cwt) | <u>EAR</u><br>(Commodity Lbs.) | <u>Freight</u><br><u>Costs</u><br>(M\$) |
|---------------------|-------------------------------|--------------------------------|-----------------------------------------|
| California Products | 6.27                          | 1.0MM                          | \$ 71.5                                 |
| M.A. Bruder & Sons  | 4.65                          | 3.0MM                          | \$133.9                                 |
| Paragon Paints      | 5.20                          | 2.0MM                          | \$103.0                                 |
|                     |                               |                                | <u>\$308.4M</u>                         |