Monsanto

FROM (NAME & LOCATION): T. F. Basso (4-6421) — Corporate Engineering - F4WB

DATE: May 23, 1979

cc: G. Anthony - F3WD
R. Lee - F4WB
T. S. Novak - F4WB

SUBJECT: CAUSTIC PIPELINE vs TRUCK

REFERENCE: St. Louis Area Incinerator
CEA 3246

TO:

F. J. Basile - 1740
M. McCombs - 1760
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M. A. Terpstra - T3E
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SITUATION:

A plant proposal (FJB-4/7/79) to receive 50% caustic by pipeline has been evaluated by MCIC Engineering. W. G. Krummrich plant will be a net supplier of 50% caustic by 1981. This means that caustic will be in excess supply. Caustic used on 3246 will be shipped from the Chlor-Alkali department. Truck transfer and pipeline transfer were both considered as alternates.

RECOMMENDATION:

The project should add a 2" Carbon steel (stress relieved) pipeline from the caustic surge tank south of Santosite department to the CEA 3246 Caustic Storage Tank. Approximate capital costs for this alternate are $45,000. The additional captial includes the electrically-traced and insulated pipeline, a booster pump, and an emergency truck unloading "tee" for use should the line become frozen. Operation and maintenance costs are estimated at less than $5000/year.

ALTERNATES CONSIDERED:

Alternate 1:

Truck transfer of caustic is a low captial cost high operating cost alternate. W. G. Krummrich presently has a dedicated caustic trailer for moving excess caustic to the river terminal and back. Capital costs fo a truck unloading station are less than $10k. Operating costs are extremely high. Assuming a truck driver for a total of two hours per load, labor costs would be about $35k per year. The payout on the pipeline is a little over a year, justifying the expenditure.

Alternate 2:

Non-stressed relieved carbon steel costs $5000 less than the recommended alternate but would require more maintenance over the life of the installation and was not justified. Polypropylene lined pipe was considered as an alternate material of construction. This alternate costs an additional $20,000 and was considered

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to be more than was needed for this application.

ACTION REQUESTED

The CEA 3246 project should include the recommendation in the P.D.R. development and estimate.

Tom
T. F. Basso

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