



Interoffice Communication

To Distribution

From J. D. Thorne, Chief Engineer, Lake Charles

Date February 12, 1980

Subject MARINE DOCK UPGRADING AND COORDINATION

A meeting was held with Refinery and Chemical personnel to discuss past and present projects and usage of the marine docks. Those attending on February 8, 1980 were: Bob Cowden, John Murray, Jim Thorne, Duncan Parks, Paul Morstead, Mike McCaulley and Richard Tuttle.

In the Refinery's 1978 Capital Budget, the hose booms on No. 1 and No. 3 docks were to be replaced with loading arms to eliminate spill hazards from hoses and to upgrade the loading booms to meet present standards. Three loading arms were installed on No. 1 dock in 1979 at which time the light and dark products were manifolded separately to reduce possible contamination. The 1979 Capital Budget approved money to lay one line from No. 1 to No. 3 dock for the purpose of loading light and heavy paraffins. This was due to the expectation of having a crude ship at No. 1 dock every three days thus eliminating paraffin loading; but, Chemicals said separate lines were needed so light and heavy paraffin could be loaded simultaneously on No. 3 dock. By re-engineering and the use of some surplus pipe, two lines were provided on No. 3 dock. Presently on No. 1 dock, light and heavy paraffin, diesel, gasoline and fuel oil can be loaded. Also, crude, fuel oil and Molex feed can be unloaded. No. 2 dock is used to unload methanol, syn. twr. bottoms, thermal tar, shell tar, Monsanto tar, crude oil and Molex feed by barge. With the joint venture between Conoco and Monsanto, we committed to load out 62,000 Bbl/D of feedstock for Monsanto which will be over either No. 1 or No. 2 dock. Originally, No. 4 dock was to be built to handle the feedstock barges but with the Clifton Ridge Project handling crude ships, No. 2 dock is to be revamped in lieu of building No. 4 dock. The revamp will put two loading arms on each side of No. 2 dock and with a piping and header revamp, all loading and unloading will be through four loading arms. One exception is the methanol unloading every 16-17 days. This would require the continuing use of a hose boom. The booms on this dock are also substandard and need to be replaced for which a 1980 Capital Budget project is approved. But with the loading arm revision, the Refinery will not need this revision. It is suggested that Chemicals make money available to relocate the Ethylene arm from No. 3 dock for methanol unloading.

No. 3 dock is used for either unloading crude oil, Ethylene, Molex feed or loading light and heavy paraffin, EDC, VCM and light and heavy alcohol, all by hose. The 1978 capital project proposed to install two loading arms, one for light and one for dark hydrocarbons. The Chemicals 1979 capital project provided money for a loading boom to be used for VCM hose loading. The Chemical LAD project plans to install two loading arms to handle the benzene base materials. Since the loading booms on this dock do not meet standards, something must be done to provide the necessary services on this dock. Therefore, we looked at three possibilities:

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- I. Replace booms with two cranes and continue to use hoses.
- II. Install one crane for the VCM hose and use loading arms on everything else.
- III. Replace booms and hoses with loading arms only.

Item I was discarded since the LAB project will have loading arms; the existing booms would have to be replaced with two cranes, and all of the headers and hoses require relocating. This cost is expected to be as much as Item II.

It was thought that either Item II or III was a good workable solution, and the revision should be coordinated with the LAB project installation to reduce dock downtime and reduce Conoco expense. Study by Chemicals is necessary to determine if loading arms could be used for multiple service without contamination. Otherwise, eleven loading arms would be needed, but if light and heavy paraffins and alcohols were in two arms, LAB benzene, EDC and VCM were in two arms and two crude arms were used, only six arms would be necessary. Since possible contamination is the only amount left on the loading arm walls after draining or blowing back, it was thought this might not be a problem. If VCM insists on using a loading hose, then the rest stays as suggested, and the project is Item II.

It was proposed, after defining the projects better, that CED should estimate to provide a cost basis.

The Refinery lines on the low N-S stanchions are being relocated to the high stanchions. The next lines relocated will have a service change for the Monsanto project and tied into lines on No. 1 and No. 2 dock. One of the tie-ins for No. 2 dock will eliminate the Molex feed unloading from No. 2 and No. 3 dock which will be about April. The original Molex feed unloading project was installed only on No. 1 dock but for more efficient dock usage, jumpers were installed to Refinery lines which will now be placed in feedstock service.

These being the foreseeable changes at the Conoco docks, we decided to try to get together in two or three weeks to discuss and finalize plans for the upgrading and efficient use of No. 2 and No. 3 dock. The timely manner is required so coordination can be obtained with the LAB project on No. 3 dock and the Monsanto revisions on No. 2 dock.


Jim D. Thorne

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Distribution:

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