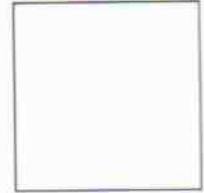


Both the pipeline and the truck offload facility feed water into a De-sanding vessel described above. The inlets to the De-Sander Tank are pictured here. Each is fitted with a manual isolation valve as seen in picture at the right. This allows the operations staff to manually open or close the inlets as required.



DE-SANDING TANK OPERATIONS

The De-Sanding Tank has two outlets, pictured here. These are 10" outlets and each is fitted with an isolation valve seen here. A major role of the De-Sanding Tank is to divide the outlet flow into two even increments. The divided flow feeds two "Skim Tanks" tanks. The isolation valves allow the operator to divert 100% of the flow into only one of two Skim Tanks, by-passing the other Skim Tank altogether. Should this become necessary, the inlet flow to Elwood **MUST** be reduced to the capacity of the Skim Tank, or 15,000 BWP. If the inflow is not reduced the Skim Tank will **overflow**.



The De-Sanding Tank is designed with flow splitting overflow tubes. The third tube will not be in service initially. However, when the third Skim Tank is added, increasing the Elwood capacity to 45,000 BWP, the third flow splitting tube outlet will be piped to the added Skim Tank. At this point, closing one of the De-Sanding Tank outlets will reduce the Elwood capacity from 45,000 BWP to 30,000 BWP, and the inflow **MUST** be reduced accordingly to **avoid a Skim Tank overflow**. Closing two of the De-Sanding Tank outlets further reduces the Elwood process capacity to 15,000 BWP, so the inflow water rate **MUST** be reduced accordingly to **avoid Skim Tank overflow**.

The De-Sanding Tank is designed to accumulate solids. As the solids build up in the tank bottom they become more and more difficult to remove. Therefore, the operator should thief the tank at least once a week to determine the depth and nature of the solids. Samples of the solids thieved from the tank should be retained for observation, and should be sent off for analysis. If the solids are observed to be "cementitious", becoming harder with time, then the operator should clean the De-Sanding Tank more often. If the solids remain loose and flowable, less frequent tank cleanouts will be necessary. In any case, no more than 4' of solids should be allowed to build up in the De-Sanding tank for structural reasons which could damage the tank.

There are three suggested methods of De-Sanding Tank cleanout. They are: