

### IMPROPER CONTROL VALVE LOCATION

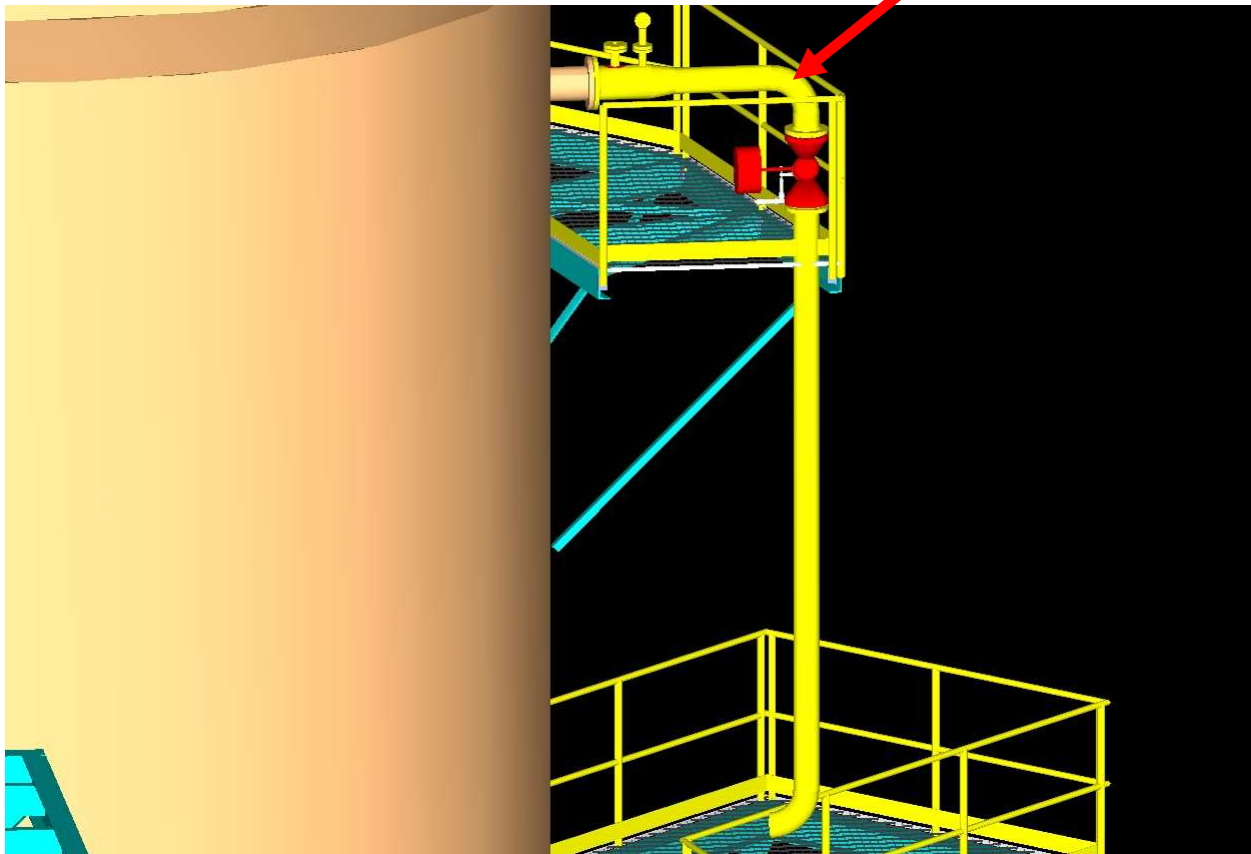
On a recent project the customer's specification required that all control valves be located where they had access from a platform. The safety of the people working on the valve was the first priority. There was an available platform on top of the tower and the flow control valve was located at this position just upstream of a pipe elbow. The new location of the valve violated a rule of thumb that control valves should be located up stream of straight pipe runs. Unfortunately this location of the valve set up eddy currents in the elbow and the wall of the pipe eroded/corroded after several months of operation resulting in an acid leak.

Subsequently the valve was relocated with a straight pipe run down stream of the valve and no leaks in the elbows have been reported.

Refer to the following sketches of the correct and incorrect valve locations.

**Incorrect valve location**

**LEAK**



**Correct valve location**

