

When adding water to the pool, if the water supply should be accidentally shut down at the plant and the valve would be opened lower than the pressure level, the vacuum of the water leaving the line would pull the pool water over into the water main.

We put a ~~hair~~ gap between the water line and the pool line. There is no possible chance now of a vacuum being formed. To be doubly safe we cut off the discharge from the filter into the pool above the water line. There is no possible chance of contamination into the main from the pool.

When running the alum and soda ash into the pool water it is delivered under main pressure, which is on an average of 40 lbs. greater pressure than the circulating pump pressure. If in adding this water the main pressure would drop lower than the pump pressure there would be a tendency to run this alum and soda ash water back into the main.

(Suggestion for Dr. Allen only: Suggest take that in on outlet side of filter and there would be no possible chance of contamination into the main, as the resistance on the outlet line of the filter is negligible.)