

return sludge pumping station shall be 1.5 m lower than the secondary clarifier tank hopper bottom level.

3.3.4.36 Valve Chambers, Pumping Stations and Pipe galleries

For all valve and instrument chambers, pumping stations and pipe galleries;

- Treated water supply system shall be designed and installed with all required equipment, valve, pipe, fittings, etc. for washing and cleaning purposes.
- The floor of these chambers, pumps rooms and these galleries shall be designed and constructed with appropriate slope. There shall be drainage channel at the lowest edge of the chambers and the side of the gallery. At the end of this channel, there shall be the permanent drainage pump readily for use at drainage pit. This drainage pit shall be constructed considering the installation of the drainage pump.
- Foul air shall be collected from the buildings/rooms/galleries and shall be sent to the odor treatment unit. For foul air collection; the collection piping network system with appropriate material shall be designed and installed in the buildings/rooms/galleries. This network shall be designed and installed to collect the foul air from the top and floor part of the areas. The main collection line shall be installed at the top of the rooms with appropriate distance to the ceiling and the foul air at the bottom part shall be collected with the pipe branches (drop legs) connected to this top main collection line network. H₂S and CH₄ monitoring and warning system shall be installed for the buildings/rooms/galleries. Minimum recycle rate and locations foul air to be collected are given in Section 2.6.2.
- If the pumping station shall be designed and constructed as buried, a lifting system shall be provided to carry out the maintenance works.