

Para 3.2.4 Per capita Sewage Flow:

The entire spent water of a community should normally contribute to the total flow in a sanitary sewer. However, the observed Dry weather Flow quantities usually are slightly less than the per capita water consumption. Since some water is lost in evaporation, seepage into ground, leakage etc. In and regions means sewage flow may be as little as 40 percent of water consumption. In well developed areas, flow may be as high as 90 percent due to industrial wastes, changed water use habits etc. Generally 80 percent of the water supply may be expected to reach the sewers unless there is data available to the contrary. However the sewers should be designed for a minimum waste water flow of 100 liters per capita per day. Industries and commercial buildings often use water other than the municipal supply and may discharge their liquid waste into the sanitary sewers. Estimates of such flows have to be made separately. The details of requirements of water for institutions and industries is discussed in Chapter 2 of Manual on Water Supply and Treatment. Industrial wastes have to be treated to the standards prescribed by the regulatory authorities before being discharged into sewers. For some areas it is safe to assume that the future density of population for design purpose to be equal to the saturation density. It is desirable that all sewers serving a small area be designed on the basis of saturation density.

Infiltration into sewer may occur through pipes, pipe joints and structures. The probable amount has to be equated carefully.