Waste water from customer house toilets, baths, etc., becomes sewage. The sewage runs through a pipe reticulation system known as sewers. This combined with the sewage is referred to as the Sewerage System.

**Pump Station**

**Mica Street Water Filtration Plant**

**Customer House**

**Reservoir or river**

**Raw water supply**

**Water storage reservoir**

**Filtered water**

**Sewer Rising Main**

**Sewage pump station**

**Sewer** transporting sewage to the waste water treatment plant.

**Waste Water Treatment Plant (Trickling Filter Process)**

**Pre Treatment** (Physical Process)

- **Flow recorder**
- **Bar Screen**
- **Grit Collection & Removal**
- **Dosing Tank**
- **Primary Sedimentation Tank**

**Primary Treatment** (Physical Process)

- **Primary Sedimentation Tank** aim is to remove solids by sedimentation:
  - Removal of 100% settleable solids.
  - Remove 40 to 60% Suspended Solids.
  - Remove 30 to 40% BOD

**Digester** (Biological anaerobic process)

- **Digger aim is to:**
  - Reduce quantity of solids
  - Destroy parasitic & pathogenic organisms
  - Destroy odours
  - Produce an inoffensive end product

**Sludge Line**

**Sludge Drying Bed**

- **Sludge drying bed aims:**
  - reduce quantity of sludge
  - end product dry cake ease of handling

**Secondary Aerobic Biological Treatment Process**

- **Trickling Filter** aim:
  - Remove 90% suspended solids
  - Convert suspended solids to settleable

**Secondary Sedimentation Tank**

**Tertiary Treatment** (Disinfection)

- **UV Disinfection**
- **Tertiary Pond**

**Final Effluent pumped to two major users these being the Broken Hill Golf Course, Mines and some other minor users.**

**Vent**

**Sewage** containing:

- 99.9% water, 0.1% solids
- BOD 280 to 350 mg/ltr
- SS 200 to 300 mg/ltr

**Reservoirs** i.e. Stephens Creek and Umberumberka

**Or River supply**, Menindee, Darling River River

**Waste Water Treatment Plant (Trickling Filter Process).**