

OXIDATION POND

- - Stabilization Pond / Redox Pond / Sewage Lagoons / Waste Stabilization Pond
- It is an open shallow pool 5 ft deep with an Inlet & Outlet
- Over 50 ponds are working at present in India
- Established method of purifying sewage for Small Communities
- 1st large scale installation was in Bhilai for the population of 1 lakh
- Oxidation Pond requires > i. Bacteri, ii. Algae, iii.

Sunlight

- Mechanism of Oxidation Pond - Organic matter in the Sewage is oxidized by Bacteria to Carbon Dioxide, Ammonia & Water
- Oxygen needed for oxidation is derived from Algae which liberates oxygen under Sunlight
- During Sunshine Hours - Oxidation Pond is predominantly Aerobic
- during Night Hours - Bottom layers are generally Anaerobic
- Hence, purification in oxidation pond is by Combination of Aerobic & Anaerobic

Bacteria's

- Effluent may be used for growing crops