

EXTENDED AERATION



Categorization of Technology

BIOLOGICAL → **AEROBIC** → **SUSPENDED GROWTH**
Mechanized Treatment System

Technology Brief

The extended aeration is a modification of the conventional activated sludge plant, which eliminates the primary sedimentation and the sludge digestion tank. It is also known as an oxidation ditch. The provision of aeration minimizes the area requirement as compared to an oxidation pond. The lagoons may be constructed either in brick or stone masonry with vertical walls or in earthwork with earthen embankments, however, water-tightness is essential in either of the cases. The ditch is equipped with a horizontal rotor for agitating and circulating the sewage. The rotor provides an oxygen supply to the sewage and also keeps the sewage solids in suspension. The sludge is settled by stopping the rotor for a couple of hours, and part of the settled sludge is recirculated while excess sludge is dried and disposed of.