HDPE Perforated/ Slotted Piping System

City waste dumping grounds are designed to handle the leachates which could be in liquid and gases forms. The collection, transmission and disbursement of these leachates need to be through closed piping network. The piping used should be inherent to the chemical effects of the leachate.

HDPE being inert materials, they get totally unaffected by most of the chemicals and even chemicals which affect the plastic materials, have been conveyed through these pipes for minimum 100 years without much damage to the piping system.

River water infiltration galleries are prepared to collect the clean water (free from slit, clay) from the river bed for use in city water supply, thermal power plants, coal mines, or any industrial application. In the design of infiltration gallery, the network of perforated/slotted HDPE pipes covered with geo textile/fabric are installed at the specific depth below river bed, above which layer of graded gravels are packed to stop silt, clay flowing in to HDPE pipes. The water percolated through these graded gravels, gets filtered through geo textile/fabric and the clean filtered water enters in to HDPE pipes through perforations or slots which is further conveyed to jack/intake wells using HDPE pipes.

HDPE pipes supplied for such applications could be plain ended, male-female threaded, spigot and socket coupling type. The type of pipe joint depends on direction of installation of pipes & site conditions, that is, horizontal or vertical. The perforation made in HDPE pipe could be drilled holes or slotted. The perforations could be all along the surface of pipe or certain specific area on pipe circumference.

Technical specifications

Range	Ø 20 to 2500 mm Pressure Rating 2.5 to 25 kgf/cm² Also available with tracer for easy detection
Standard	Pipes as per IS 4984, IS 14333, BS EN 12201, ISO 4427 & stating as per Company Standard
Length	1m, 2m, 3m, 6m & 12m
Material Grades	• PE-63 •PE-80 •PE 100 (Black Colour) ■
Applications	• Leachate Collection • City Waste Dumping ground (Gas + Liquid) • Collection of Methane Gas from landfills • Dispersion of Oxygen for Fast Decomposing of Waste in Dumping Yards • River Water Infiltration Gallery • Sub Surface Drainage for Stadiums, Cricket Grounds, Airport Runways, Rain water harvesting systems, break testing tracks & Railway tracks.
Type of Joints	• Spigot & Socket Threaded • Spigot & Socket Coupling • Butt Fusion & Electro Fusion Joint • Quick Connect • Sure-Loc+ • Flange Joints • Sleeve Joints • Rubber Ring Joints.

River Water Infiltration Gallery with Network of Slotted HDPE Pipes