

Drainage pipes for the collection of leachate in solid waste landfill environmental containment systems



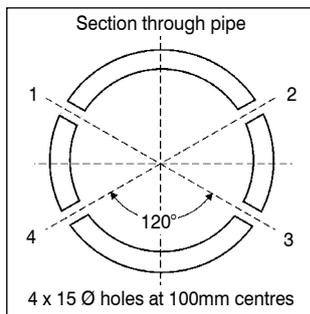
Dura-Line has identified a need for a specialised solid waste leachate collection pipe in landfill sites. Liquid leachate that has drained through the waste mass accumulates in the bottom of the land fill and must be guided, by an HDPE perforated collection pipe, to one or more centralised collection sumps. Pipes perforated with narrow slots can clog when used in this application. This is due to the growth of micro organisms, or a chemical reaction leading to the precipitation of minerals. Dura-Line has developed a mass produced pipe, called **Wastex**, perforated with 15mm diameter holes which is much less susceptible to clogging. Until now

such a pipe has not been available in the market, and the only option was the time consuming and costly manual drilling of a solid wall HDPE pipe on site.

Wastex was designed in consultation with leading Consulting Engineers specialising in the solid waste landfill field. The pipes are manufactured from HDPE and have a double wall corrugated construction complying with the strength requirements of DIN 4262 Part 1 "uPVC and HDPE subsoil and multi-purpose drain pipes for use in road construction and civil engineering". Four longitudinal rows of 15mm diameter drainage

holes are positioned along the pipe at 100mm centres. See the drawing below. Wastex is available in nominal diameters of 110mm and 160mm.

The apex of the pipe is marked with an indelible yellow line to facilitate the correct orientation during installation.



The pipes are connected with standard push fit couplings. A full range of fabricated HDPE fittings are also available. They are joined to the **Wastex** pipe with SSN couplings, which are manufactured from stainless steel with a neoprene rubber seal.

HDPE is one of the most chemically resistant polymers, and the pipe is unaffected by acids and alkalis in the most aggressive soils and effluents. A detailed chemical resistance specification is available on request.

Technical data:

Nominal pipe size

Outside diameter (mm)
Inside diameter (mm)
Infiltration area (mm²/m)
Nominal hole diameter (mm)
Standard pipe length (m)
Ring stiffness (kPa)

DN110

110
95
>7000
15
6
>450

DN160

160
137
>7000
15
6
>450

All specifications are subject to manufacturing tolerances