

TABLE B.3. RECOMMENDED MINIMUM DISTANCE BETWEEN A RECEPTOR AND A PERCOLATION AREA OR POLISHING FILTER.

T/P-value ¹	Type of soil/subsoil ²	Depth of soil/subsoil (m above bedrock) (see Notes 1, 2, 3, 6)	Minimum distance (m) from receptor to percolation area or polishing filter ⁵				
			Public water supply	Karst feature	Down-gradient domestic well or flow direction is unknown (see Note 5)	Domestic well alongside (no gradient)	Up-gradient domestic well
>30	CLAY; sandy	1.2			40		
	CLAY (e.g. clayey till); SILT/CLAY	>3.0	60	15	30	25	15
10–30	Sandy SILT; silty	1.2			45		
	SAND; silty GRAVEL (e.g. sandy till)	>8.0	60	15	30	25	15
<10	SAND; GRAVEL; silty SAND	2.0 ³			60		
		2.0 ⁴	60	15	40	25	15
		>8.0 ⁴			30		

¹The T-value (expressed as min/25 mm) is the time taken for the water level to drop a specified distance in a percolation test hole. For shallow subsoils the test hole requirements are different and hence the test results are called P-values. For further advice see [Annex C](#).

²BS 5930 descriptions.

³Water table 1.2–2.0 m.

⁴Water table >2.0 m.

⁵The distance from the percolation area or polishing filter means the distance from the periphery of the percolation area or polishing filter and not from the centre.

Notes:

1. Depths are measured from the invert level of the percolation trench.
2. Depths and distances can be related by interpolation: e.g. where the thickness of sandy CLAY is 1.2 m, the minimum recommended distance from the well to percolation area is 40 m; where the thickness is 3.0 m, the distance is 30 m; distances for intermediate depths can be approximated by interpolation.
3. Where bedrock is shallow (<2 m below invert of the trench), greater distances may be necessary where there is evidence of the presence of preferential flow paths (e.g. cracks, roots) in the subsoil.
4. Where the minimum subsoil thicknesses are less than those given above, site improvements and systems other than systems as described in Sections 8 and 9 may be used to reduce the likelihood of contamination.
5. If effluent and bacteria enter bedrock rapidly (within 1–2 days), the distances given may not be adequate where the percolation area is in the zone of contribution of a well. Further site-specific evaluation is necessary.
6. Where bedrock is known to be karstified or highly fractured, greater depths of subsoil may be advisable to minimise the likelihood of contamination.

based on the concepts of ‘risk assessment’ and ‘risk management’, and take account, as far as practicable, of the uncertainties associated with hydrogeological conditions in Ireland. Use of the depths and distances in this table does not guarantee that pollution will not be caused; rather, it will reduce the risk of significant pollution occurring.

Where an on-site system is in the zone of contribution of a well, the likelihood of contamination and the threat to human health depend largely on five factors:

1. The thickness and permeability of subsoil beneath the invert of the percolation trench
2. The permeability of the bedrock, where the well is tapping the bedrock
3. The distance between the well or spring and the on-site system
4. The groundwater flow direction, and
5. The level of treatment of effluent.