

Groundwater Protection Responses for Landspreading – Summary

Response Matrix for Landspreading

VULNERABILITY RATING	SOURCE PROTECTION AREA		RESOURCE PROTECTION Aquifer Category					
			Regionally Important (R)		Locally Important (L)		Poor Aquifers (P)	
	Inner	Outer	Rk	Rf/Rg	Lm/Lg	Ll	Pl	Pu
Extreme (E)	R4	R4	R3 ²	R3 ²	R3 ¹	R3 ¹	R3 ¹	R3 ¹
High (H)	R4	R2 ¹	R1	R1	R1	R1	R1	R1
Moderate (M)	R3 ³	R2 ¹	R1	R1	R1	R1	R1	R1
Low (L)	R3 ³	R2 ¹	R1	R1	R1	R1	R1	R1

R1 Acceptable, subject to normal good practice.

R2¹ Acceptable subject to a maximum organic nitrogen load (including that deposited by grazing animals) not exceeding 170 kg/hectare/yr.

R3¹ Not generally acceptable, unless a consistent minimum thickness of 1 m of soil and subsoil can be demonstrated.

R3² Not generally acceptable, unless a consistent minimum thickness of 2 m of soil and subsoil can be demonstrated.

R3³ Not generally acceptable, unless no alternative areas are available and detailed evidence is provided to show that contamination will not take place.

R4 Not acceptable.

- If contamination by nitrate (or other contaminants) is a problem in any particular area, then more restrictive responses may be necessary. Monitoring carried out under any Local Authority or Agency authorisation will assist in determining whether or not a variation in any of these responses is required.
- The total nitrogen (organic and inorganic) load applied should not exceed Teagasc's nutrient recommendations for growing crops.
- No spreading should be allowed within 50 m of groundwater sources.
- In karst limestone areas, features such as swallow holes, caves and streams connected to karst systems, must be taken into account. Landspreading should not occur within 30 m of karst features.
- Landspreading should coincide with the growing season so that the nutrients applied will be utilised by the growing crop.
- Landspreading should be avoided when soil conditions prevent infiltration or when heavy rain is forecast within 48 hours. It is generally unacceptable to carry out landspreading during the period November to February inclusive. Operators who are considering landspreading during this period should consult the relevant authority.
- Site investigations (e.g. trial pits, auger holes, boreholes) should reach sufficient depths to show that the minimum required subsoil thickness is present. In extreme vulnerability areas or within source protection areas there should be at least one investigation point per hectare. In all other cases the sampling points should be at a minimum frequency of one per 5 hectares.