

**Table 4–1. Site features – risk ratings for OWMS**

Site Feature	Relevant System(s)	Risk Rating			Restrictive Feature
		Minor Limitation	Moderate Limitation	Major Limitation	
Geology/ regolith	All EAA systems	N/A	N/A	Major geological discontinuities, fractured or highly porous bedrock or regolith	Groundwater pollution hazard
Shallow bedrock	In ground treatment systems and all EAA systems	N/A	N/A	Bedrock at shallower depth than tanks or effluent application systems	Difficult excavation Low saturated hydraulic conductivity Shallow limiting layer (see Table 4-5)
Rocks and rock outcrops (% of land surface containing rocks (floaters) >0.2m diameter)	All EAA systems	<10%	10-20%	>20%	Limits EAA system performance Provides preferential flow paths Difficult excavation
Fill	All OWMS	No fill	Fill present	N/A	Subsidence Variable permeability
Landform	All OWMS	Hill crests, divergent slopes and plains	Convergent slopes and foot slopes	Drainage plains and incised channels	Groundwater pollution hazard Resurfacing hazard
Slope %	Subsurface irrigation	0 - 20	20 - 30	>30	Difficult installation Linear Loading Rate (LLR) Run-off Erosion
	Surface irrigation	0 - 5	5 - 10	>10	Difficult installation LLR Run-off Erosion
	Evapotranspiration Absorption (ETA)/ Absorption system: trench	0 - 10	10 - 20	>20	Difficult installation LLR Run-off Erosion
	ETA/ Absorption system: bed	0 - 5	5 - 10	>10	Difficult installation LLR Run-off Erosion

Site Feature	Relevant System(s)	Risk Rating			Restrictive Feature
		Minor Limitation	Moderate Limitation	Major Limitation	
	Mound	0 - 10	10 - 15	>15	Difficult installation Large volume of sand required. Risk of toe seepage
Erosion potential	All EAA systems	No signs of erosion potential present Well vegetated	Absence of vegetation	Signs of erosion present, e.g. rills, mass movement and slope failure	Soil degradation Transport System failure
Run-on and upslope seepage	All EAA systems	None	Some - diversion possible	High - diversion not practical	System inundation Transport of effluent off-site
Flood potential	All treatment systems	Vents, openings, and electrical components above 1 in 100-year flood contour	N/A	Vents, openings, and electrical components below 1 in 100-year flood contour	Transport of effluent off-site System failure and electrocution hazard
	All EAA systems	Rare; above 1 in 20-year flood contour	N/A	Frequent; below 1 in 20-year flood contour	System inundation. Transport of effluent off-site
Site drainage	All effluent application systems	No visible signs of surface dampness	N/A	Visible signs of surface dampness, e.g. moisture-tolerant vegetation (sedges and ferns), seeps, springs	Groundwater pollution hazard Resurfacing hazard
Exposure	All effluent application systems	High sun and wind exposure	N/A	Low sun and wind exposure	Poor evapotranspiration
Land area	All systems	Area is available	N/A	Area is not available	Health risk Pollution risk
Buffer distance	All effluent application systems	(see Section 4.3.2 and Table 4 2)	N/A	N/A	Health risk Pollution risk
<b>NOTES</b> Sites with major limitations are generally <b>not</b> suitable for land application of effluent. Risk reduction measures must be applied to reduce to minor limitation.					