



Recommended Buffer Distances

Site Feature	Irrigation type* ¹	Buffer (m) - <10% slope	Buffer (m) - >10% slope
Buildings and property boundaries	ETA Beds	12/6* ²	15
	Sub-surface Irrigation	6/3* ²	15
Parking areas, driveways and swimming pools	ETA Beds	12/6* ²	15
	Sub-surface Irrigation	6/3* ²	15
Permanent surface waters (eg Rivers, Lakes etc.)	All	100	100
Other waters (eg. farm dams, intermittent streams and drainage channels)	All	40	40
Drainage depressions	All	6	6
Water bores.	All	250/50* ²	250/50* ²

Notes *¹ In most cases, similar buffers should be provided to treatment systems as to irrigation systems
*² See Note 2

Buffers, Example Layout of Septic Tanks and ETA Beds – Design and Installation Requirements

- Council guidelines should be referenced to confirm recommended buffer distances. In some cases it may be acceptable to reduce buffer distances if additional environmental security is provided e.g. minimum distance to boundary may be reduced if better quality effluent, larger irrigation area or collection swale provided.
- x/y indicates requirements for areas down / upslope of the re-use area, i.e. 6 metre buffer is required if the irrigation field is upslope of the feature and 3 m if it is down slope.
- The irrigation system represented in this plan is indicative only, refer to Council's guidelines and Sheets 1, 2, 4 and 5 for further design details and sizing requirements.
- Septic Tanks are must be installed in accordance with manufacture's specification and must fulfil NSW Health's sizing and performance criteria.
- The location of the septic tank must be greater than 1.5 m from any building and allowances must be made for easy access to the tank in order for the pumping contractor to get truck near the system for periodic clean outs.
- Septic tanks are required to have an effluent filter on the outlet. It should be fitted to the outside of the tank to allow ease of maintenance and to avoid the need for owners to put their hands in the system.
- Septic tank systems typically produce a primary effluent. Trenches and beds are commonly used to dispose septic tank effluent. Further treatment is required before the effluent can be irrigated on-site. Sand filters and sub-surface wetlands are commonly used with septic tanks for further treatment.

Maintenance and Management

- Effluent filter is to be checked monthly and regularly cleaned out.
 - The residual sludge contents of the septic tanks should be pumped out on average every three to five years.
 - The system must be kept mosquito and fly proof.
 - The system should be thoroughly serviced as required in Council guidelines. The service should include: (1) assessment of sludge and scum levels, (2) check for blockages of the outlet and inlet junctions, (3) inspection for blockages of the distribution pipes and aggregate and (4) flushing, cleaning and/or replacing of components as required.
 - Runoff diversion structures to be inspected annually and maintained as required.
 - Vegetation from irrigation/disposal fields must to be regularly harvested to promote young growth and enhance effluent re-use.
- NSW Health Department System Performance Specifications**
- Septic Tanks should be sized according to NSW Health department accreditation guidelines.

Final Draft

CLIENT/PROJECT North Coast Councils	TITLE Example Septic Tank, Reed Bed & ETA Bed Layout	DESIGNED: DL	DATUM: na	SHEET 9 OF 10 SHEETS	REV.	DESCRIPTION	DATE	ISSUED	
		DRAWN: DL	HORIZONTAL RATIO: na		1.0	On-site wastewater management systems - Septic Tanks	10/11/2003	DL	
THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY All measurements in mm unless otherwise specified.		PROJECT MANAGER:	PROJECT REFERENCE / DRAWING NUMBER: 2003G812JD8.2	REVIEWED: DM	VERTICAL RATIO: na	2.0	Septic tank, reed bed and ETA beds on moderately sloping land	03/03/2004	DL
						3.0	Septic tank and ETA bed layout	25/03/2004	DL