## H23 Appendix: Clearances, Setbacks and Maximum Slope Gradients for Installation of Unreticulated Wastewater Treatment, Storage and Disposal Systems

#### Criteria A – Clearance to water tables from discharges

- 1. For Permitted Activity discharges of wastewater or greywater, the depth of the soil absorption zone below the point of discharge to the highest water table shall be no less than:
  - a. 600mm for primary treated effluent
  - b. 400mm for secondary treated effluent
  - c. 300mm for tertiary treated effluent
- 2. For Permitted activities for discharges of wastewater or greywater, the depth of the soil absorption zone below the point of discharge to an impermeable layer shall be no less than:
  - a. 600mm for primary treated effluent
  - b. 400mm for secondary treated effluent
  - c. 300mm for tertiary treated effluent

The clearance criteria do not apply to systems established before April 2002.

- 1. For Permitted Activity pit latrines, the depth from the base of the pit to the highest water table shall be no less than 2 metres.
- 2. For Permitted Activity discharge to land of septage within the property it originated from, the depth from the base of the discharge pit to the highest water table or to any impermeable layer shall be 2 metres.
- 3. For Permitted Activity discharge to land through deep bores, the depth from the base of the deep bore to the highest water table or any impermeable layer shall be 2 metres.
- 4. For Controlled Activity composting toilets, the depth below the point of discharge to the highest water table shall be 600mm.

#### Criteria B – Setbacks from land and water features and structures for discharges

- 1. For Permitted Activities, discharges of wastewater or greywater shall be no closer than:
  - a. 1.5 metres from any building or structure, or;
  - b. 1.5 metres from a property boundary, or;
  - c. 2 metres from a boundary interfacing with a beach or dune where there is also:
    - i. 20 metres of vegetative cover between the discharge and the beach margin; or
    - ii. 20 metres of vegetative cover between the discharge and the dune crest;
    - iii. 5 metres from a dune crest if dune is within the property boundary; or
  - d. 20 metres to any water body, artificial water body or coastal water; or
  - e. 20 metres to any dam or pond except any dam or pond specifically constructed for the treatment of wastewater; or
  - f. 20 metres of any bore used for human drinking water; or 20 metres to any bore used for irrigation water or stock drinking water; or
  - g. 20 metres of any stock drinking water pond or dam; or1.5 metres of any surface land drain that is exclusively contained on the property other than a land drain specifically constructed above a land application system to protect that system from inundation; or
  - h. 5 metres of any surface land drain that is not exclusively contained on the property; or
  - i. 1.5 metres vertically and 1.5 metres horizontally to a subsurface land drain.

For systems established before April 2002, only criteria (a) to (e) apply.

For systems established after April 2002 but prior to notification of this Rule, only criteria (a) to (g) apply.

For systems established after notification of this Rule, criteria (a) to (k) apply.

- 2. Permitted Activity discharges from pit latrines shall be no closer than:
  - a. 20 metres of the edge of a water body, artificial water body or coastal water; or
  - b. 50 metres of a bore, well or spring used for a buildings water supply, stock water or irrigation water; or

- c. 1000 metres up flow and 150 metres down flow of a community drinking water supply; or
- d. 20 metres of any subsurface land drain; or
- e. 10 metres of any property boundary; or
- f. 5 metres of any surface land drain; or
- g. 5 metres of any building used for habitable purposes.
- 3. Controlled Activity discharges from composting toilets shall be no closer than:
  - a. 5 metres of any property boundary; or
  - b. 5 metres of any drain; or
  - c. 20 metres of any water body, artificial water body or coastal water; or
  - d. 5 metres of any building used for habitable purposes; or
  - e. 20 metres of land used to produce food crops for human consumption.
- 4. Permitted Activity discharges to land of septage from the same property shall be no closer than:
  - a. 150 metres from the property boundary; or
  - b. 150 metres from any building used for habitable, commercial or industrial purposes; or
  - c. 100 metres from any water body, artificial water body or coastal water; or
  - d. 150 metres of a bore, well or spring used for a building's water supply, stock water or irrigation water; or
  - e. 1000 metres up flow and 150 metres down flow of a community drinking water supply; or
  - f. an area sensitive to coastal hazard.
- 5. Permitted Activity discharges to land from deep bores shall be no closer than:
  - a. 20 metres of the edge of a water body, artificial water body or coastal water; or
  - b. 50 metres of a bore, well or spring used for a buildings water supply, stock water or irrigation water; or
  - c. 1000 metres up flow and 150 metres down flow of a community drinking water supply; or
  - d. 20 metres of any subsurface land drain; or
  - e. 20 metres of any property boundary; or
  - f. 20 metres of any surface land drain.

# Criteria C - Land Stability Setbacks and Maximum Slope Gradients for installation of land application systems

For all new systems established as Permitted Activities after notification of this Rule, discharges of wastewater or greywater shall meet the following setback requirements:

a. Minimum Setback Distance from Areas of Slope movement and/or Erosion

The minimum setback distance from areas of slope movement and/or erosion shall be **8m**, unless a geotechnical investigation and analysis of the site carried out by a suitably qualified professional confirms that the proposed separation distance is adequate or provides recommendations for engineering measures to adequately protect the effluent system from slope instability and/or erosion.

### b. Minimum Setback Distances from land features

The wastewater treatment and land application system shall be located a minimum distance away from embankments, escarpments, base/toe of slope, retaining structures, and buildings, unless a specific engineering assessment has been undertaken by a suitably qualified professional confirming that the proposal is unlikely to affect that feature. The minimum disposal field setback distance shall be:

- 1.5 x the height of any embankment;
- 1.5 x the height of any slope;
- 1.5 x the height of a retaining wall;
- 1.5 x the depth of the foundations of any building with a minimum distance of 1.5m;
- above a 45° line drawn from the base of any building foundation;
- 5 metres to the top of a shear plane

unless site specific geotechnical requirements differ.

- c. The maximum slope gradient and depth in which a disposal system can be installed is
- 14° (1v to 4h) for seepage beds up to 1.6 metres deep
- 3° (1v to 20h) for ETS beds
- 19° (1v to 3h) for trenches up to 1 metre deep
- 22° (1v to 2.5h) for shallow installations up to 0.3 metres deep

provided that the base of the excavation for the disposal unit is equal to or greater than 5 metres from the building or adjacent structure and that the slope does not show evidence of being affected by slope instability and/or erosion; unless a specific engineering assessment of the proposal is completed by a suitably qualified professional confirming that the disposal field is unlikely to adversely affect the stability of the slope or the building during construction and operation.