

Appendix 6B

APPENDIX 6B

CRITERIA FOR SITING SANITARY LANDFILLS

General Exclusions

- Saturated soils
- Unstable soils such as marine clays with a high organic content; soils which lose their strength on compaction; soils with high bentonite levels which sink and swell with moisture change
- Soils at risk of subsidence from underground activity such as ground water pumping or mining
- Sites within 100-year flood plain zone and/or storm water back-up
- Sites within areas of ground water recharge
- Sites too close to, or upstream of, potable water intake points
- Sites in, or close to natural resources, habitats of endangered species, parks, forests, natural areas etc.
- Sites where there is a risk of landslides
- Land of economic and cultural importance
- Sites of historical importance
- Sites of sensitivity – typically, close to sites for storage of explosive materials, airports etc.
- Areas adjacent to stationary population
- Areas of inequity – where a proposed facility would be an unbalanced and unrelated function to existing land use and settlement.

Appendix 6B

Preferred Conditions - checklist.

	SUBJECT	FACTOR	REQUIREMENTS AND CONDITIONS
1.	Geological	Bedrock	Depth greater than 6 metres.
	Geological	Rock Character	Avoid fissured and fractured rocks.
	Geological	Seismicity	Low seismic risk.
	Geological	Unique features	Avoid sites of scientific or cultural interest.
2.	Physio-graphical	Topography	Site should be flat or in rolling country with slopes averaging <10%.
	Physio-graphical	Soils	Depth >6m. Basal soil impermeable. Avoid sites with soil movement, slopes greater than 25%, surface soils of heavy, poor draining clays.
3.	Hydro-geological	Drainage	Dry surface, little ponding.
	Hydro-geological	Surface water	>500m from streams and rivers draining higher ground. Avoid flood plains.
	Hydro-geological	Ground water	>3000m from water catchment areas. Original soil surface >6m to unconfined water table. No indications of excessive water table rise, springs, or vadose water passages.
	Hydro-geological	Aquifers	Confined beneath impermeable layers.
4.	Climate	Rain	Minimal rain and rainfall intensity.
	Climate	Air/wind	Areas with relatively good air mixing and predominantly downstream of human settlements.
5.	Land use	Resource use	Avoid sites of high biological diversity – e.g. dry forests, wetlands, mangroves, karst landscapes, rare and unique habitats, scenic and recreational areas. Avoid sites already contaminated where natural attenuation capacity has been exceeded in surrounding areas.
	Land use	Human use	Stay >1000m from nearest township, school, hospital or other institution. Stay >250m away from the nearest permanent dwelling. Avoid densely populated areas, areas of historical, cultural and religious importance. Consider site afteruse and the possibility of re-conversion to current use.
	Land use	Development issues	Refer to structure plans and development plans. Avoid areas planned for high value development.
	Land use	Water use	Down gradient and at least 3000m from water intake point.
	Land use	Transport	>500m from main roads and highways. Access within 1.5km of main roads, highway and utilities. Within 45 minutes travel time from transfer stations and/ or collection nodes. Avoid access through heavily congested roads/junctions.