

TECHNICAL GUIDELINE (Additional Information)



DEPARTMENT OF ENVIRONMENT
AND CONSERVATION

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WATER & LAND DISCHARGES

In addition to the requirements set out in the DEC Information Guideline for *Submission of an Application for an Environment Permit to Discharge Waste*, the following information, where applicable, should be provided as part of an application for an Environment (Waste Discharge) Permit where WATER/LAND emissions may be generated.

SITE PLANS & LOCATION

In addition to the A4 site plan (requested in Information Guideline), please provide two (2) large-scale drawings. All plans should be drawn to scale and indicate the following:

- (a) proposed treatment system indicating general layout, method of operation, dimensions, materials and grade.
 - specifications describing proposed works (e.g. land irrigation system) if not indicated on drawings.
- (b) scale and direction of north showing the site in relation to roads, streams, residential allotments, and other landmarks, indicating:
 - boundaries and dimensions of the premises.
 - location and dimensions of proposed works.
 - zoning and/or land use within 1km of the premises.
 - location of any relevant site features, easements, or watercourse within or adjacent to the premises, including nearest residence.
 - location of proposed discharge point(s) and sampling point(s).

INFORMATION

Provide details on the following:

- (a) design basis of the proposed wastewater treatment and disposal system, indicating:
 - treatment process including details of wastewater generation, waste minimization, waste collection and storage.

- design calculations or performance characteristics to show that the system will produce the stated results.
 - disposal method (i.e. to land or water).
 - effluent quality and quantify expected to be produced.
 - proposed operational and maintenance procedures and plant failure contingency plans.
- (b) description of the discharge point from the premises, if it is proposed to discharge wastes to water, indicating:
 - dimensions and materials of construction of discharge pipes or drains.
 - location and name of receiving waters, both immediate (e.g. stormwater drain) and eventual (e.g. a particular creek, lake or bay).
 - beneficial values of the receiving water (e.g. drinking, fishing, recreational, etc.), within 1km downstream of the discharge point.
 - seasonal ambient water quality data and hydrological information.
 - climate regime (e.g., rainfall, temperature, etc.).
 - information on pre-existing pollution source(s), type(s) and level(s).
 - (c) for wastewater discharges to land:
 - details of groundwater regime (seasonal), groundwater quality and groundwater use within 1km of premises.
 - characterisation of soils.
 - water balance (e.g. losses due to evaporation, seepage, and runoff) to be provided for land disposal systems.
 - (d) for wastewater discharges to land and/or water:
 - water balance to be provided for water intake and wastewater produce from the premises.
 - details of investigations into wastewater recycling and reuse.

- water balance to be provided for water intake and wastewater produce from the premises.
- details of investigations into wastewater recycling and reuse.
- water conservation measures taken to reduce water usage.
- source of wastewater and expected effluent quality and quantity.
- rates of discharge (litres per hour, hours per day, days per month, months per year).
- design basis of the treatment system using results of field evaluation studies and method of disposal:
 - i. *beneficial values used to assess effects of discharge against*
 - ii. *water quality criteria for protection of these values and which may be used in the Environment Permit.*
- availability of sewerage and/or expected date of availability.

WASTE MINIMISATION

Provide details on the following:

- (a) Information on different wastewater minimisation options applicable to the industry and details of the options examined.
 - details of investigations into wastewater recycling and reuse.
 - water conservation measures taken to reduce water usage.
- (b) Details of applicants proposed wastewater minimisation strategy (Avoidance, Reduction, Reuse, Recycle, Treatment & Disposal).
- (c) Information on alternative treatment and disposal system considered.
- (d) Basis for choosing the proposed treatment and disposal system.

RISK ASSESSMENT

- (a) An assessment of the likely risk of treatment and disposal system failure causing an environmental hazard.
 - Worse case scenarios (e.g. pond seepage)
 - Emergency situations (e.g. pond over-flow, flooding, etc.)
- (b) A description of treatment and disposal system safety measures to avoid an environmental hazard.
- (c) Contingency plan for the treatment and disposal system must be based on the findings of the risk assessment.

AUTHORISATIONS

If wastewater is to be discharged across or on to land owned by others or to a drain controlled by other, written proof that appropriate permission has been obtained.

Where the information exceeds 10 pages in length a summary is required and should include:

- Process description and waste discharge rate.
- Treatment plant description.
- Nature, composition and source of waste.

Where an application contains insufficient information the Director will request further information. The application cannot be acted upon until the further information sought is received and accepted as adequate.