

## TERMS OF APPROVAL FOR SITES LIKELY TO BE EXEMPT FROM CONSTRUCTION DEWATERING LICENSING – BOTANY SANDS GROUNDWATER SOURCE

These terms do not represent any form of authorisation for the extraction of groundwater. As necessary, the site concerned may or may not establish a groundwater dewatering system.

## Prior to Construction

- 1. The Applicant shall assess the likely impacts of the dewatering activities on other groundwater users or structures or public infrastructure; this assessment will include an appropriate bore, spring or groundwater seep census and considerations relevant to potential subsidence or excessive settlement induced in nearby buildings and property, and be documented together with all calculations and information to support the basis of these in a report provided to the Consent Authority prior to the commencement of construction.
- 2. The design and construction of the building must prevent any take of groundwater after construction by making any below-ground levels that may be impacted by any watertable watertight for the anticipated life of the building. Waterproofing of below-ground levels must be sufficiently extensive to incorporate adequate provision for unforseen high watertable elevations to prevent potential future inundation.
- 3. Sufficient permanent drainage shall be provided beneath and around the outside of the watertight structure to ensure that natural groundwater flow is not impeded and:
  - A. any groundwater mounding at the edge of the structure shall be at a level not greater than 10 % above the level to which the watertable might naturally rise in the location immediately prior to the construction of the structure; and
  - B. any elevated watertable is more than 1.0 m below the natural ground surface existent at the location immediately prior to the construction of the structure; and
  - C. where the habitable structure is founded in bedrock or impermeable natural soil then the requirement to maintain groundwater flows beneath the structure is not applicable.
- 4. Construction methods and material used in and for construction shall be designed to account for the likely range of salinity and pollutants which may be dissolved in groundwater, and shall not themselves cause pollution of the groundwater.

## Requirements for dealing with groundwater during excavation

If for any reason the take of groundwater during construction is expected to exceed the amount nominated in report No. E22556 GA of 26 May 2015 by Environmental Investigations Australia

- Pty Ltd, then an authorisation shall be obtained for the take of groundwater as part of the activity.
- Engineering measures designed to transfer groundwater around and beneath the basement shall be incorporated into the basement construction to prevent the completed infrastructure from restricting pre-existing groundwater flows.
- 7. Piping, piling or other structures used in the management of pumped groundwater shall not create a flooding hazard or induce mounding of groundwater. Control of pumped groundwater is to be maintained at all times during dewatering to prevent unregulated off-site discharge.
- 8. Groundwater shall not be pumped or extracted for any purpose other than temporary construction dewatering at the site identified in the development application.
- 9. The method of disposal of pumped water shall be nominated (i.e. reinjection, drainage to the stormwater system or discharge to sewer) and a copy of the written permission from the relevant controlling authority shall be provided. The disposal of any contaminated pumped groundwater (sometimes called "tailwater") must comply with the provisions of the *Protection of the Environment Operations Act 1997* and any requirements of the relevant controlling authority.
- 10. Contaminated groundwater (i.e. above appropriate NEPM 2013 thresholds) shall not be reinjected into any aquifer. The reinjection system design and treatment methods to remove contaminants shall be nominated and included in the initial report and any subsequent intermediate report as necessary. The quality of any pumped water that is to be reinjected must be demonstrated to be compatible with, or improve, the intrinsic or ambient groundwater in the vicinity of the reinjection site.

END OF GENERAL, TERMS OF APPROVAL FOR SITES EXEMPT FROM CONSTRUCTION DEWATERING LICENSING BOTANY SANDS GROUNDWATER SOURCE