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16th June 2009
Referral Business Entry Point
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Dear Sir/Madam,

PROPONENT REFERRAL - EAST ROCKINGHAM WASTEWATER TREATMENT PLANT

Please find enclosed a referral for determination under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act 1999) for the Water Corporation's East Rockingham Wastewater Treatment Plant (ERWWTP) proposal.

The Water Corporation proposes to construct and operate the new municipal Wastewater Treatment Plant (WWTP) in East Rockingham, Western Australia (WA), approximately 35 km south of Perth in the City of Rockingham. Specifically, the ERWWTP will be located in the Rockingham Industrial Zone (RIZ), within Improvement Plan No.14 (known as IP14) which was initiated in 1998 under the Metropolitan Region Town Planning Scheme Act 1959.

The IP14 area is currently undergoing a Strategic Environmental Assessment (SEA) under the *WA Environmental Protection Act 1986* (the EP Act), and will be referred separately to the Department Environment, Water, Heritage and the Arts (DEWHA) by LandCorp for determination and possible assessment under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The ERWWTP referral is complementary to LandCorp's and should be considered in conjunction with it.

The ERWWTP is proposed to meet the increasing sewage demands of the City of Rockingham, which has a rapidly growing population and will ultimately service about 700,000 people. The proposal is to be developed in stages up to an operational capacity of a 160 ML/d beyond 2070.

The proposed location of the ERWWTP covers an area of approximately 30.85 hectares (Ha), including the outlet pipeline corridor. Stage 1 construction is planned to commence in 2012 with Stage 1 of the ERWWTP to be fully commissioned and operational by 2015.



The Water Corporation proposes to construct and operate the ERWWTP with wastewater being treated to an advanced secondary standard most likely to be based upon the activated sludge process. This process achieves a high degree of nitrogen removal and would maximise opportunities for further downstream treatment and recovery of 'reclaimed water' for recycling.

Treated wastewater (TWW) will be discharged via the currently operating Sepia Depression Ocean Outlet (SDOO), 4.2km offshore. The discharge will be within Ministerial Conditions applied to the SDOO under the EP Act and the current Part V licence operating conditions applied to those facilities discharging to it.

It is envisaged that ultimately up to a maximum of 75% (120 ML/d) of the total volume of TWW ((160 ML/d) could be utilised through 'reclaimed water' recycling as and when recycling opportunities present themselves as the IP14 area and greater RIZ develops over time. The design of the ERWWTP will be such that future recycling can be facilitated.

The Water Corporation considers that the proposal is unlikely to result in significant impacts on matters of national environmental significance (MNES) protected by the EPBC Act 1999. Therefore the Water Corporation believes ERWWTP proposal is not a controlled action for the following reasons:

- No World, National or Commonwealth heritage places will be disturbed or impacted by the development.
- There are no RAMSAR wetlands within, or in close proximity (within 10km) of the site. The site is located within the same catchment as three RAMSAR wetlands; Becher Point Wetlands, Forrestdale and Thompson Lakes and Peel-Yalgorup System. It is considered unlikely that development at the site will affect these RAMSAR wetlands in any way, as the wetlands are up hydraulic gradient from the site and a minimum of 13km north-west and south of the site.
- None of the EPBC listed threatened or endangered fauna species (outlined in Annex G and assessed in Annex H) predicted to occur in the area has been recorded on the site. Due to their habitat requirements it is considered unlikely that these species would occur within the site (refer to Annex J).
- No evidence of Baudin's Black Cockatoo and Carnaby's Black Cockatoo breeding or feeding was observed at the site, with the vegetation onsite not regarded as representing habitat critical to the survival of either species (Harewood, 2009; Johnstone, 2009). Based on the significant impact criteria for endangered and vulnerable species, Baudin's Black Cockatoo and Carnaby's Black Cockatoo are not likely to be significantly impacted by the proposed development, see Annex J, Section 6.1 and Annex K for more details.
- Furthermore, clearing of approximately 50 Tuart trees, will not have a significant impact upon the Baudin's Black Cockatoo and Carnaby's Black Cockatoo viability and conservation status in the region (Harewood, 2009; Johnstone, 2009).
- Notwithstanding this, the Water Corporation recognises DEWHA's preference for open woodlands of *Eucalyptus gomphocephala* (Tuart) that require clearing to be replaced to provide for potential Black Cockatoo habitat in the future. Should DEWHA disagree with the Water Corporation's assertion on the significance of

impact on the Black Cockatoo's, the Water Corporation will contribute to the planting and densification and management of Tuart stands within IP14, within LandCorp's proposed conservation area and/ or within the wider local vicinity at a planting ratio of 4:1 (i.e 200 *E. gomphocephala* planted for 50 taken).

- Of the EPBC listed migratory fauna species predicted to occur in the area (listed and assessed in Annex P), the Rainbow Bee-eater was the only species positively identified as utilising the site. It is unlikely that the Rainbow Bee-eater will be significantly impacted by activities of the site, with it being capable of flying long distances and not being solely reliant on any area to be impacted by the proposal.
- Of the EPBC listed threatened fauna species predicted to occur in the area (listed and assessed in Annex J), no species was determined to be solely reliant on the 30.85 Ha of land and habitat to be cleared within the site. Therefore the development of the proposed ERWWTP is not predicted to significantly impact any species or MNES.
- The EPBC listed TEC 19 has been inferred as occurring in approximately 2.2 Ha of the site. Based on the current known extent of TEC 19 on the Swan Coastal Plain (142 Ha), clearing of the proposed site, including all of the 2.2 Ha of TEC, will result in the removal of approximately 1 % of the known TEC 19 extent. Based on this, the proposal is considered unlikely to result in a significant reduction in the extent or viability of the TEC 19, and therefore will not significantly impact on this MNES.
- Also, the enhancement and protection of approximately 20% of the known TEC 19 on the Swan Coastal Plain within LandCorp's proposed conservation reserve will allow for the preservation and protection of the TEC 19, which if left unmanaged, is unlikely to survive into the future due to falling groundwater levels (Umwelt, 2008).
- However, should DEWHA disagree with the Water Corporation's assertion on the significance of the proposal's impact on the TEC 19, the Water Corporation will contribute to the enhancement of the TEC 19 within the proposed conservation area at a 4:1 ratio¹ (four plantings of relevant species for each plant of inferred TEC 19 cleared) for the TECs removed within the ERWWTP site.
- No Commonwealth marine or land areas will be impacted beyond that currently approved and operating by the proposed development.
- Monitoring, reporting and management measures in place (see Annexes N and O) for marine flora and fauna suggest that no marine species will be significantly impacted by the proposal.
- The site will be located in an already designated industrial area, away from sensitive receptors such as residential housing and hospitals.

Further, this proposal will also be referred to the Western Australian Environmental Protection Authority for a decision as to whether it requires formal assessment under the

¹ Successful enhancement of communities has never been undertaken and as such, the Water Corporation will be planting species representative of the communities for enhancement at a ratio of 4:1.

Environmental Protection Act 1986. This referral is expected to occur in mid to end July 2009.

Should you have any queries regarding this project, please contact Andrew Baker, Senior Environmental Consultant on (08) 9420 2114 or via email at andrew.baker@watercorporation.com.au. We look forward to your determination on this matter.

Yours faithfully



Rupert Duckworth
Environmental Approvals Manager
Environment Branch

att:

1. Completed and signed *Referral of a proposed action* form;
2. Folder consisting of all documentation and annexes entitled *East Rockingham Wastewater Treatment Plant EPBC Referral*; and
3. CD entitled *East Rockingham WWTP EPBC Referral, June 2009*, containing files in .pdf format for all annexes and figures.