

1 INTRODUCTION

1.1 BACKGROUND

The Alkimos Wastewater Scheme is to be implemented approximately 40km north-west of Perth's CBD, within the future suburb of Alkimos as shown in **Figure 1**.

The Water Corporation commenced planning for the Alkimos Wastewater Scheme in the 1970s to provide for the planned continued residential growth in the Perth metropolitan north-west corridor. The Water Corporation is the proponent for the Alkimos Wastewater Scheme and the project/proposal has been subject to the Western Australian (WA) Environment Impact Assessment (EIA) process and was assessed at the level of Public Environmental Review. (Alkimos Wastewater Treatment Plant – Public Environmental Review. Water Corporation, 2005).

In December 2006, the Water Corporation announced the Alkimos Water Alliance (AWA) as the successful Alliance partner to undertake design and construction works associated with the Alkimos Wastewater Scheme on behalf of the Water Corporation. It comprises Alliance partners Multiplex, Züblin and Macmahon and sub-contract partners Worley Parsons, Connell Wagner, Land and Marine and Cardno BSD.

The AWA was formed specifically to progress the design and construction of:

- Earthworks for the wastewater treatment plant (WWTP) to be located at Site B;
- The 3.7 km ocean outfall including the launch site at Launch Site 1B;
- A land based connection between the WWTP site and the launch site/ocean outfall; and
- The remaining section of the Quinns Main Sewer to connect established residential areas to the WWTP site.

It is also envisaged that the AWA may be contracted to integrate the design and construction of the WWTP itself once the earthworks have been completed, however it will not be responsible for the ongoing operation of the scheme.

The Alkimos Wastewater Scheme components, listed above (except for the Quinns Main Sewer), received Ministerial approval on 12 November 2007 (see **Appendix A**) pursuant to Part IV of the *Environmental Protection Act 1986* (EP Act). The Quinns Main Sewer section of the scheme from the suburb of Butler to the edge of the buffer boundary falls under the jurisdiction of the *Water Agencies (Powers) Act 1984* as general works and received Clearing Permit (CPS 1064/2) pursuant to Part V of the *Environmental Protection Act 1986* on 9 August 2007, and hence was not assessed under Part IV (see **Appendix B**).

The Construction and Operation of the Alkimos Wastewater Treatment Plant has been considered pursuant to Section 75 of the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). On the 26 February 2007 it was deemed 'not a controlled action' and, as such, did not require further assessment by the Australian Government (EPBC 2007/3259) (refer to **Appendix C**).

Since the formation of the AWA, the project design has progressed and has been refined from the design presented in the PER and as shown in **Figure 2**. Based on discussions held between the Water Corporation and the EPA Service Unit, it has been agreed that a number of changes to the scope of the original proposal will be progressed through a *Section 45c* process, and that the proposed changes are considered "non substantial".

This primarily relates to the original proposal requiring 29Ha of clearing and the revised proposal will necessitate the clearing of approximately 50Ha in total.

The Alkimos – Eglington Metropolitan Regional Scheme Amendment No. 1029/33 was formally reviewed by the EPA and through this process, Area 9 to the north of the WWTP was identified as having high east-west ecological linkage values. To assist in the finalisation of the MRS assessment, the Water Corporation proposed two areas within the buffer zone to be protected and managed for conservation purposes, as an offset to taking a portion of Area 9 for the location of the WWTP Site B. These are referred to as Area 10b which is located to the south of the WWTP site and Area 10a which is the portion of land north of Area 9 as shown in **Figure 3**. A key aspect of the design process and this management plan has been avoiding and managing impacts to Area 9, Area 10a and Area 10b.

1.2 PURPOSE OF THIS DOCUMENT

This Terrestrial Construction Management Plan (TCMP) has been prepared by the AWA for construction works associated with the Alkimos Wastewater Scheme. It details how the AWA will manage the environmental aspects associated with the construction of the Alkimos Wastewater Scheme, primarily potential impacts to flora/vegetation and landforms.

The primary objective of the TCMP is:

To protect native vegetation and landforms on the site outside the authorised area of permanent disturbance as defined in Figure 3 in Schedule 2 and Figure 4 in Schedule 3 of Ministerial Statement 755.

The TCMP has been prepared to satisfy Condition 6 as specified in Ministerial Statement 755 (November, 2007).

Specific requirements for the TCMP have been recommended by the EPA (2007) and within Ministerial Statement 755, and these recommendations have been addressed within various sections of this document. For ease of reference, the issues identified by the EPA and the Ministerial Conditions and corresponding section references for this document are provided below in **Table 1.2**.

Table 1.2 Terrestrial construction issues and relevant section references

Issue	References
Modification and configuration (dimension and gradient) of the launch site as far as practicable, to minimise the impact on the terrestrial vegetation and formation of the launch site dimensions	Section 11
Access roads	Section 5
Sheds, amenities and other facilities to be installed	Section 6
Management of activities in areas outside the area of disturbance (as defined in Figure 3 in Schedule 2 and Figure 4 in Schedule 3)	Section 4
Depth of pipe burial sufficient to withstand a one-in-one hundred year storm	Section 2.1.3
Impacts on the beach profile	Section 2.1.3
Bush forever site, including <i>Frankenia pauciflora</i>	Section 12

Threatened Ecological Communities	Section 2.2.3
Rehabilitation of the launch site/s	Section 11.2.7, Section 12.2.7

1.3 DOCUMENT FORMAT

The remainder of this report is comprised of the following components:

- Section 2 – Existing environment;
- Section 3 – Management standards and objectives ;
- Section 4 – Project wide terrestrial management principles;
- Section 5 – Access roads;
- Section 6 – Site offices and compounds;
- Section 7 – Haul roads;
- Section 8 – Quinns main sewer;
- Section 9 – WWTP site excavation;
- Section 10 – Land based connection from the WWTP to the launch site;
- Section 11 – Launch site;
- Section 12 – Launch site dune crossing through Bush Forever;
- Section 13 – Operational monitoring;
- Section 14 – Reporting;
- Section 15 – Summary; and
- Section 16 – References.

