



environmental management consultants

Our Ref: 155AA

22 May 2006

Ms Toni Cowell  
Water Corporation  
629 Newcastle Street,  
Leederville WA 6007

Dear Toni

## Proposed Water Quality Monitoring Binningup

### 1. Introduction

360 Environmental Pty Ltd is pleased to provide this proposal for the provision of water quality monitoring at Binningup.

Monitoring and sampling will be carried out in accordance with written instructions received from Toni Cowell on the 18<sup>th</sup> of May 2006.

### 2. Scope of Work

The following scope of work is proposed:

- The collection of water quality samples at a single location in Binningup to be advised. Sampling is to occur at the surface and at 5m depth. A replicate of each sample will also be collected.

- In situ measurements will be taken for pH, Temperature, Turbidity, and Conductivity.
- The silt density index will be recorded in the field at 5 minute intervals from 5 to 15 minutes.
- Samples will be analysed for the following parameters;
  - Total Dissolved Solids
  - Total Suspended Solids
  - Silica
  - Fluoride
  - Sulphate
  - Chloride
  - Magnesium
  - Calcium
  - Strontium
  - Boron
  - Barium
  - Bromide
  - Potassium
  - Sodium
  - Carbonate
  - Bicarbonate
  - Ammonia
  - Total Nitrogen
  - Total Phosphorus
  - Aluminium
  - Biochemical Oxygen Demand 5-days (BOD)
  - Oil and Grease
  - Heterotrophic Plate Count (48 hours at 37oC)
  - Heterotrophic Plate Count (72 hours at 20oC)
- The preparation of a brief report detailing the work undertaken and a interpretation of the results of the sampling.

### **3. Approach**

Fieldwork will be directed by a Senior Environmental Scientist who will locate the sampling locations, perform the environmental sampling and QA/QC procedures, and record the results. We have allowed for the sampling location to be surveyed with a hand held GPS and recorded in Geocentric Datum of Australia (GDA).

All water sample will be analysed by a NATA accredited laboratory to perform the testing of the samples for the analytes requested.

In accordance with quality control / quality assurance best practice guidance, field quality control samples will include 10% field duplicate samples, daily rinsate samples and daily trip blanks and/or trip spikes. Two hard copies and one electrical copy of the report will be provided.

#### 4. Costs, Timing and Terms of Engagement

Commercial  
in Confidence

We are able to commence the work immediately and anticipate our report being complete and issued to yourself within 3 weeks of project commissioning. Work would be undertaken in accordance with our standard Terms of Appointment: Issue 2 (July 2005), attached.

We trust this proposal meets your requirements at this time. Should you have any questions or require further action please do not hesitate to contact Tamara Smith or the undersigned on (08) 9321 0420. We look forward to hearing from you soon.

**For and on behalf of**  
**360 Environmental Pty Ltd**

**David Procter**

*Enc: 360 Environmental Pty Ltd Terms of Appointment*  
*Enc: 360 Standard Rates*