



**VOLUME 1**

**INFORMATION TO TENDERERS**

**RFB NO: 047/2025/PMID/MAINTENANCE/RFB**

**FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE  
DRAINAGE TREATMENT PLANT FOR A PERIOD OF 60 MONTHS**

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**DEFINITIONS AND ABBREVIATIONS**

<b>B-BBEE</b>	Broad Based Black Economic Empowerment in terms of the Broad Based Black Economic Empowerment Act 53 of 2003 (B-BBEE Act).
<b>TENDER SUBMISSION</b>	A Tenderer's written proposal in response to an Invitation for Tenders (Request for Tenders/Quotations/ Information etc.)
<b>BLACK PEOPLE</b>	Africans, Coloureds and Indians as defined in the Broad Based Black Economic Empowerment Act 53 of 2003.
<b>CIDB</b>	Construction Industry Development Board as established by Act 38 of 2000.
<b>CONSORTIUM OR JOINT VENTURE OR CONSORTIUM</b>	An association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.
<b>CONSULTANT</b>	A professional person appointed to provide technical and specialist advice or to assist with the design and implementation of projects. The legal status of this person can be an individual, a partnership, a corporation or a company.
<b>CONTRACT</b>	A legal agreement signed by TCTA and a successful tenderer.
<b>CONTRACT MANAGER</b>	A representative from the Requesting Department that will be responsible for monitoring the day to day activities related to the contract.
<b>EME</b>	Means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act.
<b>FIRM PRICES</b>	Means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the tenderer and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract.
<b>HISTORICALLY DISADVANTAGED ENTITIES</b>	<ul style="list-style-type: none"> <li>• Means entities that are at least:</li> <li>• 51% black owned;</li> <li>• 51% owned by black youth;</li> <li>• 51% owned by black women;</li> <li>• 51% owned by black people with disabilities;</li> <li>• 51% owned by black people in rural areas, underdeveloped areas or townships;</li> <li>• a co-operative that is 51% owned by black people.</li> <li>• 51% owned by black people who are military veterans.</li> </ul>

<b>LOWEST ACCEPTABLE TENDER</b>	Means a tender that complies with all specifications and conditions of tender and that has the lowest price compared to other tenders.
<b>PRICE</b>	Means an amount of money for goods or services and includes all applicable taxes less all unconditional discounts.
<b>PROCUREMENT SPECIALIST</b>	Any person in the Procurement Unit who is responsible for managing a tender process from start to finish.
<b>PO</b>	A Purchase Order generated by the Procurement Unit after the conclusion of a successful tender process authorizing the expenditure against an awarded contract.
<b>QSE</b>	Means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act.
<b>RD</b>	A requesting department within TCTA or its representative.
<b>SPECIFIC GOALS</b>	Means specific goals as contemplated in section 2(1)(d) of the Act which may include contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender and disability including the implementation of programmes of the Reconstruction and Development Programme as published in Government Gazette No. 16085 dated 23 November 1994.  This will include the percentage black people ownership.
<b>SUPPLIER</b>	A juristic person or legal entity that provides goods or services to TCTA.

# T1: TENDERING PROCEDURES

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**T1.1: TENDER NOTICE AND INVITATION TO TENDER**

<b>Bid Reference Number:</b>	047/2025/PMID/MAINTENANCE/RFB
<b>CIDB Grading Requirement:</b>	It is estimated that tenderers must have a cidb contractor grading of 9ME.
<b>Briefing Session:</b>	Compulsory
<b>Briefing Session Date and Time:</b>	19 March 2026 at 12H00
<b>Briefing Session Venue:</b>	<p>Eastern Basin AMD Treatment Plant  Grootvlei Proprietary Mines,  Van Niekerk Road,  Springs,  1559  GPS: 26°15'.02.2"S  28°29.11'8"E</p> <p><i>Tenderers shall meet at the venue at the stated time. Transport will not be provided. No latecomers will be accommodated.</i></p>
<b>Clarifications Deadline:</b>	At least ten (10) working days before the closing time i.e. 02 April 2026.
<b>Site Visit:</b>	Compulsory
<b>Site Visit Location</b>	<p>Eastern Basin AMD Treatment Plant  GPS: 26°15'.02.2"S  28°29.11'8"E</p>
<b>Closing Date and Time:</b>	16 April 2026 at 12H00
<b>Bid Validity Period:</b>	84 Calendar Days
<b>Bid Submission Physical Address:</b>	<p>Proposals must be hand delivered at TCTA's offices located at the address indicated below and addressed to The Receiving Officer, and <b>marked RFB No: 047/2025/PMID/MAINTENANCE/RFB</b> on or before the closing date and time:</p> <p>First Floor  Building 9 Byls Bridge Office Park  Cnr Olivenhoutsbosch &amp; Jean Avenue  Doringkloof, Centurion  0046</p>
<b>Enquiries:</b>	<p>Name: Colbert Makhubele  Email Address: <a href="mailto:tenders04@tcta.co.za">tenders04@tcta.co.za</a></p>

Tenders must only be submitted on the tender documentation that is issued. A record of tenders received will be circulated to all the Tenderers and shall be published on National Treasury's e-Tender portal and TCTA website.

Requirements for sealing, addressing, delivery, opening, and assessment of proposals are stated in the Conditions of the Tender and Tender Data.

### 1.1.1 BACKGROUND

Mine water started accumulating in the old mine workings as underground operations ceased and withdrew from the basins. The mine water is characterised by acidity, high metal content and high salinity. If the mine water accumulation is allowed to continue, then the Acid Mine Drainage (AMD) will eventually fill the basins and start impacting on shallow groundwater bodies and surface water resources.

In response to this risk, the Minister of Water and Sanitation issued a directive to TCTA on 6 April 2011 in terms of section 103(2) of the NW Act, to undertake certain emergency works in respect of the AMD project. TCTA is a state owned entity operating in the water sector responsible for the funding and implementation of bulk raw water infrastructure projects and the provision of advisory services, as directed by the Minister from time to time. In circumstances where the Department of Water and Sanitation wishes to implement bulk raw water infrastructure projects of an off-budget and/or emergency nature, TCTA is the preferred service provider of choice to fund and/or implement such projects on its behalf. The AMD project is of an emergency nature.

As part of its activities under the AMD project, TCTA entered into a construction agreement for the construction of the Water Treatment Plant in the Eastern Basin. Following construction thereof, TCTA entered into a contract with a service provider to undertake the operations and maintenance of the Water Treatment Plant for an interim period.

TCTA further entered into a contract in 2021 with a service provider appointed through a competitive tender process to operate and maintain the Facility at Eastern Basin for a period of 60 months. The current contract will be coming to an end on the 30 November 2026 for Eastern Basin.

It is imperative for the current Facility to seamlessly continue to operate in order to avoid acid mine drainage breaching the Environmental Critical Level (ECL) and heavy metal containing water decanting onto the surface. Therefore, to avoid any interruptions in operations, TCTA intends to appoint a competent Operator through a competitive tender process to operate and maintain the Facility for a period of 60 months.

The current treatment process incorporates neutralisation and metals removal with limited desalination.

The Eastern Basin plant is situated at Springs, Grootvlei TSF, Van Niekerk Road. S26°14'59.4" E028°29'13.3"

## **T1.2: CONDITIONS OF TENDER AND TENDER DATA**

### **C.1.1 GENERAL**

#### **C.1.1.1 Introduction**

The conditions that are applicable to this request for tender are the Standard Conditions of Tender published in Annex C of the Construction Industry Development Board (CIDB) Standard for Uniformity for Construction Procurement, Board Notice 423 of 2019 Government Gazette No 42622 of 08 August 2019. Tenderers are referred to the CIDB website ([www.cidb.org.za](http://www.cidb.org.za)) where all CIDB documentation is readily accessible. Additionally, the following standard is applicable to bid and can be accessed on the CIDB website (<https://www.cidb.org.za/contractors/advisory/cidb-standards/>):

Implementation of the Standard for Developing Skills through Infrastructure Contracts, published in Gazette Notice 48491 of 28 April 2023.

The Standard Conditions of Tender makes references to the **Tender Data** for details that apply specifically to this tender. Any provision contained in this **Tender Data** shall prevail if there is any inconsistency between such provision and provision contained in the Standard Conditions of Tender.

Each item below is cross-referenced to the relevant clause in the Annexure C: Standard Conditions of Tender to which it mainly applies.

#### **C.1.1.2 Code of Conduct**

##### **Add the following to clause C1.1.2**

All suppliers and their representatives shall conduct their business activities in full compliance with the applicable laws and regulations of the Republic of South Africa while conducting business with and/or on behalf of the TCTA. In addition to any specific obligations under the supplier's agreement with TCTA, all suppliers shall, without limitation:

- a) Comply with the anti-corruption laws of the Republic of South Africa and any other country in which it does business, including the Prevention and Combating of Corrupt Activities Act.
- b) Conduct business in full compliance with antitrust and fair competition laws within the Republic of South Africa.
- c) Comply with all applicable environmental laws and regulations regarding hazardous materials, air emissions, waste and wastewater discharges, including the manufacture, transportation, storage, disposal and release to the environment of such materials.
- d) Be honest, direct and truthful in discussions with regulatory agency representatives and government officials.

Suppliers and their representatives shall conduct their business interactions and activities with integrity and in accordance with their obligations under their specific agreements. In addition to those obligations, all our suppliers shall, without limitation:

- a) Honestly and accurately record and report all business information and comply with all applicable laws regarding their completion and accuracy.
- b) Create, retain and dispose of business records in full compliance with all applicable legal and regulatory requirements.
- c) Protect and responsibly use both the physical and intellectual assets of TCTA, including its property, data and equipment when authorised to use such assets.
- d) Use TCTA provided information technology and systems (including email) only for authorised business-related purposes. TCTA strictly prohibits suppliers and their representatives from using Company-provided technology and systems to create, access, store, print, solicit or send any material that is intimidating, harassing, threatening, abusive, sexually explicit or otherwise offensive or inappropriate and/or send any false, derogatory or malicious communications using provided information assets and systems.
- e) Comply with the intellectual property ownership rights of TCTA and others including but not limited to copyrights, patents, trademarks and trade secrets. Use software, hardware and content only in accordance with their associated license or terms of use.
- f) Speak to the press on TCTA's behalf only if supplier and/or representative is expressly authorised in writing to do so by TCTA.

TCTA expects its suppliers to share its commitment to human rights and equal opportunity in the workplace. TCTA suppliers shall conduct their employment practices in full compliance with all applicable laws and regulations, and shall, without limitation:

- a) Cooperate with TCTA's commitment to a workforce free of harassment and unlawful discrimination. We believe that supplier companies should not engage in discrimination in hiring, compensation, access to training, promotion, termination or retirement based on religion, age, disability, gender, marital status, sexual orientation, union membership, political affiliation or any other category protected by applicable law.
- b) Comply in all respects with the Employment Equity Act, in line with TCTA's commitment to redress the racial makeup of the South African economy.
- c) Provide a safe and healthy work environment and fully comply with all applicable safety and health laws, regulations and practices. Adequate steps shall be taken to minimise the causes of hazards inherent in the working environment. While on TCTA property, suppliers shall comply with all rules and regulations concerning the operation of the property and the interaction with other individuals with access to the property, whether TCTA, its clients, or other suppliers, employees or guests.

- d) Prohibit the use, possession, distribution and sale of illegal drugs while on TCTA owned, leased or managed property.
- e) Use only voluntary labour. The use of forced labour whether in the form of indentured labour, bonded labour, or prison labour by a Company supplier or its subcontractors is prohibited.
- f) Workers should not be required to lodge "deposits" or their identity papers with their employer and are free to leave their employer after reasonable notice without penalty.
- g) Comply with all local minimum working age laws and requirements and not utilise child Employees under the legal minimum working age of the respective region or shall not be less than 16 years of age (whichever is higher). We only support the development of legitimate workplace apprenticeship programs for the educational benefit of younger people and will not do business with those who abuse such systems.
- h) Not engage in physical discipline or abuse. Physical abuse or discipline, the threat of physical abuse, sexual or other harassment and verbal abuse or other forms of intimidation is prohibited.
- i) Pay living wages under humane conditions. All workers shall be provided with clear, written information about their employment conditions with respect to wages before they enter employment and as needed throughout their term of employment. Deductions from wages as a disciplinary measure shall not be permitted nor shall any deductions from wages not provided for by national law be permitted without the express permission of the worker concerned. All disciplinary measures should be recorded. Wages and benefits paid for a standard working week meet, at a minimum, national legal standards.
- j) Not require workers to work more than the maximum hours of daily labour set by the Department of Employment and Labour; ensure that overtime is paid in accordance with applicable laws.
- k) Keep employee records in accordance with acts and prescripts issued by the Department of Labour.

TCTA expects its suppliers to share the same social responsibility of growing business in a sustainable fashion. At TCTA, we believe that environmental stewardship and local business development are of utmost importance, and we constantly seek new ways to fulfil our responsibilities to the environment.

Adopt an environmentally friendly policy and share our commitment to sustainability. Comply with all applicable environmental laws and regulations.

TCTA expects its suppliers to share its commitment to Broad Based Black Economic Empowerment and supplier diversity. TCTA suppliers shall implement supplier diversity programs that meet the requirements of the Broad Based Black Economic Empowerment Codes of Good Conduct. At all times the supplier undertakes to ensure that they are in possession of a valid B-BBEE certificate.

TCTA will not tolerate any retribution or retaliation taken against any individual who has in good faith sought out advice or has reported questionable behaviour or a possible violation.

**Add the following:**

**C.1.1.4 Fronting**

The TCTA supports the spirit of Broad-Based Economic Empowerment and recognises that real empowerment can only be achieved through individuals and businesses conducting themselves in accordance with the Constitution and in an honest, fair, equitable, transparent and legally compliant manner. Against this background TCTA condemns any form of fronting.

TCTA, in ensuring that Tenderers conduct themselves in an honest manner will, as part of the tender evaluation process, conduct or initiate the necessary probity investigation to determine the accuracy of the representation made in the tender document. Should any of the fronting indicators as contained in the Guidelines on Complex Structures and Transactions and Fronting, issued by the Department of Trade, Industry and Competition be established during such enquiry / investigation, the onus will be on the Tenderer to prove that fronting does not exist.

Failure to do so within a period of 14 calendar days from the date of notification may invalidate the Tender and may also result in the restriction of the Tenderer, by National Treasury, to conduct business with the public sector for a period not exceeding ten years, in addition to any other remedies the National Treasury may have against the Tenderer concerned.

**C.1.1.5 Protection of Personal Information Act**

- (a) By participating in this tender process, you hereby acknowledge that you have read and accept the following Protection of Personal Information (POPI) disclaimer.
- (b) You (the Tenderer, herein after referred to in the first person for purposes of this disclaimer) understand and agree that all information provided, whether personal or otherwise, may be used and processed by TCTA and such use may include placing such information in the public domain.
- (c) Further by partaking in this process you specifically agree that the TCTA will use such information provided by you, irrespective of the nature of such information.
- (d) TCTA shall take all reasonable measures to protect the personal information of users and for the purpose of this disclaimer “personal information” shall be defined as detailed in the Promotion of Access to Information Act, Act 2 of 2000 (“PAIA”) and the Protection of Personal Information Act, Act 4 of 2013 (“POPI”).

- (e) As per the POPI Act personal information refers to information that identifies or relates specifically to you as a person or data subject, for example, your name, age, gender, identity number and your email address.
- (f) We may collect the following information about you:
- Your name, address, contact details, date of birth, place of birth, identity number, passport number, bank details, details about your employment, tax number and financial information;
  - Information about your beneficial owner if we are required to do so in terms of POPIA.
  - Records of correspondence or enquiries from you or anyone acting on your behalf.
  - Details of transactions you carry out with us.
  - Details of contracts you carry out with us; and
  - Sensitive or special categories of personal information, including biometric information, such as images, fingerprints, and voiceprints
- (g) If you are under 18 years old, please do not provide us with any personal information unless you have the permission of your parent or legal guardian to do so.
- (h) Why we collect Personal Information:

#### Employee and Contractor Information

- To Remunerate the person.
- To comply with laws authorising or requiring such processing, including (but not limited to) the Basic Conditions of Employment Act 75 of 1997; the Labour Relations Act 66 of 1995 as amended; the Employment Equity Act 55 of 1998; the Occupational Health and Safety Act 85 of 1993, the Income Tax Act 58 of 1962 and the VAT Act 89 of 1991.
- To Admit the person to the Pension Fund and/or Medical Aid providers, if applicable.
- To conduct criminal, credit, employment reference and other related reference checks.
- To provide value added services such as human resource administration, training, performance reviews, talent management and other reasons related to the management of employees and/or contractors.

#### Client Information

- To render client related services and administration of client accounts.
- To conduct criminal, credit, reference, and other related reference checks.
- To authenticate the client.

- To provide the client with information which TCTA believes may be of interest to the client, such as information relating to public awareness campaigns and matters of public interest in which TCTA is involved or has decided to lend its support to.

#### Supplier and Third-Party Contractor/Service Provider Information

- To secure the products and services of the supplier/service provider or contractor as part of TCTA's product and service offering.
- To manage the TCTA supply chain and relationship with the supplier and/or contractor for any purposes required by law by virtue of the relationship between the supplier and TCTA.
- To render services relating to the administration of supplier supplier/service provider or contractor accounts.
- To provide the supplier/service provider or contractor with information which TCTA believes may be of interest, such as information relating to public awareness campaigns and matters of public interest in which TCTA is involved or has decided to lend its support to.

#### (i) Sources of Personal Information

- Personal information may be collected from the following sources:
- Directly from the person when he/she applies for any TCTA related employment, provide services to TCTA, submit forms requests or transactions, use our websites, or make use of any of the TCTA services.
- From public registers, credit bureaus and law enforcement agencies and any other organisation from which TCTA may acquire your information.
- From people and entities employed by TCTA to provide services to TCTA which may be legally entitled to provide TCTA with personal information.

#### (j) The Storage of Personal Information

- All personal information collected by TCTA will be stored as follows:
- In a secure and safe manner according to strict information security principles with safeguards to ensure its privacy and confidentiality.
- For no longer than is necessary to achieve the purpose for which it was collected unless further retention is:
- Required by law or contractual obligation.
- Otherwise reasonably required by TCTA for lawful purposes related to its functions and activities.
- Retained further with the person's consent:

- After which the information will be de-identified and disposed of as per the TCTA Records policy.
- (k) Sharing of Personal Information
- Any information supplied to TCTA will be treated as confidential and TCTA will not disclose information unless legally permitted thereto. No information will be transferred to a Third Party without the explicit consent of the data subject unless legally obliged thereto. By providing the personal information, the data subject agrees that TCTA may transfer the information to the following people and organisations in pursuit of the data processing purposes set out in our Policy on the Protection of Personal Information.

### C.1.2 TENDER DOCUMENTS

The documents issued by the Employer for the purpose of a tender offer are listed in the tender data.

The tender document consists of the following:

**Volume 1 Tendering Procedures**

**Volume 2 Returnable Documents**

**Volume 3 Contract**

### C.1.4 COMMUNICATION AND EMPLOYER'S AGENT

***b) Replace the title and sub-clause with:***

#### **Communication during tender period**

Each communication between the Employer and a Tenderer shall be directed through the Employer's Receiving Officer as detailed below, and in a form that can be readily read, copied and recorded. Communications shall be in English. The Employer will not take any responsibility for non-receipt of communications from or to a Tenderer. The Tenderer must quote the Tender Number in all communication.

#### **The Receiving Officer**

Trans-Caledon Tunnel Authority (TCTA)

Email: [tenders04@tcta.co.za](mailto:tenders04@tcta.co.za)

### C.1.5 CANCELLATION AND RE-INVITATION OF TENDERS

**a) Remove or delete clause C.1.5.3**

## C.1.6 PROCUREMENT PROCEDURES

### C.1.6.1 Replace the sub-clause with:

A contract will be concluded with a Tenderer after a successful negotiation procedure as described in **C.1.6.2**, as amended in these Tender Data.

### C.1.6.2 Competitive negotiation procedure

#### a) Replace the first sentence with:

Negotiations will be undertaken with the highest ranked Tenderer or the Tenderer scoring the highest number of tender evaluation points in terms of C.3.11, based on the submissions that are received at the closing date and time for the tender, subject to C.3.13, with the intention of concluding a contract between the Employer and that Tenderer. Should these negotiations not be successful then the next ranked Tenderer will be invited for negotiations. The successful negotiations will be recorded in a Memorandum of Understanding.

**Delete sub-clause C.1.6.2.3**

**Delete sub-clause C.1.6.2.4**

**Delete sub-clause C.1.6.3.1**

## C.2 TENDERER'S OBLIGATIONS

### C.2.1 ELIGIBILITY

#### A Tenderer will not be eligible to submit a tender offer if:

- (a) Only those Tenderers who are registered with the CIDB or are capable of being registered prior to the evaluation of tenders, in a contractor grading designation equal a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 9ME class of construction work, are eligible to have their tenders evaluated further.
  - i. Joint ventures are eligible to submit tenders provided that:
    - Every member of the joint venture that is eligible to conduct business in South Africa is registered with the CIDB.
    - The lead partner has a contractor grading designation in the 8ME or higher ME class of construction work; or not lower than one level below the required grading designation in the ME class of works construction works under considerations and possesses the required recognition status.

- The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is 9ME class of construction work in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.
- ii. Each tenderer shall submit only one tender offer for the same project, either as an individual company or as a joint venture.
- (b) More than one tender offer has been submitted by the same Tenderer.
- (c) A Tenderer submits or participates in more than one tender proposal.
- Each Tenderer shall submit only one tender for the same project, either as an individual entity or as a member in a joint venture.
  - No firm can be a subcontractor while submitting a tender individually or as a member of a joint venture in the same tendering process.
  - An entity or firm, if acting in the capacity of subcontractor or designer in any tender, may participate in more than one tender, but only in that capacity.

(d) **C.2.4 CONFIDENTIALITY AND COPYRIGHT OF DOCUMENTS**

**Add the following:**

Tenderers are advised that information in respect of the Project is strictly confidential and may not be reproduced or made public in any way and shall remain the property of the Trans-Caledon Tunnel Authority (TCTA) who in this Tender is the Employer. Any statements to the press or the media regarding this invitation or the Project must be authorised by the Employer.

**C.2.7 CLARIFICATION MEETING**

• **Add the following:**

Arrangements for the compulsory tender clarification meeting and site inspection are as specified in the Tender Notice and Invitation to Tender.

The Tenderer shall bear all costs associated with his visit or visits to the site and his attendance at the tender clarification meeting.

A compulsory clarification meeting will be held with the representatives of the employer

Briefing Session Date and Time: 19 March 2026 at 12H00

Briefing Session Venue: Eastern Basin AMD Treatment Plant

Grootvlei Proprietary Mines,

Van Niekerk Road,

Springs,

1559

GPS: 26°15'.02.2"S

28°29.11'8"E

Tenderers shall meet at the venue at the stated time. Transport will not be provided. No latecomers will be accommodated.

The Employer shall not be bound by any oral representations, clarification meetings or otherwise which may be made during the site visit, whether by the Employer's Agent or by others. In order to minimize the possibility of misunderstanding, Tenderers shall present any requests for clarification in writing.

Tenderers are at liberty to visit the site at other times during the Tender Period subject to making reasonable prior arrangements with the Employer. The period for such a request shall not be less than 1 week to the date where the Tenderer wants to visit the site.

### C.2.8 SEEK CLARIFICATION

Tenderers shall request clarifications at least ten (10) working days before the closing date i.e. 02 April 2026.

### C.2.13 SUBMITTING A TENDER OFFER

#### C.2.13.3 *Replace sub-clause with:*

#### **Functional Offer (Envelope 1):**

**Submit one (1)** original set of Tender documents (as defined in **C.1.2**) duly completed and signed as relevant to envelope 1, i.e. **forms and returnables** in **Volumes 1 and 2**; plus two **(2) photocopies** and a **digital copy on a USB-DISK** shall be submitted together with a covering letter and supporting documents in a sealed package endorsed with the tender identification details.

#### **Financial Offer (Envelope 2):**

**Submit one (1)** original and **two (2) photocopies** of the **Financial Offer including the cash flow for the project**, plus **one (1) USB-DISK containing the digital priced Bill of Quantities** (Microsoft Excel format) in **Volume 2** together with a covering letter and supporting documents in a sealed package endorsed with the tender identification details. Any financial related information shall be included in envelope 2. i.e Bill of quantities.

An English translation must be provided for any document in a language other than English.

**Add the following sub-clauses after C.2.13.9**

### **C.2.13.10 Delivery of Tender**

The Employer's address for delivery of the tender offers and identification details to be shown on each package are:

Physical address: As stated in T1.1 Tender Notice and Invitation to Tender above.

Identification details to be used on each package:

#### **Functional offer (Envelope 1):**

**ORIGINAL TECHNICAL OFFER: TENDER FOR CONTRACT NO. 047/2025/PMID/MAINTENANCE/RFB: FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE TREATMENT PLANT FOR A PERIOD OF 60 MONTHS.**

And two (2) copies:

**COPY OF TECHNICAL OFFER: TENDER FOR CONTRACT NO. 047/2025/PMID/MAINTENANCE/RFB: FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE TREATMENT PLANT FOR A PERIOD OF 60 MONTHS.**

#### **Financial offer (Envelope 2):**

**ORIGINAL FINANCIAL OFFER: TENDER FOR CONTRACT NO. 047/2025/PMID/MAINTENANCE/RFB: FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE TREATMENT PLANT FOR A PERIOD OF 60 MONTHS.**

And two (2) copies:

**COPY OF FINANCIAL OFFER: TENDER FOR CONTRACT NO. 047/2025/PMID/MAINTENANCE/RFB: FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE TREATMENT PLANT FOR A PERIOD OF 60 MONTHS.**

If the tender package and/or envelopes are not sealed and marked as instructed, the Employer will assume no responsibility for the misplacement or premature opening of the Tender submitted.

No other documents shall be submitted by the Tenderer unless they are directly related to the requirements for the relevant Returnable Documents and Schedules. In particular no Company brochures or promotional materials are to be submitted with the Tender offer.

#### **C.2.14 INFORMATION AND DATA TO BE COMPLETED IN ALL RESPECTS**

- **Add the following:**

Should a Tenderer fail to complete the returnables TCTA may call upon the Tenderer to complete and submit such returnables except where such returnables are indicated as mandatory or are required for purposes of functional and specific goals evaluation. If a Tenderer fails to submit any of the requested documents and / or annexures duly completed, TCTA reserves the right to request such documents or seek clarity on any ambiguities in the documents that have already been submitted.

#### **C.2.16 TENDER OFFER VALIDITY**

##### **C.2.16.1 Replace sub-clause with:**

“The Tender Offer validity period is 84 calendar days from the closing date and time for submission of tender offers.”

#### **C.2.19 INSPECTIONS, TESTS AND ANALYSIS**

- **Amend as follows:**

It is the tenderers responsibility to familiarize themselves with the site and therefore access shall be provided to tenderers for inspections and analysis during the tender period at their liberty subject to making reasonable prior arrangements with the Employer’s agent as stated in C.1.4. The period for such a request shall not be less than 1 week to the date where the Tenderer wants to visit the site.

The Tenderer and any of his personnel or agents who enter upon the site or the Employer’s premises for the purpose of such inspection will release and indemnify the Employer and his personnel, contractors and agents from and against all liability in respect thereof and in respect of entering and being conveyed in any vehicle including airborne vehicles arranged by the Employer and will be responsible for personal injury (whether fatal or otherwise), loss of or damage to property and any other loss, damage, costs and expenses however caused, whether or not caused by the negligence of the Employer. The Tenderer will provide their own transport and vehicles to site visit and meetings. [Such indemnities shall be given to the Employer prior to the start of any site visit and shall be accompanied by a notarised copy of a resolution of the Tenderer’s Managing Board to provide the indemnity executed by the person named in the indemnity].

The Employer shall not be bound by any oral representations, clarification meetings or otherwise which may be made during the site visit, whether by the Employer's Agent or by others. In order to minimise the possibility of misunderstanding, Tenderers shall present any requests for clarification in writing.

The last day for site inspection shall be on (02 April 2026 at 13H00)

### **C.2.22 RETURN OF TENDER DOCUMENTS**

- **Delete clause C.2.22.**

### **C.2.23 CERTIFICATES**

- **Add the following:**

The Tenderers (including all JV members) shall submit all the certificates listed in T2.1 in Volume 2.

## **C.3 THE EMPLOYER'S UNDERTAKINGS**

### **C.3.2 ISSUE ADDENDA/AMENDMENTS**

- a) Add the following:**

- TCTA reserves the right, in its sole and absolute discretion, to amend any terms and conditions of the Request for Bid and/or to stipulate additional requirements, provided that such amended terms and conditions and/or additional requirements are placed on TCTA's website at least 10 (ten) business days prior to the stipulated closing date and time. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who attended the compulsory briefing session.
- Any amended terms and conditions and/or stipulation of additional requirements by TCTA shall be deemed to form part of this Request for Bid.
- TCTA shall not be liable, nor assume liability of any nature whatsoever, for the failure of a Bidder to receive information if sent to the e-mail.
- TCTA reserves the right to stipulate additional Bid requirements as it deems appropriate in its sole and absolute discretion.
- TCTA shall not be liable nor assume liability to any potential Bidder/s for any failure by such Bidder/s to receive any request for additional information.

- vi. In the event that TCTA amends its Bid requirements or requests additional information, any Bidder shall be entitled to withdraw its Bid Submission submitted by it prior to the stipulated closing date and time and re-submit a replacement Bid Submission by not later than the stipulated closing date and time

### C.3.4 OPENING OF TENDER SUBMISSIONS

The time for opening of the technical offers at Trans-Caledon Tunnel Authority (TCTA), Office are:

Time: 12H00 on 16 April 2026

Location: the address is as stated under C.2.13.10

### C.3.5 TWO-ENVELOPE SYSTEM

- **Replace C.3.5.1 with:**

The Tender Offer will be closed at: 12H00 on 16 April 2026.

Location / Venue: Trans-Caledon Tunnel Authority (TCTA), the address is as stated under C.2.13.10

#### **Functional Offer (Envelope 1)**

Open only the Functional Offer of valid tenderers in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose Functional Offer is opened.

- **Add the following to C.3.5.2:**

Evaluate functionality of the Functional Offer offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the Financial Offer will be opened. Open only Financial Offers of tenderers, who score in the functionality evaluation points that are equal or more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the Functional Offer and the total price as well as any points claimed on persons historically disadvantaged on the basis of race. Once the tender is finalised, return unopened Financial Offers to tenderers whose Functional Offer failed to achieve the minimum number of points for functionality.

Reasons for non-responsive/not achieving the threshold will only be communicated when the tender process is concluded, in terms of Clause C.3.16 of the Tender Data. The scores obtained for the non-financial proposals will not be announced at the opening of the financial offers/proposals.

### **Financial Offer (Envelope 2)**

The Financial Offer (Envelope 2) will be opened in public as follows:

Location / Venue: Trans-Caledon Tunnel Authority (TCTA), the address is as stated under C.2.13.10

### **C.3.7 GROUNDS FOR REJECTION AND DISQUALIFICATION**

- ***Amend the sub-clause by inserting C3.7.1 for the existing sub-clause and adding the following sub-clause C3.7.2:***

#### **C3.7.2 The Employer will disqualify any Tenderer that fails:**

- Stage 1: Meet the Eligibility requirements.
- Stage 2: Compulsory briefing session and site visit.
- Stage 3: To submit mandatory returnable documents.
- Stage 4: Tenderers must achieve an overall minimum of 60 points of the total Functionality but may not score less than 20 points for company experience and key Personnel respectively when calculating the total functionality score to qualify for Stage 5 Price and Preference.
- Stage 5: To submit the Bill of Quantities as stipulated in Part C2: Pricing Data and Preference.
- Stage 6: To meet supplier vetting requirements.

### **C.3.16 REGISTRATION OF THE AWARD**

#### **a) Add the following**

The Employer will notify unsuccessful tenderers when the tender process has been concluded. Any unsuccessful tenderer may request a debriefing in writing as specified in Clause C.3.18.

### **C.3.17 PROVIDE COPIES OF THE CONTRACTS**

The number of paper copies of the signed contract to be provided by the Employer is: **ONE** original.

## T1.3 TENDER EVALUATIONS

### 1 COMPANY EXPERIENCE

- 1.1 The tenderer shall list (in T2.1 List of Returnable Documents: Form 1 : - Company Experience) the appropriate experience to operate and maintain waste water treatment plants (WWTP), HDS plant or water treatment plants > 20 ML/day over the previous 10 years.
- 1.2 For each of the projects listed, the following information shall be provided as indicated under Form 1. The tenderer must demonstrate the ability to operate and maintain an asset management system and process control of the required plant sizes over the previous 10 years. The evaluation criteria for company experience will be as follows:
- *No points for plants <20 ML/day operated and maintained by the company.*
  - *For each plant between 20 and 50 ML/day (Waste Water Treatment Plant, HDS plant or Water Treatment Plant) operated and maintained by the company, 5 points to a maximum of 20 points.*
  - *For each plant > 50 ML/day (Waste Water Treatment Plant, HDS plant or Water Treatment Plant) operated and maintained by the company, 10 points to a maximum of 40 points.*

### 2 PERSONNEL EXPERIENCE

- 2.1 The Tenderer shall list (in T2.1 List of Returnable Documents: Form 2:- Personnel Experience) the appropriate experience for each of the key personnel.
- 2.2 For each of the key personnel, the following information shall be provided:
- *Form 2 contain the required information.*
- 2.3 Key Personnel required are:
- *Responsible Manager,*
  - *Operations manager*
  - *Class 5 operator (site supervisor)*
  - *Maintenance Manager*
  - *Process Engineer*
  - *Process Technician*
  - *SHEQ Personnel*

### 3 STAGES OF EVALUATION

The method for evaluation of the responsive tender offers will be Procurement Procedure PP2E: Functionality, Price and Preference. Responsive tender offers will be evaluated according to the 90:10 points system, in terms of The Preferential Procurement Policy Framework Act 5 of 2000 and Preferential Procurement Regulations of 2022.

Tender offers will be evaluated in five stages:

Stage 1: Eligibility

Stage2: Compulsory briefing session and site visit

Stage 3: To submit mandatory returnable documents

Stage 4: Functional

Stage 5: Price and Preference

Stage 6: Supplier Vetting

#### 3.1 STAGE 1: ELIGIBILITY

- (a) Only those Tenderers who are registered with the CIDB or are capable of being registered prior to the evaluation of tenders, in a contractor grading designation equal a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 9ME class of construction work, are eligible to have their tenders evaluated further.
- i. Joint ventures are eligible to submit tenders provided that:
- Every member of the joint venture that is eligible to conduct business in South Africa is registered with the CIDB.
  - The lead partner has a contractor grading designation in the 8ME or higher ME class of construction work; or not lower than one level below the required grading designation in the ME class of works construction works under considerations and possesses the required recognition status.
  - The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is 9ME class of construction work in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.
- ii. Each tenderer shall submit only one tender offer for the same project, either as an individual company or as a joint venture.

- (b) More than one tender offer has been submitted by the same Tenderer.
- (c) A Tenderer submits or participates in more than one tender proposal.
- Each Tenderer shall submit only one tender for the same project, either as an individual entity or as a member in a joint venture.
  - No firm can be a subcontractor while submitting a tender individually or as a member of a joint venture in the same tendering process.
  - An entity or firm, if acting in the capacity of subcontractor or designer in any tender, may participate in more than one tender, but only in that capacity.

### 3.2 STAGE 2: COMPULSORY BRIEFING SESSION AND SITE VISIT

TCTA will refer to the attendance register to confirm if a bidder attended the compulsory Briefing Session and Site Visit.

**FAILURE TO ATTEND A COMPULSORY BRIEFING SESSION AND SITE VISIT WILL RESULT IN A BIDDER BEING DISQUALIFIED AT THIS STAGE AND NOT BEING EVALUATED FURTHER.**

### 3.3 STAGE 3: RETURNABLE

Refer to Volume 2 Part T2.2.1 for a list of all the Returnable documents. All documents requested in Volume 2 Part T2.2.1 will be required for compliance, evaluation and contractual purposes.

**Any Tenderer who fails to submit a non-mandatory returnable document will receive zero points where that document is linked to specific evaluation criteria. Any Tenderer who fails to submit a mandatory document will be disqualified and not evaluated further.**

### 3.4 STAGE 4: FUNCTIONAL EVALUATION

The offers will be evaluated for functionality as per the evaluation criteria set out in Table 1 hereafter.

#### **TABLE 1: FUNCTIONAL EVALUATION CRITERIA**

The tables below forms part of the Functional Evaluation Criteria assessment. Further details related to the functional evaluation criteria are provided in Form 1A : Schedule of Work Experience for the Company Experience; and Form 2: Personnel Experience for the listed Key Personnel.

**Tenderers must complete and submit Form 1 and 2 to score points.**

FUNCTIONAL EVALUATION CRITERIA			Max
<b>1. COMPANY EXPERIENCE</b>			<b>40</b>
<b>Form 1</b>	<p>The demonstrated ability to operate and maintain an asset management system and process control for plants of this size over the previous 10 years.</p> <p>(Tenderer must complete a form and provide contactable reference)</p>	<p>Points will be awarded as follows up to a maximum of 40 points:</p> <ul style="list-style-type: none"> <li>No points for plants &lt;20 ML/day operated and maintained by the company.</li> <li>For each plant between 20 and 50 ML/day (Waste Water Treatment Plant, HDS plant or Water Treatment Plant) operated and maintained by the company, 5 points to a maximum of 20 points.</li> <li>For each plant &gt; 50 ML/day (Waste Water Treatment Plant, HDS plant or Water Treatment Plant) operated and maintained by the company, 10 points to a maximum of 40 points.</li> </ul>	<p>0</p> <p>20</p> <p>40</p>
<b>2. KEY PERSONNEL EXPERIENCE</b>			<b>60</b>
<b>Form 2</b>	Tenderer shall include completed form (Form 2) including relevant qualifications for each of the personnel, failing which the staff member will not be scored.		
	<p>Responsible Manager (<u>B.Eng/BSc in Engineering</u> (or equivalent NQF 8)) (GMR 2.1, Refer to note below)</p>	<p>Experience in management of Waste Water Treatment Plants, HDS plant or Water Treatment Plants.</p> <p>No points will be awarded for experience less than 5 years.</p> <p>5 points for the first 5 years', thereafter 1 point for each year up to the overall maximum of 15 points.</p>	15
	<p>Operations manager (<u>B.Eng/BSc in Engineering</u> (or equivalent NQF 8)) (GMR 2.1, Refer to note below)</p>	<p>Experience of operating High Density Sludge (HDS) or water treatment plants or wastewater treatment plants.</p> <p>No points will be awarded for experience less than 5 years.</p> <p>5 points for the first 5 years', thereafter 1 point for each year up to maximum of 13 points.</p>	13
	<p>Class 5 operator (site supervisor) (<u>National Certificate for</u></p>	<p>Experience of operating High Density Sludge (HDS) or water treatment plants or wastewater treatment plants.</p>	6

FUNCTIONAL EVALUATION CRITERIA			Max
	<u>Water and Waste Water Treatment Process Operations)</u>	No points will be awarded for experience less than 5 years. 3 points for the first 5 years, thereafter 1 point for each year up to a maximum of 6 points.	
	Maintenance Manager ( <u>BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)</u> (GMR 2.1, Refer to note below)	Experience of operating High Density Sludge (HDS) or water treatment plants or wastewater treatment plants.  No points will be awarded for experience less than 5 years. 5 points for the first 5 years', thereafter 1 point for each year up to maximum of 14 points.	14
	Process Engineer (B.Eng./BSc in Chemical Engineering)	Experience of operating High Density Sludge (HDS) or water treatment plants or wastewater treatment plants.  No points will be awarded for experience less than 5 years. 3 points for the first 5 years, thereafter 1 point for each year up to a maximum of 6 points	6
	Process Technician ( <u>BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)</u>	Experience of operating High Density Sludge (HDS) or water treatment plants or wastewater treatment plants.  No points will be awarded for experience less than 5 years. 3 points for the first 5 years, thereafter 1 point for each year up to a maximum of 6 points	6
<b>TOTAL</b>			<b>100</b>

**GMR 2.1 is a requirement and any of the site-based management personnel (i.e. Responsible Manager, Operations Manager or Maintenance Manager) must show proof of accreditation. The accreditation will be required upon contract award.**

**Should none of the proposed management personnel meet the GMR 2.1 requirement, the tenderer shall, at its own cost, supply a replacement with equal or better qualifications, competencies and relevant accreditation to fulfil the GMR 2.1 role.**

**Tenderers must achieve an overall minimum of 60 points of the total Functionality but may not score less than 20 points for company experience and key Personnel respectively when calculating the total functionality score to qualify for Stage 5 Price and Preference.**

### 3.5 STAGE 5: PRICE AND PREFERENCE EVALUATION

**Price:** The maximum price points available are 90.

It is compulsory for all Tenderers to price all items in the Bill of Quantities.

Bidders are referred to the pricing instructions in Volume 3 C2.1.

**Preference:**

The Preference system for this RFB is 90/10. Preference points awarded will be according to a Specific Goals and Promotion of Redistribution and Development Programme as summarised in the Table 3 below:

#### TABLE 2: SPECIFIC GOALS

The following criteria to allocate specific goals will be applied and Form A11 – SBD 6.1 will be used to evaluate the criteria below:

#### PERSONS HISTORICALLY DISADVANTAGED ON THE BASIS OF RACE

The following table will be used to calculate the score out of 10 for percentage black ownership:

Persons historically disadvantaged on the basis of race Number of Points for bids evaluated using 90/10.

% Ownership	Number of Points
100% black ownership	10
75% - 99% black ownership	8
60% - 74% black ownership	6
51% - 59% black ownership	3
0% - 50% black ownership	0

Proof or documentation that will be considered to claim points for specific goal related to persons or categories of persons historically disadvantaged by unfair discrimination must include:

- i. BBBEE Certificate issued by the SANAS accredited verification agency.

**Any bidder that does not meet the above-mentioned specific goals will not be disqualified but will be scored 0 for specific goals.**

### 3.6 STAGE 6: SUPPLIER VETTING CAPACITY EVALUATION

TCTA reserves the right to disqualify a successful Tenderer who/whose:

- Submits fraudulent information or information that they do not have to authority to submit;
- Is listed on National Treasury's list of Blacklisted Suppliers or Defaulters or similar;
- Poses a risk in terms of any vetting process conducted either by TCTA internally or the National Intelligence Agency;
- Has a director and/or shareholder who is employed by any organ of state. This does not apply to any organ of state acting as a Tenderer; and
- Tax affairs are not in order at the time of award after being requested to resolve the non-compliance status with SARS within the prescribed period.

## TCTA

**TENDER NO.: 047/2025/PMID/MAINTENANCE/RFB**

**FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE  
TREATMENT PLANT FOR A PERIOD OF 60 MONTHS**

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**TCTA**

**TENDER NO.: 047/2025/PMID/MAINTENANCE/RFB**

**FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE  
TREATMENT PLANT FOR A PERIOD OF 60 MONTHS**

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T2.2	RETURNABLE SCHEDULES

**T2.1 LIST OF RETURNABLE DOCUMENTS****THE TENDERER IS REQUIRED TO SUBMIT THE FOLLOWING DOCUMENTS WITH THE TENDER:**

	FORM	DESCRIPTION	MANDATORY/ NON-MANDATORY	*ENVELOPE NO.
<b>ADMINISTRATIVE COMPLIANCE</b>	A1	RECORD OF ADDENDA TO TENDER DOCUMENTS	Non-MANDATORY	1
	A2	CERTIFICATE OF INSURANCE COVER	NON-MANDATORY	1
	A3	TENDERER'S BANK DETAILS	NON-MANDATORY	1
	A4	SCHEDULE OF CURRENT COMMITMENTS	NON-MANDATORY	1
	A5	CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2003	NON-MANDATORY	1
	A6	CERTIFICATE OF REGISTRATION WITH CIDB	MANDATORY	1
	A7	SBD 1 – INVITATION TO BID	NON-MANDATORY	1
	A8	SBD 4 - BIDDERS DISCLOSURE	NON-MANDATORY	1
	A9	SBD 6.1 PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PPR 2022	NON-MANDATORY	1
	A9.1	B-BBEE CERTIFICATE	NON-MANDATORY	1
	A10	ACKNOWLEDGEMENT OF THE RFB	NON-MANDATORY	1
	A11	PROOF OF REGISTRATION ON THE NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD REPORT)	NON-MANDATORY	1
	A12	CERTIFICATE OF TAX COMPLIANCE	NON-MANDATORY	1
	A13	AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT No 85 OF 1993	NON-MANDATORY	1
	A14	PERFORMANCE SECURITY	NON-MANDATORY	1
A15	ADVANCE PAYMENT SECURITY	NON-MANDATORY	1	
<b>FUNCTIONAL PROPOSAL</b>	1	COMPANY EXPERIENCE	NON-MANDATORY	1
	2	PERSONNEL EXPERIENCE	NON-MANDATORY	1
	3	COMPLETION CERTIFICATES	NON-MANDATORY	1
<b>EVALUATION &amp; CONTRACT</b>	C1.1	FORM OF OFFER AND ACCEPTANCE	MANDATORY	2
	C1.1	Schedule of Deviations	Non-MANDATORY	2
	C1.2	CONTRACT DATA (PART 2: DATA PROVIDED BY THE CONTRACTOR)	MANDATORY	2
	C2.2	BILL OF QUANTITIES	MANDATORY	2
	C2.2	STAFFING REQUIREMENTS	MANDATORY	2
	C2.2	ADDITIONAL STAFF	MANDATORY	2

\*SCHEDULES/DOCUMENTS TO BE INCLUDED IN THE

- FUNCTIONAL OFFER (ENVELOPE 1)
- FINANCIAL PROPOSAL (ENVELOPE 2)

**C1.1 : FORM OF OFFER AND ACCEPTANCE**

**Form of Offer**

TO:  
Trans-Caledon Tunnel Authority  
PO Box 10335  
Centurion  
South Africa  
0046

Trans-Caledon Tunnel Authority, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE TREATMENT PLANT FOR A PERIOD OF 60 MONTHS

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

**THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS**  
.....Rand (in words);  
R..... (in figures) (or other suitable wording)

This offer may be accepted by TCTA by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data (or at the end of any agreed extension thereof), whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.

I/we declare this offer is submitted entirely without deviations or qualifications other than those stipulated in the Schedule of Deviations or Qualifications by the tenderer and that it is made free from any fraud, corruption and misrepresentation.

Signature(s)			
Name(s)			
Capacity for the tenderer			
Name and address of tenderer			
Name and signature of witness		Date	
Name and signature of witness		Date	

## Form Of Acceptance

By signing this part of this form of offer and acceptance, Trans-Caledon Tunnel Authority (TCTA) identified below accepts the tenderer's offer. In consideration thereof, TCTA shall pay the contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between TCTA and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- Part C1 Agreements and contract data, (which includes this agreement)
- Part C2 Pricing data
- Part C3 Scope of work
- Part C4 Site information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the returnable schedules as well as any changes to the terms of the offer agreed by the tenderer and TCTA during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this form of offer and acceptance. No amendments to or deviations from said documents are valid unless contained in this schedule.

The tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact TCTA's agent (whose details are given in the contract data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor) within five (5) working days of the date of such receipt notifies TCTA in writing of any reason why he/she cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

Signature(s)			
Name(s)			
Capacity			
for TCTA			
Employer's Name and Address	Trans Caledon Tunnel Authority (TCTA), Building 9, Byls Bridge Office Part, Olievenhoutbosch Rd, Centurion, 0157		
Name and signature of witness		Date	
Name and signature of witness		Date	

### Schedule of Deviations

**Notes:**

1. *The extent of deviations from the tender documents issued by TCTA before the tender closing date is limited to those permitted in terms of the conditions of tender.*
2. *A tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.*
3. *Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.*
4. *Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.*

1 Subject \_\_\_\_\_

Details \_\_\_\_\_

2 Subject \_\_\_\_\_

Details \_\_\_\_\_

3 Subject \_\_\_\_\_

Details \_\_\_\_\_

4 Subject \_\_\_\_\_

Details \_\_\_\_\_

By the duly authorised representatives signing this agreement, TCTA and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and TCTA during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

**C1.2 CONTRACT DATA (PART 2: DATA PROVIDED BY THE CONTRACTOR)**

**PART C1.2: CONTRACT DATA  
(PART 2: DATA PROVIDED BY THE CONTRACTOR)**

**Data Provided by the Contractor:**

**The Contractor is :** .....

**Address** ..... :

**Telephone** ..... :

**Facsimile** ..... :

**E-mail** ..... :

**The authorised and designated representative of the Contractor is:**

**Name** ..... :

**The address for receipt of communications is:**

.....

**Telephone** ..... :

**Facsimile** ..... :

**E-mail** ..... :

**Address** ..... :

**C2.2 BILL OF QUANTITIES**

**047/2025/PMID/MAINTENANCE/RFB: FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE TREATMENT PLANT FOR A PERIOD OF 60 MONTHS.**

ITEM NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b><u>OPERATIONS AND MAINTENANCE</u></b>				
		<b><u>OPERATIONS FEE</u></b>				
<b>1</b>		<b>OPERATOR'S ESTABLISHMENT AND DE-ESTABLISHMENT</b>				
1.1		<u>Establishment:</u>	Sum	1		
		Establishment of any new Facility required for operation of plant.				
1.2		<u>De-establishment:</u>	Sum	1		
		The Sum shall cover the cost of removal of the establishment in 1.1 above.				
1.3		5 senior staff members required for one month training prior to taking over site.	Sum	1		
1.4		Cost of maintaining the Operator's establishment.	Months	60		
<b>2</b>		<b>OPERATIONS</b>				
2.1	Agreement in its entirety	Day-to day (7 days a week 24 hours per day) operation of WTP and costs of meeting all contractual obligations not priced separately elsewhere in this Schedule, including but not limited to human resources, management, communications and reports, baseline survey, asset inventory, documents, laboratory operation, contingency and emergency plans, training, purchasing, administration, accounting legal services, payroll, technical support, transport (includes 2x high clearance - 4x4 vehicle for TCTA personnel), insurances, utilities, waste management, sewage waste, slaker waste, dust suppression and access road maintenance, grass maintenance on site and along pipelines and powerline servitudes, major and minor cleaning operations, spills cleaning, certification of lifting equipment, Operation and maintaining of CMMS, updating of O&M manuals.	Months	60		
		<i>Note: i) The rate for Item 2.1 is fixed for a period of one year. The rate for subsequent years will be adjusted in accordance with Sub-clause 8.18</i>				
		<i>ii) Special attention is drawn to the requirements of Clause 19 for insurances. iii) A full breakdown of operational fee to be submitted.</i>				
<b>TOTAL CARRIED FORWARD</b>						

ITEM NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>TOTAL BROUGHT FORWARD</b>						
<b>3</b>		<b>VARIABLE PERFORMANCE FEE</b>				
3.1	Clause 7.1	Variable performance fee (percentage of item 2.1 of the Operations Fee)	%	5		
		<i>Note: This fee is paid annually in three equal portions. The annual amount is reduced by any deductions for non-compliance by the Operator with requirements of the Agreement as specified.</i>				
<b>4</b>		<b>SAMPLING AND LABORATORY TESTING</b>				
4.4.1	Part D1	Sampling equipment and consumables	Months	60		
4.4.2	Part D1	Testing including reagents and consumables	Months	60		
4.4.3	Part D1	Daily sampling of sludge within the sludge mixing box and testing by an external lab to the determine the TSS of the sample	Months	60		
4.4.4	Part D1	Hourly monitoring and tests	Months	60		
4.4.5		Additional laboratory equipment or replacement of existing laboratory equipment	Prov Sum	1		1 500 000.00
		<u>SANAS Accredited External Laboratory</u>				
4.4.7	Part D1	Costs of external laboratory tests	Prov Sum			800 000.00
4.4.8		Operator's % mark-up on invoices submitted for provisional sums at 4. above	%			
<b>5</b>		<b>SAFETY, HEALTH AND ENVIRONMENTAL MANAGEMENT</b>				
5.1	Sub-clause 3.11	Compliance with the OHS Act including provision of PPE and submission of and implementation of all required procedures and plans.	Months	60		
5.2		Identification of hazardous materials or products and provide appropriate MSD sheets and install necessary signage	Sum	1		
5.3	Part D1	Environmental Compliance: Ground and surface water monitoring and compliance with all the OEMPr, NNR, DWS Directive and EA requirements	Months	60		
5.4	Part D1	Cost of implementing Audits outcome/OEMPr/NNR/DWS Directive/EA amendments and DEFF requirements	Prov Sum	1		1 000 000.00
<b>TOTAL CARRIED FORWARD</b>						

ITEM NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>TOTAL BROUGHT FORWARD</b>						
<b>6</b>		<b>SECURITY</b>				
6.1	Sub-clause 3.15	Secure the Facility at all time against unauthorized access including the prevention of theft or damage to the Facility	Months	60		
6.2		Improvements to the existing Facility identified by the operator and approved by the Employer	Prov Sum			2 500 000.00
6.3		Operator's % mark-up on invoices submitted for provisional sums at 6. above	%			
<b>7</b>	Sub-clause 3.16	<b>SUB - OPERATORS</b>				
		<u>SCADA</u>				
		<i>(Staro Process Control)</i>				
7.1	Sub-clause 3.10	Support for SCADA system	Prov Sum			2 000 000.00
		<u>AMD Abstraction Pump Station</u>				
		<i>Andritz Pumps / Carl Hamm</i>				
7.2	Part D1	Routine maintenance in accordance with the requirements of the O&M Manual	Prov Sum			25 000 000.00
		<u>Shaft Inspections</u>				
		<i>(Mines Rescue Services or Equally competent service provider)</i>				
7.3		Annual inspections of the shaft	Prov Sum			400 000.00
		<u>Generators</u>				
7.4	Part D1	Routine maintenance in accordance with the requirements of the O&M Manual	Prov Sum			1 500 000.00
7.5		Operator's % mark-up on invoices submitted for provisional sums at 7. above (subcontractors and contractors invoices)	%			
<b>TOTAL CARRIED FORWARD</b>						

ITEM NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>TOTAL BROUGHT FORWARD</b>						
<b>8</b>		<b>PROTECTION OF ASSETS AND MAINTENANCE OF FACILITIES</b>				
8.1	Clause 5.10	Provision for maintaining Computerized Maintenance Management System (CMMS) including all costs for licences, software upgrade hardware upgrade, data capture, and to apply and utilise the system's full capabilities during the Contract Term. (Refer to Annexure E Section 3 for more details)	Sum	1		
		<b>Baseline Surveys - Corrections</b>				
8.2	Clause 5.3 (1)	Corrections or repairs resulting from baseline condition survey (civil, structural and site-related assets, mechanical and electrical equipment)	Prov Sum	1		3 000 000.00
8.3	Clause 5.3 (1)	Corrections or repairs resulting from initial inventory/condition survey (laboratory equipment and instrumentation)	Prov Sum	1		400 000.00
		<b>Routine Maintenance</b>				
		<u>Preventative Maintenance</u>				
8.4	Clause 5	Preventative maintenance (civil, structural and site-related assets, mechanical and electrical equipment)	Prov Sum	1		25 000 000.00
8.5	Clause 5	Preventative maintenance (laboratory equipment and instrumentation)	Prov Sum	1		1 500 000.00
		<u>Corrective Maintenance (Repairs)</u>				
8.6	Clause 5	Corrective maintenance (civil, structural and site-related assets, mechanical and electrical equipment)	Prov Sum	1		30 000 000.00
8.7	Clause 5	Corrective maintenance (laboratory equipment and instrumentation)	Prov Sum	1		1 500 000.00
		<b>Requests by Employer</b>				
8.8	Sub-clause 5.8	Replacement of mechanical, electrical equipment and civil	Prov Sum			40 000 000.00
8.9		Social Development	Prov Sum			1 000 000.00
8.10		Operator's % mark-up on invoices submitted for provisional sums at 8. above for replacements (labour, hired plant, consumables, specialized testing, etc.)	%			
<b>TOTAL CARRIED FORWARD</b>						

ITEM NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>TOTAL BROUGHT FORWARD</b>						
<b>9</b>		<b>Provisional Sums for Chemicals and Diesel</b>				
		<i>Note: There is no Operator's mark-up on chemical and diesel supplies as these are covered by the advance payment provided by the Employer.</i>				
<b>9.1</b>	<b>Part D1</b>	<b>Chemicals</b>				
		<u>Unslaked Lime</u>				
		<i>Estimated maximum monthly requirement (6000 tons)</i>				
9.1.1		Supply, deliver to site and offload	Prov Sum			150 000 000.00
		<u>Limestone</u>				
		<i>Estimated maximum monthly requirement (4000 tons)</i>				
9.1.2		Supply, deliver to site and offload	Prov Sum			80 000 000.00
		<u>Polyelectrolyte</u>				
		<i>Estimated maximum monthly requirement (10 tons)</i>				
9.1.3		Supply, deliver to site and offload	Prov Sum			25 000 000.00
<b>9.2</b>	<b>Part D1</b>	<b>Diesel for generator</b>				
9.2.1		Supply of diesel fuel for standby power generation as per O&M Manual	Prov Sum			2 000 000.00
<b>TOTAL CARRIED FORWARD TO SUMMARY</b>						

**SUMMARY**

<b>BILL</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>
1	PRELIMINARIES	
2-9	OPERATIONS AND MANAGEMENT	
	<b>SUBTOTAL</b>	
	ADD _____ % ALLOWANCE FOR ESCALATION (CPA)	
	<b>SUBTOTAL INCLUDING ESCALATION</b>	
	ADD VAT	
	<b>TOTAL CARRIED TO FORM OF OFFER</b>	

**1. STAFFING REQUIREMENTS (To be enclosed in Envelope 2)**

The EASTERN BASIN AMD treatment plant is classified as Class A under the “DWS Water Services Act 1997. Regulations Relating to Compulsory National Standards for Process Controllers and Water Services Works” dated 23 October 2005.

**Staffing requirements for EASTERN BASIN AMD treatment plant shall be as follows:**

CLASS OF WORKS: SCHEDULE 2 (A)						
DESIGNATION	NO	Level*	FUNCTION	Monthly Rate		Billing rate
				Salary (1)	Mark-up (2)	1+2
Responsible Manager (Note 1) (BSc, BEng in Engineering (or Equivalent NQF 8)	1	S	Responsible for the overall management of the contract and will be the liaison between Employer and Operator.			
Operations Manager (Note 1) (BSc, BEng in Chemical Engineering (or Equivalent NQF 8)	1	S	Responsible for overall operation of the Facility			
Site Supervisor National Certificate for Water and Waste Water Treatment Process Operations	1	S	Provide assistance to Operations Manager			
Maintenance Manager (GMR 2.1, Note 1) (BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	1	S	Responsible for overall maintenance of the Facility Generated power is greater than 3 000 kW and therefore required by Law			
Process Engineer ( (BSc or BEng in Chemical Engineering)	1	S	Responsible for the quality of the discharged treated water			
Process Technician (BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	1	M	Provide assistance to Process Engineer			
Administrator/HR	1	M	Responsible for admin and HR matters			
SHEQ Officer-Environmental (Qualified Environmentalist) (BSc/BEng/BTech Environmental & SAMTRAC, HIRA Certificate)	1	M	Responsible for all Health and Safety related matters on site )			
Process Controllers (Registered Class VI)	4	S	Shift workers providing assistance to Process Engineer			
Process Controllers (Registered Class V or VI)	4	J	Shift workers providing assistance to Snr Process Controllers			

CLASS OF WORKS: SCHEDULE 2 (A)						
DESIGNATION	NO	Level*	FUNCTION	Monthly Rate		Billing rate
				Salary (1)	Mark-up (2)	1+2
Process Controllers/Shift Attendants (Registered Class V or VI)	4	M	Shift workers providing assistance to Snr Process Controllers			
Laboratory Analyst (Snr) (BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	1	M	Responsible for the operation of Laboratory and Testing			
Laboratory Analyst (Jr) (BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	2	J	Provide assistance to Snr Laboratory Analyst			
Laboratory Assistant (BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	1	J	Provide assistance to both Laboratory Analysts			
Mechanical Fitters (or suitably experienced) (Trade Test)	2	M	Responsible of mechanical work			
Mechanical assistant (Trade Test)	2	J	Provide assistance to mechanical fitters			
Electrician with control and MV switching (Red seal level)	2	M	Responsible for electrical work			
Electrical assistants (Trade Test)	2	J	Provide assistance to the Electrician			
Instrument Technician (Trade Test)	1	M	Responsible for all instrumentation work on site			
General Workers	6	J	Responsible for general work onsite			
<b>TOTAL</b>	<b>39</b>	<b>-</b>	<b>-</b>			

\*S = Senior, M = Middle and J = Junior

**Notes:**

- GMR 2.1 is a requirement and any of the site-based management personnel (i.e. Responsible Manager, Operations Manager or Maintenance Manager) shall show proof of accreditation.**
- Refer to the Annexure J for minimum staffing requirements.**

**2. ADDITIONAL STAFF (To be included in Envelope 2)**

Based on the Operator’s experience in the operation of similar sized plants the Operator can list additional staff that is required to effectively operate the Plant.

Additional Staff	Monthly Rate		Billing Rate
	Salary (1)	Mark-up (2)	1+2
General workers Grade .....no. off....			
General workers Grade .....no. off....			
General workers Grade .....no. off....			
General workers Grade .....no. off....			
<b>Additional Resources</b>			
To be listed by the Operator			
(1.)			
(2.)			
(3.)			
(4.)			
(5.)			

## **T2: RETURNABLE DOCUMENTS**

## **T2: RETURNABLE DOCUMENTS**

### **T2.2: RETURNABLE SCHEDULES**

#### T2.2.1 LIST OF RETURNABLE DOCUMENTS

**FORM A1 – RECORD OF ADDENDA TO TENDER DOCUMENTS**

The undersigned confirm that the following communications received from TCTA before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	<b>Date</b>	<b>Title or Details</b>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

SIGNED ON BEHALF OF THE TENDERER: .....

**FORM A2: CERTIFICATE OF INSURANCE COVER**

**Note to tenderer:**

**In the event of the tenderer being a joint venture/consortium the details of the individual members must also be provided.**

The tenderer shall provide the following details of this insurance cover:

i) Name of Tenderer: .....

ii) Period of Validity: .....

iii) Value of Insurance:

- Insurance for Works and Contractor’s Equipment

Company: .....

Value: .....

- Insurance for Contractor’s Personnel

Company: .....

Value: .....

- General public liability

Company: .....

Value: .....

- SASRIA

Company: .....

Value: .....

SIGNED ON BEHALF OF THE TENDERER: .....

**FORM A3: TENDERER’S BANK DETAILS**

**Notes to tenderer:**

- 1. The tenderer shall attach to this form a letter from the bank at which he declares he conducts his account. The contents of the bank’s letter must state the credit rating that it, in addition to the information required below, accords to the tenderer for the business envisaged by this tender.
- 2. The tenderer’s banking details as they appear below shall be completed.
- 3. In the event that the tenderer is a joint venture enterprise, details of all the members of the joint venture shall be similarly provided and attached to this form.

The tenderer shall provide the following:

- i) Name of Account Holder: .....
- ii) Account Number:.....
- iii) Bank name: .....
- iv) Branch Number: .....
- v) Bank and branch contact details .....
- .....

SIGNED ON BEHALF OF THE TENDERER: .....

**FORM A4: SCHEDULE OF CURRENT COMMITMENTS**

**Notes to tenderer:**

1. The tenderer shall list below all contracts currently under construction or awarded and about to commence and tenders for which offers have been submitted but awards not yet made.
2. In the event of a joint venture enterprise, details of all the members of the joint venture shall similarly be attached to this form.
3. The lists must be restricted to not more than 10 contracts and 10 tenders. If a tenderer's actual commitments or potential commitments are greater than 10 each, those listed should be in descending order of expected final contract value or sum tendered.

Table 1 Contracts awarded				
Client	Project	Expected total value of contract (incl. VAT)	Duration (Months)	Expected completion date

Table 2 TENDERS NOT YET AWARDED				
Client	Project	Sum Tendered (incl. VAT)	Tendered Duration (Months)	Expected commencement

SIGNED ON BEHALF OF THE TENDERER: .....

**FORM A5: CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2003**

**Note to tenderer:**

**Discovery that the tenderer has failed to make proper disclosure may result in TCTA terminating a contract that flows from this tender on the ground that it has been rendered invalid by the tenderer’s misrepresentation.**

The tenderer shall attach to this Form evidence that he is registered and in good standing with a compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993).

The tenderer is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the tenderer at any time during the 36 months preceding the date of this tender.

SIGNED ON BEHALF OF THE TENDERER: .....

**FORM A6: CERTIFICATE OF REGISTRATION WITH CIDB**

The tenderer shall provide a printed copy of the Active Contractor’s Listing of the CIDB website or proof of application. ([www.cidb.org.za](http://www.cidb.org.za))

Name of Contractor: .....

Contractor Grading Designation: .....

CIDB Contractor Registration Number: .....

**Notes to tenders**

- Tenderers’ attention is drawn to tender data clause C.2.1.
- In the case of Joint venture/ subcontractors, each member of the Joint venture / subcontractor must complete this form

**FORM A7 - SBD 1 – INVITATION TO BID****PART A  
INVITATION TO BID**

<b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE TRANS-CALEDON TUNNEL AUTHORITY</b>					
BID NUMBER:	047/2025/PMID/MAINTENANCE/RFB	CLOSING DATE:	16 APRIL 2026	CLOSING TIME:	12H00
DESCRIPTION	FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE TREATMENT PLANT FOR A PERIOD OF 60 MONTHS				
<b>BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)</b>					
First Floor Building 9 Byls Bridge Office Park Cnr Olivenhoutsbosch & Jean Avenue Doringkloof, Centurion 0046					
<b>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO</b>			<b>TECHNICAL ENQUIRIES MAY BE DIRECTED TO:</b>		
CONTACT PERSON	Colbert Makhubele		CONTACT PERSON	Colbert Makhubele	
TELEPHONE NUMBER	N/A		TELEPHONE NUMBER	N/A	
FACSIMILE NUMBER	N/A		FACSIMILE NUMBER	N/A	
E-MAIL ADDRESS	Tenders04@tcta.co.za		E-MAIL ADDRESS	Tenders04@tcta.co.za	
<b>SUPPLIER INFORMATION</b>					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:	OR	CENTRAL SUPPLIER DATABASE No:	MAAA	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No	B-BBEE STATUS LEVEL SWORN AFFIDAVIT	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES &amp; QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]</b>					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS/ SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]		
<b>QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?			<input type="checkbox"/> YES	<input type="checkbox"/> NO	
DOES THE ENTITY HAVE A BRANCH IN THE RSA?			<input type="checkbox"/> YES	<input type="checkbox"/> NO	
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?			<input type="checkbox"/> YES	<input type="checkbox"/> NO	
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?			<input type="checkbox"/> YES	<input type="checkbox"/> NO	
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?			<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.</b>					

**PART B: TERMS AND CONDITIONS FOR BIDDING**

<b>1. BID SUBMISSION:</b>	
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	<b>ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.</b>
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4.	<b>THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).</b>
<b>2. TAX COMPLIANCE REQUIREMENTS</b>	
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER’S PROFILE AND TAX STATUS.
2.3	APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6	WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7	NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE.”

**NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.**

SIGNATURE OF BIDDER: .....

CAPACITY UNDER WHICH THIS BID IS SIGNED: .....

(Proof of authority must be submitted e.g. company resolution)

DATE: .....

**FORM A8 – SBD4 - BIDDER’S DISCLOSURE**

**1. PURPOSE OF THE FORM**

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

**2. BIDDER’S DECLARATION**

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest<sup>1</sup> in the enterprise,

employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:  
.....  
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

<sup>1</sup> the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

2.3.1 If so, furnish particulars:

.....  
.....

**3 DECLARATION**

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>2</sup> will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

<sup>2</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of bidder

## FORM A9 - SBD 6.1 - PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

**NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022**

### 1. GENERAL CONDITIONS

1.1 The following preference point systems apply to this bid:

- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 The value of this bid is estimated to exceed R50 million (all applicable taxes included), and therefore the 90/10 preference point system will be applicable in this tender.

1.3 Points for this tender shall be awarded for:

- a) Price; and
- b) Specific Goals.

1.4 The maximum points for this tender are allocated as follows:

	<b>POINTS</b>
<b>PRICE</b>	<b>90</b>
<b>SPECIFIC GOALS</b>	<b>10</b>
<b>Total points for Price and SPECIFIC GOALS</b>	<b>100</b>

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

### 2. DEFINITIONS

- a) "tender" means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- b) "price" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- c) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

- d) “tender for income-generating contracts” means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- e) “the Act” means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

### 3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

#### 3.1. POINTS AWARDED FOR PRICE

##### 3.1.1 THE 90/10 PREFERENCE POINT SYSTEMS

A maximum of 90 points is allocated for price on the following basis:

**90/10**

$$P_s = 90 \left( 1 - \frac{P_t - P_{min}}{P_{min}} \right)$$

Where

$P_s$  = Points scored for price of tender under consideration

$P_t$  = Price of tender under consideration

$P_{min}$  = Price of lowest acceptable tender

### 4. POINTS AWARDED FOR SPECIFIC GOALS

4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

- a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
- b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

**Table 1: Specific goals for the tender and points claimed are indicated per the table below.**

**Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)  
Tenderer must also submit a valid B-BBEE certificate issued by SANAS accredited verification agency to substantiate their points claimed for specific points.**

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)
100% black ownership	10	
75% - 99% black ownership	8	
60% - 74% black ownership	6	
51% - 59% black ownership	3	
0% - 50% black ownership	0	

**DECLARATION WITH REGARD TO COMPANY/FIRM**

4.3. Name of company/firm.....

4.4. Company registration number: .....

4.5. TYPE OF COMPANY/ FIRM

[TICK APPLICABLE BOX]

- Partnership/Joint Venture / Consortium
- One-person business/sole propriety
- Close corporation
- Public Company
- Personal Liability Company (Pty) Limited
- Non-Profit Company
- State Owned Company

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
  - (a) disqualify the person from the tendering process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person’s conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution, if deemed necessary.

<b>SIGNATURE(S) OF TENDERER(S)</b>	
<b>SURNAME AND NAME:</b>	.....
<b>DATE:</b>	.....
<b>ADDRESS:</b>	.....
	.....

**FORM A9.1 - B-BBEE CERTIFICATE**

[TO BE ATTACHED HERE]

**FORM A10 - ACKNOWLEDGEMENT OF THE RFB**

**Acknowledgement**

We.....(name of Bidder), through our duly authorised representative, acknowledge that we have read, understand and accept the contents of the tender document in its entirety, and our submission constitutes a response thereto.

\_\_\_\_\_  
Name of Authorised Representative

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**FORM A11- PROOF OF REGISTRATION ON THE NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD REPORT).**

The tenderer shall provide a pdf. copy of the supplier registration form from National Treasury Central Supplier Database ([www.treasury.gov.za](http://www.treasury.gov.za)). In the case of a Joint Venture, a supplier registration form must be provided for each member of the Joint Venture.

Name of Contractor: .....

Central Supplier Database Supplier Number: .....

Supplier Commodity: .....

Delivery Location: .....

(ATTACH HERE)

**FORM A12: CERTIFICATE OF TAX COMPLIANCE**

The tenderer shall complete the declaration below.

I, ..... (name)  
the undersigned in my capacity as ..... (position)  
on behalf of .....(name of company)  
herewith grant consent that SARS may disclose to the TCTA our tax compliance status. For this purpose, our  
unique security personal identification number (PIN) is ..... our tax reference number is  
and our tax clearance certificate number is .....

In the event of a Joint Venture / Consortium, each member shall comply with the above requirement.

**FORM A13: AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT NO 85 OF 1993**

THIS AGREEMENT is made between **TRANS-CALEDON TUNNEL AUTHORITY (TCTA)** (hereinafter called the EMPLOYER) of the one part, herein represented by: .....

in his capacity as: . ;

AND:

(hereinafter called the OPERATOR) of the other part, herein represented by

in his capacity as:

duly authorised to sign on behalf of the Operator.

**WHEREAS** the OPERATOR is the Mandatory of the EMPLOYER in consequence of an agreement between the OPERATOR and the EMPLOYER in respect of

**THE OPERATION AND MAINTENANCE OF THE AMD TREATMENT PLANT AT EASTERN BASIN**

for the construction, completion and maintenance of the works;

**AND WHEREAS** the EMPLOYER and the OPERATOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by OHS Act Amendment Act No 181/1993 (hereinafter referred to as the ACT);

**NOW THEREFORE** the parties agree as follows:

1. The OPERATOR undertakes to acquaint the appropriate officials and employees of the OPERATOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
2. The OPERATOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed certain arrangements and procedures that same shall be observed and adhered to by the OPERATOR, his officials and employees. The OPERATOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
3. The OPERATOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the OPERATOR expressly absolves the EMPLOYER and the Employer's CONSULTING ENGINEERS from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.
4. The OPERATOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the OPERATOR has complied with his undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the OPERATOR, or to take such steps it may deem necessary to remedy the default of the OPERATOR at the cost of the OPERATOR.
5. The OPERATOR shall be obliged to report forthwith to the EMPLOYER any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at \_\_\_\_\_ for and on behalf of the **OPERATOR**  
on this the ..... day of ..... 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: ...1.

2.

Thus signed at \_\_\_\_\_ for and on behalf of the **EMPLOYER**  
on this the ..... day of ..... 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2. ....

**FORM A14: PERFORMANCE SECURITY**

**TCTA**

**ACID MINE DRAINAGE WORKS ON THE WITWATERSRAND GOLD FIELDS (AMD) PROJECT**

**CONTRACT NO 047/2025/PMID/MAINTENANCE/RFB**

**THE OPERATION AND MAINTENANCE OF THE AMD TREATMENT PLANT AT EASTERN BASIN**

**PERFORMANCE SECURITY – DEMAND GUARANTEE**

To be provided to:

The Chief Executive  
TCTA  
First Floor  
Building 9 Byls Bridge Office Park  
Cnr Olivenhoutsbosch & Jean Avenue  
Doringkloof, Centurion  
0046

PERFORMANCE SECURITY No. ....

WHEREAS the TCTA has awarded Contract No. **047/2025/PMID/MAINTENANCE/RFB: THE OPERATION AND MAINTENANCE OF THE AMD TREATMENT PLANT AT EASTERN BASIN**

to

.....

(hereinafter called “the Operator”)

and whereas under the Contract the sum of

R..... (in figures)

R.....

..... (in words)

(The “Guaranteed Amount(s)”) has to be secured in respect of the performance of the Contract by the Operator.

We, the undersigned

...

..... and  
(Name 1) (Name 2)

acting herein in our respective capacities as

..... and  
(Position 1) (Position 2)

Of  
(Institution)  
(hereinafter called "the Bank")

and being duly authorised to sign and incur obligations in the name of the Bank under and in terms of a Resolution of the Board of Directors of the Bank, a notarised certified copy of which is annexed hereto, hereby irrevocably and unconditionally guarantee and undertake on behalf of the Bank that:

1. The Bank will :
  - 1.1 pay to TCTA within 28 calendar days from receipt of TCTA's first written demand and without proof of any breach of contract by the Operator other than the certificate specified in Clause 1.2 below, amounts not exceeding the Guaranteed Amount(s).
  - 1.2 make such payment to TCTA upon receipt by the Bank of a certificate signed by TCTA certifying that the Operator, in the opinion of TCTA, as at the date of issue of such certificate is in breach of its contractual obligations to TCTA under the Contract.
  - 1.3 make payment in the currency of the Contract of the Guaranteed Amount up to the maximum amount stipulated in the demand.
  - 1.4 make such payment to TCTA at an address within the Republic of South Africa designated by TCTA for this purpose.
2. The demand for payment together with this guarantee shall constitute prima facie proof of the Bank's indebtedness hereunder for the purposes of any proceedings including but not limited to provisional sentence proceedings instituted against the Bank in any court of law having jurisdiction.
3. Neither the failure of TCTA to enforce strict or substantial compliance by the Operator with his obligations nor any act, conduct, or omission by TCTA will discharge the Bank from liability under this guarantee.
4. The guarantee shall:
  - 4.1 remain in full force and effect from the date hereof, and shall expire upon the issue by the Engineer of the Performance Certificate in terms of the Contract.
  - 4.2 exist independently of the Contract or any amendment, variation or novation thereof.
  - 4.3 are returned to the Operator on expiration according to Clause 4.1 above.

- 4.4 not be ceded or assigned by TCTA, or otherwise dealt with in any manner whatsoever which has or may have the effect of transferring or encumbering or alienating TCTA's rights hereunder.
- 4.5 be deemed to have been made in the Republic of South Africa and to be governed and construed by and in accordance with the laws of the Republic of South Africa to the jurisdiction of whose Court the Bank irrevocably submits itself. The submission to such jurisdiction shall not (and shall not be construed so as to) limit the right of the Employer to take proceedings against the Bank in any other court of competent jurisdiction nor shall the taking of proceedings in any one or more jurisdictions against the Bank preclude the taking of proceedings against the Bank in any other jurisdiction whether concurrently or not.

SIGNED ON THIS.....DAY OF.....2015

AT

(Place)

.....

(Signature 1)

and.....

(Signature 2)

AS WITNESSES:

1.

2.

Attachment: Resolution of Board of Directors (Certified Copy)

**FORM A15: ADVANCE PAYMENT SECURITY**

**TCTA  
ACID MINE DRAINAGE WORKS ON THE WITWATERSRAND GOLD FIELDS (AMD) PROJECT  
CONTRACT NO 047/2025/PMID/MAINTENANCE/RFB**

**THE OPERATION AND MAINTENANCE OF THE AMD TREATMENT PLANT AT EASTERN BASIN  
ADVANCE PAYMENT SECURITY**

To be provided to

The Chief Executive  
TCTA  
First Floor  
Building 9 Byls Bridge Office Park  
Cnr Olivenhoutsbosch & Jean Avenue  
Doringkloof, Centurion  
0046

whereas TCTA

has awarded Contract No. **047/2025/PMID/MAINTENANCE/RFB: THE OPERATION AND MAINTENANCE OF THE AMD TREATMENT PLANT AT EASTERN BASIN** to (hereinafter called "the Contract")

to  
(hereinafter called "the Operator")

and whereas under the Contract the sum of .....  
is payable in advance against a bank guarantee.

We, the undersigned

..... and  
(Name 1) (Name 2)

acting herein as

..... and  
(Position 1) (Position 2)

of

(hereinafter called "the Bank")

and being duly authorised to sign and incur obligations in the name of the Bank under and in terms of a Resolution of the Board of Directors of the Bank, a certified copy of which is annexed hereto, hereby irrevocably and unconditionally guarantee and undertake on behalf of the Bank that :

- 1. The Bank will
  - 1.1 pay without delay to the TCTA on its first written demand and without proof of any breach of contract by the Operator other than the certificate specified in 1.2 below, amounts not exceeding in total :

R .....(

(figures)      (words)

RAND)

(hereinafter called "the Guaranteed Amounts")

- 1.2 make such payment(s) to the TCTA upon receipt by the Bank of a certificate signed by TCTA certifying that the Operator, in his opinion, as at the date of issue of such certificate is in breach of its contractual obligations to the TCTA under the Contract;
- 1.3 make such payment(s) to the TCTA at an address designated by the TCTA for this purpose.
- 2. The demand for payment together with this guarantee shall constitute prima facie proof of the Bank's indebtedness hereunder for the purposes of any proceedings including but not limited to provisional sentence proceedings instituted against the Bank in any court of law having jurisdiction.
- 3. Neither the failure of the TCTA to enforce strict or substantial compliance by the Operator with the obligations nor any act, conduct, or omission by the TCTA prejudicial to the interests of the Bank will discharge the Bank from liability under this Guarantee.
- 4. The Guarantee shall:
  - 4.1 remain in full force and effect from the date hereof until the issue of a certificate signed by the Engineer appointed in terms of the Contract to the effect that the Operator has duly and fully discharged the obligations as provided for in the Contract in respect of repayment to the TCTA of the Guaranteed Amounts;
  - 4.2 exist independently of the Contract or any amendment, variation or notation hereof;
  - 4.3 not be ceded or assigned by the TCTA, or otherwise dealt with in any manner whatsoever which has or may have the effect of transferring or encumbering or alienating the TCTA's rights hereunder;
  - 4.4 be governed by the Law of the Republic of South Africa.

SIGNED ON THIS ..... DAY OF .....20 .....

AT PLACE .....

SIGNATURE 1..... SIGNATURE 2.....

AS WITNESSES:

1..... 2.....

**FORM 1: COMPANY EXPERIENCE**

The experience of the company or each of the members in the joint venture, specialist suppliers and subcontractors must be stated below. List projects/name of plants (completing all columns in table) operated and maintained in South Africa and abroad.

**FORM 1: TREATMENT PLANTS (Note 1)**

Treatment Plants							
	Name of Plant	Client Authority	Size (ML/day)	Type of Plant (HDS/WWTP/WTP)	Time the plant was operated & maintained within a 10 year period	Duly authorized Contact person	Contact number
1							
2							
3							
4							
5							
6							

- Notes :
1. No points will be awarded for plants with a capacity of less than 20 ML/day. Points will only be allocated for plants starting from 20 ML/day and above.
  2. Duly authorised contact person: A person who can be contacted to verify the specific plant being referenced. The designated individual must also be able to arrange a site visit and provide access to the site when verification is conducted.
  3. If the listed subcontractor or specialist supplier is not available to form part of the project at the time it commences, an equivalent experienced subcontractor or specialist supplier must be contracted by the successful bidder, subject to employer’s vetting and approval.
  4. Bidders to note that forms can be duplicated to fit the required experiences that they so wish to bring into the employer’s attention for the purpose of evaluation.

**FORM 2: PERSONNEL EXPERIENCE**

	Position	Name	ID/Passport No.	Min. Qualification (Tick Appropriate Box)	Years of Experience				Total Years of Experience	
					Name of Plant	Type (HDS/WTP/ WWTP)	Start Date	End Date		
1	Responsible Manager			B. Eng./BSc in Engineering (or equivalent NQF 8)	YES	1.				
						2.				
						3.				
					NO	4.				
						5.				
						6.				
						7.				
2	Operations Manager			B. Eng./BSc in Chemical Engineering (or equivalent NQF 8)	YES	1.				
						2.				
						3.				
					NO	4.				
						5.				
						6.				
						7.				
3	Class 5 Operator (Site Supervisor)			National Certificate for Water and Waste Water Treatment Process Operations	YES	1.				
						2.				
						3.				
					NO	4.				
						5.				
						6.				

	Position	Name	ID/Passport No.	Min. Qualification (Tick Appropriate Box)	Years of Experience				Total Years of Experience	
					Name of Plant	Type (HDS/WTP/ WWTP)	Start Date	End Date		
4	Maintenance Manager			(BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	YES	1.				
						2.				
						3.				
					NO	4.				
						5.				
						6.				
						7.				
5	Process Engineer			B. Eng./BSc in Chemical Engineering	YES	1.				
						2.				
						3.				
					NO	4.				
						5.				
						6.				
6	Process Technician			(BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	YES	1.				
						2.				
						3.				
					NO	4.				
						5.				
						6.				
7	GMR 2.1 Appointment			-		N/A				N/A

**Notes:**

- 1) **The individual’s qualification certificates shall be submitted showing that they meet the minimum requirements**
- 2) **GMR 2.1 is a requirement and any of the site-based management personnel (i.e. Responsible Manager, Operations Manager or Maintenance Manager) shall show proof of accreditation. The accreditation will be required on award.**
- 3) **No roles will be shared, and points will be allocated for each individual.**
- 4) **Bidders to note that forms can be duplicated to fit the required experiences that they so wish to bring into the employer’s attention for the purpose of evaluation.**

I HEREBY CONFIRM AND UNDERSTAND THAT I, THE TENDERER AND TCTA ARE BOUND BY TENDER DATA CLAUSE C.1.1.65 PROTECTION OF PERSONAL INFORMATION ACT

.....  
Signature

.....  
Date

.....  
Name of Bidder

**FORM 3: COMPLETION CERTIFICATES**

The tenderer shall attach all final completion certificates for all projects listed in FORM 1 for verification purpose: - SCHEDULE OF WORK EXPERIENCE signed by the Engineer or Employer.

## TCTA

### TENDER NO.: 047/2025/PMID/MAINTENANCE/RFB

### FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE TREATMENT PLANT FOR A PERIOD OF 60 MONTHS

### OVERALL TABLE OF CONTENTS

#### Volume 1 Tendering Procedures

- T1.1 Tender Notice and Invitation to Tender
- T1.2 Conditions of Tender and Tender Data
- T1.3 Tender Evaluations

#### Volume 2 Returnable Documents

- T2.1 List of Returnable Documents
- C1.1 Form of Offer and Acceptance AND Appendix to Tender
- C1.2 Contract Data (Part 2: Data provided by the contractor)
- C2.2 Bill of Quantities
- T2.2 Returnable Schedules

#### Volume 3 Contract

- C1.2 Contract Data (Part 1: Data provided by the Employer)

##### **Part C2: Pricing Data**

- C2.1 Pricing Instructions

##### **Part C3: Scope of Works**

- C3.1 Description of the works
- C3.2 Procurement
- C3.3 Work Activities
- C3.4 Specifications

##### **Part C4: Site Information**

- C4.1 Site information

##### **Part D1: Pro-Forma Documents**

ANNEXURE A: DESCRIPTION OF THE EASTERN BASIN WTP FACILITY

ANNEXURE B: DESCRIPTION OF SERVICES.

ANNEXURE C: OPERATIONAL ENVIRONMENTAL MANAGEMENT PROGRAMME (OEMPR)

ANNEXURE D: PROTECTION OF ASSETS AND MAINTENANCE OF FACILITIES

ANNEXURE E: SAMPLING AND TESTING REQUIREMENTS

ANNEXURE F: OPERATING AND PROCESS CONTROL PARAMETERS

ANNEXURE G: SURFACE AND GROUNDWATER MONITORING

ANNEXURE H: CHEMICAL SPECIFICATION

ANNEXURE I: INVENTORY OF LABORATORY EQUIPMENT

ANNEXURE J: MINIMUM STAFFING REQUIREMENTS

**TCTA**

**TENDER NO.: 047/2025/PMID/MAINTENANCE/RFB**

**FOR THE OPERATION AND MAINTENANCE OF THE EASTERN BASIN ACID MINE DRAINAGE  
TREATMENT PLANT FOR A PERIOD OF 60 MONTHS**

**TABLE OF CONTENTS – VOLUME 3**

C1.2	Contract Data (Part 1: Data provided by the Employer)
C2.1	Pricing Instructions
C3.1	Description of the Works
C3.2	Procurement
C3.3	Work Activities
C3.4	Specifications
C4.1	Site Information
D1	Pro-Forma Documents

## PART C1: AGREEMENT AND CONTRACT DATA

### 1. DEFINITIONS

In this Agreement and the annexures hereto, unless the context indicates otherwise, the words and expressions set out below shall bear the meanings assigned to them and cognate words and expressions shall have a corresponding meaning.

#### 1.1 Background

Refer to Volume 1

#### 1.2 Definitions.

In this Agreement the following terms have the following meanings unless the context otherwise requires:

- (a) **“AMD”** means Acid Mine Water Drainage;
- (b) **“Abnormal Raw Water”** means **Raw Water** that contains levels of substances in sufficiently high concentrations that cannot be treated with the processes necessary for the treatment of the water to achieve the Compliance Criteria. The Operator shall demonstrate to the Operations Agent that the substances are at a concentration sufficient to cause interference with the treatment process;
- (c) **“Adjustment to the Operations Fee”** has the meaning assigned in Clause 8.3 of this Agreement;
- (d) **“Affiliated Company”** means, with respect to the Operator, any other Person who directly or indirectly controls, is controlled by, or is under direct or indirect common control with, the Operator, and includes any Person in like relation to an Affiliated Company. A Person shall be deemed to control another company if such Person possesses, directly or indirectly, the power to direct or cause the direction of the management and policies of such Company, whether through ownership of voting securities, by contract or otherwise; and the term “controlled” shall have a similar meaning;
- (e) **“Agreement”** means this agreement and all schedules attached to it including the Form of Offer as they may be amended, modified, supplemented, restated, or replaced from time to time by mutual agreement of the Parties;
- (f) **“Annual”** means occurring once per year from the Commencement Date, inclusive;
- (g) **“Annual Asset Report”** has the meaning assigned in sub-clause 3.7(4) of this Agreement;

- (h) “Applicable Laws” is to be broadly interpreted and means, with respect to any Person, property, transaction, event or other matter dealt with or adverted to in this Agreement, any and all statutes, by-laws, regulations, enactments, ordinances, rules, permits, consents, approvals, licences, judgments, orders, judicial decisions, common-law rules, decrees, injunctions, agreements, authorizations, regulations, policies, guidelines, objectives, whether federal, provincial or municipal including, but not limited to all laws relating to occupational health and safety matters, fire prevention and protection, land use planning, environment, labour matters, in each case which have the force of law and which relate to the operation and maintenance of water treatment facilities and distribution systems;
- (i) “Arbitrator” means the individual or individuals appointed in accordance with the procedure described in Clause 17 of this Agreement to determine a matter referred to arbitration hereunder;
- (j) “Assets” means the buildings and other permanent fixed assets of the Facilities, and includes all mechanical, electrical and instrumentation equipment that forms part of the Facilities;
- (k) “Asset Management System” has the meaning as described in Clause 5.2;
- (l) “Best Efforts” means, in relation to the performance of an obligation under this Agreement, timely efforts that are sensible and practical in a commercial context and involve the exercise of sound judgment, having regard to relevant circumstances;
- (m) “Best Practices” means best Operations and Maintenance and management practices as established in accordance with industry standards which a commercially reasonable and prudent operator of the Facilities would follow in similar circumstances, having regard to the objectives and terms of this Agreement;
- (n) “Business Day” means a day which is not a Saturday, Sunday or a legal holiday;
- (o) “Capital Improvements” means expenditures, repairs or replacements which are permitted to be capitalised in accordance with generally accepted accounting principles, (including, but not limited to, the roofing, structural elements, exterior wall systems, plumbing and drainage systems, foundations, floors, electrical systems, SCADA and related computer systems, pipes, tanks, valves, pumps and other equipment, and all material and labour related hereto, but excluding office furniture and office equipment, and excluding expenditures made for Routine Maintenance and Repairs and Replacement);
- (p) “Change of Laws” means the enactment, adoption, promulgation, modification, repeal or change of any Applicable Laws by any Governmental Authority, including the Employer, which comes into effect after the Commencement Date and which

- requires the Operator to provide additional or different services relating to operation or maintenance of the Facilities, or materially affects the costs of operation or maintenance of the Facilities pursuant to this Agreement;
- (q) “Civil Maintenance Program” has the meaning assigned in sub-clause 5.4(1) of this Agreement;
- (r) “Civil, Structural and Site-Related Assets” means the permanent fixed assets of the Facilities but shall not include the Mechanical and Electrical Equipment;
- (s) “Claim” includes claims, actions, proceedings, causes of action, suits, debts, dues, accounts, Guarantees, warranties, claims over, indemnities, covenants, contracts, losses (but excluding consequential losses), damages, costs, grievances, executions, judgments, obligations, liabilities (and excluding those relating to or arising out of loss of opportunity or loss of anticipated profit), rights and demands whatsoever, whether actual, pending, contingent or potential, whether in law or in equity, whether express or implied, whether present or future and whether known or unknown;
- (t) “CMMS” or “Computerized Maintenance Management System” means the computerized maintenance management system described in Clause 5.10, with online access available to the Employer for monitoring purposes only, used to schedule and record all Maintenance and Repairs performed on the Facilities and the Equipment and shall include but not be limited to Asset Inventory and Management;
- (u) “Commencement Date” means the date on which the Operator is required to assume the day-to-day operation and maintenance of the Facilities.
- (v) “Compliance Criteria” means all terms, conditions, instructions, concentration limits and maximum permissible values listed or specified by Governmental Authorities and the Treated Water Performance Criteria and as required under Clause 4 and **ANNEXURE B**.
- (w) “Compliance Failure” means when the Treated Water exceeds the maximum permissible limits for any Compliance Criteria and shall be determined pursuant to Clause 4.4 and **ANNEXURE B** of this Agreement;
- (x) “Compliance Report” has the meaning assigned in sub-clause 3.7(2) of this Agreement;
- (y) “Condition Survey” means an inspection and review of the Assets;
- (z) “Consumables” means all exhaustible materials used in the day-to-day operation of the Facilities and includes, but is not limited to, chemicals, lubricants, and fuel;

- (aa) “Consumer Price Index” or “CPI” means the Statistics South Africa Consumer Price Index (“CPI Headline”) (All Items) as published in Table A of P0141.1 as determined from time to time during the Term;
- (bb) “Contract Data” key items relating to the Agreement, that are summarised as the Contract Data;
- (cc) “Contract Year” means each year of the Term from the Commencement Date, till midnight of the anniversary of the Commencement Date;
- (dd) “Control” shall have the meaning assigned in the definition of ‘Affiliated Company’ of this Agreement;
- (ee) “Corrective Maintenance” means the repair and correction of deficiencies, failures and malfunctions of the Facilities and the components therein to maximize the service life of the Facilities and its components but does not include repair and correction of deficiencies, failures and malfunctions of the Facilities that are a result of the Operator’s inadequate performance or non-performance of the Preventative Maintenance to the Facilities as required in this Agreement;
- (ff) “Cumulative Monthly Treated Water Performance Failure” shall have the meaning assigned in sub-clause 4.5;
- (gg) “Deficiency” or “Deficiencies” means those Assets which have deteriorated, are non-operational, or are unable to substantially perform their design function in respect of the Facilities, or which are reasonably likely to fail and require replacement or which create an immediate material risk to human health and safety or the environment;
- (hh) “Direct Claim” has the meaning assigned in sub-clause 16.4(1)(a) of this Agreement;
- (ii) “Efficiency Improvement” has the meaning assigned in Clause 3.17 of this Agreement;
- (jj) “Electricity Cost” means the cost of electricity used by the Facilities;
- (kk) “Emergency Situation” means an occurrence of an incident that results in an interruption of the treatment plant or the impairment of the quality of Treated Water;
- (ll) “Employer” means the entity who is stated in the Contract Data;
- (mm) “Employer’s Equipment Replacement” has the meaning assigned in Clause 5.8 of this Agreement;

- (nn) "Employer Fault" means any breach of any of the Employer representation or warranty herein set forth, failure, non-performance, non-compliance or any negligent or wilful misconduct by the Employer (whether or not attributable to any officer, member, agent, employee, or Operator, of the Employer) with respect to its obligations under this Agreement, to the extent not attributable to any Uncontrollable Circumstance or negligence or wilful misconduct of the Operator, and which materially and adversely affects the Operator's rights and obligations or ability to perform under this Agreement;
- (oo) "Employer's Inventory" has the meaning assigned in Clause 9.3 of this Agreement;
- (pp) "Employer's Manager" means the person designated by the Employer pursuant to sub-clause 3.7(1)(a) of this Agreement;
- (qq) "Equipment PM Program" has the meaning assigned in Clause 5.6 of this Agreement;
- (rr) "Equipment Renewal Program" means the replacement program which provides for the replacement of specified equipment and systems at the Facilities for the purpose of maintaining a high level of serviceability, reliability and availability of the Facilities, all in accordance with Clause 5.2;
- (ss) "Event of Default" means the occurrence of any of the following:
  - (tt) if the Employer fails to pay any fee, charge or other monetary payment, other than the Operations Fee, to the Operator within ninety (90) days of the date upon which such payment is due as provided in this Agreement;
  - (uu) if the Operator fails to operate and maintain the Facilities in accordance with the terms of this Agreement;
  - (vv) if either Party breaches any other representation, warranty, or covenant to this Agreement, where such breach is not cured by the defaulting Party within ninety (90) days of the delivery of notice specifying the breach, or, where such breach is not capable of cure within such ninety (90) day period, the defaulting Party has in good faith commenced and exerted its Best Efforts to remedy such default within such ninety (90) day period;
  - (ww) if the Operator is determined by a court of competent jurisdiction to be in non-compliance with Applicable Laws;
  - (xx) if the Operator fails to file a Compliance Report or files a deficient Compliance Report with the Employer;
  - (yy) if, at any time during the Term, the total of all occurrences of the events described in sub-clause 3.7(b)(7)(c) of this Agreement exceeds a total of five (5);

- (zz) failure to supply the Employer with updated contingency and emergency plans as required by sub-clause 3.11 of this Agreement;
- (aaa) if the Operator has caused, contributed to, or is responsible for a Safety Deficiency at the Facilities and/or has failed to correct that Safety Deficiency to the extent caused or contributed to by the Operator, as required hereunder;
- (bbb) if the Employer has caused, contributed to, or is responsible for a Safety Deficiency at the Facilities and has failed to correct that Safety Deficiency to the extent caused or contributed to by the Employer;
- (ccc) a Compliance Failure;
- (ddd) failure by the Operator to comply with the Treated Water Performance Criteria as described in sub-clause 4.2 of this Agreement;
- (eee) failure by the Operator to comply with the insurance requirements under any insurance required by Clause 14;
- (fff) if contrary to Clause 3.16 of this Agreement, the Operator employs or hires the service of a sub-operator to assist the Operator in the performance of its obligations under this Agreement without having obtained prior approval from the Employer;
- (ggg) if contrary to Clause 5.6 of this Agreement, the Operator fails to first complete the repair in a timely fashion where the Operator disagrees with or disputes the Employer's determination of an Incident of Repairs and Replacement or Corrective Maintenance or whether the Operator's expenditures for an Incident of Repairs and Replacement or Corrective Maintenance have been reasonably incurred;
- (hhh) any other Events of Default as otherwise identified in this Agreement; but for greater certainty shall not include any of the foregoing events caused by Uncontrollable Circumstances, which include Abnormal Raw Water, or the Employer fault;
- (iii) failure by the Operator to comply with the Socio-economic Objectives;
- (jjj) failure by the Operator to comply with the implementation and requirements of the OEMPr;
- (kkk) "Extraordinary Event of Default" has the meaning assigned in Clause 10.5 of this Agreement;
- (III) "Facilities" means the Employer's Water Treatment Plant ("WTP") including the associated Reservoirs, Pumping Stations and Pipelines, all as described in ANNEXURE A to this Agreement and all buildings and related infrastructure or other physical assets located thereon;
- (mmm) "Final Condition Survey" has the meaning assigned in sub-clause 5.3(2) of this Agreement;
- (nnn) "Final Contract Year" means the final year of the Term;

- (ooo) “Final Inventory and Survey” has the meaning assigned in sub-clause 5.5(4) of this Agreement;
- (ppp) “First Contract Year” means the period commencing at the Commencement Date and ending a year later;
- (qqq) “Governmental Authority” means a national, provincial or municipal, ministry, agency, department or body having jurisdiction over the Facilities, the Employer, the Operator, their agents, servants, and/or employees in respect of Applicable Laws. The term “Governmental Authority” shall not include the Employer unless otherwise specified herein;
- (rrr) “Variable Performance Fee” has the meaning assigned in Clause 7.1 of this Agreement;
- (sss) “Incident of Repairs and Replacement” has the meaning assigned in sub-clause 5.7(c) of this Agreement;
- (ttt) “Incident of Repairs and Replacement or Corrective Maintenance” has the meaning assigned in sub-clause 5.4(1)(c) of this Agreement;
- (uuu) “Indemnified Party” means the Party who is entitled to be indemnified pursuant to Clause 16 of this Agreement;
- (vvv) “Indemnifying Party” means, in relation to an Indemnified Party, the Party to this Agreement that has agreed to indemnify that Indemnified Party pursuant to Clause 6 of this Agreement;
- (www) “Initial Condition Survey” has the meaning assigned in Clause 5.3 of this Agreement;
- (xxx) “Inventory and Baseline Survey” has the meaning assigned in sub-clause 5.5(1)(b) of this Agreement;
- (yyy) “Form of Offer” means the document entitled letter of tender, which was completed by the Operator (Operator) and includes the signed offer to the Employer for the operation and maintenance of the Works.
- (zzz) “Manager” means the Employer’s Manager and the Operator’s Manager appointed from time to time during the term of this Agreement pursuant to sub-clause 3.7(1) of this Agreement or that individual’s official designate.;
- (aaaa) “Mechanical and Electrical Equipment” means all mechanical, electrical and instrumentation equipment that forms part of the Facilities;
- (bbbb) “Minimum Water Quantity” means the minimum volume of water treated as required in ANNEXURE B;
- (cccc) “Monthly Operations and Maintenance Report” has the meaning assigned in sub-clause 3.7(4) of this Agreement;

- (dddd) "Movable Assets" means all pieces of mobile plant, equipment and furniture which are not physically attached to the Facilities and which are required in the current day-to-day operations and maintenance of the Facilities;
- (eeee) "Operational Environmental Management Program (OEMPr)" means the environmental management programme issued for the WTF;
- (ffff) "Occupational Health and Safety Act" is described in Clause 3.11 of this Agreement;
- (gggg) "Operations Agent" means any service provider appointed by the Employer to act as intermediary between the Employer and the Operator;
- (hhhh) "Operations Agent's Representative" means the representative of the Operations Agent, appointed from time to time;
- (iiii) "Operations Fee" means the fee as defined in the Schedule of Rates and Prices;
- (jjjj) "Operations and Maintenance" or "O&M" means the operations and maintenance services provided pursuant to this Agreement;
- (kkkk) "Operating and Maintenance Costs" means all costs and expenses of managing, operating and maintaining the Facilities incurred by the Operator pursuant to the provisions of this Agreement;
- (llll) "Operations and Maintenance Manual" means the Operations and Maintenance manual described in Clause 3.14 of this Agreement;
- (mmmm) "Operating Period" means the period from the Commencement Date to the earlier of the expiry or termination of this Agreement;
- (nnnn) "Operational Change" means an adjustment in routine operating procedures, which does not require prior notification of any other Governmental Authority responsible for administration of Applicable Laws;
- (oooo) "Operator" means the entity that is stated as the Operator in the Contract Data. Note the term Operator and Operator will be interchangeable in terms of this Agreement and the Contract;
- (pppp) "Operator's Actual Results" means the actual results of the quality of water for any parameters set out in the Treated Water Performance Criteria;
- (qqqq) "Operator's Cumulative Monthly Results" has the meaning assigned in Clause 4.3 of this Agreement as it relates to the Treated Water;
- (rrrr) "Operator's Manager" means the person employed and designated by the Operator pursuant to sub-clause 3.7(1)(a) of this Agreement;
- (ssss) "Party" means the Employer or the Operator, as the case may be; and "Parties" means both of them;
- (tttt) "Peak" means the period of time during any day which is identified from time to time during the Term by Eskom as being peak energy consumption periods;

- (uuuu) "Performance Deduction" means any penalty or performance deduction as set out in the Agreement and the Contract Data;
- (vvvv) "Permits and Licences" means all permits, approvals, registrations and licences required by Applicable Laws in connection with the Operation and Maintenance of the Facilities including but not limited to those which were issued prior to the Commencement Date;
- (www) "Person" is to be broadly interpreted and includes an individual, a corporation, a partnership, a trust, an unincorporated organization, the government of a country or any political subdivision thereof, or any Governmental Authority, agency or department of any such government, and the executors, administrators or other legal representatives of an individual in such capacity;
- (xxxx) "Pipelines" means any conduit used to transfer water, sludge or other liquids / air to or from the WTP;
- (yyyy) "Preventative Maintenance" means routine and repetitive maintenance of the Facilities to maximize the service life of the Facilities as recommended or required by an equipment supplier or manufacturer, the design consultants or the Employer;
- (zzzz) "Previous Operator" means the Operator who was responsible for the management, operation, and maintenance of the Facilities immediately prior to the Commencement Date;
- (aaaaa) "Prime Rate" means the annual rate of interest announced from time to time by the South African Reserve Bank, as being its reference rate then in effect for determining interest rates on Rand denominated commercial loans made by a Reserve Bank;
- (bbbbb) "Process Change" means an adjustment or improvement (including, without limitation, a Capital Improvement) to the major components of the Facilities or an adjustment in routine operating procedures any of which requires prior approval from the Employer and/or any other Governmental Authority, and does not include an Operational Change;
- (ccccc) "Proposal" means the final form of a technical and/or financial proposal submitted by the Operator to the Employer in response to the Employer's Request for Proposals to manage, operate and maintain the Facilities and incorporated into this Agreement;
- (dddd) "Pumping Stations" means the pumping stations which are part of or associated with the Facilities;
- (eeee) "Quarterly Contract Report" has the meaning assigned in sub-clause 3.7 of this Agreement;

- (fffff) “Quarterly Water Quality Report” has the meaning assigned in sub-clause 3.7(3)(b) of this Agreement;
- (ggggg) “Raw Water” means the Acid Mine Drainage (AMD) water abstracted from the South West Vertical Shaft;
- (hhhhh) “Repairs and Replacement” means all non-routine, non-repetitive activities repair or replacement of structures, machinery, equipment or rolling stock required for continuity of operations, safety, and operating performance that are necessary to prevent or correct a failure of any component of the Civil, Structural and Site-Related Assets and the Mechanical and Electrical Equipment and which is not included as part of Preventative Maintenance;
- (iiiiii) “Reports” means the Monthly Operations and Maintenance Report, the Quarterly Contract Report, the Quarterly Water Quality Report, the Annual Asset Report, and the financial reports;
- (jjjjj) “RFP” or “Request for Proposals” means the Employer’s Request for Proposals, including all Addendums issued by the Employer with respect to the provision of the operation and maintenance services for the Facilities;
- (kkkkk) “Routine Maintenance” means Corrective Maintenance or Preventative Maintenance or both;
- (lllll) “Safety Deficiency” has the meaning assigned in sub-clause 3.11(2) of this Agreement;
- (mmmmm) “SCADA” means the Supervisory Control and Data Acquisition software and hardware and is described in Clause 3.10 of this Agreement;
- (nnnnn) “Semi-Annual” means occurring twice per year;
- (ooooo) “Service Area” means the geographical area located serviced by the Employer as at the Commencement Date;
- (ppppp) “Spare Parts” means all replaceable parts and supplies required for the purpose of maintaining the functionality of plant and equipment at the Facilities. Spare Parts are typically items that are subject to wear and replacement, are maintained in an inventory and are used in Routine Maintenance procedures;
- (qqqqq) “Spare Parts Inventory” has the meaning assigned in sub-clause 9.3(4) of this Agreement;
- (rrrrr) “Term” has the meaning assigned in Clause 2.1 of this Agreement;
- (sssss) “Third Party Claim” has the meaning assigned in sub-clause 16.4(1) of this Agreement;
- (ttttt) “Transformation Goals and Social Development Requirements” means the requirements and/or objectives;

- (uuuuu) "Treated Water" means water that has passed through the treatment plant, prior to final discharge;
- (vvvvv) "Treated Water Performance Criteria" means the Treated Water criteria as set out in **ANNEXURE B** to this Agreement;
- (wwwww) "Uncontrollable Circumstance" means any act, event or condition which is beyond the reasonable control of or could not reasonably be anticipated by the Party relying thereon as justification for a delay in, non-compliance with, or non-performance of any obligation of such Party pursuant to this Agreement and shall include but not be limited to the following:
- (xxxxx) an act of God, landslide, lightning, earthquake, hurricane, flood, tornado, fire, explosion, pandemics, acts of public enemy, act of terrorism, war, blockade, sabotage, insurrection, riot or public disturbance;
- (yyyyy) an order of any court, administrative or governmental agency of competent jurisdiction which has not been made as a result directly or indirectly of the actions or inaction of the Party against whom such an order is issued. This specific provision shall be construed strictly against the Party seeking to so rely to excuse non-performance or delay;
- (zzzzz) a Change of Laws. This specific provision be construed strictly against the Party seeking to so rely to excuse non-performance or delay;
- (aaaaa) the suspension or termination of any licence relating to the Facilities or the operation and maintenance thereof, or the imposition of a term, condition or requirement for the operation and maintenance of the Facilities which is more stringent or burdensome than the terms, conditions or requirements in effect as of the Commencement Date, to the extent that such occurrence is not the result of wilful or negligent action, error or omission or a lack of reasonable diligence of the Operator or the Employer, whichever is asserting the occurrence, provided however that the contesting in good faith or the failure in good faith to contest any such occurrence shall not be construed as such a wilful or negligent action or lack or reasonable diligence;
- (bbbbb) loss or inability to obtain service from a utility other than as a result of the action or inaction of the Party;
- (ccccc) Abnormal Raw Water, or
- (dddddd) Vandalism which could not otherwise have been prevented by the proper and necessary security systems required by Clause 3.15 of this Agreement.

(eeeeee) provided, however, that a failure by a Party to perform its obligations under this Agreement arising from or related to such Party's insufficient cash flow or its economic or financial condition generally, shall not constitute an Uncontrollable Circumstance;

(ffffff) and "Uncontrollable Circumstances" means the plural of the foregoing;

(gggggg) "Water Treatment Plant" ("WTP") means the water treatment plant and the buildings and all related infrastructure located therein, part of the Facilities as described in **ANNEXURE "A"**.

### 1.3 Annexures.

The following annexures which are attached to this Agreement are incorporated by reference into this Agreement and are deemed to be a part of it:

- ... DESCRIPTION OF WTP FACILITIES
- ... SCOPE OF SERVICES
- ... TREATED WATER PERFORMANCE CRITERIA
- ... SAMPLING AND TESTING REQUIREMENTS
- ... OPERATIONAL ENVIRONMENTAL MANAGEMENT PROGRAMME (OEMPR)
- ... LATENT DEFECTS REGISTER
- ... GROUNDWATER MONITORING TOR
- ... CHEMICAL SPECIFICATION
- ... OPERATING PARAMETERS
- ... INVENTORY OF LABORATORY EQUIPMENT
- ... TRANSFORMATION GOALS AND SOCIAL DEVELOPMENT REQUIREMENTS

### 1.4 Entire Agreement.

This Agreement constitutes the entire agreement between the Parties pertaining to the subject matter of this Agreement and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written. There are no conditions, warranties, representations or other agreements between the Parties in connection with the subject matter of this Agreement (whether oral or written, express or implied, statutory or otherwise) except as specifically set out in this Agreement.

In the Contract, except where the context requires otherwise:

- a) words indicating one gender include all genders;

- b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing, and
- d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

### **1.5 Priority of Documents.**

The documents forming the Agreement are to be taken to be mutually explanatory of one another. In the case of any conflict between any of the documents which form part of this Agreement, the provisions of this Agreement will take precedence over Annexures to this Agreement which, in turn, will take precedence over the Form of Offer attached to this Agreement.

### **1.6 Amendments.**

No amendment to this Agreement shall be effective unless in writing and signed by all Parties to this Agreement.

### **1.7 Number of Days.**

Except as expressly stated to the contrary elsewhere herein, in computing the number of days, for the purposes of this Agreement, all days shall be counted including Saturdays, Sundays and legal holidays, provided, however, that if the final day of any period shall fall on a Saturday, Sunday or legal holiday, then the final day shall be deemed to be the next day which is not a Saturday, Sunday or legal holiday.

### **1.8 Statute and Regulation References.**

Any references in this Agreement to any statute, regulation or any section thereof shall, unless otherwise expressly stated, be deemed to be a reference to such statute, regulation or section as amended, restated or re-enacted from time to time.

### **1.9 References to the Operator.**

For the purpose of this Agreement, all references to the Operator shall, unless the context required otherwise, include its directors, officers, employees, agents and Operators.

### **1.10 References to Currency.**

For the purpose of this Agreement, all references to currency or money shall mean South African Rand.

### **1.11 Express Terms.**

The express terms herein control and supersede any course of performance or usage of the trade inconsistent with any of the terms herein.

### **1.12 Corrupt Practices**

The Operator (which for the purpose of this sub-clause 1.12 shall include his directors, employees, agents, shareholders and/or partners) warrants that the performance of his obligations shall in no way constitute an infringement or other violation of the laws of the Republic of South Africa, and in particular will under no circumstances engage in any activities which may constitute corruption or corrupt activities within the ambit of the Prevention and Combating of Corrupt Activities Act, No 12 of 2004, such activities to include:

- a) accepting or agreeing, or offering to accept or give or offer any gratification to any person in order to influence such other person to act in a manner that amounts to the illegal dishonest exercise or performance of any power, duty, statutory, contractual or other legal obligation; or
- b) procuring that any person, directly or indirectly, accepts or agrees or offers to accept any gratification from another person or gives or agrees or offers to give to any other person any gratification in order to improperly influence the conclusion or performance of his obligations in terms of this Contract.
- c) In addition to any right which the Employer may have to cancel, in the event that the Operator is convicted on a charge relating to, or concerning corruption, bribery or fraud during the 10-year period preceding the Commencement Date, or being convicted on a charge relating to, or concerning corruption, bribery or fraud, or in the event that the Operator gives or offers any person any bribe, gratuity, commission or other thing of value as contemplated in sub-clause 1.12:
  - i.) The Operator shall forfeit any profit to be derived from this Contract;
  - ii.) Such profit will be deemed for the purpose hereof to be 10% of the total Contract Price;
  - iii.) The Operator will make payment thereof on demand; and
  - iv.) The Employer shall be entitled to deduct such amount from any amount which is due or may become due and payable to the Operator whether arising from this Contract or any other contract between the Employer and the Operator.

## **TERM AND COMMENCEMENT DATE**

### **1.1 Term.**

The term of this Agreement shall be five (5) years, starting from the date stated in the Contract Data. If the Employer wishes to renew this Agreement it shall provide the Operator a minimum of five (5) months written notice of its wish to renew this Agreement, and subject to the Parties mutually agreeing to renew the Agreement, the Agreement shall be renewed for a maximum of a one (1) year term, unless extended or terminated pursuant to the express provisions of this Agreement (“**Term**”). Whenever there is a reference to the Term in this Agreement, it means the initial Term and also the extended Term where renewed by the Parties unless otherwise terminated in accordance with this Agreement.

## **OPERATION AND MAINTENANCE OF THE FACILITIES**

### **1.1 Facilities in General.**

#### ***Description of the Facilities.***

- (a) The scope of this Agreement, except where expressly provided, is confined to the operation and maintenance of the Facilities as they are described in Annexure A of this Agreement. This Clause makes references to several Annexures. The relevant Annexures shall have precedence in the interpretation of any ambiguity or inconsistency between them and this Clause.

#### ***Use and Possession of the Facilities.***

- (a) All grounds, facilities, equipment, vehicles and documents relating to the Facilities and owned by the Employer or acquired by the Employer shall remain the property of the Employer, except as may otherwise be provided for herein.
- (b) The Operator shall act as an independent Operator or operator to the Employer for the safe, professional and efficient operation and maintenance of the Facilities. The Operator shall use all the Facilities exclusively for the operation and maintenance of the Facilities and shall not carry out any other business from the Facilities, without the express written permission of the Employer.
- (c) The Operator shall, as specified in the Agreement or as instructed by the Employer, allow appropriate opportunities for carrying out work to:
  - (d) the Employer's Personnel,
  - (e) any other Operators or contractors employed by the Employer, and
  - (f) the personnel of any legally constituted public authorities, who may be employed in the execution on or near the WTP of any work not included in the Agreement.

- (g) If any such instruction causes the Operator to incur additional cost, such reasonable cost will be reimbursed to the Operator.

***Employer Access to Facilities.***

- (a) The Employer shall have twenty-four (24) hour per day access to the Facilities. The Operator shall allow unrestricted access to the Facilities to the Employer's Manager or the Employer's Manager's delegate without notice and without restriction. The Employer's Manager or his/her delegate shall not have the right to direct or control the activities of the Operator or its employees. The Employer's Manager and his/her delegate shall comply with all reasonable health and safety procedures of the Operator.

**1.2 Scope of Services.**

- (a) The Operator shall perform all activities and services for the proper and effective management, operation and maintenance of the Facilities in a cost effective and professional manner as set forth in this Agreement and in accordance with generally accepted principles and practices for water treatment and treatment of AMD, the Employer policies applicable to the Facilities, and all Applicable Laws.
- (b) Except as otherwise provided in this Agreement, the Operator shall provide or obtain all personnel, materials, equipment, tools, services and supplies necessary to manage, operate and maintain the Facilities and performance levels in the manner required by this Agreement, and in any event to a standard that meets industry standards, including but not limited to the Scope of Services as described in **ANNEXURE B** of this Agreement. Operator

**1.3 Testing and Sampling.**

***Procedures.***

- (a) The Operator shall, at its own cost, conduct all testing and analyses required by this Agreement as described in ANNEXURE E and Applicable Laws. Routine testing can be carried out in the on-site laboratory; however a specified number of testing shall be carried out by an SANAS accredited laboratory. The Operator shall provide the Employer with evidence of such accreditation.
- (b) The Operator shall ensure that all sampling and testing programs required to be conducted by the Operator pursuant to this Agreement shall be conducted in accordance with the applicable testing requirements.

- (c) Any testing to be conducted by the Employer, in addition to the testing required to be conducted pursuant to the terms of this Agreement shall be the sole responsibility and shall be conducted at the sole expense of the Employer. The Employer shall conduct all sampling and testing in accordance with the same requirements indicated above. The Operator shall provide all further sampling necessary to allow the Employer to conduct the additional testing at no further cost to the Employer.

***Verification of the Operator's Testing Procedures.***

- (a) The Employer shall be permitted to, on an annual basis, at its own expense, conduct a review of the Operator's laboratory and testing procedures and confirm the test results produced by the Operator's laboratory. If the Employer's review demonstrates that the results produced by the Operator's laboratory are materially inaccurate, the Employer shall be entitled to require an Adjustment to the Operations Fee pursuant to Clause 8.3 of this Agreement for those costs of its review referable to the inaccuracy of the laboratory's results. The Operator shall, upon receipt of notice from the Employer of material inaccuracy of laboratory results, correct the quality problem at its laboratory immediately.
- (b) In addition to sampling and testing by the Operator, the Employer may at any time elect to take independent samples or obtain split samples from the Operator and to perform tests and analyses in order to assess the Operators sampling and testing procedures and to assess the Operator's compliance. The Operator shall cooperate fully with any such effort by the Employer and will provide samples and test results promptly at no further cost to the Employer.
- (c) Compliance with Applicable Laws or Change of Laws.

***General.***

- (a) The Operator shall be knowledgeable of and comply with Applicable Laws.
- (b) Should any procedures or standards set forth in this Agreement conflict with procedures or standards contained in any Applicable Laws, the more stringent procedures or standards shall apply.
- (c) The Operator shall not be in breach of its obligations hereunder if it is prevented from complying with Applicable Laws due to Uncontrollable Circumstances, the Employer Fault, the limits of the capacity of the Facilities, Abnormal Raw Water quality or quantity inconsistent with historical seasonal variations or where the Operator has obtained the written consent of the Employer for non-compliance (provided however that such consent of the Employer shall only apply to the specific breach or non-compliance and shall not apply to subsequent breaches by the Operator), and in each case only to the extent the obligations of the Operator are affected by such circumstances as described herein.

- (d) If the Operator is determined by a court of competent jurisdiction, to be in noncompliance with Applicable Laws, then, except when such non-compliance is caused by Uncontrollable Circumstances, Abnormal Raw Water quality or quantity inconsistent with historical seasonal variations or the Employer Fault, the Employer may deduct the Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee, and such non-compliance shall be an Event of Default.

***Process or Operational Changes to Achieve Compliance.***

- (a) If at any time during the Term of this Agreement, Process Changes are required to comply with Applicable Laws or either Process Changes or Operational Changes are required to comply with a Change of Laws, then the Operator shall promptly provide the Employer with its recommendations for achieving compliance and an estimate of the impact on Operating and Maintenance Costs for achieving compliance with such Applicable Laws or a Change of Laws. The Employer shall evaluate the Operator's recommendations and shall, within a reasonable period of time, either approve the Operator's recommendations or determine appropriate and necessary Process or Operational Changes to be made and direct the Operator on the appropriate approach to achieving compliance. The Operator shall not claim any Adjustment to the Operations Fee for the cost of preparation of its recommendations for achieving compliance.
- (b) Where either Process Changes or Operational Changes are required to achieve compliance with a Change of Laws or, where the Employer directs the Operator to carry out alternative Process Changes to achieve compliance with Applicable Laws, and any of the aforementioned activities causes an increase or decrease in the actual Operating and Maintenance Costs, either the Employer or the Operator may require an Adjustment to the Operations Fee in accordance with Clause 8.3 of this Agreement.
- (c) The Operator shall make any Operational Changes or Process Changes required in order to achieve compliance with Applicable Laws at its own expense unless such Operational Changes or Process Changes are required in connection with a Change of Laws.
- (d) If the Operator disputes the Employer's decision to disapprove Operator's recommendation pursuant to sub-clause 3.4(2)(a), or either the Operator or the Employer disputes a required Adjustment to the Operations Fee pursuant to sub-clause 3.4(2)(a), then the Operator or the Employer, as the case may be, may refer the matter in dispute to dispute resolution pursuant to of this Agreement.

***Process or Operational Changes Initiated by the Operator.***

- (a) Process Changes and Operational Changes may be made by the Operator during the course of this Agreement. No Process Change will be made without the prior written consent of the Employer. Operational Changes will be made as a matter of routine practice by the Operator and will not require prior approval by the Employer. However, the Operator shall inform the Employer of any material Operational Changes in its monthly reports to the Employer.
- (b) The Operator shall be responsible for all risks associated with any Process Change proposed and implemented by it, and/or any Operational Changes proposed and implemented by it as part of the operation and maintenance of the Facilities, including, without limitation, the risk of complying with all Applicable Laws, but excluding all risks associated with Change of Laws or other Uncontrollable Circumstance.

***Operating and Management Policies and Procedures.***

- (a) The Operator shall prepare operating and management policies and procedures with respect to the day-to-day operations of the Facilities, including quality control and quality assurance procedures. The Operator shall consult with the Employer in the preparation of such operating and management policies and procedures and shall permit the Employer to review and provide comments on them. The operating and management policies and procedures prepared by the Operator pursuant to this sub-clause shall comply with the Employer policies, where applicable and shall become the property of the Employer.

***Communications between the Employer and the Operator.******Managers***

- (a) The Employer shall designate one person, the Employer's Manager, to act as their primary liaison and coordinator. The Operator shall at all times employ a person designated as the Operator's Manager, who shall, among his or her other duties, serve as the Operator's liaison with the Employer and who shall be the Operator representative primarily responsible for dealing with the Employer. The Operator shall submit the name of its designated Operator's Manager for the Facilities to the Employer for approval, which approval shall not be unreasonably withheld. The Employer reserve the right to veto any of the Operator's designated Operator's Managers submitted for approval at the sole discretion of the Employer. The Operator shall, where practicable provide the Employer with at least sixty (60) days prior written notice of any change in the Operator's Manager.

- (b) The Employer and the Operator shall also appoint designees to the Employer Manager's position and the Operator Manager's position to act on behalf of the respective Manager in the respective Manager's absence. The Employer shall also review and approve the Operator's designee for the Operator's Manager, which approval shall not be unreasonably withheld. The Operator shall provide the Employer with at least sixty (60) days prior written notice of any change in the Operator's Manager's designee.
- (c) The Employer reserves to themselves the right to request in writing, upon reasonable notice to the Operator, that the Operator replace the Operator's Manager or designee, or Manager of any individual Facility, and the Operator shall, subject to Applicable Laws, make best efforts to comply with such a request from the Employer. The Employer or the Operator may refer any dispute with respect to this sub-clause to dispute resolution pursuant to Clause 17.
- (d) The Employer's Manager has the authority to ensure that the provisions of this Agreement are faithfully adhered to. The authority of the Employer's Manager shall be limited to providing direction, approval or consent in respect of any matter falling within the provisions of this Agreement, and shall be binding upon the Employer. The Employer's Manager shall not have the authority to provide direction, approval or consent or enter into any agreement for any matter that falls outside of the provisions of this Agreement and any such direction, approval, consent provided or agreement entered into shall not be binding upon the Employer.
- (e) The Employer may appoint an Operations Agent to manage the Operator on the Employer's behalf. The Operations Agent will act in place of the Employer's Manager. The Operations Agent shall have the same rights and privileges as provided in this agreement to the Employer.

**Compliance Reports.**

- (a) The Operator shall prepare and submit all performance, environmental and monitoring reports required by this Agreement and the Applicable Laws and shall file such reports with the Employer's Manager at least ten (10) Business Days prior to the date such reports are required. All environmental and monitoring reports shall be provided to the Employer in electronic format and in hard copy.
- (b) The Operator shall provide a Compliance Report on a monthly basis, which will include a summary of all test results to confirm that the Treated Water is in compliance with the Performance and Compliance Criteria. All Compliance Reports shall be provided to the Employer in electronic format and in hard copy.

**Monthly Operations and Maintenance Report.**

- (a) The Operator shall compile, maintain and provide to the Employer, within ten (10) Business Days of the end of each calendar month in each Contract Year and no later than seven days prior to each monthly meeting with the Employer, a comprehensive Monthly Operations and Maintenance Report. Quarterly Contract Report
- (b) The Operator shall compile, maintain and provide to the Employer, within thirty (30) days after the end of each 3 month period (quarterly or four times per Contract Year) a comprehensive Quarterly Contract Report. The Quarterly Contract Report should not be a mere consolidation of the Monthly Operations and Maintenance Reports. Quarterly Water Quality Report.
- (c) The Operator shall compile, maintain and provide to the Employer, within thirty (30) days after the end of each 3 month period (quarterly or four times per Contract Year), a comprehensive Quarterly Water Quality Report. The Quarterly Water Quality Report shall summarise all the water quality information on both raw and treated water quality.

**Annual Asset Report and Financial Reports.**

- (a) The Operator shall provide the Employer with a detailed Annual Asset Report summarizing the condition of the Civil, Structural and Site-Related Assets, using the Initial Condition Survey as a guide, within sixty (60) days after the end of each Contract Year.

**Financial Reports.**

- (a) For each quarter of each Contract Year, the Operator shall provide the Employer with a verifiable summary of the Operator's costs for the preceding quarter, in a form and containing the content as mutually agreed upon by the Parties acting reasonably with respect to its management, operation, and maintenance of the Facilities within thirty (30) days of the end of each quarter of the Contract Year. These verifiable summaries shall be provided to the Employer together with the Quarterly Contract Reports; and
- (b) At the end of each Contract Year, the Operator shall provide the Employer with a verifiable summary of the Operator's costs for that Contract Year, in a form and containing the content as mutually agreed upon by the Parties acting reasonably, related to the management, operation and maintenance of each individual WTP and all other Facilities within ninety (90) days of the end of each Contract Year.

(6) ***Deficient or Late Compliance Reports.***

- (a) Except when caused by an Uncontrollable Circumstance, if the Operator fails to submit a Compliance Report or submits a deficient Compliance Report due to negligence or non-performance of the Operator's obligations, the Employer may deduct the Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee and, such a failure by the Operator, shall be an Event of Default.

***Deficient or Late Reports.***

- (a) Except when caused by an Uncontrollable Circumstance, if, during any one Contract Year, the Operator fails to deliver one (1) or more Reports other than a Compliance Report within the prescribed time period, or delivers one or more Reports that, in the opinion of the Employer, are materially deficient or have omitted material information, the Employer may withhold the Performance Deduction as set out in the Contract Data per month of the monthly payment of the Variable Performance Fee or Operations Fee payable by the Employer and the Employer shall not pay the amount withheld unless and until the Operator delivers the Report, or corrects the deficiencies identified by the Employer, as the case may be.
- (b) Except when caused by an Uncontrollable Circumstance, if, at any time during the Term, the Operator fails to deliver three (3) or more Reports within the prescribed time period, or delivers three (3) or more Reports that, in the opinion of the Employer, are materially deficient or have omitted material information, the Employer may deduct from the Variable Performance Fee or Operations Fee the Performance Deduction as set out in the Contract Data
- (c) If, at any time during the Term, the total of all occurrences of the events described in subsections 3.7(b)(7)(a) and 3.7(b)(7)(b) herein equals to or exceeds a total of five (5) in any Contract Year, then such occurrences shall be an Event of Default.
- (d) The Parties agree that a failure to file a report other than a Compliance Report due to late receipt of sampling, testing or analytical results from a third party where the Operator can reasonably demonstrate to the Employer's Manager that the third party was in default of its contractual obligations to deliver sampling or test results in a timely fashion, and that the Operator used its Best Efforts to obtain such results in a timely fashion, shall not be considered an occurrence under any of the paragraphs in sub-clause 3.7(b)(7).
- (e) The Employer shall notify the Operator in writing within thirty (30) days after receipt of a Report of any deficiencies in such Report. If written notice is not provided within the time within thirty (30) days after receipt of a Report, such Report shall be considered acceptable and the Employer shall not withhold any amount in respect of such Report.

***Inspections and Review of Records and Reports.***

- (a) The Operator shall permit the Employer and its authorized representatives, during the Term of the Agreement and without unreasonable disruption to the Operator, to examine and electronically monitor and retrieve any and all operating and maintenance records and Reports of the Operator, and make copies of and take extracts from such records and Reports as may be reasonably necessary to ensure compliance by the Operator with the terms of this Agreement and review any of the records and Reports described above.

***Dealings with Governmental Authorities.******Communications with Governmental Authorities.***

- (a) The Employer shall be the primary liaison with the Governmental Authorities and will invite the Operator to attend or participate in such meetings relevant to the Operator's management, operation and maintenance of the Facilities or the Operator's obligations pursuant to this Agreement. Note that the Employer by definition is excluded from being a Governmental Authority.
- (b) The Operator shall not communicate directly with any Governmental Authorities, with the exception of times when the Operator is under a legal obligation to report directly to the Governmental Authorities or where the Operator has obtained the prior written approval of the Employer's Manager. The Operator shall report forthwith to the Employer regarding any such discussions.

***Permits and Licences.***

- (a) The Operator shall prepare and file on a timely basis with the appropriate authorities all applications for Permits and Licences and renewals of Permits and Licences which are required in connection with the management, operation and maintenance of the Facilities.

***Operator's Ability to Provide Services.***

- (a) The Operator shall ensure that at all times it maintains the appropriate Permits and Licences to fulfill its obligations pursuant to this Agreement. Such Permits and Licences shall include, but not be limited to, any requirement of a Government Authority imposed on the Operator as a precondition to carrying on business.

***Contingency and Emergency Planning.***

- (a) The Operator shall review and update all current contingency and emergency response plans. The Operator shall ensure that any such plan meets all Applicable Laws and are consistent with the standard and policies of the Employer. The contingency and emergency response plans shall be submitted to the Employer for the Employer's approval thirty (30) days prior to the Commencement Date. Failure to submit such plan in compliance with this sub-clause shall be an Event of Default.

- (b) In the event of an Emergency Situation, the Operator must respond within thirty (30) minutes and ensure appropriate staff is available at the Facilities within sixty (60) minutes from the earlier of the occurrence of the Emergency Situation or the reasonable time within which a prudent operator should have known about the Emergency Situation. The Employer may deduct the Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee for each event of non-compliance with the performance requirements of this sub-clause. Further, in the event of non-compliance by the Operator with the performance requirements of this sub-clause, the Employer may, upon giving verbal notice to the Operator's Manager, take such action as is reasonably necessary to respond to the Emergency Situation, and the Operator shall pay the reasonable cost of the Employer's response to the Emergency Situation plus a mark-up of five percent (5%).

### ***SCADA Systems.***

- (a) The Operator shall continue to operate and maintain the Supervisory Control and Data Acquisition (the "**SCADA**") systems associated with the Facilities and shall be responsible for all operations and maintenance, training, service level standards, and the operation and maintenance of enhancements to the SCADA systems, including back-up systems also as required. For greater certainty, the Employer shall retain the responsibility for SCADA programming, and the Operator shall only make changes after having consulted with and receiving approval from the Employer.

### **Health and Safety Procedures.**

#### ***Occupational Health & Safety.***

- (a) This Agreement will be governed by the requirements of the Occupation Health and Safety Act (Act 85 of 1993) and all applicable regulations, and the Operator shall comply with all applicable health and safety laws and regulations.

#### ***Safety Audits and Non-Compliance.***

- (a) The Employer may, at its sole discretion and expense, conduct safety audits of the Facilities on a semi-annual basis which may include inspections of physical conditions and reviews of the Operator's compliance with all applicable safety legislation and regulations.
- (b) If, as a result of the Employer's safety audit or otherwise, the Employer determines that one of the following deficiencies ("**Safety Deficiencies**") has occurred:
- i.) non-compliance with Applicable Laws relating to health and safety; or
  - ii.) the creation by the Operator of a health or safety hazard to a worker or the environment which is contrary to Applicable Laws or contrary to the procedures established under this Agreement,

- iii.) then the Operator shall correct the Safety Deficiency to the satisfaction of the Employer within the time frame determined by the Employer acting reasonably but in any event within three (3) months of the identification of the Safety Deficiency.
- (c) If the Operator fails to correct the Safety Deficiency to the satisfaction of the Employer within the time frame determined by the Employer such failure shall be considered an Event of Default, and, the Employer may, in their discretion, withhold from the Variable Performance Fee or Operations Fee payable to the Operator the Performance Deduction as set out in the Contract Data for each month in which the Operator failed to correct the Safety Deficiency within the prescribed time frame, unless the Operator is using Best Efforts to correct such Safety Deficiency. A period of three (3) months or longer, shall not constitute Best Efforts as that phrase is used in this sub-clause. The withholding of payment of the Variable Performance Fee or Operations Fee as described herein is in addition to the rights and remedies of the Employer.

**Technical Support.**

- (a) The Operator shall provide all necessary technical support to ensure the performance of the Operator's obligations under this Agreement and the proper management, Operation and Maintenance of the Facilities.

**Accounting.**

- (a) The Operator shall maintain up-to-date financial records of activities related to the Facilities prepared in accordance with the accepted accounting standards.

**Operations and Maintenance Manuals.**

- (a) The Employer shall provide to the Operator at the Commencement Date, the available Operations and Maintenance Manuals for the Facilities.
- (b) The Operator shall within three (3) months of the Commencement Date prepare revised and updated Operations and Maintenance Manuals as appropriate to reflect changes to Operations and Maintenance procedures for the Operating Period. The revised and updated Operations and Maintenance Manuals shall be to the reasonable satisfaction of the Employer and shall become the property of the Employer.
- (c) The Operator shall within three (3) months of the Commencement Date compile all current Facility drawings and keep same on file in a drawing room. These documents shall be updated at least annually. The Operator will be responsible for any costs of updating the drawings in electronic format. The Operator's obligation to maintain drawings and figures does not include the providing of engineering services and/or professional certifications.

- (d) Any operational changes made by the Operator must result in the corresponding changes and updates being made to the Operations and Maintenance Manuals and such changes and updates to the Operations and Maintenance Manuals must be made within sixty (60) days from the implementation of the operational change. The Employer may withhold from the Variable Performance Fee or Operations Fee payable to the Operator the Performance Deduction as set out in the Contract Data for each month the relevant changes and updates are delayed, and may deduct an additional Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee after three (3) months delay by the Operator in completing the updates and changes.
- (e) The Operator shall, one month prior to the completion of termination of the Agreement, prepare and submit an updated Operations and Maintenance Manual to the Employer. The Employer may withhold the final Operations Fee payment until such updated Operations and Maintenance Manual has been submitted to the satisfaction of the Employer.

#### **Security.**

- (a) The Operator shall be responsible to secure the Facilities against unauthorized access and theft or damage, including if necessary, the use of physical surveillance. For greater certainty, the Operator shall acknowledge that the Employer has implemented a system of closed-circuit television cameras at the Facilities. The Operator shall ensure that this system is maintained at all times. The Operator shall take into account the record of security incidents available as well as other records available indicating the historic security issues in the area.

#### **Use of Sub-operators.**

- (a) Upon receipt of written notice from the Employer at any time during the Term, the Operator shall not, at the sole discretion of the Employer, employ or hire the services of a specified sub-operator to assist the Operator in the performance of its obligations under this Agreement without the prior written consent of the Employer, and such consent shall not be unreasonably withheld.
- (b) The Employer may, at the sole discretion of the Employer, instruct the Operator to employ or hire the services of a specified sub-operator for certain portions of the operations and maintenance of the Facility.

#### **Innovation and Improvement.**

- (a) The Parties hereby agree and the Employer expects the Operator to employ initiative and ability to optimize the Facilities' Operations and Maintenance, including but not limited to all Efficiency Improvements and Capital Improvements contemplated by this Agreement.

The Operator shall proactively seek out and propose innovative strategies to the Employer to enhance performance of the operations and maintenance and to reduce the overall Operating and Maintenance Costs. The foregoing shall in no way result in an adverse impact on health and safety nor breach any Applicable Law and must at all times be carried out by the Operator by employing Best Practices.

### **Transformation Goals and Social Development Requirements**

- (a) The Operator shall comply with the Transformation Goals and Socio Economic Requirements as set out . Failure to do so will result in the Operator becoming liable for the Performance Deduction as set out in the Contract Data. Should Performance Deductions become due for payment by the Operator to the Employer, such amounts shall be deducted from the Variable Performance Fee or Operations Fee.

### **Environment**

- (a) The Operator shall implement and comply with the requirements of the Operational Environmental Management Programme (“OEMPr”) and the cost of such implementation and compliance shall be included in the Operations Fee.
- (b) The Employer will schedule regular independent environmental audits and the findings will be communicated to the Operator. The Operator shall attend promptly to any non-compliance with the OEMPr. Any non-compliance that is not resolved within 7 days of the non-compliance being identified or communicated shall result in a reduction to the Variable Performance Fee or Operations Fee of the Performance Deduction as set out in the Contract Data per non-compliance. The Operator shall in any case provide a written report to the Employer on the resolution of any findings or non-compliances within 14 days, failing which a further Performance Deduction as set out in the Contract Data shall be applied.

## **WATER QUALITY AND PERFORMANCE REQUIREMENTS**

### **1.1 Quantity of Treated Water.**

- (a) The Operator shall abstract and treat the Raw Water at the WTP in order to produce Treated Water at a rate as determined by the Employer from time to time and to maintain at all times water levels in Central Basin. The Operator is responsible for calibrating and reading all meters of the Facilities.

### **1.2 The Employer's Treated Water Performance Criteria and Compliance Criteria.**

- (a) The Operator shall manage and operate the Facilities so as to produce a quality of Treated Water that at a minimum meets the Compliance Criteria and meets the standards of Treated Water as described in the Employer's Treated Water Performance Criteria described herein and attached to this Agreement.
- (b) In the event of any conflict between any Compliance Criterion and the Employer's Treated Water Performance Criterion the stricter Criterion shall apply.
- (c) The Operator acknowledges that there may be a periodic variation in Raw Water characteristics over the course of the Term and that there shall be no Adjustment to the Operations Fee in the event of any such variations in Raw Water characteristics provided such seasonal variations are not materially inconsistent with historical seasonal variations.

### **1.3 Treated Water Performance.**

- (a) For the purposes of this Agreement, the quality of Treated Water supplied by the WTP shall be determined using the sampling tests and frequency of tests identified in the **ANNEXURE E** to this Agreement.
- (b) In the event of an Uncontrollable Circumstance, variation in Raw Water quality or quantity materially inconsistent with historical seasonal variations, or the Employer's Fault, the Operator shall be entitled to require an Adjustment to the Operations Fee in accordance with Clause 8.3 of this Agreement to reflect any increase in the actual Operating and Maintenance Costs that the Operator can demonstrate has occurred as a result of the Uncontrollable Circumstance, variation in Raw Water quality or quantity, or, the Employer Fault.

#### 1.4 Compliance Failures.

- (a) The Parties agree that a Compliance Failure shall be deemed to have occurred when the Operator's Actual Results exceed the maximum permissible values for that specified criterion and for the applicable time period as provided in the Compliance Criteria for Treated Water quality, when the operator fails to achieve the Minimum Required Quantity or when the Operator fails to comply with any other terms, conditions, instructions contained within the Compliance Criteria. A Compliance Failure shall be deemed not to have occurred if the Operator can demonstrate, and the Employer determines that, such exceedance or non-compliance is a result of the occurrence of an Uncontrollable Circumstance, variation in Raw Water quality or quantity materially inconsistent with historical seasonal variations or the Employer's Fault.
- (b) The Party having knowledge of a Compliance Failure shall notify the other Party of a Compliance Failure immediately upon discovering the Compliance Failure.
- (c) Where a Party is obligated by law to inform a Governmental Authority of a contravention of any Applicable Law or any other Permits and Licences requirement, it shall notify the other Party immediately after informing such Governmental Authority.
- (d) The Operator shall take steps to rectify the situation giving rise to the Compliance Failure immediately and shall provide to the Employer, within three (3) Business Days of a Compliance Failure, an action plan including a schedule for implementation, to prevent the Compliance Failure from reoccurring.
- (e) The Managers shall meet to review the Compliance Failure identified by the Operator, and the Employer shall approve, in its sole discretion, the remedial steps to be taken by the Operator, if any.
- (f) If the Operator fails to take steps to correct the Compliance Failure immediately, such failure shall be considered an Event of Default and the Employer may, in its sole discretion, exercise its rights to terminate this Agreement pursuant to Clause 10.1 of this Agreement. In the alternative, the Employer may deduct the Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee and may withhold for a period of up to one year, the Performance Deduction as set out in the Contract Data from the monthly payment of the Variable Performance Fee or Operations Fee.
- (g) Where the Operator demonstrates and the Employer determines that the Compliance Failure has resulted from the occurrence of an Uncontrollable Circumstance, variation in Raw Water quality or quantity materially inconsistent with historical seasonal variations or the Employer's Fault, then the Employer shall not have the right to terminate this Agreement nor make any deduction from the Variable Performance Fee or Operations Fee pursuant to sub-clause 4.4(f) above.

- (h) Where the Operator disagrees with or disputes the Employer's decision on whether a Compliance Failure has occurred, the cause of such Compliance Failure, the remedial steps to be taken to address the Compliance Failure or the assessment of deductions, then the Operator may refer the matters in dispute to dispute resolution pursuant to Clause 17 of this Agreement.

#### **1.5 Cumulative Monthly Treated Water Performance Criteria Failures.**

- (a) The Parties also agree that the Operator's Treated Water shall be measured on a cumulative monthly basis against the Employer's Treated Water Quality Performance Criteria and Minimum Water Quantity in relevant **ANNEXURE** to this Agreement.
- (b) If the Operator's Cumulative Monthly Results at the end of any month in a Contract Year exceed the monthly performance criteria a "Cumulative Monthly Treated Water Performance Failure" shall be deemed to have occurred.
- (c) If the Employer is of the opinion that a Cumulative Monthly Treated Water Performance Failure has occurred in a given month at the WTP, then the Employer shall give written notice to the Operator specifying the particulars of the Cumulative Monthly Treated Water Performance Failure. If there have been two (2) or more Cumulative Monthly Treated Water Performance Failures then the Employer may, in its discretion, deduct the Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee and for each consecutive Cumulative Monthly Treated Water Performance Failure thereafter. If there have been three (3) consecutive Cumulative Monthly Treated Water Performance Failures for any one parameter then it shall be considered an Event of Default.
- (d) The Managers shall meet to review each Cumulative Monthly Treated Water Performance Failure. At the meeting, the Operator shall recommend to the Employer the appropriate remedial steps it proposes to take and the Employer shall review the Operator's recommendations. The Employer shall notify the Operator as to whether the Employer accepts or rejects the Operator's recommendations and as to whether the Employer requires further recommendations from the Operator.
- (e) A failure by the Operator to provide the Operator's Cumulative Monthly Results to the Employer in the Monthly Operations and Maintenance Report pursuant to sub-clause 3.7(2)(b) will constitute a Cumulative Monthly Treated Water Quality Performance Failure.

- (f) If the Operator fails to correct the Cumulative Monthly Treated Water Performance Failure within two months of the Employer's acceptance of the Operator's recommendations, such failure shall be considered an Event of Default, and the Employer may exercise its rights to terminate this Agreement pursuant to Clause 10 of this Agreement.
- (g) Notwithstanding sub-clause 4.5(c) and 4.5(f) above, the Employer shall not be entitled to withhold payment of the Variable Performance Fee or Operations Fee pursuant to sub-clause 4.5(c) or to terminate the Agreement pursuant to sub-clause 4.5(f) if the Operator demonstrates, and the Employer determines that, the Cumulative Monthly Treated Water Performance Failure has resulted from the occurrence of an Uncontrollable Circumstance or an Employer Fault in which case the Cumulative Monthly Treated Water Quality Performance Failure shall be deemed not to have occurred.
- (h) If the Operator does not agree with the Employer's determination as to whether an Cumulative Monthly Treated Water Quality Performance Failure has occurred, the cause of such Cumulative Monthly Treated Water Quality Performance Failure (including, without limitation, a determination that a Cumulative Monthly Treated Water Quality Performance Failure is caused by an Uncontrollable Circumstance) or the remedial steps to be taken to address the Cumulative Monthly Treated Water Quality Performance Failure, then either the Employer or the Operator may refer the matter in dispute to dispute resolution in accordance with Clause 17.

#### **1.6 Changes to the Employer's Treated Water Quality Performance Criteria.**

- (a) During the Term of this Agreement, the Employer may change any of the criteria identified in the Employer's Treated Water Quality Performance Criteria, or include parameters not previously identified in the Employer's Treated Water Quality Performance Criteria. In the event that the Employer changes a criterion in the Employer's Treated Water Quality Performance Criteria, the Operator or the Employer shall be entitled to require an Adjustment to the Operations Fee pursuant to Clause 8.3 of this Agreement to reflect any increase or decrease in the actual Operating and Maintenance Costs that the Operator, or the Employer with the assistance of the Operator, can demonstrate have occurred as a result of the change to the Employer's Treated Water Quality Performance Criteria.
- (b) The Employer and the Operator further acknowledge and agree that any changes made to the Employer's Treated Water Quality Performance Criteria may be either temporary or permanent.

**1.7 Changes to Compliance Criteria.**

- (a) During the Term of this Agreement, the Employer may require changes to all or some of the criteria identified in the Compliance Criteria, or to include parameters not previously identified in the Compliance Criteria, as a result of new or amended requirements of Governmental Authorities or Applicable Laws which may be applicable to the Facilities. In the event that the Employer changes the criteria in the Compliance Criteria, the Operator or the Employer shall be entitled to require an Adjustment to the Operations Fee pursuant to Clause 8.3 of this Agreement to reflect any increase or decrease in the actual Operating and Maintenance Costs that the Operator, or the Employer with the assistance of the Operator, can demonstrate have occurred as a result of the changes in the Compliance Criteria.

## **PROTECTION OF ASSETS AND MAINTENANCE FACILITIES**

### **GENERAL**

#### **1.1 Background.**

- (a) The protection and maintenance of assets is of primary importance to the Employer. The Operator shall have full responsibility for the maintenance of the Facilities for the Term of this Agreement, except as provided otherwise herein. The Operator shall be responsible for performing Routine Maintenance, Preventative Maintenance and Corrective Maintenance of the Facilities, all in a manner that is cost effective and in accordance with generally accepted principles and practices for water treatment and all Applicable Laws. The Operator shall implement an asset management system in accordance with ISO 55000.
- (b) The Parties further acknowledge that, for the purpose of this Clause, the Facilities shall be divided into two general categories of assets namely: (a) Civil, Structural and Site-Related Assets; and (b) Mechanical and Electrical Equipment. Each category of assets shall be subject to its own regimen of asset protection and Routine Maintenance.
- (c) The Operator shall provide all personnel, materials and services necessary to maintain the Facilities, structures, grounds, vehicles, equipment, mechanical, electrical, instrumentation, communication, computer and SCADA system adequately to ensure efficiency, long-term reliability and conservation of capital investment. The Operator shall implement its maintenance in accordance with industry standards, equipment manufacturers' instructions together with existing operations and maintenance manuals so that upon the Termination Date the Facilities are returned to the Employer in the same or better condition than at the Commencement Date, normal wear and tear excepted. The Operator shall make provisions for enforcing existing equipment warranties and guarantees, and for maintaining all warranties on new equipment purchased after the Effective Date.
- (d) The Operator shall include specialized testing as part of their preventive and predictive maintenance program. The specialized testing shall include, but not be limited to, vibration testing and analysis, wear particle analysis or oil analysis, infrared thermography, ultrasonic testing, laser alignment systems, performance monitoring, non-destructive testing, image scoping systems, ultrasonic thickness gauges, structural failure detection, videography and air quality monitoring.

## 1.2 The Asset Management Objective.

- (a) The Asset Management objective is to cover the maintenance of the assets and will be developed from the service and monitoring requirements as contained in the Operations and Maintenance Manual. The incorporation of the other 3 components of the asset management plans as set out in ISO 55000 will not be required of the Operator. (creation, utilisation and decommissioning).
- (b) From ISO 55000 it is clear that asset management is an iterative process. A condition survey is required at the beginning of the contract to assist the contractor in developing the asset management plans unless there has been no appreciable deterioration in the plant and the asset management plans can be developed on the information provided in the Operations and Maintenance Manual.
- (c) The employer we would need to agree to the plan (as there is a cost associated with the implementation of the plan) and the operator would be then expected to operate the plant in accordance with the asset management plan
- (d) ISO 55000 sets out the iterative process that is followed in updating of the plan. One of the concepts behind ISO 55000 is that conditioning monitoring is incorporated into the asset management plan so there should be no need to undertake a survey at the end of the contract and be looking to charge the contractor for any "deficiencies". Penalties would be applied if the Operator does not operate the asset according to the plan. If breakages occurred as a result of this the Operator would then be liable.

## 1.3 Asset Management System.

- (a) The Operator shall provide, validate and update the current information in its Asset Management System, including the rolling Equipment Renewal Program. This program must address specific work tasks for developing asset management practices, inventorying of assets and implementation of a fully integrated, secure and accessible information system.
- (b) The Operator shall, within forty-five (45) days, of the Commencement Date implement an Asset Management System in accordance with ISO 55000. The Asset Management System should include but not be limited to the following:
  - i.) All assets must be classified into appropriate asset groups;
  - ii.) Collect base inventory data;
  - iii.) Validation of the current inventory records. Review all of the assets and infrastructure records stored in various data bases and validate against the physical asset;

- iv.) Development processes to collect changes to the asset inventory including the purchase of new assets, changes to assets;
  - v.) Development of the processes for regular condition assessments that can easily be used to update the inventory system;
  - vi.) Review the current use of the CMMS to assess its ability to support advanced asset management practices.
- (c) The Operator shall, as part of the Asset Management System assist the Employer with the development of an Equipment Renewal Program. The Equipment Renewal Program shall detail the replacement program at the Facilities for such equipment and systems which are beyond their useful life, for the purpose of maintaining a high level of reliability, and availability of the Facilities during the Term.
- (d) The Equipment Renewal Program shall:
- i.) list major Assets including equipment and systems recommended to be replaced;
  - ii.) provide the schedule during the Term for replacement of those Assets;
  - iii.) the rationale for the replacement of those Assets, including priority and criticality of the replacement;
  - iv.) the anticipated cost of replacement of those Assets.
- (e) The Operator shall update the Equipment Renewal Program on an annual basis and provide the Employer with the program. At a minimum, the Operator shall update the information required to be included in the Equipment Renewal Program for the next three (3) years of the Equipment Renewal Program. The updated Equipment Renewal Program shall identify any changes to the anticipated cost of replacement of specified Assets, and shall include a rationale by the Operator for any changes from the Equipment Renewal Program provided to the Employer for the previous Contract Year.
- (f) Except when caused by an Uncontrollable Circumstance, if, at any time during the Term, the Operator fails to deliver and implement its Asset Management System, including the rolling Equipment Renewal Program within prescribed time period, or are in the opinion of the Employer materially deficient, the Employer may deduct from the Variable Performance Fee or Operations Fee the Performance Deduction as set out in the Contract Data. Such failure will also constitute an Event of Default.

**CIVIL, STRUCTURAL AND SITE-RELATED ASSETS**

Condition Surveys.

**(1) Initial Condition Survey.**

- (a) The Operator shall within six (6) weeks of the Commencement Date together with the Employer inspect the Facilities and undertake a comprehensive survey of these structures. Together with the Employer, the Operator will identify any corrections or repairs required to correct major deficiencies within a time frame to be developed by the Employer.
- (b) The Employer may choose, at its expense, to correct and repair such deficiencies and may undertake any of the correction or repairs within a time frame to be developed by the Employer; provided, however, that the Employer shall, at its expense, within a reasonable time frame to be developed by the Employer, correct and repair the deficiencies to the extent necessary in order for (i) the Facilities to comply with Applicable Laws or (ii) the Civil, Structural and Site-Related Assets to which the deficiency relates to be in good working order. The Operator shall cooperate with the Employer in the scheduling and implementation of all such repairs, and there will be no adjustment to the Operations Fee for any such accommodation unless such accommodation would materially adversely affect the Operator's ability to perform its obligations under this Agreement.
- (c) Except for the deficiencies the Employer is required to correct or repair pursuant to this Agreement, the Employer may decide not to correct or repair the deficiencies identified by the Operator pursuant to subsections 5.3(1)(a) in which case the Operator will not be responsible for correcting or repairing these deficiencies prior to the end of the Agreement.

**Final Condition Survey.**

- (a) In the Final Contract Year, the Employer and the Operator shall conduct an inspection of all Civil, Structural and Site-related Assets and prepare a "**Final Condition Survey**" of all Facilities. The sub-consultant engaged by the Operator in connection with the Final Condition Survey and the Final Condition Survey Report must be acceptable to the Employer, acting reasonably. The Operator shall submit the Final Condition Survey Report to the Employer at least three (3) months before expiry of this Agreement, or if the Term of this Agreement is extended, then three (3) months prior to the expiry of the Term as amended.
- (b) Based on the results of the Final Condition Survey, the Employer shall prepare a list of deficiencies identified in the Final Condition Survey and submit it to the Operator.

- (c) Based on the list of deficiencies prepared by the Employer, the Operator shall prepare a plan for remediation to correct the deficiencies and submit the plan to the Employer no later than three (3) months before the expiry of the Agreement.
- (d) The Operator shall correct or repair all the deficiencies identified in the Final Condition Survey prior to the expiration of the Agreement; provided, however, that the Operator shall have no obligation to correct or repair any deficiency which (i) is not material, (ii) results from normal wear and tear and provided the Operator has complied with its obligations pursuant to this Agreement to repair and maintain the Facilities, (iii) results from Uncontrollable Circumstances or (iv) was identified in the Proposal or the Initial Condition Survey and not corrected or repaired by the Employer.
- (e) If the Operator has not corrected or repaired the above deficiencies described in sub-clause 5.3(2)(d) above, the Employer may, at its discretion, withhold the estimated cost of correcting or repairing the deficiencies plus management fees, plus five per cent (5%), as determined by the Employer, from any of the monthly payments of the Operations Fee or Variable Performance Fee until the Operator has performed the corrections or repairs to the satisfaction of the Employer.
- (f) The Operator shall have the right to contest the Employer's determination or identification of any deficiencies hereunder, and the requirement to repair same, by submitting the matter to dispute resolution pursuant to Clause 17.
- (g) Under no circumstances shall the Operator be responsible for deficiencies caused by an Uncontrollable Circumstance or the Employer Fault or deficiencies identified under Clause 5.3 and not corrected or repaired by the Employer.

### **Routine Maintenance of Civil, Structural and Site-Related Assets.**

#### ***Civil Maintenance Program.***

- (a) The Operator shall prepare and submit for approval within six (6) weeks from the Commencement Date, the Operator's maintenance management program describing, in general terms, all Preventative and Corrective Maintenance which is required for the Civil, Structural and Site-Related Assets (the "Civil Maintenance Program").
- (b) the Employer shall pay for such Repairs and Replacement or Corrective Maintenance:
- (c) caused by events outside the control of Operator;
  - I. are not as result of Operator's negligence or failure to perform the Corrective Maintenance and Preventative Maintenance pursuant to the Civil Maintenance Program and the Civil Maintenance Specifications; and
  - II. have been reasonably incurred by the Operator.
- (d) For the purpose of this Clause 5.4, an Incident of Repairs and Replacement or Corrective Maintenance shall mean:

- i. a random failure of a single item of Civil, Structural and Site-Related Assets or a part thereof, that causes an adverse impact either immediately, or in the long term, upon the integrity of the functionality of that item or part thereof; or
  - ii. a failure of single, or multiple, items of Civil, Structural and Site-Related Assets, the failure of which can be shown to be caused by a specific event which is outside the control of the Operator, including an Uncontrollable Circumstance or the Employer Fault, and is outside the normal operating conditions for the particular item or items of Civil, Structural and Site-Related Assets.
- (e) The Operator shall be required to obtain three written competitive bids for any failures or deficiencies where the value of the materials is estimated to be one hundred thousand Rand (R100,000.00) or more and submit the bids to the Employer for approval, except where an emergency situation occurs.
- (f) In the case of an emergency situation and where reasonably possible, the Operator shall provide the Employer with an estimate of the cost of the Repairs and Replacement or Corrective Maintenance required to correct the emergency situation and shall obtain the written consent of the Employer before implementing the Repairs and Replacement or Corrective Maintenance.
- (g) The Operator shall not undertake Repairs and Replacement or Corrective Maintenance where the value of the materials for an Incident of Repairs and Replacement or Corrective Maintenance is estimated to exceed one hundred thousand Rand (R100,000.00) in total cost without the prior written consent of the Employer.
- (h) Where the Operator disagrees with or disputes the Employer's determination of an Incident of Repairs and Replacement or Corrective Maintenance or whether the Operator's expenditures for an Incident of Repairs and Replacement or Corrective Maintenance have been reasonably incurred, then the Operator may refer the matter to dispute resolution pursuant to Clause 17 of this Agreement.
- (i) The amount of one hundred thousand Rand (R100,000.00) specified in this Clause 5.4 shall be adjusted Annually by the Consumer Price Index (CPI).

## **MECHANICAL AND ELECTRICAL EQUIPMENT**

Inspections and Surveys.

### ***Inventory and Baseline Survey.***

- (a) The Employer shall make available to the Operator, Equipment Operating and Maintenance Manuals, as well as drawings, calculations, maintenance manuals, operational records, logs, reports, submittals, test records, repair records, cost records, energy consumption records, specifications which may be in the Employer's possession related to the design, condition or operation of the Facilities. The Operator shall take no action which would invalidate or void such Documents.
- (b) Within six (6) weeks of the Commencement Date, the Operator shall undertake and complete a comprehensive inspection survey and inventory of all mechanical and electrical equipment (the "**Inventory and Baseline Survey**") to verify and supplement the Employer's information.
- (c) The Inventory and Baseline Survey shall include, but not be limited to, the following:
  - i. Collect all necessary information to support the implementation and maintenance of a Computerised Maintenance Management System.
  - ii. Set up a bar coding system that will form a numbering system for the CMMS.
  - iii. Carry out a condition survey of all major equipment and list the deficiencies associated with all Mechanical and Electrical Equipment. The Operator shall conduct the specialized testing listed in sub-clause 5.1(d) as part of the Inventory and Baseline Survey.
- (d) The lack of or poor quality of any background information or documentation for the Mechanical and Electrical Equipment shall not prevent the Operator from completing the Inventory and Baseline Survey.
- (e) The Operator shall submit the Inventory and Baseline Survey prepared by the Operator to the Employer for review within six (6) weeks of the Commencement Date.
- (f) The Employer shall pay the Operator the submitted rate in the Proposal for the preparation of the Inventory and Baseline Survey upon the acceptance by the Employer. The fee includes all costs required for obtaining access to the equipment, including confined space entry and rescue teams.

### ***Deficiencies Identified from Inventory and Baseline Survey.***

- (a) The Employer shall review the mechanical, and electrical deficiencies listed in the Inventory and Baseline Survey and shall establish whether any of the Mechanical and Electrical Equipment should be repaired, replaced or upgraded.

- (b) The Employer may decide to address any or all of the deficiencies identified at its expense. The Employer makes no representations or warranties that the upgrades, repairs or replacement to the Mechanical and Electrical Equipment will be undertaken; provided, however, that the Employer shall, at its expense, within a reasonable time frame to be developed by the Employer repair, replace or upgrade the deficiencies to the extent necessary in order for (i) the Facilities to comply with Applicable Laws or (ii) the Mechanical and Electrical Equipment to which the deficiency relates to be in good working order.
- (c) If the Employer decides not to correct or repair a deficiency identified in the Inventory and Baseline Survey, and the piece of Mechanical or Electrical Equipment which was identified as deficient fails within the first year, it shall be repaired or replaced by the Employer at no cost to the Operator.

***Annual Review of Mechanical and Electrical Equipment.***

- (a) The Operator shall conduct an annual review of the Mechanical and Electrical Equipment, using the Inventory and Baseline Survey as a guide, before the end of each Contract Year. The Operator shall report on the results of this review as part of the Annual Asset Report pursuant to sub-clause 3.7(4) of this Agreement.

***Final Inventory and Survey.***

- (a) Three (3) months prior to expiry of the Agreement the Employer and the Operator shall conduct an inspection of all Mechanical and Electrical Equipment and the Operator shall prepare a Final Inventory and Survey of all the mechanical and electrical equipment. The Operator shall conduct the specialized testing listed in sub-clause 5.1(d) as part of the Final Inventory and Survey with such specialized testing to be sufficient to permit comparison to the Inventory and Baseline Survey for the purposes of this sub-clause 5.5(4).
- (b) The Operator shall prepare a plan for remediation to correct the deficiencies identified in the Final Inventory and Survey and shall submit the plan to the Employer no later than three (3) months prior to the expiration of the Term of the Agreement.
- (c) The Operator shall at its sole cost correct or repair all deficiencies identified in the Final Inventory and Survey prior to the expiration of the Agreement; provided, however, that the Operator shall have no obligation to correct or repair any deficiency which (i) is not material, (ii) results from normal wear and tear and provided that the Operator had complied with its obligations pursuant to this Agreement to repair and maintain the mechanical and electrical equipment, (iii) results from Uncontrollable Circumstances or (iv) was identified in the Proposal or the Inventory and Baseline Survey and not corrected or repaired by the Employer.

- (d) If the Operator has not corrected or repaired the above deficiencies for which it is responsible under sub-clause 5.6(a), the Employer reserves the right to withhold the estimated cost of correcting or repairing the deficiencies plus management fees plus five per cent (5%) from the Operator's Operations Fee or Variable Performance Fee for the remainder of the Term until the Operator has performed the corrections or repairs to the satisfaction of the Employer.
- (e) The Operator shall have the right to contest the Employer's determination or identification of any deficiencies hereunder, and the requirement to repair same, by submitting the matter to dispute resolution pursuant to Clause 17.
- (f) Under no circumstances shall the Operator be responsible for deficiencies caused by an Uncontrollable Circumstance or the Employer Fault.
- (g) The Employer shall pay the Operator the submitted rate in the Proposal for the preparation of the Final Inventory and Survey upon the acceptance thereof by the Employer, The fee includes all costs required for obtaining access to the equipment, including confined space entry and rescue teams.

#### **Routine Maintenance of Mechanical and Electrical Equipment.**

- (a) Based upon the intended use of the equipment and manufacturer's performance specifications together with any available background information including operating and maintenance manuals and specifications and the Inventory and Baseline Survey referred to in sub-clause 5.5(1), the Operator shall update the Preventative Maintenance program for the Mechanical and Electrical Equipment (the "**Equipment PM Program**") and submit it to the Employer for review and approval within six (6) weeks of the Commencement Date.
- (b) The lack or poor quality of available background information for the Mechanical and Electrical Equipment shall not prevent the Operator from completing the Equipment PM Program or from performing any Preventative Maintenance as required pursuant to the provisions of this Agreement.
- (c) Throughout the Term of this Agreement, the Operator shall perform all Preventative Maintenance on the Mechanical and Electrical Equipment in accordance with the Equipment PM Program.
- (d) Throughout the Term of this Agreement, the Operator may request changes to the Equipment PM Program. The Employer shall review the Operator's requests and determine, in its discretion, whether such changes should be made. The Operator shall also update the Equipment PM Program periodically in accordance with a protocol to be agreed upon by the Employer.
- (e) The Operator shall ensure that the backlog for all Preventative Maintenance does not exceed one (1) month for the Term of this Agreement.

- (f) Unless the Operator is able to demonstrate to the Employer that it has been unable to access the necessary parts, having made all reasonable best efforts to access such parts, where the backlog for Preventative Maintenance exceeds the values in sub-clause 5.6(e), the Employer may, in its sole discretion deduct the Performance Deduction as set out in the Contract Data from the monthly payment of the Operations Fee or Variable Performance Fee. The payment shall be withheld for the month in which the performance was below the required level and shall only be paid to the Operator when the required performance standard has been achieved in any two (2) successive months, following the month in which payment was withheld.

### **Repairs and Replacement of Mechanical and Electrical Equipment.**

- (a) The Operator shall perform all Repairs and Replacement to the Mechanical and Electrical Equipment, including in the event of an emergency situation, in order to maintain the equipment in good working order.
- (b) For the purpose of this Agreement, an Incident of Repairs and Replacement shall mean:
- i. a random failure of a single item of Mechanical and Electrical Equipment. Such item will be any piece of Mechanical and Electrical Equipment which is manufactured and sold as a self-contained functional unit. Items would include, but not be limited to, a pump, a motor, a valve, an actuator, or a measurement probe; or
  - ii. a failure of single, or multiple, items Mechanical and Electrical Equipment, the failure of which can be shown to be caused by a specific event which is outside the control of the Operator and is outside the normal operating conditions for the particular item or items of Mechanical and Electrical Equipment.
- (c) the Employer shall pay for each Incident of Repairs and Replacement where material, contract labour or Mechanical or Electrical Equipment costs and contract labour costs providing the following conditions are met:
- i. the Operator has performed all Preventative Maintenance as recommended by the equipment suppliers, the Facilities designer, and approved by the Employer as part of the Equipment PM Program and all Monthly Operations and Maintenance Reports have been produced by the Operator pursuant to sub-clause 3.7(4) of this Agreement;
  - ii. the Mechanical and Electrical Equipment has been operated within the manufacturer's limitations;
  - iii. the Incident of Repairs and Replacement is clearly documented, outlining the work required, the parts to be purchased, the sub-contracted services necessary, proposed sub-Operator, the reason for occurrence, and cost;
  - iv. the costs of the Repairs and Replacement have, in the opinion of the Employer, been reasonably incurred; and

- v. the Employer may elect to have the Operator perform the work on terms to be agreed upon by the Parties or have an outside Operator perform the work or competitively bid the work.
- (d) If the Operator fails to meet any of the conditions described in sub-clause 5.7(c) above, the Operator shall pay for that portion of the cost of the Incident of Repairs and Replacement which resulted from the failure of the Operator meet any of such conditions. The Employer shall not pay for any Incident of Repairs and Replacements where the Operator has failed to maintain and provide adequate Quarterly Contract Reports pursuant to sub-clause 3.7 of this Agreement to the extent that the Operator's failure to so maintain and provide adequate Quarterly Contract Reports caused the cost of any Incident of Repairs and Replacements.
- (e) Where the Operator disagrees with or disputes the Employer's determination of an Incident of Repairs and Replacement, or whether the Operator's expenditures for an Incident of Repairs and Replacement have been reasonably incurred, then the Operator may refer the matter to dispute resolution pursuant to Clause 17 of this Agreement.

#### **The Employer's Equipment Replacements.**

- (f) Throughout the Term of this Agreement, the Employer at its expense may replace existing Mechanical and Electrical Equipment to enhance the operation of the Facilities or to upgrade outdated Mechanical and Electrical Equipment ("**the Employer's Equipment Replacements**").
- (g) The Operator shall accommodate the Employer and any of its contractors to allow for the implementation of the Employer's Equipment Replacements and shall not claim any Adjustment to the Operations Fee as a result of reasonable disruption to the operation of the Facilities from the Employer's Equipment Replacements, unless such disruption materially adversely affects the Operator's ability to perform its obligations under this Agreement. The Employer shall use Best Efforts to minimize any such disruption.

#### **Further Testing by the Employer**

- (a) From time to time, the Employer may wish to undertake specialized testing including, but not limited to vibration, thermographic and electrical analysis, instrumentation maintenance and oil and grease sampling to confirm the level of Preventative Maintenance performed by the Operator. The Operator shall provide the Employer with access to the Mechanical and Electrical Equipment to undertake such activities. The Operator shall cover the Employer's specialized testing costs if it is determined that the Equipment has not been maintained as per the Equipment Manufacturers

Specifications or that Routine Maintenance has not been performed to the satisfaction of the Employer, acting reasonably.

### **Computerized Maintenance Management System**

- (a) If required, the Operator will purchase licences for a Computerized Maintenance Management System (“**CMMS**”), approved by the Employer, for the Operator’s use. The Operator shall implement and install the CMMS licence and software that will allow the Operator to schedule and record all Corrective, Predictive and Preventative Maintenance to the Civil, Structural and Site-Related Assets and the Mechanical and Electrical Equipment.

- (b) The Operator shall be responsible for all costs associated with using and maintaining the CMMS.
- (c) The Operator shall develop and implement a comprehensive bar coding system for all equipment to populate the CMMS. The Operator shall maintain and update the CMMS including data entry, troubleshooting, backup and all necessary software upgrades for the duration of this Agreement.
- (d) The Employer shall have direct on-line access at all times to the Operator's CMMS for monitoring purposes only.
- (e) The Operator shall enter one hundred percent (100%) of all necessary data in the CMMS within six (6) weeks of the Commencement Date. All data in connection with the construction, installation, and/or implementation of new equipment must be entered within one (1) month of installation of the new equipment.
- (f) The Employer may, in its discretion, withhold the Performance Deduction as set out in the Contract Data from the monthly payment of the Operations Fee or Variable Performance Fee if the Operator does not achieve the performance levels stated in sub-clause 5.10(e) above. The Employer shall withhold the payment for the month in which the performance was below the required level and the payment shall only be paid to the Operator in the month when the required performance standard has been achieved, following the month in which payment was withheld.
- (g) The Employer shall be permitted, at its own expense, to have complete and full access to the CMMS maintained by the Operator at a location or locations specified by the Employer's Manager.
- (h) The CMMS, including any database(s) and data referred to herein and all associated licences, copyrights and other intellectual property rights shall be the property of the Employer and shall remain with the Employer upon the termination or completion of this Agreement.

#### **Calibration of Flow Measurement and Instrumentation.**

- (a) The Operator shall conduct, at a minimum, annual testing and calibration of all flow measuring, sampling equipment and instrumentation using a qualified, independent firm and shall prepare a report outlining the status of all flow measuring, sampling equipment and instrumentation to be included in the Annual Operating Report. The Operator shall implement any remedial action required to ensure the proper calibration of this equipment.

**Warranties.**

- (a) The Employer and the Operator shall cooperate in enforcing all warranties and warranty rights with respect to the Civil, Structural and Site-Related Assets and all maintenance contracts with respect to the Mechanical and Electrical Equipment installed in the Facilities prior to the Commencement Date and during the Term of this Agreement and generally in all claims to be made against third parties including any latent defects covered under the construction contract for the prior construction of the Facilities.

## **CAPITAL IMPROVEMENTS**

### **1.1 General.**

- (a) The Operator acknowledges that throughout the Term of this Agreement, the Employer may install or implement Capital Improvements to the Facilities, whether they are part of the Employer's annual capital budget or not.
- (b) The Employer shall be responsible for financing all Capital Improvements unless the Parties agree that the costs of any Capital Improvement shall be paid in part or in their entirety by the Operator.

## **VARIABLE PERFORMANCE FEE**

### **1.1 Variable Performance Fee.**

- (a) The Operator shall be entitled to a Variable Performance Fee in accordance with the Schedule of Rates and Prices, paid annually subject to any deductions as set out in this Agreement.

## **COMPENSATION PAYABLE TO THE OPERATOR**

### **1.1 Operations Fee.**

- (a) Effective the Commencement Date, the Employer shall pay the Operations Fee to the Operator for the services provided by the Operator under this Agreement to the Employer. The Operations Fee to be paid by the Employer on a monthly basis shall be for the services provided by the Operator under this Agreement as adjusted under this Agreement from time to time.
- (b) The Operator acknowledges that the Operations Fee is inclusive of all Operating and Maintenance Costs for the Facilities and for all services to be supplied by the Operator pursuant to the terms and conditions of this Agreement.
- (c) The Parties agree that the Operations Fee is as set out in the Schedule of Rates and Prices.

### **1.2 Electricity Cost.**

- (a) The Employer shall pay the Electricity Cost.
- (b) For greater certainty, the Operator must participate in the Employer's energy efficiency and pump optimization strategy.

### **1.3 Adjustments to the Operations Fee.**

#### ***General.***

- (a) The Parties acknowledge that the purpose of an "**Adjustment to the Operations Fee**" is to reflect a material change to the actual Operating and Maintenance Costs.
- (b) The Parties agree that it is their intention that an Adjustment to the Operations Fee shall be limited to a review of only those costs and expenses which have been affected, either negatively or positively, by the occurrence of only the events, or any one of them described below and in order to account for the impact of such event, and should not be considered an opportunity to review all items included or excluded from the Operations Fee.

#### ***Adjustments to the Operations Fee.***

- (a) Either the Employer or the Operator may require an Adjustment to the Operations Fee if either Party can demonstrate that there has been an increase or decrease in the actual Operating and Maintenance Costs that has occurred as a result of only the following events:

- i.) an Uncontrollable Circumstance, a variation in Raw Water quality or quantity materially inconsistent with historical seasonal variations or the Employer Fault;
  - ii.) Process or Operational Changes which have been approved by the Employer pursuant to this Agreement;
  - iii.) Capital Improvements made or not made to the Facilities;
  - iv.) a Change of Laws;
  - v.) a request by the Employer for additional types of insurance or higher policy limits made pursuant to sub-clause 14.1(2)(d)
- (b) All Adjustments to the Operations Fee from the occurrence of any of the events described in sub-clause 8.3(2)(a) above shall be reviewed on an annual basis.
- (c) Any Adjustments to the Operations Fee shall be equal to the actual change to the Operating and Maintenance Costs as a result of any of the events described in sub-clause 8.3(2)(a) above.

***Adjustment to the Operations Fee as a Result of Fluctuations in Treated Water Volume.***

- (a) The Parties acknowledge that Raw Water Quality may vary from time to time. The Parties agree there shall be no Adjustments to the Operations Fee for any change in Raw Water quality or quantity, materially consistent with historical variations.

***Procedure for Adjustments.***

- (a) If a Party requests an Adjustment to the Operations Fee, the onus shall be on that Party to provide supporting evidence of its claim for an Adjustment to the Operations Fee. The Party will be required to demonstrate that:
- i.) There has been an occurrence of one of the events described in sub-clause 8.3(2) above has occurred;
  - ii.) There has been a change to the actual Operating and Maintenance Costs;
  - iii.) The change to the actual Operating and Maintenance Costs is directly related to one of the circumstances described in sub-clause 8.3(2) above.
- (b) The Operator shall cooperate with the Employer in providing the Employer with information on the Operating and Maintenance Costs which the Employer determines that it requires supporting the Operator's claim for an Adjustment to the Operations Fee.
- (c) The Adjustment to the Operations Fee shall be made retroactive to the date on which the impact on the Operating and Maintenance Costs of such event was first documented by the Operator. If, at any time, the Employer and the Operator cannot agree on the appropriate Adjustment to the Operations Fee, then either Party may refer the matter to dispute resolution pursuant to Clause 17 of this Agreement.

**Operations and Maintenance Plan.**

- (a) The Operations and Maintenance Plan shall contain the following information:
- (b) Operator's Asset maintenance approach;
- (c) Operator's proposed maintenance programs and procedures;
- (d) Operator's program for SCADA system and CMMS optimization;
- (e) Operator's general maintenance and operations procedures including overall Facility and equipment appearance, corrosion prevention and Asset protection procedures;  
and
- (f) Operator's detailed and specific operation and maintenance procedures for each of the Facilities portions of infrastructure.

**Transition Plan.**

- (a) The Transition Plan shall contain a detailed identification by the Operator of the transition issues from the current Operator or in the case of a new facility from the construction Operator. The Transition plan shall include proposals by the Operator to address transition issues including the details of each service to be provided and the cost of the service to be provided by the Operator. The Transition Plan shall include job shadowing to be provided by the Operator on its own cost and expense for a period of three (3) months for up to five (5) persons prior to the expiration or termination of this Agreement.

**Penalty for Failure to Prepare and Abide by Plans**

- (a) In the event the Operator fails to provide the plans identified in this Agreement in the form and substance acceptable to the Employer and in accordance with the requirements set out herein, or provides same but fails to govern itself according to such plans, the Employer shall have the right to withhold the Performance Deduction as set out in the Contract Data per month per plan from the. Variable Performance Fee of Operations Fee.

**Method of Payment.**

- (a) Effective forty-five (45) days after the Commencement Date, the Operator shall render an invoice to the Employer by the 15th day of each month for services provided in the preceding month, for an amount equal to the monthly Operations Fee for the Contract Year.

- (b) The Operator shall also render an invoice to the Employer for any agreed upon Adjustments to the Operations Fee applicable to the month immediately preceding the month in which such cost was incurred.
- (c) The invoices rendered by the Operator to the Employer shall be in accordance with the format agreed upon by the Employer and the Operator, both acting reasonably, and shall be accompanied by such backup information and documentation as is considered necessary by the Employer, acting reasonably. It is specifically required that the format of the invoices will be in accordance with the Employers chart of accounts.
- (d) Except where the Operator fails to provide the Employer with the necessary backup information and documentation as required in this Agreement, and provided that the Employer does not require clarification from the Operator as to the charges included in the invoice, the Employer shall pay each invoice within forty two (42) days after the date of the invoice. The Operations Fee and the agreed upon Adjustments to the Operations Fee shall be paid in the amount billed in each such invoice notwithstanding any circumstance, happening or event whatsoever, except to the extent the Employer is permitted and decides to withhold a portion of the Operations Fee pursuant to this Agreement.
- (e) Within sixty (60) days after the end of each Contract Year, the Operator shall provide to the Employer for review and approval an annual statement which shall show for each Contract Year the calculation of all amounts owed or payable to the Operator by the Employer under this Agreement, all amounts owed or payable to the Employer by the Operator under this Agreement, all amounts paid by the Employer to the Operator under this Agreement and all amounts paid by the Operator to the Employer under this Agreement, including corrections and reconciliations to actual values of all estimated amounts. The Employer shall review the annual statement and make any amendments it deems necessary within thirty (30) days of receipt. If there are no amendments required to the annual statement, the Employer shall approve the annual statement. If the approved annual statement reflects any balance owed by either the Employer or the Operator to the other, such amount shall be paid within thirty (30) days after the Employer's approval.
- (f) If the Employer makes amendments to the Annual Statement, the Employer shall return the amended annual statement to the Operator. If the Operator agrees with the amendments, then the balance owing on the amended annual statement shall be paid within thirty (30) days of the Operator's approval. If the Operator disagrees with the amendments, then the Employer and the Operator shall meet to attempt to resolve the dispute. If the Parties are unable to reach a resolution within thirty (30) days, then either Party may refer the matter to dispute resolution pursuant to Clause 17 of this Agreement.

**Other Payments.**

- (a) The Employer shall be responsible for payment of any and all municipal taxes, utility costs or payments in lieu of taxes assessed against the Facilities.

**Withholding of Operations Fee.**

- (a) If the Employer decides to withhold any portion of the monthly payment of the Operations Fee to the Operator pursuant to the terms of this Agreement, no interest shall accrue or be paid to the Operator for the time the portion of the monthly payment of the Operations Fee is withheld by the Employer. The Employer shall not withhold any portion of the monthly payment of the Operations Fee which is not in dispute and shall promptly advise the Operator of the basis for the Employer's withholding of any portion of the monthly payment of the Operations Fee.

**Additional Services.**

- (a) During the Term of this Agreement, the Employer and the Operator agree that the Operator may perform additional services outside of the scope of this Agreement, and, if the Employer requests additional services, the Operator shall provide a price to provide the additional services. The Employer will review the Operator's price and decide whether to use the Operator's services or have the additional services carried out by another party.

**Books, Payrolls, Accounts and Records.**

- (a) The Operator shall maintain and keep sufficiently complete and accurate books, payrolls, accounts, and records which pertain to the Agreement in accordance with the applicable and accepted accounting procedures to permit their verification and audit and they shall have no claim for payment unless such books, payrolls, accounts, and records have been so maintained and kept.
- (b) The Employer may inspect, review or audit the books, payrolls, accounts, and records of the Operator as they pertain to the Agreement at any time during the Term of the Agreement and at any time thereafter as deemed by the Employer to be desirable but not exceeding the preservation period set forth below.
- (c) The Operator shall preserve all original books, payrolls, accounts, and records which pertain to the Agreement relating to the performance of the Agreement or to claims arising from the performance of the Agreement, for a period of thirty-six (36) months after the completion of the Term or thirty-six (36) months after the final settlement of all claims, made or threatened at the time of completion of this Agreement, whichever period is the longer.

**Failure of the Employer to Approve Adjustments.**

- (a) Any failure of the Employer to approve an Adjustment to the Operations Fee where such Adjustment is provided for in this Agreement may be submitted by the Operator to dispute resolution pursuant to Clause 17 of this Agreement.

**Advance Payment Guarantee**

- (a) The Employer shall make an advance payment as an interest-free loan to cover the cost of chemical procurement for three (3) months chemicals supply for operation of the WTP, when the Operator submits a guarantee in accordance with this sub-clause. Unless and until the Employer receives this guarantee this sub-clause shall not apply. This guarantee shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in a form approved by the Employer. The Operator shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount may be progressively reduced by the amount repaid by the Operator. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days prior to the expiry date, the Operator shall extend the validity of the guarantee until the advance payment has been repaid.
- (b) The advance payment shall be repaid through three (3) equal deductions in the monthly payments over the last three (3) months of the Operating Period.

**Operations Fee Escalation**

- (a) The Operations Fee and provisional sums shall be reviewed by the Parties annually on the anniversary of the Commencement Date of this Agreement and on each anniversary of that date thereafter and will be adjusted by an amount equal to the percentage increase Consumer Price Index ("CPI Headline") (All Items) as published in Table A of P0141.1 by Statistics South Africa for the most recent 12 (twelve) month period for which those statistics would then be available

$((P1 - P0)/P0) * 100$  where:

P1 = CPI Headline Index for anniversary month in which escalation to be applied.

P0 = CPI Headline Index at Commencement Date or previous anniversary month whichever is applicable

## TRANSFER OF RESPONSIBILITIES

### 1.1 **Transfer of Operations.**

- (a) The Operator shall ensure that all contracts and commitments it has entered into in relation to the Facilities expire upon the completion or termination of this Agreement. The Parties agree that the Employer will not assume any of the Operator's contracts and commitments upon the completion or termination of this Agreement, unless agreed to by the Employer, at the sole discretion of the Employer.

### 1.2 **Transfer of Records.**

- (a) the Employer shall make available to the Operator all records and documents in the possession of the Employer in respect of the management, operation and maintenance of the Facilities which the Operator may request either prior to the Commencement Date or from time to time thereafter provided that such documents are readily available and no other restrictions as to their release exists.
- (b) At the completion or termination of this Agreement, the Operator shall return all operational and maintenance documents to the Employer.

### 1.3 **Transfer of Assets.**

#### (1) ***The Employer's Inventory.***

- (a) Within thirty (30) days of the Commencement Date the Operator shall complete an inventory of all existing Movable Assets and Spare Parts owned by the Employer and available at the Facilities as of the Commencement Date (the "**the Employer's Inventory**").

#### ***Movable Assets.***

- (b) The Employer shall transfer all Movable Assets owned by the Employer which are located on and within the Facilities at the time of the Commencement Date at no cost to the Operator (the "**the Employer's Movable Assets**").
- (c) The Operator shall be responsible for securing and providing all additional or replacement Movable Assets, in addition to the Employer's Movable Assets, the Operator deems necessary to operate and maintain the Facilities pursuant to the terms of this Agreement.
- (d) The Employer shall retain ownership of the Employer's Movable Assets provided to the Operator, and the Operator shall not dispose of nor grant security interests in the Employer's Movable Assets without the prior written consent of the Employer.

- (e) The Operator shall maintain all Movable Assets in accordance with the manufacturer's recommendations and shall include the maintenance of all Movable Assets in the CMMS.
- (f) Upon the completion or termination of this Agreement, the Operator shall return all Movable Assets to the Employer at no cost to the Employer and, in the same condition on an overall basis as they were in on the Commencement Date, reasonable wear and tear excepted.

**Consumables.**

- (a) At the completion or termination of this Agreement, the Operator shall ensure that the Consumables on hand at the Facilities are sufficient for two (2) months operation of the Facilities from the date of completion or termination.

**Spare Parts.**

- (a) The Employer shall provide to the Operator its inventory of Spare Parts related to the Operation and Maintenance of the Facilities which are located at the Facilities on the Commencement Date at no cost to the Operator.
- (b) At the completion or termination of this Agreement, the Operator shall return to the Employer an inventory of Spare Parts, in good working condition to the satisfaction of the Employer and in quantities at least equal to the Spare Parts provided to the Operator by the Employer on the Commencement Date (the "**Spare Parts Inventory**").
- (c) The Employer and the Operator shall within thirty (30) days from the Commencement Date agree on the nature, quantity and type of Spare Parts to be contained in the Spare Parts Inventory.

The Operator shall upon termination of this Agreement provide the Employer with the Spare Parts Inventory at no cost to the Employer.

## **COMPLETION OR TERMINATION OF THE AGREEMENT**

### **1.1 Termination by the Employer.**

- (a) The Employer shall have the right to terminate this Agreement in the Event of Default or an Extraordinary Event of Default of the Operator on the terms set out in this Clause of this Agreement.

### **1.2 Termination by the Operator.**

- (a) The Operator shall have the right to terminate this Agreement in the Event of Default or an Extraordinary Event of Default of the Employer on the terms set out in this Clause of this Agreement.

### **1.3 Notice and Cure for Event of Default.**

- (a) If any Party determines that the other Party has committed an Event of Default, the non-defaulting Party shall give notice in writing to the defaulting Party of the Event of Default. The Parties shall, no later than thirty (30) days following delivery of such notice of breach, meet and determine whether the Event of Default is a result of an Uncontrollable Circumstance and agree upon the remedial steps, if any, to be taken by the defaulting Party.
- (b) If the Parties are unable to agree upon the remedial steps to be taken within a further thirty (30) days or to agree upon the occurrence of an Event of Default, then the matter may be referred to dispute resolution pursuant to Clause 17 of this Agreement.
- (c) If the defaulting Party does not implement the remedial action agreed upon or fixed by dispute resolution within the time frame agreed upon or fixed by dispute resolution, then the non-defaulting Party may exercise any of the remedies set forth in this Agreement.
- (d) The Parties agree that any time period allowed for a defaulting Party to cure an Event of Default shall be extended if the Event of Default cannot be cured without Governmental Authority approval by the time required to obtain such approval, provided that an application for such approval has been filed with the appropriate Governmental Authority within the applicable cure period.

### **1.4 Termination Upon Event of Default.**

- (a) If a defaulting Party does not cure an Event of Default as described in Clause 10.3 above, then:

- i.) if the Operator is the Party in default, the Employer may terminate this Agreement on not less than sixty (60) days prior written notice of the effective date of termination; or
  - ii.) if the Employer is the Party in default, the Operator may terminate this Agreement on not less than sixty (60) days prior written notice of the effective date of termination.
- (b) The foregoing remedies shall be in addition to, and not in lieu of or a limitation of all remedies available at law or in equity to the non-defaulting Party.

### 1.5 Definition of “Extraordinary Event of Default”.

- (a) The occurrence of any of the following shall be an Extraordinary Event of Default under this Agreement:
- (b) material and persistent Events of Default by a defaulting Party, whether or not remedied by the defaulting Party, including the Operator’s failure to correct or remedy Compliance Failures or a Performance Failure pursuant to Sections 4.4 and 4.5 of this Agreement and which are not due to an Uncontrollable Circumstance or Employer Fault;  
  
If:
  - i.) the Operator generally does not pay its debts as they become due;
  - ii.) the Operator admits in writing its inability to pay its debts generally or makes a general assignment for the benefit of creditors;
  - iii.) a receiver is appointed for the Operator for any substantial part of its property;
  - iv.) any proceedings are instituted by or against the Operator seeking to adjudicate it a bankrupt or insolvent, or seeking liquidation, winding up, reorganization, arrangement, adjustment protection, relief or composition of it or its debts under any law relating to bankruptcy, insolvency, reorganization or relief of debts, or seeking the entry of an order for relief by the appointment of a receiver, trustee, custodian or other similar official for it or for any substantial part of its property where any such proceeding has not been stayed or dismissed within thirty (30) days of a receiver custodian or other similar official being appointed for it or any substantial part of its property;
- (c) if the Employer fails to pay the monthly payment due for the Operations Fee or agreed upon Adjustments to the Operations Fee as provided for in this Agreement within thirty (30) days of the date upon which such payment is due as provided in this Agreement (subject to the exceptions as provided for in Clause 8, except where an amount is withheld by the Employer in accordance with the terms of this Agreement;

- (d) any strike or lockout of the employees of the Operator which creates a situation which poses a potential for a real and serious threat to the health and public welfare of residents or which would seriously jeopardize the operational capacity or integrity of the Facilities;
- (e) if the Operator operates or maintains, or fails to properly operate or maintain the Facilities in accordance with industry standards so as to create a situation which poses a potential for a threat to the health and public welfare of the residents, or which would jeopardize the operational capacity or integrity of the Facilities, except in the event of Uncontrollable Circumstance or Employer Fault;
- (f) any change of Control of the Operator in contravention of Clause 21 of this Agreement or any realization by any creditor upon its shares as may be pledged;
- (g) there is a failure to provide the insurance coverage specified in Clause 14 of this Agreement in a form acceptable to the Employer, within the time specified in 14.1(2)(b) or there is a lapse of the insurance coverage required to be maintained by the Operator pursuant to Clause 14 of this Agreement, and failure to secure replacement coverage within fifteen (15) days of the insurance coverage expiration date.

#### **1.6 Remedy for Extraordinary Event of Default.**

- (a) In the event of any Extraordinary Event of Default, the non-defaulting Party shall be entitled to give notice of termination of this Agreement, specifying the circumstances of the asserted Extraordinary Event of Default, which notice shall be effective immediately.

#### **1.7 Conditions upon Completion or Termination of the Agreement.**

##### ***Costs Payable by the Operator upon Termination by the Employer.***

- (a) In the event the Employer terminates this Agreement pursuant to this Clause 10, the Operator shall not be entitled to any compensation subsequent to receiving notice of termination from the Employer including, without limitation, but for this sub-clause 10.7(1), any fee which would be payable to the Operator. The Operator shall also not be entitled to any demobilization costs incurred as a result of the Employer's termination of the Agreement.
- (b) Upon termination of this Agreement by the Employer, the Operator shall:
  - i.) forfeit the Performance Security described in Clause 14.2; and

- ii.) in any case, the Operator shall pay to the Employer all reasonable costs incurred by the Employer in negotiating and implementing a new agreement with the subsequent operator of the Facilities, and all reasonable costs incurred by the Employer in operating and maintaining the Facilities until such time as the new Operator commences operation and maintenance of the Facilities.

***Costs Payable by the Employer to Operator upon Termination by Operator.***

- (c) In the event the Operator terminates this Agreement pursuant Clause 10.2, the Operator shall be entitled to payment from the Employer of the sum of (a) all reasonable costs and expenses of the Operator relating to demobilization by the Operator from the Facilities including (without limitation) reasonable costs of termination of employees, sub-operators, contracts for the purchase of Consumables and movement of equipment of the Operator located at the Facilities, (b) all capital investment of the Operator approved by the Employer pursuant to this agreement relating to the purchase by the Operator of Capital Improvements which have not been fully amortized and (c) lost profits of the Operator for one (1) year as determined in accordance with the provisions of this Agreement.

***Carryover Services.***

- (a) Upon the completion or termination of this Agreement and only at the Employer's request, the Operator shall provide the services necessary to continue normal operations for a period of up to ninety (90) days after the termination date. This ninety (90) day period shall commence only at the Employer's request and shall be only for the purpose of training and assisting new employees of the Employer or the subsequent operator of the Facilities in the management, operation and maintenance of the Facilities. In such event, the Employer agrees to pay to the Operator a pro rata portion of the then current Operations Fee for such ninety (90) day period.

***Return of Civil, Structural and Site-Related Assets.***

- (a) Upon the completion or termination of this Agreement, the Operator shall return the Civil, Structural and Site-Related Assets to the Employer, in the same condition on an overall basis as they were in at the Commencement Date, except that under no circumstances shall the Operator be responsible for deficiencies caused by an Uncontrollable Circumstance or the Employer Fault or deficiencies identified under Clause 5.3 and not corrected or repaired by the Employer.
- (b) The Operator shall be responsible for the correction and repair of any deficiencies identified by the Employer pursuant to sub-clause 5.3(2) of this Agreement, unless otherwise specified in this Agreement.

***Return of the Mechanical and Electrical Equipment.***

- (a) Upon the completion or termination of this Agreement, the Operator shall return the Mechanical and Electrical Equipment to the Employer in a well-maintained and functional condition and shall ensure that the Mechanical and Electrical Equipment is fully operational in accordance with manufacturer's equipment specifications, except that under no circumstances shall the Operator be responsible for deficiencies caused by Uncontrollable Circumstance or Employer Fault.
- (b) The Operator shall be responsible for the repair and correction of any deficiencies identified by the Employer in accordance with the provisions of this Agreement.

## **INVENTIONS AND INNOVATIONS**

### **1.1 Inventions.**

- (a) The Employer shall retain exclusive rights to all intellectual property, inventions and innovations developed by or for it in connection with its operations and maintenance of the Facilities including the Operations and Maintenance Manuals, the CMMS, SCADA and all associated software where applicable. For the Operator-owned inventions introduced into the Facilities during the Term of this Agreement, the Operator shall grant to the Employer a perpetual nonexclusive fully paid up licence, to continue to use such technology in connection with the operation, maintenance and management of the Facilities after the expiration or termination of this Agreement, without charge to the Employer. The licence shall be specific to the Employer and the Facilities and may be transferred or assigned by the Employer to any subsequent operator of the Facilities for use in connection with the operation, maintenance and management of the Facilities. This provision shall apply only to those inventions and innovations for which the Operator has the right to grant such a licence to the Employer.

## **CONFIDENTIALITY AND NON-DISCLOSURE**

### **1.1 Confidentiality and Non-Disclosure.**

- (a) The Operator acknowledges that all sampling and laboratory test results and other similar information collected or received by it during or following the term hereof concerning the day to day operations of the Facilities are the property of the Employer and may be confidential and any such information shall not be released or disclosed to any person, unless required or compelled by Applicable Law to do so, without the prior written consent of the Employer, which consent shall not be unreasonably withheld. The Operator shall have the right to retain copies of all such sampling and laboratory test results and other similar information.

## **TRADE MARK**

### **1.1 Trade-Mark.**

- (a) The name of the Employer and all related marks, slogans and designs belongs to the Employer exclusively and shall not be used in any way by the Operator unless otherwise approved in writing by the Employer.
- (b) Within thirty (30) days after the Commencement Date, the Operator shall cause to be removed all marks, slogans and designs related to the Previous Operator from any buildings at the Facilities, structures or vehicles to be used by the Operator.

## **INSURANCE**

### **1.1 Insurance.**

#### ***Insurance Coverage to be obtained by the Operator.***

- (a) The Operator shall obtain and maintain throughout the Term and be responsible for payment of the deductible, insurance with insurers that are acceptable to the Employer covering the following events and in the following amounts:

#### ***Public Liability Insurance***

- (a) Occurrence-basis comprehensive general liability insurance cover against legal liability for accidental death of or injury to third party persons and accidental loss of or damage to third party property arising out of or in connection with the Operator's performance of the Agreement, for an amount not less than One Hundred Million Rand (R100,000,000) covering the directors, officers, employees, agents and other persons for whom the Operator is responsible throughout the entire period of this Agreement. Such policy shall include non-owned automobile liability, personal injury, broad form property damage, contractual liability, owners' and Operators' protective, contingent employers' liability, cross liability and severability of interest Clauses. This insurance shall have a deductible no greater than Two Hundred Thousand Rand (R200,000) per occurrence.

#### ***Operator's All Risks Insurance***

- (a) Standard all risk property insurance covering the property of the Operator, including Movable Assets, in an amount not less than the full replacement cost value with a deductible of no more than Two Hundred Thousand Rand (R200,000); such policy shall include a waiver of subrogation in favour of the Employer;

#### ***Motor Vehicle Insurance***

- (a) In addition to any compulsory insurance required in terms of legislation and without limiting the Operator's obligations and responsibilities, the Operator shall insure against liabilities in respect of all motor vehicles and items of mobile equipment whether owned, leased, hired, borrowed or operated by the Operator in connection with its operation of the Facilities with a coverage limit of not less than Five Million Rand (R5,000,000) for any one occurrence;
- (b) The Operator shall not do, omit to do, or permit any acts or omissions on or in the Facilities that may void coverage under the insurance policies.

**Conditions of Insurance.**

- (a) The Operator shall cause the Employer to be included as an additional insured on the policies of insurance described in subsections 14.1(1)(a)(i) to (iii) maintained by the Operator pursuant to this Agreement and each such policy shall contain a cross-liability Clause and shall protect the Employer against all claims for all damage to any property of the Employer or any other public or private property resulting from or arising out of any failure, neglect or omission including negligence.
- (b) The Operator shall provide the Employer with certificates, in a form prescribed by the Employer, confirming that the Operator has obtained insurance coverage as described in this Agreement **thirty (30) days** before the Commencement Date and confirmation of the renewal of such policies within **ten (10) days** of their renewal date.
- (c) The Operator or the Operator's insurance company shall not suspend, void, cancel, restrict or reduce insurance coverage or limits except after giving thirty (30) days, prior written notice by registered mail to the Employer. Any deductibles or self-insured retention greater than that specified in sub-clause 14.1(1) must be declared to the Employer for acceptance or rejection by the Employer. Any such deductible or self-insured retention shall be the sole and immediate responsibility of the Operator in the event of a claim.
- (d) The policy limits and policy types described in sub-clause 14.1(1) above shall be reviewed annually by the Employer and the Operator, having regard to the Operator's claims history and loss statistics in the prior Contract Year. The Employer and the Operator reserve the right to request higher limits or additional types of insurance as they may reasonably require. The Employer shall pay the cost of any such higher limits or additional types of insurance required by the Employer.
- (e) The insurance as required by this Agreement shall be kept in place by the Operator for a period of twelve (12) months following the expiry or termination of this Agreement, unless a longer period is stipulated.
- (f) The Operator shall promptly notify the Employer of any loss or claim against the policies maintained by the Operator pursuant to this Agreement. If claims reduce the aggregate coverage amount available from those limits described in sub-clause 14.1(1) above, or as subsequently amended by agreement between the Employer and the Operator, then the Employer may require that the Operator acquire additional insurance coverage to ensure that the aggregate limits are maintained at the levels described above. The cost of acquiring such additional insurance shall form part of the Operating and Maintenance Costs.

- (g) The Operator shall advise the Employer of the cost of the insurance described in sub-clause 14.1(1) above. Upon receipt of this information the Employer may, in its sole discretion, require the Operator to obtain such insurance or the Employer may obtain such insurance at its own cost.

## **1.2 Financial Security.**

### ***Performance Security.***

- (a) The Operator shall at its own expense throughout the term of this Agreement, provide, maintain and pay for a Performance Guarantee, in a form acceptable to TCTA, as security for the performance by Operator of its obligations pursuant to this Agreement, to be delivered to TCTA prior to the Commencement Date. Notwithstanding that any amendments to this Agreement following the date hereof shall not be covered by the Performance Guarantee until expressly so indicated by its issuer, Operator agrees that all such amendments made pursuant to the terms of this Agreement shall be supported by a form of security reasonably satisfactory to TCTA unless this requirement is waived by TCTA.

## **REPRESENTATIONS AND WARRANTIES**

### **1.1 Representations and Warranties of the Operator.**

- (a) The Operator hereby represents and warrants, on a continuous basis, to the Employer and. acknowledges that the Employer is entering into this Agreement in reliance on such representations and warranties:
- (b) The Operator is a company, legislated under the Companies Act (Act 71 of 2008). The Operator has sent to the appropriate Governmental Authority all material annual returns and financial statements required to be sent under the Applicable Laws. The Operator has the corporate power and authority to carry on business as currently carried on by it. No act or proceeding has been taken by or against the Operator in connection with the dissolution, liquidation, winding up, bankruptcy or reorganization of the Operator.
- (c) The Operator has the corporate power, authority and capacity to enter into this Agreement and all other agreements and instruments to be executed by it as contemplated by this Agreement and to carry out its obligations under this Agreement and such other agreements and instruments. The execution and delivery of this Agreement and such other agreements and instruments and the completion of the transactions contemplated by this Agreement and such other agreement and instruments have been duly authorized by all necessary corporate action on the part of the Operator and its shareholders, as required.
- (d) This Agreement constitutes a valid and binding obligation of the Operator enforceable against the Operator in accordance with its terms. The Operator is not an insolvent person within the meaning of the Insolvency Act (Act 24 of 1936), as amended.
- (e) The execution, delivery or performance of this Agreement by the Operator and the fulfilment of its obligations herein do not and will not conflict with or result in a breach of:
  - i.) any Applicable Laws affecting the Operator;
  - ii.) any of the terms or conditions of the constituting documents of the Operator;
  - iii.) any agreement, document or instrument to which the Operator is a party or by which the Operator is bound or to which any property of the Operator is subject;  
and
  - iv.) do not and will not constitute or result in a violation, breach or default under any of the foregoing.

- (f) There is no action, suit, proceeding, claim, application, complaint or investigation in any court or before any Arbitrator or before or by any regulatory body or Governmental or non-governmental Authority pending or threatened by or against the Operator which would materially affect its ability to enter into or perform its obligations pursuant to this Agreement; and, there is no factual or legal basis which could give rise to any such action, suit, proceeding, claim, application, complaint or investigation.
- (g) The statements, representations, warranties (express and/or implied) in the Operator's Proposal are and remain true as of the date of the execution of this Agreement and shall survive the execution of this Agreement.
- (h) Representations and Warranties of the Employer.
- (i) The Employer hereby represents, warrants, on a continuous basis, to the Operator and acknowledge that the Operator is entering into this Agreement in reliance on such representations and warranties:
- (j) The execution and delivery of this Agreement has been authorized by the Employer and such authorization has not been rescinded or otherwise modified.
- (k) This Agreement has been authorized, executed and delivered by the Employer and constitutes a legal, valid, and binding obligation of the Employer, enforceable against it in accordance with its terms.
- (l) To the knowledge of the Employer there is no action, suit, or proceeding pending or threatened against the Employer or the Previous Operator which would materially affect the Employer's ability to enter into or perform obligations pursuant to this Agreement or which would or could materially affect the Operator.
- (m) With respect to the Consumables purchased from the Employer pursuant to the provisions of sub-clause 9.3(3) of this Agreement, the Employer has the authority to convey such assets to the Operator as provided in this Agreement. Such assets are or will be at the date of closing of the purchase and sale thereof, free and clear of any and all charges and encumbrances whatsoever.

## **INDEMNIFICATION**

### **1.1 Indemnification by the Operator.**

- (a) The Operator shall indemnify, hold, defend and save the Employer, its directors, officers, agents and employees harmless from all costs, expenses, damages and Claims of third parties for personal injury or property damage arising from the extent of negligent performance or non-performance or wilful misconduct by the Operator of its obligations under this Agreement or which arise as a result of the negligent acts or omissions or wilful misconduct of the Operator in connection with the performance or non-performance of its obligations under this Agreement or in connection with the Operator's use or occupancy of the Facilities pursuant to this Agreement, including, without limitation, Claims for personal injury and damage to or loss of use or loss of any personal or real property caused by or arising out of the negligent act or omission or wilful misconduct of the Operator.
- (b) Without limiting the generality of the foregoing, the Parties acknowledge and agree that part of the Mechanical and Electrical Equipment located at the Facilities includes equipment required to be installed and maintained pursuant to Applicable Laws relating to health and safety. The Operator shall indemnify and save the Employer harmless from any and all claims and losses which the Employer can demonstrate that it has suffered or incurred as a result of any injury arising from the use of such health and safety equipment, except to the extent such Claims or losses result from insufficient health and safety equipment located at the Facilities at the Commencement Date in non-compliance with Applicable Laws, and failure by the Employer to repair or correct such non-compliance in accordance with this Agreement.
- (c) The Operator, its agents and all workers and persons employed by or under its control, including sub-operators, shall use all reasonable care to ensure that no person or property is injured and that no rights are infringed in the carrying out of the Operator's duties and obligations under this Agreement.
- (d) The Operator shall be solely responsible for all damages by whomsoever claimable in respect of any injury to persons, including death, or to land, buildings, structures or property of whatever description, and in respect of any infringement of any right or privilege whatever occasioned in the carrying out of the Operator's duties or obligations under this Agreement, or any part thereof, or by any neglect, misfeasance or nonfeasance on the Operator's part or on the part of any of its agents, workers or persons employed by the Operator or under its control, including sub-operators, either carrying out the Operator's duties and obligations under this Agreement or present at the Facilities and shall bear the full costs thereof and shall at its own expense make such temporary provisions to ensure the avoidance of any such damage, injury, or

infringement and to prevent the interruption of or danger or menace to the operation of the Facilities.

- (e) The Operator shall indemnify and save harmless the Employer from and against all Claims, demands, loss, costs, damages, actions, suits or other proceedings by whomsoever made, brought, occasioned by or attributed to any such damage, injury or infringement referenced in sub-clause 16(d) above.
- (f) The Operator further agrees to indemnify and save the Employer, its agents, servants and employees, harmless from all legal consequences including, without limitation, all legal costs and expenses incurred to defend any action brought by Governmental Authority in connection with noncompliance with Applicable Laws or a Change of Laws, as well as any fines or penalties imposed by a Governmental Authority except where the Operator is entitled to indemnification by the Employer pursuant to Clause 16.2.

## **1.2 Indemnification by the Employer.**

- (a) The Employer shall indemnify and save the Operator, its agents, employees and sub-operators, all directors and officers from all reasonable costs, expenses, damages and claims of third parties for personal injury or property damage arising from:
  - i.) all reasonable costs, expenses, damages and claims of third parties for personal injury or property damage arising from the Employer Fault, including the negligent acts or omissions or wilful misconduct of the Employer in connection with the performance or non-performance of its obligations under this Agreement;
  - ii.) any incorrectness in or breach of any representation or warranty of the Employer contained in this Agreement or in any other agreement, or instrument executed and delivered pursuant to this Agreement;
  - iii.) a violation of Applicable Law by the Employer;
  - iv.) failure of the Employer to make Process or Operational Changes or Capital Improvements to achieve compliance with Applicable Laws or to correct unsafe or hazardous situations as advised by the Operator within forty-five (45) days following the Commencement Date;
  - v.) the presence at the Facilities of (i) subsurface structures, materials or conditions having historical, geological, archaeological, religious or similar significance, or (ii) any habitat of an endangered or protected species;
  - vi.) the presence on the Commencement Date of hazardous waste or hazardous substances upon or beneath the Facilities in non-compliance with Applicable Laws;

- vii.) structural damage to or the collapse of the Facilities caused by geological conditions; and
  - viii.) any other matters specifically provided in this Agreement. Notwithstanding the above, the Employer shall only be liable for its percentage of fault or negligence.
- (b) the Employer further agrees to indemnify and save the Operator, its agents, servants, and employees, harmless from all legal consequences including, without limitation, all legal costs and expenses incurred to defend any action brought by a Governmental Authority in connection with noncompliance with Applicable Laws or a Change of Laws, as well as any fines or penalties imposed by a Governmental Authority which the Operator can demonstrate it has suffered or incurred arising from or in connection with its compliance with the Employer's direction as to the appropriate means of achieving compliance with Applicable Laws or a Change of Laws, subject to the Operator confirming due care and diligence by the Operator in following and implementing the Employer's direction and in its management, operation and maintenance of the Facilities.
- (c) the Employer shall indemnify and save harmless the Operator, its agents and employees in respect of any claim, demand, action, cause of action, damage, loss, cost or liability arising out of non-compliance of any employee of the Employer with the Operator's health and safety procedures

### **Survival of Covenants.**

- (a) Wherever this Agreement contains an express obligation by one or more Parties to indemnify any other Party, such obligation to indemnify shall survive the completion or termination of this Agreement and continue in full force and effect.

### **Procedure for Indemnification.**

#### ***Notice of Claim.***

- (a) Promptly after becoming aware of any action or proceeding that may give rise to a Claim pursuant to this Agreement, the Indemnified Party shall provide to the Indemnifying Party written notice of the commencement of such action or proceeding. Such notice shall specify whether the Claim arises as a result of a claim by a Person other than a Party to this Agreement against the Indemnified Party (a "**Third Party Claim**") or whether the Claim does not so arise (a "**Direct Claim**"), and shall also specify with reasonable particularity, to the extent that the information is available:
- i.) the factual basis for the Claim; and
  - ii.) the amount of the Claim, if known.

- (b) If, through the fault of the Indemnified Party, the Indemnifying Party does not receive notice of any Claim in time effectively to contest the determination of any liability susceptible of being contested, then the Liability of the Indemnifying Party to the Indemnified Party under this Clause shall be reduced by the amount of any losses incurred by the Indemnifying Party resulting from the Indemnified Party's failure to give such notice on a timely basis.
- (c) The Party shall be defended by the Indemnifying Party but shall be entitled to participate in the defence of any such claim, at its own expense, and without limiting the generality of the foregoing, may advance a defence available to it, which is not available to the Party obliged to defend and may participate in such defence through counsel without the obligation to conduct the defence. The Indemnifying Party shall not be liable for any settlement of any action or proceeding effected without its written consent.
- (d) The Parties agree that in individual cases it may be more appropriate for the Indemnified Party to conduct its own defence in reliance on the financial obligation of the Indemnifying Party. In these cases, the Indemnifying Party shall not be liable for any settlement of any action or proceeding effected without its written consent.
- (e) The assumption of the defence or financial obligations of the defence by the Indemnifying Party is not a bar to any claim for contribution and indemnity or other relief over against the Indemnified Party.
- (f) If the Indemnifying Party fails to assume control of the defence of any Third Party Claim, the Indemnified Party shall have the exclusive right to contest, settle or pay the amount claimed. Whether or not the Indemnifying Party assumes control of the negotiation, settlement or defence of any Third Party Claim, the Indemnifying Party shall not settle any Third Party Claim without the written consent of the Indemnified Party, which consent shall not be unreasonably withheld or delayed; provided, however, that the liability of the Indemnifying Party shall be limited to the proposed settlement amount if any such consent is not, obtained for any reason within a reasonable time after the request therefor.

***Direct Claims.***

- (a) In the case of a Direct Claim, the Indemnifying Party shall have sixty (60) days from receipt of notice of the Claim within which to make such investigation of the Claim as the Indemnifying Party considers necessary or desirable. For the purpose of such investigation, the Indemnified Party shall make available to the Indemnifying Party the information relied upon by the Indemnified Party to substantiate the Claim, together with all such other information as the Indemnifying Party may reasonably request. If both Parties agree at or before the expiration of such sixty (60) day period (or any mutually agreed upon extension thereof) to the validity and amount of such Claim, the

Indemnifying Party shall immediately pay to the Indemnified Party the full agreed upon amount of the Claim, failing which the matter shall be referred to binding arbitration in such manner as the Parties may agree or shall be determined by a court of competent jurisdiction.

#### **16.5 Limits on Liability.**

- (a) Notwithstanding any other provision in this Agreement:
- (b) The Operator shall be liable to the Employer for Claims for general and special damages resulting from negligence or wilful misconduct in the performance or non-performance of the obligations under this Agreement up to a total aggregate of the amount(s) recoverable from the insurance and financial security that is required to be in place by Clause 14 of this Agreement during the term of this Agreement , whether such damages are characterized as arising under breach of contract or warranty, to (including negligence), fault, strict liability, indemnity or other theory of legal liability.
- (c) The Employer shall be liable to the Operator for Claims for general and special damages resulting from negligence or wilful misconduct performance or non-performance under this Agreement, whether such damages are characterized as arising under breach of contract, negligence, fault, strict liability, indemnity or other theory of legal liability.
- (d) The Parties' respective liability under this Agreement shall be limited to Claims arising from the negligence or wilful misconduct, acts, omissions, violations, or non-performance under this Agreement by a Party, or those for whom the Party is responsible at law, in the course of performing the terms and conditions of this Agreement. In addition, neither Party shall be liable for indirect, consequential, aggravated, exemplary or punitive damages, including damages for loss of profit or business shut-down.

## **DISPUTE RESOLUTION**

### **1.1 Availability of Dispute Resolution.**

- (a) The Parties agree that dispute resolution shall be available in the following circumstances, including the interpretation of this Agreement as it relates to those circumstances:
- (b) any dispute or controversy with respect to the assessment of liquidated damages by the Employer as provided in this Agreement;
- (c) any dispute or controversy with respect to the withholding by the Employer of a portion of the Operations Fee as provided in this Agreement;
- (d) any dispute or controversy with respect to an Adjustment to the Operations Fee pursuant to Clause 8.3 of this Agreement;
- (e) any matters described in this Agreement that require further terms, conditions or payments to be negotiated or agreed upon by the Parties and the Parties are unable to reach an agreement on such terms, conditions or payments; and
- (f) those instances specifically identified in this Agreement.

### **Meeting Among Parties to Negotiate a Resolution.**

- (a) If a dispute arises out of or in relation to this Agreement (the “**Dispute**”), the Parties will attempt in good faith to negotiate a resolution of the Dispute.
- (b) The Parties will appoint representatives with decision-making authority to settle the Dispute.
- (c) To commence negotiations under this Clause, any Party may send a notice to the other Party of a Dispute which has not been resolved in the ordinary course of business. The notice shall include a statement of the Party’s position and the name and title of the representative of the Party who will attend the resolution meeting.
- (d) The Party who receives such a notice shall within ten (10) Business Days deliver a response setting out its position and the name and title of the representative of the Party who will attend the resolution meeting.
- (e) Within ten (10) Business Days of the sending of a notice of Dispute, a meeting shall be held between the Parties at a mutually satisfactory time and place. At the meeting, the Parties will attempt in good faith to negotiate a resolution of the Dispute.

**Dispute Submitted to Mediation.**

- (a) If the Parties have not succeeded in negotiating a resolution of the Dispute within ten (10) Business Days after such meeting or if a meeting is not held within fifteen (15) Business Days of the disputing Party's notice (unless extended by mutual agreement of the Parties), the Dispute shall be submitted to mediation.

**Costs of Mediation.**

- (a) The Parties will bear equally all costs of the mediation.

**Appointment of Mediator.**

- (a) The Parties will jointly appoint a mutually acceptable mediator. If the Parties have been unable to agree upon the appointment of a mediator within ten (10) Business Days from the conclusion of the negotiation period, then each Party shall identify a mediator and the mediators identified by the Parties shall select a mediator, being a person who is not one of the mediators identified by the Parties to select a mediator.

**Disclosure.**

- (a) There will be complete and honest disclosure by each Party to the other and to the mediator, if appointed, of all information and documents relevant to the Dispute.

**Conduct of Mediation.**

- (a) Within ten (10) Business Days following his or her appointment, the mediator shall fix a time and a place in Centurion for the purpose of conducting the mediation.
- (b) Each Party shall provide a written summary of no more than five (5) pages summarizing its perspective on the Dispute to the mediator and to the other Party no later than the third day prior to the scheduled commencement of the mediation event.
- (c) The mediation event will be attended by the Parties and their legal counsel, and each Party will be represented by a person or persons who have full and unqualified authority to reach a settlement on all issues relating to the Dispute.
- (d) The Parties agree that they will not call the mediator as a witness for any purpose and will not seek access to any documents prepared or delivered to the mediator in connection with the mediation, including any records or notes of the mediator. Statements made by any person and documents produced in the mediation not otherwise discoverable shall not be subject to disclosure through discovery or any other process and shall not be admissible into evidence in any context for any purpose.
- (e) The Parties agree to keep all communications and information forming part of the mediation in confidence. The only exception to this is disclosure for the purposes of enforcing any settlement agreement reached between the Parties.

- (f) The Parties agree that any agreement reached as the result of the mediation event shall be reduced to writing and signed by the parties.

**Participation in Mediation.**

- (a) The Parties agree to participate in good faith in the mediation and the related negotiations for a period of fifteen (15) Business Days.

**Arbitration**

- (a) If the Parties are not successful in resolving the Dispute through the mediation, then either Party may submit the Dispute to arbitration.
- (b) Unless otherwise agreed by both Parties:
- (c) the dispute shall be finally settled under the Rules of Arbitration of the Association of Arbitrators (Southern Africa),
- (d) the dispute shall be settled by three arbitrators appointed in accordance with these Rules,
- (e) the arbitration shall be conducted in English; and
- (f) the place of Arbitration shall be Centurion, Republic of South Africa.

## **FORCE MAJEURE**

### **1.1 Performance.**

- (a) In the event that performance of this Agreement in the reasonable opinion of either Party is made impossible by reason of an Uncontrollable Circumstance, and if a Party seeks to rely on the occurrence of an act, event or condition as an Uncontrollable Circumstance as grounds for not performing its obligations under this Agreement, then the Party relying on such act, event or condition shall; (i) provide prompt notice to the other Party of the occurrence of the act, event or condition as soon as reasonably practicable after the Party first knew of such occurrence and give an estimation of its expected duration and the probable impact on the performance of its obligations hereunder (ii) exercise all reasonable efforts to continue to perform its obligations hereunder; (iii) in accordance with this Agreement, as expeditiously as reasonably practicable, take action to correct or cure the act, event or condition preventing its performance; (iv) exercise all reasonable efforts to mitigate or limit damages to the other party; and (v) provide prompt notice to the other Party of the cessation of the act, event or condition giving rise to its inability to perform.
- (b) In the event that performance of the Agreement in the reasonable opinion of either Party continues to be made impossible by reason of an Uncontrollable Circumstance, then either Party shall notify the other in writing and the Employer shall either:
- (c) terminate the Agreement forthwith and make all payment for services performed through the date of termination and all reasonable costs incurred by the Operator in demobilizing from the Facilities, sub-clause 10.7(1) shall not be invoked. Further; the Employer shall pay within sixty (60) days, all amounts owing to the Operator including the Operator's reasonable costs related to cancellation of contracts due to such termination and all capital investment of the Operator approved by the Employer pursuant to this Agreement relating to the Purchase by the Operator of Capital Improvements which have not been fully amortized; or
- (d) authorize the Operator to continue the performance of the Agreement with such Adjustments to the Operations Fee as may be required by the Uncontrollable Circumstances, as are agreed upon by both parties. In the event that the Parties cannot agree upon the aforementioned Adjustments, it is agreed by the Parties that the Agreement shall be terminated and the Employer shall pay the Operator for all services performed through the date of termination, all reasonable costs incurred by the Operator in demobilizing from the Facilities, and all capital investment of the Operator approved by the Employer pursuant to this Agreement relating to the purchase by the Operator of capital Improvements which have not been fully amortized.

- (e) Except as expressly provided under the terms of this Agreement, neither party to this Agreement shall be liable to the other for any loss, damage, delay, default or failure to perform any obligation to the extent it results from an Uncontrollable Circumstance. The occurrence of an Uncontrollable Circumstance shall not excuse or delay the performance of a party's obligation to pay monies previously accrued and owing under this Agreement, or to perform any obligation hereunder not affected by the occurrence of the Uncontrollable Circumstances.

## **LIMITATIONS ON DAMAGES**

### **1.1 Limitation on Damages.**

- (a) Neither Party shall be liable to the other Party for indirect, consequential, aggravated, exemplary, or punitive damages, including damages for loss of profit or business shut-down.

## **CHANGE OF CONTROL**

### **1.1 Change of Control.**

- (a) During the Term of this Agreement, the Operator shall not transfer Control, directly or indirectly of the Operator to a third Party without the prior written consent of the Employer. Failure by the Operator to obtain the consent of the Employer shall constitute an Event of Default. The Employer agrees that a pledge of the shares of the Operator to the Operator's principal lenders shall not constitute a transfer of Control for purposes of this Clause 20. The Employer further agrees that an initial public offering and listing of the shares of the Operator on a recognized stock exchange shall not constitute a transfer of Control for purposes of this Clause 20.1.

## **CONFLICT OF INTEREST**

### **1.1 Conflict of Interest.**

- (a) Throughout the Term of this Agreement, the Operator shall not enter into any agreement, relationship or situation which causes or potentially causes a conflict of interest with the Employer or the management, operation and maintenance of the Facilities.
- (b) Throughout the Term of this Agreement, any Affiliated Company of the Operator shall not enter into any agreement or relationship with the Employer, or provide services to the Employer relating to any water services, or water capital projects unless it receives the prior written consent of the Employer.

**NO CLAIM FOR LACK OF THE EMPLOYER'S CAPACITY****1.1 No Claim for Lack of the Employer's Capacity.**

- (a) The Operator shall not call into question, directly or indirectly, in any proceeding whatsoever, in law or in equity, the right of the Employer to enter into this Agreement or to enforce each and every term, covenant and condition herein contained and this Agreement shall be pleaded as an estoppel against the Operator in any such proceedings.

## **GENERAL PROVISIONS**

### **1.1 Notices.**

- (a) Any notice, certificate, consent, determination or other communication required or permitted to be given or made under this Agreement shall be in writing and shall be effectively given and made if (i) delivered personally, or (ii) sent by prepaid courier service, in each case to the applicable address set out in the Contract Data.
- (b) Any such communication so given or made shall be deemed to have been given or made and to have been received on the day of delivery if delivered, provided that such day in either event is a business day and the communication is so delivered before 4:30 pm on such day. Otherwise, such communication shall be deemed to have been given and made and to have been received on the next following business day.
- (c) Any Party may from time to time change its address under this Clause 23.1 by notice to the other Party given in the manner provided by this sub-clause.

### **Waiver.**

- (a) No covenant or condition of this Agreement may be waived except by the written consent of the Party waiving same and the failure on the part of any Party to insist on compliance with any covenant or condition shall not be deemed a waiver of same or a waiver of any right to subsequently insist upon compliance or fulfilment of same or condonation of continuing or subsequent default or breach.

### **Confidentiality.**

- (a) The Operator shall not disclose any information which is not otherwise available to the public relating to the Facilities other than (1) to the Employer's Manager, (2) as required from time to time from the Employer, (3) as required under Applicable Law or (a) to any Affiliate or the operator or employee, officer, director, accountant, legal counsel or other consultant of the Operator or any Affiliate of the Operator without the written approval of the Employer. Disclosure by the Operator or any Affiliate of the Operator of the existence and terms of the transaction described in this Agreement shall not be prohibited by this sub-clause.

### **Governing Law.**

- (a) This Agreement shall be governed by and construed in accordance with the laws of South Africa.

**Enurement.**

- (a) This Agreement shall enure to the benefit of the Parties and be binding upon their respective successors and assigns, provided that the Operator shall not be permitted to assign or transfer, whether absolutely, by way of security or otherwise, all or any part of its rights and obligations under this Agreement without the prior written consent of the Employer except as provided under Clause 21.1.

**Severability.**

- (a) Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to that jurisdiction, be ineffective to the extent of such prohibition or unenforceability and shall be severed from the balance of this Agreement, all without affecting the remaining provisions of this Agreement or affecting the validity or enforceability of such provision in any other jurisdiction.

**Set-Off**

- (a) The Operator expressly acknowledges and agrees that the Employer shall have a right to set-off against any damages incurred or any damages reasonably expected to be incurred or any amounts owed to the Employer by the Operator as a consequence of the Operator's breach of this Agreement or an occurrence of any Event of Default, from any monies or amounts otherwise owing to the Operator under this Agreement.

**Fines.**

- (a) The Operator shall be liable for all fines incurred by either party imposed by any Governmental Authority on the Operator or the Employer as a result of the Operator's negligence or non-performance of any of its obligations under this Agreement.
- (b) If the Employer chooses to pay a fine, then prior to the payment of the fine by the Employer, the Employer shall inform the Operator of the Employer's intent to pay the fine and the Operator may have the right to contest any government or private suits or proceedings or penalties.

**Forbearance.**

- (a) The Operator agrees that forbearance by the Employer in the enforcement of any obligations, rights or remedies pursuant to this Agreement including, but not limited to, the assessment of liquidated damages or the withholding of payment, or the forbearance in the identification of breach of this Agreement or of an Event of Default or Extraordinary Event of Default shall not affect the entitlement of the Employer under this Agreement to later seek enforcement of any such obligations, rights or remedies pursuant to this Agreement or arising from such breach, Event of Default or Extraordinary Event of Default.

**Counterparts.**

- (a) This Agreement may be executed and delivered by the Parties in counterparts, each of which shall constitute an original and may be delivered by facsimile, email or other functionally equivalent electronic means of communication, and those counterparts taken together shall constitute one and the same instrument.

**C1.2 PART 1: DATA PROVIDED BY THE EMPLOYER**

	<b>Sub-Clause</b>	
<b>Employer's name and address</b>		Chief Executive Officer Trans Caledon Tunnel Authority (TCTA) First Floor Building 9 Byls Bridge Office Park Cnr Olivenhoutsbosch & Jean Avenue Doringkloof, Centurion 0046
<b>Operator's name and address</b>		
<b>Electronic transmission systems</b>		E-mail in PDF Format
<b>Governing Law</b>		Republic of South Africa
<b>Ruling language</b>		English
<b>Time for right of access to the WTP</b>		On the Commencement Date
<b>Term</b>		5.0 years
<b>Amount of Performance Security</b>		R 35 000 000 (Thirty-five million Rands)
<b>Validity of Performance Security</b>		5.0 years
<b>Limit of Liability</b>		Aggregate of insurance recoverable and Performance Security
<b>Percentage for adjustment of Provisional Sums</b>		CPI on each anniversary of the Commencement Date
<b>Contract Price Adjustment</b>		CPI on each anniversary of the Commencement Date
<b>Advance payment</b>		R 25 000 000 on submission of an acceptable guarantee for financing of chemicals for operation.
<b>Currency of Payment</b>		South African Rand

Signature: .....

On behalf of: .....

Date: .....

<b>SCHEDULE OF DEDUCTIONS</b>						
<b>Operator's Obligation</b>		<b>Sub-clause</b>	<b>Performance Deduction ZAR</b>	<b>From</b>	<b>Reimbursable on performance</b>	<b>Event of Default</b>
Compliance with Applicable Laws		3.4 (1) (d)	R50 000 per Compliance Failure	Variable Performance Fee or Operations Fee		Yes
Deficient or Late Compliance Reports	Compliance Report	3.7 (6) (a)	R50 000 per non compliance	Variable Performance Fee or Operations Fee		Yes
Any Report late or deficient in any Contract Year	Any Report	3.7 (7) (a)	R20 000 per non compliance	Withhold payment of Performance Deduction from Variable Performance Fee of Operations Fee until Report submitted	Yes	Yes if more than 5 times in any Contract Year combined
3 or more Reports late or deficient in any prescribed period	Any Report	3.7 (7) (b)	R50 000 per non compliance	Variable Performance Fee or Operations Fee		
Failure by the Operator to respond within 30 minutes in the event of an Emergency Situation		3.9 (b)	R50 000 per failure	From Variable Performance Fee or Operations Fee for each non-compliance		
Failure by the Operator to correct a Safety Deficiency to the satisfaction of the Employer and within the time frame determined by the Employer		3.11 (2) (c)	R50 000 per month	From Variable Performance Fee or Operations Fee for each month which the Operator fails to correct the safety deficiency within the prescribed		

SCHEDULE OF DEDUCTIONS						
Operator's Obligation		Sub-clause	Performance Deduction ZAR	From	Reimbursable on performance	Event of Default
				time frame		
Updates to Operations and Maintenance Manuals within 60 calendar days from the implementation of the operational change		3.14 (d)	R50 000 per month	From Variable Performance Fee or Operations Fee for each month delayed		
Updates to Operations and Maintenance Manuals within 3 months from the implementation of the operational change		3.14 (d)	R50 000 per month	Additional Performance deduction From Variable Performance Fee or Operations Fee		
Comply with Transformation Requirements		3.18	R50 000 per non compliance	Variable Performance Fee or Operations Fee		
Implement and comply with OEMPr and resolve any non-compliance within 7 calendar days of the non-compliance being identified or communicated		3.19	R50 000 per non compliance	Variable Performance Fee or Operations Fee		
Provide written report on any OEMPr findings on non-compliances within 14 calendar days of the non-compliance being identified or communicated		3.19	R50 000 per non compliance	Further reduction from Variable Performance Fee or Operations Fee		
Failure to correct a Compliance Failure immediately		4.4 (f)	R50 000 per non compliance	Variable Performance Fee or Operations Fee		Yes
		4.4 (f)	R50 000 per	Withhold		

SCHEDULE OF DEDUCTIONS						
Operator's Obligation		Sub-clause	Performance Deduction ZAR	From	Reimbursable on performance	Event of Default
			non compliance	from monthly Variable Performance Fee or Operations Fee for each month for a period up to 1 year.		
Cumulative Monthly Treated Water Performance Failure		4.5 (c)	R100 000 per Performance Failure	Variable Performance Fee or Operations Fee		Yes for 3 consecutive failures of one parameter
Preventative Maintenance Backlog		5.5 (f)	R20 000 per month	Withhold from Operations Fee or Variable Performance Fee	Yes once performance is achieved	
CMMS performance levels not achieved		5.9 (f)	R50 000 per month	Withhold from Operations Fee or Variable Performance Fee	Yes once performance is achieved	
Failure to deliver and implement the Asset Management System, including the rolling Equipment Renewal Program within prescribed time period		5.10(f)	R100 000 per Performance Failure	Variable Performance Fee or Operations Fee		Yes
Failure to prepare and abide to plans		8.6	R20 000 per month	Variable Performance Fee or Operations Fee		

## PART C2: PRICING DATA

### C.2.1 PRICING INSTRUCTIONS

#### 1. GENERAL

The Schedule of Rates and Prices forms part of the Agreement and must be read and priced in conjunction with all the other documents comprising the Agreement, which includes Volume 1 Request for Information, the Conditions of Tender, and the Conditions of Contract and Scope of Services with its Schedules.

#### 2. DESCRIPTION OF ITEMS IN THE SCHEDULE

The short descriptions of the items in the Schedule of Rates and Prices are for identification purposes only and when pricing must be read together with the relevant Clauses of the Conditions of Contract and Scope of Services with its Schedules that set out all ancillary or associated work and activities that are to be included in the rates for the operations specified.

#### 3. PRICING OF THE SCHEDULE OF RATES AND PRICES

The prices and rates to be inserted by the Tenderer in the Schedule of Rates and Prices shall be the full inclusive prices to be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the execution of the operation described as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the Agreement.

**A full breakdown of all rates and prices is required to be included with the tender.**

Each item shall be priced and extended to the "Total" column by the Tenderer, with the exception of the items for which only rates are required, or items which already have Prime Cost or Provisional Sums affixed thereto. If the Contractor omits to price any items in the Schedule of Rates and Prices, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

The Tenderer shall fill in rates for all items where the words "rate only" appear in the "Total" column.

All rates and amounts quoted in the Schedule of Rates and Prices shall be in Rands and

cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Schedule of Rates and Prices.

#### **4. PROVISIONAL SUMS**

Where Provisional sums are provided for items in the Schedule of Rates and Prices the Employer reserves the right, to adjust the stated amounts upwards or downwards according to the actual value of work done under the item.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted in the "Amount" column of the Schedule of Rates and Prices and in the Summary of the Schedule of Rates and Prices unless ordered or authorized in writing by the Employer before closure of tenders. Unauthorized changes made by the Tenderer to provisional items in the Schedule of Rates and Prices, or to the stated provisional percentages and sums in the Summary of the Schedule of Rates and Prices, will not be tolerated.

#### **5. CORRECTION OF ENTRIES**

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.

#### **6. ARITHMETICAL ERRORS**

Arithmetical errors found in the Schedule of Rates and Prices as a result of faulty multiplication or addition, will be corrected by the Employer at the tender evaluation stage.

**PART C3: SCOPE OF WORKS**

**C3.1 Description of the Works**

**C3.1.1 Employer's objectives**

**ANNEXURE A**

**DESCRIPTION OF THE EASTERN BASIN WTP FACILITY**

## 1. GENERAL TREATMENT OBJECTIVES AND TECHNICAL INFORMATION OF THE EASTERN BASIN AMD PLANT FOR BACKGROUND PURPOSES

### 1.1 BACKGROUND

Mine water started accumulating in the old mine workings as underground operations ceased and withdrew from the basins. The mine water is characterised by acidity, high metal content and high salinity. If the mine water accumulation is allowed to continue, then the Acid Mine Drainage (AMD) will eventually fill the basins and start impacting on shallow groundwater bodies and surface water resources.

As part of the short-term solution, a new water treatment plant was designed and built to treat excess mine water to a standard suitable for interim discharge to the environment. The treatment process incorporates neutralisation and metals removal with limited desalination.

The Eastern Basin plant is situated at Springs, Grootvlei TSF, Van Niekerk Road. S26°14'59.4" E028°29'13.3"

The indicative AMD water quality from this basin is as per the following table:

**Table 1.1: AMD Water Qualities**

WATER QUALITY PARAMETER	UNITS	EASTERN BASIN 95 <sup>TH</sup> PERCENTILE	Current Eastern Basin AMD water quality
TDS	mg/l	7,700	2300
Conductivity	mS/m	730	260
Calcium (Ca)	mg/l	580	-
Magnesium (Mg)	mg/l	380	-
Sodium (Na)	mg/l	150	-
Sulphate (SO <sub>4</sub> )	mg/l	5,200	1150
Chloride (Cl)	mg/l	260	-
pH*	-	2.3	6.20
Alkalinity (CaCO <sub>3</sub> )	mg/l	0	-
Acidity (CaCO <sub>3</sub> )	mg/l	2,425	-
Iron (Fe)	mg/l	1,000	65
Aluminium (Al)	mg/l	50	0.15
Manganese (Mn)	mg/l	60	4.0

\* pH value is for 5<sup>th</sup> percentile

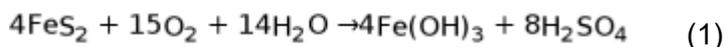
**Table 1.2: Required Effluent Standards:**

WATER QUALITY VARIABLE	UNITS	STANDARD
pH	-	7-9
Turbidity	NTU	<20
Iron	mg/l	<1
Manganese	mg/l	<10
Aluminium	mg/l	<1
Uranium	µg/l	<50
Sulphate	mg/l	<3,000
Electrical Conductivity	mS/m	≤450

## 1.2 BRIEF PROCESS DESCRIPTION OF THE EASTERN BASIN AMD PLANT

### 1.2.1 Formation of AMD and Pre-Neutralisation

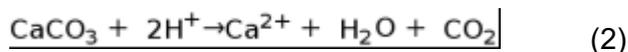
Acid mine drainage (AMD) occurs when groundwater comes into contact with remnant coal and rock rich in sulphides. The acid water is formed as a result of bacterial oxidation when pyrites are exposed to oxygen and water after or during the mining process. The result is a highly acidic, sulphate-rich drainage (Fripp, 2000). The overall equation describing this process is as follows:



In brief, the major cause is the accelerated oxidation of iron pyrite ( $\text{FeS}_2$ ) and other sulphuric minerals resulting from the exposure of these minerals to both oxygen and water, as a consequence of the mining and processing of metal ores and coals (Johnson, 2005).

The AMD can then travel either below or above ground, eventually making its way into nearby streams.

The Witwatersrand AMD is characterised by a low pH with high dissolved metal concentration. Limestone is used to partially neutralise the metal acidity of the AMD up to a pH of 5.5-6.0 by the following equation:

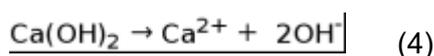


The limestone is added as a fine powder to increase the rate of the reaction. In this pH range, mainly Fe (III) and Al (III) metal ions precipitate from the solution as  $\text{Fe}(\text{OH})_3$  and  $\text{Al}(\text{OH})_3$  – effectively removing a large portion of the dissolved AMD metal components from the solution. The dissolved iron in the AMD is typically in the Fe(II) oxidation state, which does not effectively precipitate below a pH of 7-8. Through aeration, however, Fe(II) is oxidised to Fe(III), which is then precipitated through limestone neutralisation. The pre-neutralisation reactors are thus aerated to start the ferrous iron oxidation process.

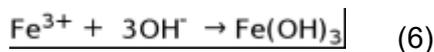
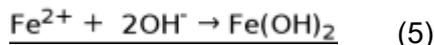
### 1.2.2 Neutralisation

Lime is used to neutralise the remaining metal acidity and precipitate metals from the AMD up to a pH of 9 and to provide a counter ion ( $\text{Ca}^{2+}$ ) to react with sulphate and precipitate gypsum. In this range, most of the remaining dissolved metals are precipitated, while dissolved Mn is removed as  $\text{Mn}(\text{OH})_2$ .

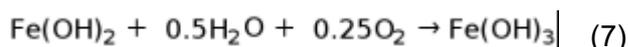
For large treatment systems, quicklime is used. This lime must first be hydrated (slaked) and is normally fed to the process as slurry. The hydrated lime then dissolves to increase pH. The two following equations illustrate these reactions:



The increased pH then provides hydroxide ions which combine with the dissolved metals to produce precipitates. The following equations show the precipitation reactions with Fe(II) and Fe(III):

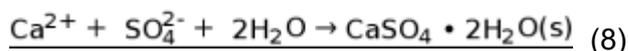


Ferrous ( $\text{Fe}^{2+}$ ) hydroxides are not as stable as ferric ( $\text{Fe}^{3+}$ ) hydroxides when the sludge is exposed to acidic waters or natural precipitation. For this reason, aeration is often applied to oxidise the iron to the more stable form, as per the following equation:



### 1.2.3 Gypsum Crystallisation

On addition of lime, the calcium reacts with the sulphates to form solid gypsum which precipitates out according to the following reaction:



Although the reaction is slow, the gypsum crystallisation reactor is specifically included to allow additional reaction time. This will also protect the downstream clarifier/ thickener from gypsum scaling, as gypsum precipitation will take place preferentially on the sludge particles that are introduced through sludge recycling back into the neutralisation reactor. No other chemical dosing takes place at this reactor, as the reactor's purpose is solely to provide additional reaction time after the lime is added in the preceding neutralisation reactor.

### 1.2.4 Solids Separation

Once metal precipitation and gypsum crystal growth have taken place, the suspended solids are removed in a thickener, where the reactor liquor is introduced from the top, at the centre distributor well of the thickener. The solids are assumed to settle at a rate not higher than 1 m/h. The thickener is designed with a side wall depth of 4.5 m to ensure sufficient space for thickening.

A sludge blanket forms at the bottom of the thickener and a centra3 drive rake scrapes the settled solids to the centre sludge sump at the bottom of the thickener. The thickener underflow sludge is pumped back to the upstream reactor for conditioning with lime and is re-introduced at the neutralisation reactor to facilitate metal precipitation and crystal growth, while a portion is disposed of (wasted)

To further enhance sludge settling and produce a clear thickener supernatant, a polymer flocculant is introduced at the feed to the thickener. Flocculation causes destabilised colloidal particles to agglomerate and form rapid-settling flocks.

The thickener is designed to produce sludge consistencies of 7-14% (m/m) solids at a sludge recycle-to-AMD ratio of 50-100%, which will ensure that the wasted sludge volume is kept to a minimum, while still being practical to pump for disposal.

### 1.2.5 Sludge Conditioning

Recycled sludge is conditioned with lime and re-introduced at the neutralisation reactor to facilitate metal precipitation and crystal growth. Lime is an effective conditioner of recycle sludge as it facilitates the formation of precipitated sludge with better settling properties. For sludge conditioning, 40-80% of the total required lime dosage is introduced in the sludge conditioning tank, and 20-60% is introduced into the neutralisation reactor.

### 1.2.6 Sludge Handling

A portion of the sludge produced at the settler is wasted from the sludge sump. The wasted sludge has a solids content range of 7-14% (w/w) and is pumped away for disposal. Sludge disposal pipeline back to the disposal site.

The Operation and Maintenance Operator is responsible for:

- Maintaining the sludge disposal system between the AMD plant and the disposal site.
- Deciding on the quantum of sludge that must be disposed for proper operations as per O&M Manual.
- Pigging the sludge pipe to remove scale build-up.

## 1.3 Description of EASTERN BASIN WTP

### Overview

An overview of the mainstream treatment process for the Eastern Basin is shown in Figure 1, whilst Figure 2 shows a simplified block flow diagram of the water treatment plant (WTP).

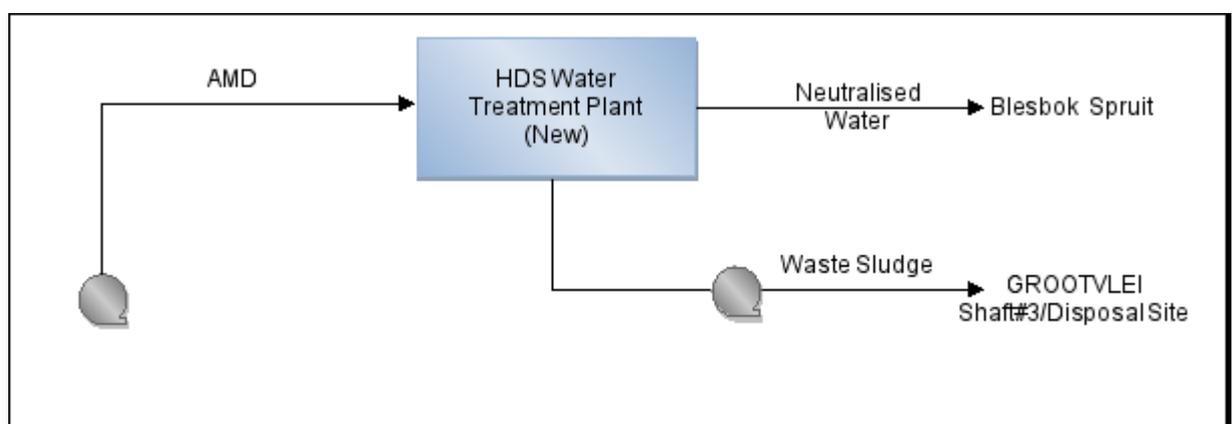


Figure 1.1: Overview of Mainstream Treatment Process for the Eastern Basin

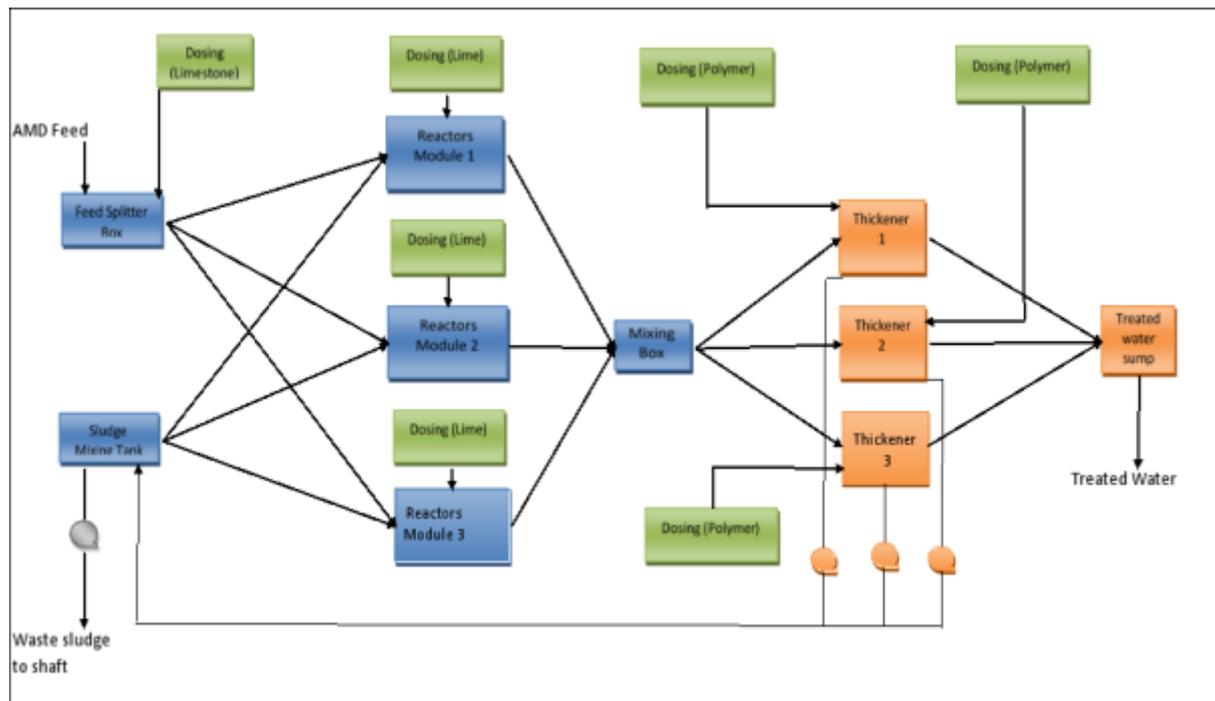


Figure 1.2: Simplified Block Flow Diagram of the Water Treatment Plant for the Eastern Basin

The main components of the mine water collection system include the following:

- Abstraction (feed) pumps at Grootvlei Shaft No 3 .
- Transfer pipelines from Grootvlei shaft No 3 to the adjacent Eastern Basin AMD Water Treatment Plant.

The main components of the dosing system for the AMD Water Treatment Plant include the following process units:

- Limestone ( $\text{CaCO}_3$ ) dosing system
- Unslaked Lime dosing system (Quicklime,  $\text{CaO}$ ); however, hydrated lime is dosed
- Polymer (polyelectrolyte) dosing system

The main components of the Eastern Basin Water Treatment Plant include the following process units:

- Feed splitter box
- Three parallel reactor modules consisting of:
  - Sludge conditioning tank
  - Reactor, consisting of:
    - Pre-neutralisation tank
    - Neutralisation tank
    - Gypsum crystallisation tank

- Flocculent dosing mixing box
- Three parallel thickeners
- Sludge recycle pumps
- Sludge mixing tank
- The main components of the treated water discharge and waste disposal systems include the following process units:
  - Treated water sump
  - Utility water pump station
  - Treated water transfer pipeline from the Eastern Basin Water Treatment Plant to Blesbokspruit.
  - Waste sludge pumps, pumping out of the sludge mixing tank.
  - Waste transfer pipeline from the Eastern Basin Water Treatment Plant to the shaft.

**Table 1.3: AMD Summary of Treatment Facility and Capacities**

DESCRIPTION	CAPACITY
Acid Mine Drainage (AMD) water Average Treatment plant capacity: <span style="color: #0070C0;">Design</span>	100 MI/d 110 MI/d
AMD abstraction pumps Average flow rate: <span style="color: #0070C0;">Design</span>	100 MI/d per 3 pumps 110 MI/d per 3 pumps
Reactors (wet capacity): Pre-Neutralization Neutralization Gypsum Crystallization Sludge Conditioning <b>Total</b>	3 x 1170 m <sup>3</sup> 3 x 2200 m <sup>3</sup> 3 x 3385 m <sup>3</sup> 3 x 1070 m <sup>3</sup> <b>23 475 m<sup>3</sup></b>
Thickeners	3 x 43 m diameter
Treated Water Disposal Tank	1730 m <sup>3</sup>
Sludge disposal Pump flow rate	1338 m <sup>3</sup> /day
Limestone Dosing Plant Capacity: Average Max	58.8 Ton/day 62.2 Ton/day
Lime Dosing Plant Capacity: Average Max	35.7 Ton/day 79 Ton/day
Polymer Dosing Plant Capacity: Average Max	0.6 Ton/day 0.72 Ton/day m

**ANNEXURE B**  
**DESCRIPTION OF SERVICES**

**ANNEXURE B: Description of Services.****1. GENERAL**

- 1.1 The Operator shall perform all activities and services for the proper and effective management, operation and maintenance of the Facilities in a cost effective and professional manner as set forth in this Agreement and in accordance with generally accepted principles and practices for water treatment and treatment of AMD, the Employer policies applicable to the Facilities, and all Applicable Laws.
- 1.2 Except as otherwise provided in this Agreement, the Operator shall provide or obtain all personnel, materials, equipment, tools, services and supplies necessary to manage, operate and maintain the Facilities and performance levels in the manner required by this Agreement, and in any event to a standard that meets industry standards, including but not limited to the Scope of Services as described in Schedule A of this Agreement.

**2. TESTING AND SAMPLING PROCEDURES**

- 2.1 The Operator shall, conduct all testing and analyses required by this Agreement as described in Annexure D and Applicable Laws. Routine testing can be carried out in the on-site laboratory; however a specified number of testing shall be carried out by a SANAS accredited laboratory. The Operator shall provide the Employer with evidence of such accreditation.
- 2.2 The Operator shall ensure that all sampling and testing programs required to be conducted by the Operator pursuant to this Agreement shall be conducted in accordance with the applicable testing requirements.
- 2.3 Any testing to be conducted by the Employer, in addition to the testing required to be conducted pursuant to the terms of this Agreement shall be the sole responsibility and shall be conducted at the sole expense of the Employer. The Employer shall conduct all sampling and testing in accordance with the same requirements indicated above. The Operator shall provide all further sampling necessary to allow the Employer to conduct the additional testing at no further cost to the Employer.

**3. VERIFICATION OF THE OPERATOR'S TESTING PROCEDURES.**

- 3.1 The Employer shall be permitted to, on an annual basis, at its own expense, conduct a review of the Operator's laboratory and testing procedures and confirm the test results produced by the Operator's laboratory. If the Employer's review demonstrates that the results produced by the Operator's laboratory are materially inaccurate, the Employer shall be entitled to require an Adjustment to the Operations Fee pursuant to Conditions of Contract Clause 10 of this Agreement for those costs of its review referable to the inaccuracy of the laboratory's results.

The Operator shall, upon receipt of notice from the Employer of material inaccuracy of laboratory results, correct the quality problem at its laboratory immediately, at the Operator's cost.

- 3.2 In addition to sampling and testing by the Operator, the Employer may at any time elect to take independent samples or obtain split samples from the Operator and to perform tests and analyses in order to assess the Operators sampling and testing procedures and to assess the Operator's compliance. The Operator shall cooperate fully with any such effort by the Employer and will provide samples and test results promptly at no further cost to the Employer.

#### **4. COMMUNICATIONS BETWEEN THE EMPLOYER AND THE OPERATOR.**

##### **Managers**

- 4.1 The Employer shall designate one person, the Employer's Manager, to act as their primary liaison and coordinator. The Operator shall at all times employ a person designated as the Operator's Manager, who shall, among his or her other duties, serve as the Operator's liaison with the Employer and who shall be the Operator representative primarily responsible for dealing with the Employer. The Operator shall submit the name of its designated Operator's Manager for the Facilities to the Employer for approval, which approval shall not be unreasonably withheld. The Employer reserve the right to veto any of the Operator's designated Operator's Managers submitted for approval at the sole discretion of the Employer. The Operator shall, where practicable provide the Employer with at least sixty (60) calendar days prior written notice of any change in the Operator's Manager.
- 4.2 The Employer and the Operator shall also appoint designees to the Employer Manager's position and the Operator Manager's position to act on behalf of the respective Manager in the respective Manager's absence. The Employer shall also review and approve the Operators designee for the Operator's Manager, which approval shall not be unreasonably withheld. The Operator shall provide the Employer with at least sixty (60) calendar days prior written notice of any change in the Operator's Manager's designee.
- 4.3 The Employer reserve to themselves the right to request in writing, upon reasonable notice to the Operator, that the Operator replace the Operator's Manager or designee, or Manager of the Facility, and the Operator shall, subject to Applicable Laws, make best efforts to comply with such a request from the Employer. The Employer or the Operator may refer any dispute with respect to this sub clause to dispute resolution pursuant to Conditions of Contract clause 24.

- 4.4 The Employer's Manager has the authority to ensure that the provisions of this Agreement are faithfully adhered to. The authority of the Employer's Manager shall be limited to providing direction, approval or consent in respect of any matter falling within the provisions of this Agreement, and shall be binding upon the Employer. The Employer's Manager shall not have the authority to provide direction, approval or consent or enter into any agreement for any matter that falls outside of the provisions of this Agreement and any such direction, approval, consent provided or agreement entered into shall not be binding upon the Employer.
- 4.5 The Employer may appoint an Operations Agent to manage the Operator on the Employer's behalf. The Operations Agent will act in place of the Employer's Manager. The Operations Agent shall have the same rights and privileges as provided in this agreement to the Employer.

## 5. REPORTS

The Operator shall prepare and submit all performance, environmental and monitoring reports required by this Agreement and the Applicable Laws and shall file such reports with the Employer's Manager. All reports shall be provided to the Employer in electronic format and in hard copy.

### **Compliance Report**

The Operator shall on a daily basis capture the following information, compile a report and submit it to the Employer:

- i. AMD (Electric conductivity, pH, Turbidity, Acidity, TSS, sulphate, aluminium, iron, manganese)
- ii. Treated water (Electric conductivity, pH, Turbidity, TSS, sulphate, aluminium, iron, manganese)
- iii. Volume of AMD pumped
- iv. Water level in the shaft
- v. All treatment trains' TSS (pre-neutralisation, sludge conditioning, neutralisation, reactor overflow, parabolic channel, sludge mixing box, thickener overflow).

### **Operations and Maintenance Reports.**

#### **Monthly report**

The Operator shall compile, maintain and provide to the Employer, within ten (10) Business Days of the end of each calendar month in each Contract Year and no later than seven calendar days prior to each monthly meeting with the Employer, a comprehensive Monthly Operations and Maintenance Report. Quarterly Contract Report.

These reports shall be in a form developed jointly by the Managers, and shall include, but not be limited to, the following information as it applies to the Facility for the preceding month:

- i. Daily rainfall (mm);
- ii. Daily volume of potable water (m<sup>3</sup>);
- iii. No. of poly bags in stock (no.);
- iv. Daily No. of poly bags used for dosing (tons);
- v. Daily Content level in the five lime silos (m);
- vi. Daily Lime delivered (kg, weighbridge);
- vii. Daily Lime dosed (tons);
- viii. Daily Content level in the three limestone silos (m);
- ix. Daily Limestone delivered (kg, weighbridge);
- x. Daily Limestone dosed (tons);
- xi. Raw Water flow including average daily flow, maximum daily flow, and total monthly flow;
- xii. Treated Water flow including average daily flow, maximum daily flow, and total monthly flow;
- xiii. Raw Water average turbidity, pH, colour, temperature, concentration of iron, sulphate and manganese
- xiv. Treated Water maximum and average turbidity;
- xv. Treated Water minimum, maximum and average pH;
- xvi. Treated Water average concentration of iron, sulphate and manganese;
- xvii. Status of any action plans required to correct Compliance Failures;
- xviii. Significant events or failures including any and all events of noncompliance with Applicable Laws or this Agreement;
- xix. Any actions required from the Employer;
- xx. Details of the safety programme and any incidents resulting from an unsafe work practice or accidental mishap;
- xxi. Equipment operability;
- xxii. Laboratory analysis relating to Facilities operation;
- xxiii. Electricity, potable water, fuel and chemicals usage;

- xxiv. Staffing utilization, including staffing levels indicating terminations and new appointments;
- xxv. List of complaints received, action plans and remedies; and where complaints received were determined not to be valid an explanation for such determination;
- xxvi. Description and status of Facilities operations;
- xxvii. Employee training which has been carried out by the Operator;
- xxviii. A detailed and comprehensive report of all maintenance work performed;
- xxix. A summary of the following:
- xxx. A summary of the work orders scheduled for the period;
- xxxi. A summary of the unscheduled work orders required during the period;
- xxxii. A summary of the completed work orders for the period;
- xxxiii. A summary of the incomplete work orders for the period.
- xxxiv. Condition monitoring assessment reports (Vibration Analysis, Piping Wall Thickness Tests, Thermography, Thickener Torque trends)
- xxxv. Mass balance of the entire facility indicating input streams and output streams.
- xxxvi. Such other information as the Employer deems fit to ensure that it has sufficient information to assess the management and operation of the Facilities.
- xxxvii. Environmental **bond** against the OEMP<sub>r</sub> and EA inclusive of water quality monitoring requirements of the DWS directive and NNR.

#### **Quarterly Contract report**

The Operator shall compile, maintain and provide to the Employer, within thirty (30) calendar days after the end of each 3 month period (quarterly or four times per Contract Year) a comprehensive Quarterly Contract Report. The Quarterly Contract Report should not be a mere consolidation of the Monthly Report and shall outline and discuss the following:

- i. Deliverables under this Agreement;
- ii. Financial position;
- iii. Adjustments to Operations Fees;
- iv. Proposed adjustments to Operations Fees;
- v. Amendment to the scope of the services to be provided by the Operator;
- vi. Changes to business continuity plans;
- vii. Regulatory and contractual compliance issues;

- viii. Occupational, health, social and safety issues;
- ix. Any other issues of mutual concern related to this Agreement.

### **Comprehensive Quarterly Water Quality Report**

The Operator shall compile, maintain and provide to the Employer, within thirty (30) calendar days after the end of each 3 month period (quarterly or four times per Contract Year), a comprehensive Quarterly Water Quality Report. The Quarterly Water Quality Report shall summarise all the water quality information on both raw and treated water quality.

### **Annual Asset Report.**

The Operator shall provide the Employer with a detailed Annual Asset Report summarizing the condition of the Civil, Structural and Site-Related Assets, using the Initial Condition Survey as a guide, within sixty (60) calendar days after the end of each Contract Year.

The Annual Asset Report shall be in a format to be agreed upon by the Employer and shall include, but not be limited to, the following information:

- i. A general overview of the operations of the Facility in the previous Contract Year including any major achievements of the Operator, the reliability of the Facility and the performance of the Facility. Such overview shall be no longer than twenty (20) pages and shall be in a form which is comprehensible to the lay person;
- ii. A summary of the information provided in the Monthly Operations and Maintenance Report with annual averages or totals where applicable for the previous Contract Year. This information shall be presented in tabular and graphical form with a brief written narrative to highlight key points in each section;
- iii. The results of the detailed Assets condition surveys undertaken by the Operator during the Contract Year, with a comparison of the condition of the Assets to the condition of the Assets as described in the Initial Condition Survey;
- iv. An analysis of electricity consumption figures for the Facility, broken down by component, including fixed charges, consumption charges, peak charges trends;
- v. An analysis of annual chemical costs and consumption figures, for the WTP, including dosage rates; and
- vi. Recommendations for capital programs to be undertaken by the Employer, including business cases for such programs.
- vii. A list of assets (movable and immovable) with their initial costs, year acquired and current status in a spreadsheet format.

**Financial Reports**

For each quarter of each Contract Year, the Operator shall provide the Employer with a verifiable summary of the Operator's costs for the preceding quarter, in a form and containing the content as mutually agreed upon by the Parties acting reasonably with respect to its management, operation, and maintenance of the Facility within thirty (30) calendar days of the end of each quarter of the Contract Year. These verifiable summaries shall be provided to the Employer together with the Quarterly Contract Reports.

At the end of each Contract Year, the Operator shall provide the Employer with a verifiable summary of the Operator's costs for that Contract Year, in a form and containing the content as mutually agreed upon by the Parties acting reasonably, related to the management, operation and maintenance of the WTP and all other Facility within ninety (90) calendar days at the end of each Contract Year.

**Deficient or Late Compliance Reports**

Except when caused by an Uncontrollable Circumstance, if the Operator fails to submit a Compliance Report or submits a deficient Compliance Report due to negligence or non-performance of the Operator's obligations, the Employer may deduct the Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee and, such a failure by the Operator, shall be an Event of Default.

**Deficient or Late Reports**

Except when caused by an Uncontrollable Circumstance, if, during any one Contract Year, the Operator fails to deliver one (1) or more Reports other than a Compliance Report within the prescribed time period, or delivers one or more Reports that, in the opinion of the Employer, are materially deficient or have omitted material information, the Employer may withhold the Performance Deduction as set out in the Contract Data per month of the monthly payment of the Variable Performance Fee or Operations Fee payable by the Employer and the Employer shall not pay the amount withheld unless and until the Operator delivers the Report, or corrects the deficiencies identified by the Employer, as the case may be.

Except when caused by an Uncontrollable Circumstance, if, at any time during the Term, the Operator fails to deliver three (3) or more Reports within the prescribed time period, or delivers three (3) or more Reports that, in the opinion of the Employer, are materially deficient or have omitted material information, the Employer may deduct from the Variable Performance Fee or Operations Fee the Performance Deduction as set out in the Contract Data

The Parties agree that a failure to file a report other than a Compliance Report due to late receipt of sampling, testing or analytical results from a third party where the Operator can reasonably demonstrate to the Employer's Manager that the third party was in default of its contractual obligations to deliver sampling or test results in a timely fashion, and that the Operator used its Best Efforts to obtain such results in a timely fashion, shall not be considered an occurrence.

The Employer shall notify the Operator in writing within thirty (30) calendar days after receipt of a Report of any deficiencies in such Report. If written notice is not provided within thirty (30) calendar days after receipt of a Report, such Report shall be considered acceptable and the Employer shall not withhold any amount in respect of such Report.

## **6. INSPECTIONS AND REVIEW OF RECORDS**

The Operator shall permit the Employer and its authorized representatives, during the Term of the Agreement and without unreasonable disruption to the Operator, to examine and electronically monitor and retrieve any and all operating and maintenance records and Reports of the Operator, and make copies of and take extracts from such records and Reports as may be reasonably necessary to ensure compliance by the Operator with the terms of this Agreement and review any of the records and Reports.

### **6.1 DEALINGS WITH GOVERNMENTAL AUTHORITIES**

#### **Communications with Governmental Authorities.**

- 6.1.1 The Employer shall be the primary liaison with the Governmental Authorities and will invite the Operator to attend or participate in such meetings relevant to the Operator's management, operation and maintenance of the Facility or the Operator's obligations pursuant to this Agreement. Note that the Employer by definition is excluded from being a Governmental Authority.
- 6.1.2 The Operator shall not communicate directly with any Governmental Authorities, with the exception of times when the Operator is under a legal obligation to report directly to the Governmental Authorities or where the Operator has obtained the prior written approval of the Employer's Manager. The Operator shall report forthwith to the Employer regarding any such discussions.

## 6.2 CONTINGENCY AND EMERGENCY PLANNING

- 6.2.1 The Operator shall review and update all current contingency and emergency response plans. The Operator shall ensure that any such plan meets all Applicable Laws and are consistent with the standard and policies of the Employer. The contingency and emergency response plans shall be submitted to the Employer for the Employer's approval thirty (30) calendar days prior to the Commencement Date. Failure to submit such plan in compliance with this sub-clause shall be an Event of Default.
- 6.2.2 In the event of an Emergency Situation, the Operator must respond within thirty (30) minutes and ensure appropriate staff is available at the Facility within sixty (60) minutes from the earlier of the occurrence of the Emergency Situation or the reasonable time within which a prudent operator should have known about the Emergency Situation. The Employer may deduct the Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee for each event of non-compliance with the performance requirements of this sub-clause. Further, in the event of non-compliance by the Operator with the performance requirements of this sub-clause, the Employer may, upon giving verbal notice to the Operator's Manager, take such action as is reasonably necessary to respond to the Emergency Situation, and the Operator shall pay the reasonable cost of the Employer's response to the Emergency Situation plus a mark-up of five percent (5%).

## 6.3 SCADA SYSTEMS

- 6.3.1 The Operator shall continue to operate and maintain the Supervisory Control and Data Acquisition (the "SCADA") systems associated with the Facility and shall be responsible for all operations and maintenance, training, service level standards, and the operation and maintenance of enhancements to the SCADA systems, including back-up systems also as required in Schedule B. For greater certainty, the Employer shall retain the responsibility for SCADA programming, and the Operator shall only make changes after having consulted with and receiving approval from the Employer.

## 6.4 OCCUPATIONAL HEALTH & SAFETY

This Agreement will be governed by the requirements of the Occupation Health and Safety Act (Act 85 of 1993) and all applicable regulations and the Operator shall comply with all applicable health and safety laws and regulations.

### **Safety Audits and Non-Compliance.**

- 6.4.1 The Employer may, at its sole discretion and expense, conduct safety audits of the Facilities on a semi-annual basis which may include inspections of physical conditions and reviews of the Operator's compliance with all applicable safety legislation and regulations.

- 6.4.2 If, as a result of the Employer's safety audit or otherwise, the Employer determines that one of the following deficiencies ("Safety Deficiencies") has occurred:
- 6.4.2.1 non-compliance with Applicable Laws relating to health and safety; or
  - 6.4.2.2 the creation by the Operator of a health or safety hazard to a worker or the environment which is contrary to Applicable Laws or contrary to the procedures established under this Agreement,
- 6.4.3 then the Operator shall correct the Safety Deficiency to the satisfaction of the Employer within the time frame determined by the Employer acting reasonably but in any event within three (3) months of the identification of the Safety Deficiency.
- 6.4.4 If the Operator fails to correct the Safety Deficiency to the satisfaction of the Employer within the time frame determined by the Employer such failure shall be considered an Event of Default, and, the Employer may, in their discretion, withhold from the Variable Performance Fee or Operations Fee payable to the Operator the Performance Deduction as set out in the Contract Data for each month in which the Operator failed to correct the Safety Deficiency within the prescribed time frame, unless the Operator is using Best Efforts to correct such Safety Deficiency. A period of three (3) months or longer, shall not constitute Best Efforts as that phrase is used in this sub-clause. The withholding of payment of the Variable Performance Fee or Operations Fee as described herein is in addition to the rights and remedies of the Employer.

## **6.5 TECHNICAL SUPPORT**

The Operator shall provide all necessary technical support to ensure the performance of the Operator's obligations under this Agreement and the proper management, Operation and Maintenance of the Facility.

## **6.6 ACCOUNTING**

The Operator shall maintain up-to-date financial records of activities related to the Facility prepared in accordance with the accepted accounting standards.

## **6.7 OPERATIONS AND MAINTENANCE MANUALS**

- 6.7.1 The Employer shall provide to the Operator at the Commencement Date, the available Operations and Maintenance Manuals for the Facility.

- 6.7.2 The Operator shall within three (3) months of the Commencement Date prepare revised and updated Operations and Maintenance Manuals as appropriate to reflect changes to Operations and Maintenance procedures for the Operating Period. The revised and updated Operations and Maintenance Manuals shall be to the reasonable satisfaction of the Employer, and shall become the property of the Employer.
- 6.7.3 The Operator shall within three (3) months of the Commencement Date verify all current Facility drawings and keep same on file in a drawing room. These documents shall be updated at least annually. The Operator will be responsible for any costs of updating the drawings in electronic format. The Operator's obligation to maintain drawings and figures does not include the providing of engineering services and/or professional certifications.
- 6.7.4 Any operational changes made by the Operator must result in the corresponding changes and updates being made to the Operations and Maintenance Manuals and such changes and updates to the Operations and Maintenance Manuals must be made within sixty (60) calendar days from the implementation of the operational change. The Employer may withhold from the Variable Performance Fee or Operations Fee payable to the Operator the Performance Deduction as set out in the Contract Data for each month the relevant changes and updates are delayed, and may deduct an additional Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee after three (3) months delay by the Operator in completing the updates and changes.
- 6.7.5 The Operator shall, one month prior to the completion of termination of the Agreement, prepare and submit an updated Operations and Maintenance Manual to the Employer. The Employer may withhold the final Operations Fee payment until such updated Operations and Maintenance Manual has been submitted to the satisfaction of the Employer.

## 6.8 SECURITY

The Operator shall be responsible to secure the Facility against unauthorized access and theft or damage, including if necessary, the use of physical surveillance. For greater certainty, the Operator shall acknowledge that the Employer has implemented a system of closed-circuit television cameras at the Facility. The Operator shall ensure that this system is maintained at all times. The Operator shall take into account the record of security incidents available as well as other records available indicating the historic security issues in the area.

In order to ensure records of active personnel onsite, a biometric clocking system shall be used at the expense of the Operator, and TCTA reserves the right to request random audit on the system.

Each employee assigned to site shall use the clocking system for record keeping. In the event where an individual is found to spend less time onsite without reasons aligned to work, then penalties shall be imposed by deducting hourly rate for the respective individual. TCTA also reserves the right to instruct the operator to replace the staff member with an equally competent individual within a period of 60 calendar days.

## **6.9 USE OF SUB-OPERATORS**

Upon receipt of written notice from the Employer at any time during the Term, the Operator shall not, employ or hire the services of a specified sub-operator to assist the Operator in the performance of its obligations under this Agreement without the prior written consent of the Employer, and such consent shall not be unreasonably withheld.

The Employer may, instruct the Operator to employ or hire the services of a specified sub-operator for certain portions of the operations and maintenance of the Facility.

## **6.10 ENVIRONMENT**

The Operator shall implement and comply with the relevant elements of requirements of the Operational Environmental Management Programme (“OEMPr”) and the Environmental Authorisation (EA), DWS Directive and NNR. The cost of implementation and compliance shall be included under schedule B.

The Operator will schedule regular environmental audits as per the requirements of the EA. and the findings will be communicated to the Employer. The OPERATOR shall attend promptly to any non-compliance from the OEMPr and the EA. Any non-compliance that is not resolved within 7 calendar days of being identified or communicated, the Operator shall have an action plan with specific time frames agreed with the client for implementation. Failing to meet the agreed time frame will result in a reduction to the Variable Performance Fee or Operations Fee of the Performance Deduction as set out in the Contract Data per non-compliance. The Operator shall in any case provide a written report to the Employer on the resolution of any findings or non-compliances within 14 calendar days, failing which a further Performance Deduction as set out in the Contract Data shall be applied. The client reserves the right to conduct reviews, compliance and investigations.

## SCHEDULE A: SUMMARY OF OPERATOR'S TASKS

### 1. GENERAL

1.1 The Operator shall staff and operate the Facility, as described in **ANNEXURE A**, on a continuous twenty-four (24) hours per day, seven (7) days per week basis throughout the entire Term of the Contract.

### 1.2 KEY PERFORMANCE TARGETS

#### 1.2.1 Quantity of Treated Water

The Operator shall pump and treat above 90% of the maximum treatment capacity of 100 ML per day of raw AMD, measured as an average for the month. Any periods when the plant could not be operated due to Uncontrollable Circumstances, such as power outages, will be excluded from the calculation. If this requirement is not met for any particular month the Operator shall submit a report within 5 working days from the end of the month to the Employer to give an account of the situation and indicate the mitigation measures being taken to recover the rise in AMD level in the shaft. In the event where the water level has reached the required buffer zone below ECL, the focus would be to maintain the level and minimise operating costs rather than treating an average pumping capacity of 90%.

#### 1.2.2 Quality of Treated Water

The Operator shall ensure that treated water meets with the minimum criteria set out in **ANNEXURE B** at all times, except for Uncontrollable Circumstances and Abnormal Raw Water quality.

#### 1.2.3 Level of Water in Shaft

The initial overall objective of pumping and treating raw AMD is to lower and maintain the water level in the shaft at the instructed level.

#### 1.2.4 Key Performance Indicators

Key performance indicators shall be agreed annually between the delegated Project Manager (Employer) and the Operator. The measures should be aligned to reflect the intent of the contract objectives. 2020 will be used to collect the baseline data for measurements, the KPI trends measurements will be part of the monthly reporting summary report statistics.

The sub elements included under the main classifications are agreed between the parties annually.

### **Plant Operation Performance (40 %)**

Water quality lab. Measurements are based on, DWA directive.

### **Plant Maintenance Performance (40 %)**

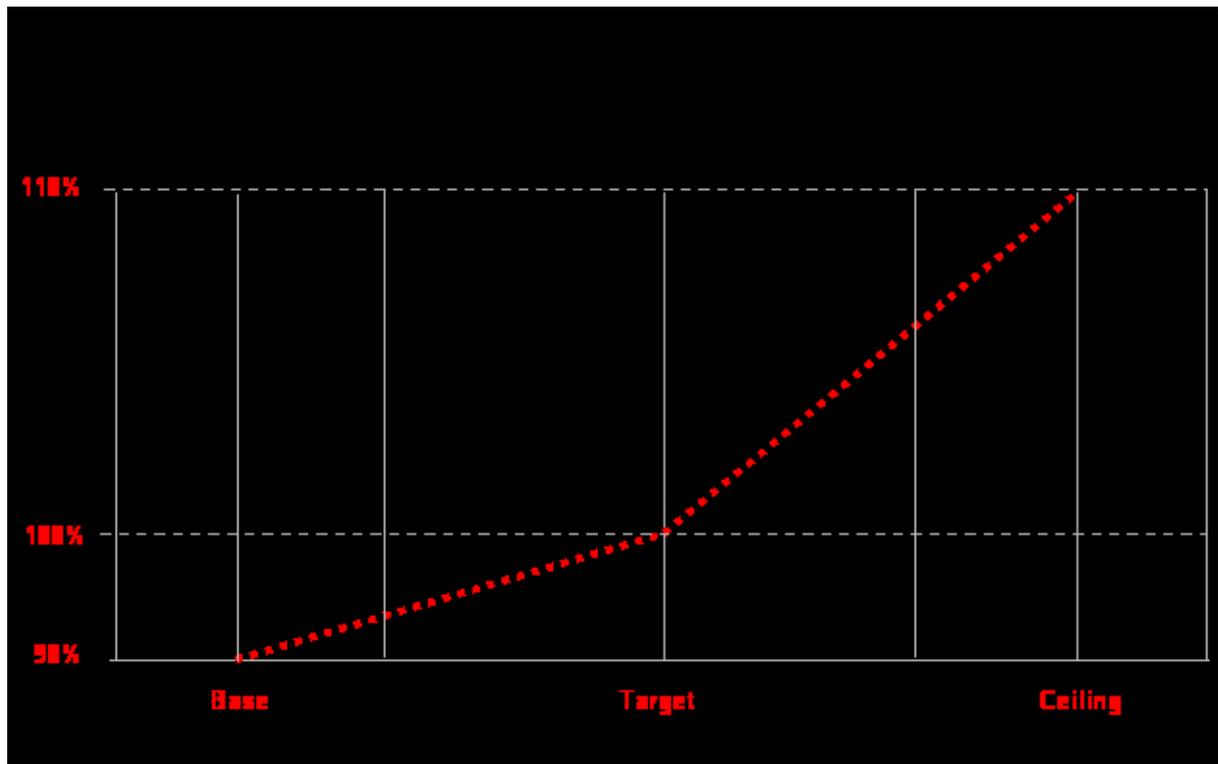
Technical measurements are based on, process plant work management, data from computerized maintenance management system.

### **Cost Performance (10 %)**

The cost measurement

### **Environmental, Social and Safety Performance (10 %)**

The targets should be set in line with the normal distribution curve shown below and taking cognizance of the probabilities of exceeding the targets.



- 1.3 The Operator shall provide or obtain all personnel, materials, equipment, tools, services and supplies necessary to manage, operate and maintain the Facility and performance levels in the manner required by the Agreement, and to a standard that meets industry standards, including but not limited to:
  - 1.3.1 Operation in accordance with the parameters set out in **ANNEXURE C**
  - 1.3.2 Protection and maintenance of the facility in accordance with the and in accordance with the Computerised Maintenance Management System, as set out in ANNEXURE D;

- 1.3.3 Perform all laboratory sampling, testing and analyses, quality control and quality assurance at the frequency and performance level as defined in ANNEXURE E;
- 1.3.4 Delivery of regular and detailed reports to the Employer, in accordance with the schedule set out in ANNEXURE F;
- 1.3.5 Undertake all environmental compliance and management activities in accordance with all relevant annexures.
- 1.3.6 Maintenance of chemical stocks;
- 1.3.7 Maintenance of all radio and software licenses, including administration software, the PLC and HMI (SCADA) software, GSM contracts, maintenance management and inventory systems, and administration systems;
- 1.3.8 Human resources management;
- 1.3.9 Training;
- 1.3.10 Purchasing;
- 1.3.11 Regulatory compliance and reporting;
- 1.3.12 Cleaning and maintenance of the areas within the WTP bound, as well as public areas, road to the entrance to the WTP including grass cutting and removal of unwanted plant growth along WTP fence lines and along the powerlines servitudes;
- 1.3.13 Maintenance of pipelines including regular pigging;
- 1.3.14 Maintenance and regular calibration of flow meters and all instruments;
- 1.3.15 Maintenance of all sludge disposal lines and boreholes or approved sludge dumping sites.
- 1.3.16 Removal of slaker waste
- 1.3.17 Dust suppression and maintenance (i.e. fixing potholes, cutting encroaching trees) of access road leading to site entrance;
- 1.3.18 Removal of sewage ;
- 1.3.19 Inspection and maintenance of lifting devices;
- 1.3.20 Inspection, maintenance and regular testing of the WTP auxiliary power generator;
- 1.3.21 Security of the Facility and provision of access control roving guards and additional security guards for regular;
- 1.3.22 All administrative and management personnel and services including plant management, human resources, training, accounting and legal services, payroll, purchasing, technical support, communication and information systems;

- 1.3.23 Contingency and emergency response plans acceptable to the Employer and a workplace safety program that meets or exceeds national standards;
- 1.3.24 Cleansing and remediation of spillages resulting from incorrect operation of the WTP by the Operator in accordance with the terms of this Agreement, the costs of which will be for the account of the Operator;
- 1.3.25 Supplying of diesel fuel for standby power generation purchasing, transporting and receiving of all materials and supplies for the operation of the Facility including but not limited to, chemicals, laboratory accessories and consumables, office supplies, building and grounds maintenance supplies, replacement parts, equipment, maintenance supplies and spare parts which are required in the day-to-day management, operation and maintenance of the plant;
- 1.3.26 All necessary insurance required by this Agreement; waste handling, transportation and disposal of all waste materials including chemicals, grit screenings, oil, grease, and excess sludge to licensed waste disposal facility on a cost reimbursable basis.
- 1.3.27 All required permits, approvals and licences;
- 1.3.28 Waste handling, transportation and disposal of all chemicals, grit, screenings, scum, oil, and other wastes and residues in licensed solid waste disposal facility, including residue transportation and disposal.
- 1.3.29 Regularly update information on the Integrated Regulatory Information System (IRIS) for DWS monitoring and maintaining facility classification grade.
- 1.3.30 Within 3 months after the commencement of the contract, the OPERATOR shall Conduct HAZOP and Safety Integrity Layer (SIL) verification study required for the Emergency Shutdown (ESD)/cause and affects and process operations review to identify hazards and operability issues and advise TCTA on mitigation provisions. Costs for conducting the study shall be on the Operator's account. The Operator shall ensure that all critical and high-risk items are implemented and signed off by TCTA. In addition, the operator shall ensure that the HAZOP/SIL review is conducted by an experienced 3rd party facilitator, the CV of the facilitator shall be submitted to TCTA for review and approval.

## **2. CONTINGENCY AND EMERGENCY PLANNING**

- 2.1 The Operator shall review and update all current contingency and emergency response plans. The Operator shall ensure that any such plan meets all Applicable Laws and are consistent with the standard and policies of the Employer. The contingency and emergency response plans shall be submitted to the Employer for the Employer's approval thirty (30) calendar days prior to the Commencement Date. Failure to submit such plan in compliance with this sub-clause shall be an Event of Default.

2.2 In the event of an Emergency Situation, the Operator must respond within thirty (30) minutes and ensure appropriate staff is available at the Facility within sixty (60) minutes from the earlier of the occurrence of the Emergency Situation or the reasonable time within which a prudent operator should have known about the Emergency Situation. The Employer may deduct the Performance Deduction as set out in the Contract Data from the Variable Performance Fee or Operations Fee for each event of non-compliance with the performance requirements of this sub clause. Further, in the event of non-compliance by the Operator with the performance requirements of this sub clause, the Employer may, upon giving verbal notice to the Operator's Manager, take such action as is reasonably necessary to respond to the Emergency Situation, and the Operator shall pay the reasonable cost of the Employer's response to the Emergency Situation plus a mark-up of five percent (5%).

### 3. MINIMUM CHEMICALS STOCKS

The chemicals dosed during normal operation of the Plant are, lime, limestone and polyelectrolyte. It is the responsibility of the Operator to ensure that there is sufficient inventory to operate the Plant for **10 calendar days**, should there be an unexpected interruption in the delivery of chemicals by suppliers.

#### 3.1 PROCUREMENT OF LIME & LIMESTONE

The material supplied is to be in accordance with the specification given in **ANNEXURE H**. It is the responsibility of the Operator to ensure that the product is of acceptable quality. The Operator is also responsible to order material, arrange delivery to site, weighing of delivery vehicles and overseeing the offloading into the correct silo.

The Operator shall at all times have one dedicated and a standby lime supplier. The Operator shall obtain quotations for the supply, delivery and off-loading of lime and limestone from 3 different suppliers and present these to the Employer with recommendations. The supply contracts will be for a period of 12 - 60 months with price adjustments for this period. The Employer will select the most favourable offer for the dedicated supplier and advise the Operator of the selection who will then appoint the selected supplier and the standby supplier(s). 21 calendar days before the end of each supply contract term the Operator shall obtain new quotations from three suppliers and submit these with recommendations to the Employer for approval.

### 3.2 PROCUREMENT OF POLYELECTROLYTE (12 MONTHS)

Polyelectrolyte is primarily dosed to achieve an acceptable turbidity measurement of the treated water within the treated water sump. Within 5 calendar days after the Operation Commencement date, the Operator shall consult with the Employer to agree on an acceptable NTU value for the discharged treated water (<20 recommended) based on economic considerations. Within 30 calendar days after the commencement date of the Contract the Operator shall arrange a sludge settling workshop and thereafter every 12 months or as deemed necessary, to which reliable polyelectrolyte suppliers in the chemicals industry as well as an Employer's representative are invited with the purpose of presenting results and recommendations for the most effective and economical product to be used. After each workshop the Operator shall compile and submit to the Employer a report which must as a minimum include the best performer in terms of NTU results and economy. In addition, the Operator shall submit quotations (R/ton) from suppliers to the Employer for approval.

The Employer will select the most favourable offer for the dedicated supplier and advise the Operator of the selection. The supply contracts will be for a period of 12 - 60 months with price adjustments for this period. The Employer will select the most favourable offer for the dedicated supplier and advise the Operator of the selection who will then appoint the selected supplier and the standby supplier(s). 21 calendar days before the end of each supply contract term the Operator shall obtain new quotations from three suppliers and submit these with recommendations to the Employer for approval.

The Operator shall at all times have one dedicated and a standby poly supplier(s).

## 4. COMMUNICATION BETWEEN THE EMPLOYER AND THE OPERATOR

### Managers

- 4.1 The Employer shall designate one person, the Employer's Manager, to act as their primary liaison and coordinator. The Employer may appoint an Operations Agent who will act in place of the Employer's Manager. The Operations Agent shall have the same rights and privileges as provided in this agreement to the Employer.
- 4.2 The Operator shall at all times employ a person designated as the Operator's Manager, who shall, among his or her other duties, serve as the Operator's liaison with the Employer and who shall be the Operator representative primarily responsible for dealing with the Employer. The Operator shall submit the name of its designated Operator's Manager for the Facility to the Employer for approval, which approval shall not be unreasonably withheld.

The Employer reserve the right to veto any of the Operator's designated Operator's Managers submitted for approval at the sole discretion of the Employer. The Operator shall, where practicable provide the Employer with at least sixty (60) calendar days prior written notice of any change in the Operator's Manager.

- 4.3 The Employer and the Operator shall also appoint designees to the Employer Manager's position and the Operator Manager's position to act on behalf of the respective Manager in the respective Manager's absence. The Employer shall also review and approve the Operators designee for the Operator's Manager, which approval shall not be unreasonably withheld. The Operator shall provide the Employer with at least sixty (60) calendar days prior written notice of any change in the Operator's Manager's designee.
- 4.4 The Employer reserve to themselves the right to request in writing, upon reasonable notice to the Operator, that the Operator replace the Operator's Manager or designee, or Manager of the Facility, and the Operator shall, subject to Applicable Laws, make best efforts to comply with such a request from the Employer. The Employer or the Operator may refer any dispute with respect to this sub-clause to dispute resolution pursuant to Conditions of Contract clause 24.
- 4.5 The Employer's Manager has the authority to ensure that the provisions of this Agreement are faithfully adhered to. The authority of the Employer's Manager shall be limited to providing direction, approval or consent in respect of any matter falling within the provisions of this Agreement, and shall be binding upon the Employer. The Employer's Manager shall not have the authority to provide direction, approval or consent or enter into any agreement for any matter that falls outside of the provisions of this Agreement and any such direction, approval, consent provided or agreement entered into shall not be binding upon the Employer.

## **5. MEETINGS**

- 5.1 The Managers, or their designees, shall meet and communicate on a regular basis. In particular, the Operator's Manager shall, as timely as reasonably possible, inform the Employer's Manager of all emergencies and the occurrence of all Uncontrollable Circumstances relating to the operation of the Facility which an independent Operator would be expected to report to an owner under customary and prudent business practices. The Operator, through the Operator's Manager, shall advise the Employer of any and all conditions, events, issues, suggestions, recommendations, and the like relating to the operation and maintenance of the Facilities and which relate to this Agreement, or which materially affect the safe, professional, and cost efficient operation and maintenance of the Facilities.

- 5.2 The Operator, through the Operator's Manager, shall advise the Employer of any and all conditions, events, issues, suggestions, recommendations, and the like relating to the operation and maintenance of the Facilities and which relate to this Agreement, or which materially affect the safe, professional, and cost efficient operation and maintenance of the Facility.
- 5.3 The Managers or their delegates shall meet not less than once per month, to discuss and review the management, operation and maintenance of the Facility, including the Monthly Operations and Maintenance Report. The Employer, in their discretion, may alter the frequency of the meetings to reflect whether or not there is a need to meet. The date and time of the meetings shall be scheduled as agreed upon from time to time by the Managers.
- 5.4 The Managers or their respective delegates shall meet, at least quarterly, to discuss and review the Quarterly Contract Report, any significant events during the previous quarter, or issues of mutual concern.

#### **Communications with Governmental Authorities.**

- 5.5 The Employer shall be the primary liaison with the Governmental Authorities and will invite the Operator to attend or participate in such meetings relevant to the Operator's management, operation and maintenance of the Facility or the Operator's obligations pursuant to this Agreement. Note that the Employer by definition is excluded from being a Governmental Authority.
- 5.6 The Operator shall not communicate directly with any Governmental Authorities, with the exception of times when the Operator is under a legal obligation to report directly to the Governmental Authorities or where the Operator has obtained the prior written approval of the Employer's Manager. The Operator shall report forthwith to the Employer regarding any such discussions.

## **6. SECURITY**

### **On-site Security**

The Operator is fully responsible for the provision of adequate security measure to control access to the site of the plant and to safeguard the Facility against theft and vandalism.

The Operator shall take into account the record of security incidents available as well as other records available indicating the historic security issues in the area.

The Facility is not currently equipped with a closed-circuit television system.

## 7. USE OF SUBCONTRACTORS

- 7.1 The Operator shall not, employ or hire the services of a sub-contractor to assist the Operator in the performance of its obligations under this Agreement without the prior written consent of the Employer, and such consent shall not be unreasonably withheld.
- 7.2 The Employer may, instruct the Operator to employ or hire the services of a specified sub-Contractor for certain portions of the operations and maintenance of the Facility. The current specified sub-contractors are as follows:

### 7.2.1 AMD Pumps

The Operator is [shall request approval from TCTA to](#) perform any work to the AMD pumps, including the PLC, and its ancillaries (pipes, flow control valves, air valves, quenching system, instrumentation, electrical supply and variable speed control). Any maintenance and/or modifications required to these systems are to be carried out by Andritz or Rockwell respectively [unless otherwise agreed between the parties](#). The Operator shall however be responsible for the following preventative maintenance tasks related to the AMD pump station:

- To check and top-up the VFD cooling systems with coolant and filters
- To turn the shaft of the spare motor as prescribed by the pump manufacturer.
- To clean the pump quench system water filters

### 7.2.2 Shaft inspections

Annual video inspections of the mine shaft are to be carried out to a depth of 250 m. The inspection is to be carried by Mine Rescue Services – South Africa (MRS) or any suitable company with similar expertise. The company must have the necessary equipment and expertise to do the inspection and draft a report on the state of the shaft walls and conveyance. MRS (or equally suitable company) must be qualified to carry out the removal of any obstacles from the shaft as governed by the Mines Health and Safety Act. An approval from TCTA is required in the event where the Operator would prefer to use an alternative company instead of MRS.

### 7.2.3 PLC and SCADA

The Operator shall continue to operate and maintain the Supervisory Control and Data Acquisition (the “SCADA”) systems associated with the Facility and shall be responsible for all operations and maintenance, training, service level standards, and the operation and

maintenance of enhancements to the SCADA systems, including back-up.

For greater certainty, the Employer shall retain the responsibility for SCADA programming, and the Operator shall only make changes after having consulted with and receiving approval from the Employer. The plant PLC code and SCADA system was developed by STARO GROUP (Sasolburg). Any modifications required to these systems shall be carried out by this company.

## **8. INNOVATION AND IMPROVEMENT**

### **8.1 CHEMICALS USAGE**

The Operator shall submit to the Employer a base study indicating the tons of lime, limestone and polyelectrolyte that were dosed on a daily basis to achieve the treated water discharge specification 60 calendar days after the Commencement Date together with an Optimization Plan containing proposals and recommendations for efficiency improvements and proposed savings sharing.

After the Employer's approval of the Optimization Plan, the Operator will immediately implement the plan on the first day of the calendar month following the approval date. The Operator shall as soon as adequate information is available but not later than 60 calendar days thereafter submit a report to the Employer on the results of the efficiency improvements, including net reduction in the tons of chemicals and per unit of treated water. The Operator is to monitor the optimisation measures on a monthly basis and provide recommendations for possible further improvements in the monthly report.

## **ENVIRONMENTAL OBLIGATIONS**

### **8.2 ENVIRONMENT**

The OPERATOR shall appoint a competent service provider to perform surface and ground water monitoring as per the EA requirements.

The Operator shall implement and comply with the requirements of the Operational Environmental Management Programme ("OEMPr") and the cost of such implementation and compliance shall be included under schedule B.

The Operator shall appoint a competent service provider to perform water monitoring as per the DWS directive requirements. The Operator shall attain approval from the Client prior to appointing the service provider.

The Operator will schedule regular independent environmental audits and the findings will be communicated to the Employer. The Operator shall attend promptly to any non-compliance with the OEMPr and EA. Any non-compliance that is not resolved within 7 calendar days of being identified or communicated, the Operator shall have an action plan with specific time frames agreed with the client for implementation. Failing to meet the agreed time frame will result in a reduction to the Variable Performance Fee or Operations Fee of the Performance Deduction as set out in the Contract Data per non-compliance. The Operator shall in any case provide a written report to the Employer on the resolution of any findings or non-compliances within 14 calendar days, failing which a further Performance Deduction as set out in the Contract Data shall be applied.

The Operator shall submit a monthly environmental report inclusive of the monitoring results with conclusions and recommendations.

### **8.3 OCCUPATIONAL HEALTH & SAFETY.**

This Agreement will be governed by the requirements of the Occupation Health and Safety Act (Act 85 of 1993) and all applicable regulations and the Operator shall comply with all applicable health and safety laws and regulations.

### **8.4 SAFETY AUDITS AND NON-COMPLIANCE.**

The Employer may, at its sole discretion and expense, conduct safety audits of the Facility on a semi-annual basis which may include inspections of physical conditions and reviews of the Operator's compliance with all applicable safety legislation and regulations.

If, as a result of the Employer's safety audit or otherwise, the Employer determines that one of the following deficiencies ("Safety Deficiencies") has occurred:

- non-compliance with Applicable Laws relating to health and safety; or
- the creation by the Operator of a health or safety hazard to a worker or the environment which is contrary to Applicable Laws or contrary to the procedures established under this Agreement, then the Operator shall correct the Safety Deficiency to the satisfaction of the Employer within the time frame determined by the Employer acting reasonably but in any event within three (3) months of the identification of the Safety Deficiency.

If the Operator fails to correct the Safety Deficiency to the satisfaction of the Employer within the time frame determined by the Employer such failure shall be considered an Event of Default, and, the Employer may, in their discretion, withhold from the Variable Performance Fee or Operations Fee payable to the Operator the Performance Deduction as set out in the Contract Data for each month in which the Operator failed to correct the Safety Deficiency

within the prescribed time frame, unless the Operator is using Best Efforts to correct such Safety Deficiency. A period of three (3) months or longer, shall not constitute Best Efforts as that phrase is used in this sub clause. The withholding of payment of the Variable Performance Fee or Operations Fee as described herein is in addition to the rights and remedies of the Employer.

## 8.5 TRAINING OF STAFF AND DEVELOPMENT

Prior to the end of the Contract Term, the Operator shall be responsible for training the new designated operational staff. The training period shall be for **30 calendar days** and initiated by the Employer.

The overall objectives of the Operator's Training Programme shall be to:

- Deliver thorough training to achieve a high standard of awareness, knowledge and understanding of the plant and plant systems.
- Provide an effective contribution to the overall training and development of the personnel.
- Provide coaching and assessment of the personnel during the training period.
- Achieve a complete hand-over to the new staff to enable the new Operator to takeover the site.
- The Operator shall ensure adequate training in all aspects of its codes of practice and safety rules.
- The Training Programme shall be agreed with the Employer at a time determined by the Employer.
- The Operator shall develop and submit a comprehensive training programme for approval by the Employer.
- The training programme shall include all aspects necessary to enable the Employer to effectively operate and maintain the system.

**ANNEXURE C**

**OPERATIONAL ENVIRONMENTAL MANAGEMENT PROGRAMME (OEMPr)**

ATTACHED AS A SEPARATE ANNEXURE

**ANNEXURE D:**  
**PROTECTION OF ASSETS AND MAINTENANCE OF FACILITIES**

## 1. GENERAL

- 1.1 The Operator shall use a Computerised Maintenance Management System (CMMS) in accordance with ISO 55000
- 1.2 TCTA shall make available to the OPERATOR all records and documents in the possession of TCTA in respect of the management, operation and maintenance of the Facility which the OPERATOR may request prior to the Commencement Date.
- 1.3 The Operator shall then undertake an initial condition survey:
  - 1.3.1 The initial condition survey shall include civil works, structures, site-related assets, mechanical equipment, electrical equipment, pipelines, power supply lines, furniture, spares and laboratory equipment. The survey must capture the condition of any particular item including recommendations by the Operator to improve the condition. The Employer will communicate whether the recommendations should be implemented. A representative of the Employer must be invited to partake and signoff on each survey;
  - 1.3.2 TCTA may choose, at its expense, to correct and repair such deficiencies and may undertake any of the correction or repairs within a time frame to be developed by TCTA; provided, however, TCTA, at its expense, within a reasonable time frame, correct and repair the deficiencies to the extent necessary in order for (i) the Facility to comply with Applicable Laws or (ii) the Assets to which the deficiency relates to be in good working order. The Operator shall cooperate with TCTA in the scheduling and implementation of all such repairs, and there will be no adjustment to the Operations Fee for any such accommodation unless such accommodation would materially adversely affect the Operator's ability to perform its obligations under this Agreement.
  - 1.3.3 The lack of or poor quality of any background information or documentation for the Facility shall not prevent the Operator from completing the initial condition survey
- 1.4 After completion of the initial condition survey and within forty-five (45) calendar days, of the Commencement Date, the OPERATOR shall maintain and operate CMMS incorporating an Equipment Renewal Programme. TCTA and the OPERATOR shall agree on the CMMS (as there is a cost associated with maintaining the CMMS) and the OPERATOR shall operate the Facility in accordance with the CMMS. Penalties may be applied if the OPERATOR does not operate the asset according to the CMMS.
- 1.5 When non-scheduled maintenance or repair takes place, a root cause analysis, as set out in Section 3, will be undertaken to determine:
  - 1.5.1 If the non-scheduled maintenance or repair occurred due to lack of adherence to the CMMS or manufacturers operating instructions. Any such maintenance or repair shall be to the OPERATORS cost

- 1.5.2 If non-scheduled maintenance or repair occurred otherwise, it shall be to TCTA's cost and it will be determined if the CMMS needs to be amended or it was unforeseen.
- 1.5.3 Where the Operator disagrees with or disputes the Employer's determination of an Incident of non-scheduled maintenance or repair, or whether the Operator's expenditures for an Incident of non-scheduled maintenance or repair have been reasonably incurred, then the Operator may refer the matter to dispute resolution pursuant to Conditions of Contract Clause 24 of this Agreement.
- 1.6 Upon the completion or termination of this Agreement, the OPERATOR shall return the Facility to TCTA in accordance with the predicted state in the CMMS. TCTA shall complete an end of agreement audit to verify the condition and the making good of any deficiencies, due to lack of adherence to the CMMS, or manufacturers operating instructions, will be to the cost of the OPERATOR

## **2. COMPUTERISED MAINTENANCE MANAGEMENT SYSTEM (CMMS)**

- 2.1. The objective of the CMMS is to cover the operation and maintenance of the assets and will be developed from the service and monitoring requirements as contained in the existing Operations and Maintenance Manuals. The incorporation of the other 3 components of the asset management plans as set out in ISO 55000 will not be required of the Operator that is creation, utilisation and decommissioning.
- 2.2. The CMMS will become the Operations and Maintenance Manual for the Facility.
- 2.2.1 The Operator is required to have licences for the CMMS, approved by the Employer, for the Operator's use. The Operator shall implement and install the CMMS software and shall be responsible for all costs associated with using and maintaining the CMMS
- 2.2.2 The Operator shall maintain and update the CMMS including data entry, troubleshooting, backup and all necessary software upgrades for the duration of this Agreement.
- 2.2.3 The Employer shall be permitted, at its own expense, to have complete and full access to the CMMS maintained by the Operator at a location or locations specified by the Employer's Manager. The Employer shall also be able to access the system from TCTA head office for monitoring and verification purposes.
- 2.2.4 The CMMS, including any database(s) and data referred to herein and all associated licences, copyrights and other intellectual property rights shall remain the property of the TCTA.
- 2.2.5 The CMMS must be maintained for the duration of the Agreement.

- 2.3. The CMMS must address specific work tasks for developing asset management practices, inventorying of assets and implementation of a fully integrated, secure and accessible information system. The CMMS shall include, but not be limited to the following:
- 2.3.1 Classification of assets into appropriate groups and shall be mechanical and electrical equipment shall be bar coded. The Facility shall be divided into two general categories of assets namely: (a) Civil, Structural and Site-Related Assets; and (b) Mechanical and Electrical Equipment and each category of assets shall be subject to its own regime of asset protection and Routine Maintenance;
- 2.3.2 Detailed and specific operation and maintenance procedures for each of the portions of the Facility, including overall asset appearance, corrosion prevention and asset protection procedures. Together with each maintenance procedure will be included a budget to cover the cost of materials, parts and any labour required in addition to the normal staffing requirements.
- 2.3.3 Adherence to equipment warranties, guarantees and recording of any latent defect covered under the prior Facilities construction contract or subsequent replacements. TCTA and the OPERATOR shall cooperate in enforcing all warranties and warranty rights with respect to the Civil, Structural and Site-Related Assets and all maintenance contracts with respect to the Mechanical and Electrical Equipment installed in the Facility prior to the Commencement Date and during the Term of this Agreement and generally in all claims to be made against third parties including any latent defects covered under the construction contract for the prior construction of the Facility.
- 2.3.4 Cleaning of the Facility, the standards of which shall be agreed between the Employer and Operator.
- 2.3.5 Calibration of instrumentation in accordance with the supplier's requirements. The equipment and instrumentation used within the site laboratory shall be subjected to an internal quality control system to ensure accurate results are obtained and used to manage the operation of the WTP. The Operator shall conduct, at a minimum, annual testing and calibration of all flow measuring, sampling equipment and instrumentation using a qualified, independent firm and shall prepare a report outlining the status of all flow measuring, sampling equipment and instrumentation to be included in the Annual Operating Report. The Operator shall implement any remedial action required to ensure the proper calibration of this equipment
- 2.3.6 Specialized testing that shall include, but not be limited to, vibration testing and analysis, wear particle analysis or oil analysis, infrared thermography, ultrasonic testing, laser alignment systems, performance monitoring, non-destructive testing, image scoping systems, ultrasonic thickness gauges, structural failure detection, videography and air quality monitoring.

- 2.3.7 An Equipment Renewal Program shall provide a rolling 3-year forecast of assets which are expected to reach the end of their useful life or warrant early replacement due to their criticality in maintaining a high state of reliability of the Facility. The Equipment Renewal Program shall:
- list major Assets including equipment and systems recommended to be replaced;
  - provide the schedule during the Term for replacement of those Assets;
  - provide the rationale for the replacement of those Assets, including priority and criticality of the replacement;
- 2.3.8 Include the anticipated cost of replacement of those Assets.
- 2.3.9 Processes for regular condition assessments that can easily be used to update the CMMS;
- 2.3.10 Waste disposal procedures. Should there be any financial benefit in selling used oil, the proceeds will be shared on an equal basis between the Operator and Employer; and
- 2.3.11 Reporting on a monthly, quarterly and Annual basis in a format to be agreed with TCTA during the development of the CMMS
- 2.4. All data in connection with the construction, installation, and/or implementation of new assets must be entered within one (1) month of installation.
- 2.5. The Operator shall ensure that the backlog, for all tasks identified in the CMMS, does not exceed one (1) month for the Term of this Agreement.

### **3. NON-SCHEDULED REPAIRS**

- 3.1. The Operator shall perform all non-scheduled repairs to the Facility, including in the event of an emergency situation, in order to maintain the facility in good working order.
- 3.2. For the purpose of this Agreement, an incident of non-scheduled repairs shall mean:
- 3.1.1 a random failure of a single asset. Such item will be any asset which is manufactured and sold as a self-contained functional unit. Items would include, but not be limited to, a pump, a motor, a valve, an actuator, or a measurement probe; or
- 3.1.2 a failure of single, or multiple, assets, the failure of which can be shown to be caused by a specific event which is outside the control of the Operator and is outside the normal operating conditions for the particular item or items of Mechanical and Electrical Equipment.
- 3.3. For each incident of non-scheduled maintenance or repair the OPERATOR shall prepare a root cause analysis to determine:
- 3.3.1 Whether operation and maintenance of the affected asset has been carried out in accordance with the CMMS.

- 3.3.2 the asset has been operated within the manufacturer's limitations (if applicable);
- 3.3.3 the non-scheduled maintenance or repair is clearly documented, outlining the work required, the parts to be purchased, the sub-contracted services (if necessary), , the reason for occurrence, and cost; and
- 3.3.4 the Employer may elect to have the Operator perform the work on terms to be agreed upon by the Parties or have an outside Operator perform the work or competitively bid the work.

#### **4. MOVEABLE ASSETS AND SPARE PARTS**

- 4.1. On the Commencement Date OPERATOR shall complete an inventory of all existing Movable Assets and Spare Parts owned by TCTA and available at the Facility as of the Commencement Date (the "TCTA's Inventory").
- 4.2. As part of the development of the CMMS the OPERATOR shall advise TCTA as to the adequacy and suitability of spares provided and shall make recommendations as to any necessary improvements.
- 4.3. The OPERATOR shall be responsible for securing and providing all additional or replacement Movable Assets, in addition to TCTA's Movable Assets, OPERATOR deems necessary to operate and maintain the Facility pursuant to the terms of this Agreement.
- 4.4. OPERATOR shall maintain all Movable Assets in accordance with the manufacturer's recommendations and shall include the maintenance of all Movable Assets in the CMMS.
- 4.5. At the termination or cancellation of this Agreement, OPERATOR shall return to TCTA the agreed inventory of Spare Parts, in good working condition to the satisfaction of TCTA and in quantities at least equal to the Spare Parts provided to OPERATOR by TCTA on the Commencement Date (the "Spare Parts Inventory").

#### **5. EMPLOYER AUDITS AND TESTING**

- 5.1. The Employer reserves the right to perform audits on the Operator's implementation of the approved PM plan and Root Cause Analyses on any equipment failures. The Employer will communicate all findings to the Operator. Where a finding is made that the Operator has failed to carry out PM, the Operator shall be liable for 80% of the value of the replacement or repair cost for the particular equipment related to the findings of the Employer, which amount will be deducted from the Variable Performance Fee or Operations Fee.

- 5.2. From time to time, the Employer may wish to undertake specialized testing including, but not limited to vibration, thermographic and electrical analysis, instrumentation maintenance and oil and grease sampling to confirm the level of Preventative Maintenance performed by the Operator. The Operator shall provide the Employer with access to the Mechanical and Electrical Equipment to undertake such activities. The Operator shall cover the Employer's specialized testing costs if it is determined that the Equipment has not been maintained as per the Equipment Manufacturers Specifications or that Routine Maintenance has not been performed to the satisfaction of the Employer, acting reasonably.
- 5.3. The Operator shall appoint a third-party auditor to carry-out O&M audits yearly. The terms of reference for the auditor shall be agreed with the Employer prior to the appointment of the service provider. The audit report shall be issued to the Employer, and all the remedial actions shall be implemented by the Operator.

## **6. DEDUCTIONS**

- 6.1. Except when caused by an Uncontrollable Circumstance, if, at any time during the Term, the Operator fails to update and implement the CMMS, including the rolling Equipment Renewal Program within prescribed time period, or are in the opinion of the Employer materially deficient, the Employer may deduct from the Variable Performance Fee or Operations Fee the Performance Deduction as set out in the Contract Data. Such failure will also constitute an Event of Default.
- 6.2. The Employer may, in its discretion, withhold the Performance Deduction as set out in the Contract Data from the monthly payment of the Operations Fee or Variable Performance Fee if the Operator does not achieve the performance levels stated in Schedule D. The Employer shall withhold the payment for the month in which the performance was below the required level and the payment shall only be paid to the Operator in the month when the required performance standard has been achieved, following the month in which payment was withheld.

## **ANNEXURE E**

### **SAMPLING AND TESTING REQUIREMENTS**

Sampling will be done in accordance with SANS 5667 for raw water (AMD), treated water and sludge samples. The parameters will be tested in accordance with the test methods specified in SANS 241. Where a test is required that is not covered by SANS 241, then applicable SANS or ANSI test method shall be used.

The following parameters will be sampled at the frequency indicated:

### Minimum Operational and Compliance Testing:

The following laboratory tests must be conducted as indicated.

Position/ Locality on Plant	Test	Unit	Test Method	Test Frequency	
				AMD Site Lab	External Accredited Lab.
<b>AMD Feed Water</b>					
AMD feed water pipeline 1,2&3	Temperature	°C	On-site lab equipment	Daily	
	Electrical Conductivity (EC)	mS/m	On-site lab equipment	Daily	
	Total Dissolved Solids (TDS)	Mg/L	As per Standard Methods	Daily	
	pH	pH	On-site lab equipment	Daily	
	Turbidity	NTU	On-site lab equipment	Daily	
	Acidity (CaCO <sub>3</sub> )	mg/L	On-site lab equipment	Daily	
	Sulphate	mg/L	On-site lab equipment	Daily	
	Aluminium	mg/L	On-site lab equipment	Daily	
	Iron	mg/L	On-site lab equipment	Daily	
Manganese	mg/L	On-site lab equipment	Daily		
<b>Reactors</b>					
Pre-Neutralisation Tank 1,2&3	pH	pH	On-site lab equipment	Daily	
	Dissolved Oxygen	mg/L	On-site lab equipment.	Weekly	
Sludge Conditioning Tank 1,2&3	pH	pH	On-site lab equipment	Daily	
	Total Suspended Solids	mg/L	As per Standard Methods	Weekly	
	Sludge settlement test	mL/1000mL	Measure volume of sludge settled in a 1000ml measuring cylinder after 30 min.	weekly	
	pH	pH	On-site lab equipment	Daily	
Neutralisation Tanks 1,2&3	Dissolved Oxygen	mg/L	On-site lab equipment	Weekly	
	Sludge settlement test		Measure volume of sludge settled in a 1000ml measuring cylinder after 30 min.	weekly	
	Sulphate	mg/L	On-site lab equipment	weekly	
Gypsum Crystallisation (at overflow weir at exit of tank)	Sludge settlement test	mL/1000mL	Measure volume of sludge settled in a 1000ml measuring cylinder after 30 min.	weekly	
<b>Thickener</b>	Sludge density of recycled sludge	mg/L	Specific weight of recycled sludge	Daily	
	Sludge settlement test	mL/1000mL	Measure volume of sludge settled in a 1000ml measuring cylinder after 30 min.	Weekly	
	Total suspended solids test (TSS) of recycled sludge	mg/L	As per Standard Methods	Daily	

Position/ Locality on Plant	Test	Unit	Test Method	Test Frequency	
				AMD Site Lab	External Accredited Lab.
	Total suspended solids (TSS) at parabolic channel after poly dosing	mg/L	As per Standard Methods	Daily	
	Total Dissolved solids (TDS) at both thickeners overflow.	mg/L	As per Standard Methods	Daily	
<b>Treated water Tank</b>	pH	pH	On-site lab equipment	Daily	Two Weekly
	Electrical Conductivity (EC)	mS/m	On-site lab equipment	Daily	Two Weekly
	Total Dissolved Solids (TDS)	mg/L	As per Standard Methods	Daily	Two Weekly
	Turbidity	NTU		Daily	Two Weekly
	Total Suspended solids (TSS)	mg/L	As per Standard Methods	Daily	Two Weekly
	Total Dissolved Solids (TDS)	mg/L	As per Standard Methods	Daily	Two Weekly
	Sulphate	mg/L	On-site lab equipment	Daily	Two Weekly
	Aluminium	mg/L	On-site lab equipment	Daily	Two Weekly
	Iron	mg/L	On-site lab equipment	Daily	Two Weekly
	Manganese	mg/L	On-site lab equipment	Daily	Two Weekly

## Notes

1. Laboratory equipment must be used, calibrated and maintained as per manufacturer's instructions.
2. Wet laboratory tests must be conducted according to the Standard Methods for Laboratory tests
3. Dissolved Oxygen tests must be conducted at point of sampling as per manufacturer's instructions.

## Sampling

1. Samples for comparative tests between the AMD Site lab and the External accredited lab must split in two, and analysed at both labs.
2. Samples to be tested at External lab must be preserved and tested as soon as possible.
3. Sampling and date of actual analysis must be reported.

**General requirements**

1. The lab must make provision for additional tests that may be required by TCTA or his representative from time to time.
2. Lab equipment and instruments must be properly maintained and calibrated frequently as required by supplier of equipment or instrument.
3. All consumables and indicators must be kept in stock to perform the required test and must be ordered timeously to ensure a continuous test program.
4. Laboratory staff must be well trained have the necessary experience to conduct the tests described above.

## **ANNEXURE F**

### **OPERATING AND PROCESS CONTROL PARAMETERS**

**OPERATING AND PROCESS CONTROL PARAMETERS**

The following operating and process control parameters must be maintained to ensure correct operation of the plant with precipitation of dissolved metals and adequate reduction of sulphates through gypsum crystallisation. The Operating Parameters will be instructed on a monthly basis by Employer’s Manager, after consultation with the Plant Manager and any changes made will be recorded on a daily Operating Parameters statement.

Annexure B:  
Operational Parameters

**OPERATING and MAINTENANCE MANUAL**

AMD EASTERN BASIN  
TCTA-MEM2

OPERATING PARAMETERS											
Note: These parameters are a guideline for plant operation and must be used in conjunction with plant observation.											
Parameter	Unit	Operating mode									Remarks
		Start-up (in charge: monitor)	Start-up (in charge: monitor)	Normal	Recycle	Train 1 or maintenance mode (Check in 30 operation)	Train 2 or maintenance mode (Check in 30 operation)	Train 3 or maintenance mode (Check in 30 operation)	Shutdown	Emergency mode	
<b>AMD Pumping</b>											
Flow Rate Pump A	m <sup>3</sup> /h	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.
Flow Rate Pump B	m <sup>3</sup> /h	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.
Flow Rate Pump C	m <sup>3</sup> /h	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.	Start-up: pump up to 2000 for 24 hours. Monitor treated water turbidity & water quality. Check and post plant in the cycle mode if water is not according to specification.
<b>Setpoint Control</b>											
Setpoint required	Yes/No	Like Setpoint when AMD flow water pH is less than 5	Like Setpoint when AMD flow water pH is less than 5	Like Setpoint when AMD flow water pH is less than 5	No	Like Setpoint when AMD flow water pH is less than 5	Like Setpoint when AMD flow water pH is less than 5	Like Setpoint when AMD flow water pH is less than 5	Like Setpoint when AMD flow water pH is less than 5	Like Setpoint when AMD flow water pH is less than 5	No
Set required in re-neutralisation tank	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Spill Control</b>											
Spill Control required	Yes/No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No
Set required in Charge Control Tank	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Redundancy Tank	Yes/No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

**Note:** The TCTA Operations Manager must be notified when the following changes are made or events occur:

1. The AMD pumping flow rate is changed
2. The plant is put on "Recycle mod"
3. Any major electrical or mechanical breakdowns, accidents or spillages occur.

## **ANNEXURE G**

### **SURFACE AND GROUNDWATER MONITORING (Minimum Operational and Compliance Testing)**

Will be used as an when required & will be issued to the successful bidder.

## ANNEXURE H

### CHEMICAL SPECIFICATION

Parameter / Property	Min/Max	TCTA Contractual Specification <sup>1</sup>	Minimum Operational Specification Required for RFQ <sup>2</sup>
		(% m/m Unless Otherwise Stated)	
Available Calcium as CaO	Min	89	85
Total Calcium as CaO	Min	92	87
Total Magnesium as MgO	Max	2	3
Silica as SiO <sub>2</sub>	Max	2	3
Manganese as Mn <sub>2</sub> O <sub>3</sub>	Max	1.2	2
Iron as Fe <sub>2</sub> O <sub>3</sub>	Max	0.5	2
Aluminium as Al <sub>2</sub> O <sub>3</sub>	Max	0.3	2
Carbon Dioxide as CO <sub>2</sub>	Max	2	2
Free Carbon as C	Max	0.01	0.2
Sulphur as SO <sub>3</sub>	Max	0.05	0.2
Phosphorous as P <sub>2</sub> O <sub>5</sub>	Max	0.01	0.2
Bulk density (kg/m <sup>3</sup> )	Aerated	800 - 900	800 - 900
	De-Aerated	1000 - 1300	1000 - 1300
Particle Size Distribution (Minimum % of Material Smaller than Stated Size)	<75 µm		70%
	<150 µm		90%
	<250 µm	100%	95%
	<600 µm		99%
	<850 µm		99.5%
	<2350 µm		100%
Free Moisture	Max		0.5%
Angle of Repose (°)	Max		10
Reactivity (R / DIN) when Produced	Min		4

#### Explanatory Notes

1. TCTA specification included for reference
2. Quicklime quality required for this RFQ

#### **Explanatory Notes:**

1. TCTA contract specification required from the service provider.
2. Minimum acceptable operational specification.

## ANNEXURE I

## INVENTORY OF LABORATORY EQUIPMENT

## LABORATORY INSTRUMENTS

NO.	DESCRIPTION	MANUFACTURER	SERIAL NO.	LAB ID CODE	ASSET OWNER	Initial	Current		COMMENT
							New	Old	
1	2100N Turbidimeter	HACH	16020C033938	LAB TM01	TCTA	1	0	1	The meter failed during operation, it has been discontinued by the manufacturer. Unit to be scrapped.
2	2100Q Turbidimeter	HACH	22080D000193		TCTA	0	0	1	Good
3	TB 211 ir Turbidimeter	LOVIBOND			TCTA	0	1	0	Good
4	Top Loader Balance	JADEVER SNUG	15091116Q0133	LAB BT01	TCTA	1	0	1	Fair
5	Analytical Balance	VIBRA	141996049	LAB AB01	TCTA	1	0	1	Fair
6	Jar Tester (6 Place)	VELP SCIENTIFICA	353877	LAB JT01	TCTA	1	0	1	Fair
7	DR 6000 Spectrophotometer	HACH	1603439	LAB SF01	TCTA	1	0	1	Good
8	Oven	LABCON	L34740	LAB OV01	TCTA	1	0	1	Fair
9	HQ14d Conductivity Meter	HACH	160 300 023 457	LAB CP01	TCTA	1	0	1	Fair
10	HQ11d pH Meter	HACH	160 300 023 450		TCTA	1	0	0	Fair
11	HQ11d pH Meter	HACH	180 900 004 566	LAB CT02	TCTA	1	0	1	Fair
12	CDC401 Conductivity Probe	HACH	153 432 587 001	LAB CT01	TCTA	1	0	1	Fair
13	CDC401 Conductivity Probe	HACH	231 302 581 914		TCTA	0	1	0	Good
14	PHC201 pH Probe	HACH	190 362 617 964		TCTA	3	1	2	Fair
15	PHC201 pH Probe		181 712 618 016						
16	PHC201 pH Probe		190 842 617 403						
17	HQ40d Multi-meter	HACH	151 200 019 124		TCTA	1	0	1	Fair
18	LDO101 Standard Dissolved Oxygen Probe	HACH	153 102 598 010		TCTA	1	0	1	Fair
19	LDO105 Rugged Dissolved Oxygen Probe Shrouded	HACH	152 822 599 012		TCTA	1	0	2	Fair

NO.	DESCRIPTION	MANUFACTURER	SERIAL NO.	LAB ID CODE	ASSET OWNER	Initial	Current		COMMENT
							New	Old	
20	LDO105 Rugged Dissolved Oxygen Probe Shrouded		231 502 599 750						
21	Magnetic Stirrer	IKA	100102424	LAB MS02	TCTA	1	0	1	Fair
22	Magnetic Stirrer	LABCON	L34738	LAB MS01	TCTA	1	0	1	Fair
23	Vacuum Pump	DRY VAC	167400-22-AEA251	LAB PV01	TCTA	1	0	1	Good
24	Vacuum Pump	GIC	No Serial Number	LAB PV02	TCTA	0	1	0	Good
25	Drager X-am: Multi gas tester	Drager	ARPA-1441		NAFASI	0	0	1	Good
26	Econopure Demin Water Unit	GIC				0	0	1	Ownership to be confirmed.Fair.
27	Oven	Scientific	09000155324275R01			0	1	0	New, received in September 2024.Good.

### LABORATORY ONLINE PROBES

NO	DESCRIPTION	MANUFACTURERE	SERIAL NUMBER	LAB CODE	ASSET OWNER	NEW	IN USE	TOT AL	COMMENT
1	PD1R1 pH probe	HACH	(1) 233144316823 (2) 230194309256	N/A	TCTA	0	2	2	Reactor 2&3 Gypsum Crystallisation.Fair.
2	CPS11E Memosens (pH probe)	E & H	(1)WB0B5705W00 (2) W633F605E00 (3)WB0B4F05W00 (4)X509E005W00 (5)X509E505W00		TCTA	1	4	5	Reactor 2&3 Sludge Conditioning,Treated Water&Laboratory.One pH probe is still new.Good condition.
3	Turbimax ( Turbidity probe)	E & H	(1) TC012C05T00 (2)TC012D05T00 (3) W6008205T00		TCTA	1	2	3	Thickener Overflow 1&2.One is new.Good condition.
4	Solitax	Hach	(1) 1508C0130607 (2) 1618274		TCTA	0	1	1	Thickener Overflow 3&Treated Water.Fair.
5	Inductive conductivity sensor	Hach	2503665454		TCTA	0	1	1	Good.
6	Calibration cap (CUY52)	E & H	TC010005T0		TCTA	0	1	1	Good.

**LABORATORY EQUIPMENT**

NO	DESCRIPTION	MANUFACTURER	VOLUME (mL)	SERIAL No.	ASSET OWNER	Current			COMMENT
						Initial	New	Old	
1	Glass Measuring Cylinder - Spouted	Glassco	1000		TCTA	1	5	0	
		Glassco	500		TCTA	3	0	3	
		Glassco	250		TCTA	0	2	1	
		Glassco	100		TCTA	5	6	1	
		Glassco	50		TCTA	6	2	1	
		Glassco	10		TCTA	5	3	1	
2	Plastic Measuring Cylinder - Spouted	Glassco	1000		TCTA	4	0	4	
		Glassco	500		TCTA	4	0	4	
3	Glass Measuring Cylinder - Stoppered	Glassco	500		TCTA	8	0	8	
		Glassco	250		TCTA	0	1	1	
		Glassco	50		TCTA	2	5	3	
4	Volumetric Flask	Glassco	1000		TCTA	4	4	3	
		Glassco	500		TCTA	4	0	4	
		Glassco	200		TCTA	4	0	4	
		Glassco	100		TCTA	15	8	5	
		Glassco	50		TCTA	0	6	1	
5	Plastic Beakers		1000		TCTA	2	0	1	
			500		TCTA	5	0	5	
			250		TCTA	4	0	5	
			100		TCTA	15	0	14	
6	Glass Beakers		250		TCTA	16	4	3	
			100		TCTA	1	0	1	
7	Plastic jugs		2000		TCTA	0	2	2	
			250		TCTA	0	3	1	
8	Round beakers		250		TCTA	1	0	1	
9	Matched sample cells	HACH	10		TCTA	0	6	8	
10	Erlenmeyer Flask	Glassco	250		TCTA	8	0	1	
		Glassco	100		TCTA	7	0	7	

NO	DESCRIPTION	MANUFACTURER	VOLUME (mL)	SERIAL No.	ASSET OWNER	Initial	Current		COMMENT
							New	Old	
11	Filtering Flask	Glassco	1000		TCTA	6	3	3	
			250		TCTA	1	0	1	
12	Turbidity vials	HACH	30		TCTA	4	6	4	
13	Plastic Funnels		2000		TCTA	1	0	1	
			100		TCTA	6	0	5	
14	Round Neck Sample Bottles		1000		TCTA	0	20	6	
			500		TCTA	0	6	3	
			250		TCTA	0	6	9	
15	Wash Bottles		500		TCTA	2	2	2	
			250		TCTA	0	2	2	
16	Cylinder Brushes				TCTA	0	2	1	
	Sample Bottle Brushes				TCTA	0	4	1	
	Burette Brushes				TCTA	0	3	1	
17	Burettes		50		TCTA	1	0	1	
			25		TCTA	2	0	2	
			10		TCTA	1	0	1	
			DR Shillings Burette		TCTA	0	1	1	
			50		TCTA	0	1	1	
18	Glass Pipettes		25		TCTA	1	0	1	
			10		TCTA	1	0	1	
			5		TCTA	0	0	1	
			2		TCTA	3	0	3	
			1		TCTA	0	0	0	
			100		TCTA	1	0	1	
19	Glass Bulb Pipette		100		TCTA	1	0	1	
			10		TCTA	2	0	2	
20	Micro Pipette	Eppendorf	10	K32883H	TCTA	1	0	1	
		Eppendorf	5		TCTA	1	0	1	
		Eppendorf	1	M17423H	TCTA	1	0	1	
		Tensette Pipette	10		TCTA	0	1	1	
		1		TCTA	0	1	1		
21	Sterifil aseptic system	Merck	250		TCTA	3	1	2	
22	Dessicator	Lasec	300		TCTA	0	0	1	
		Xamis	150		TCTA	1	0	1	

NO	DESCRIPTION	MANUFACTURER	VOLUME (mL)	SERIAL No.	ASSET OWNER	Initial	Current		COMMENT
							New	Old	
23	Buchner Funnel		125		TCTA	4	4	0	
			110		TCTA	2	0	1	
24	Plastic Spatula				TCTA	19	9	1	
25	Probe holder for ISE	HACH			TCTA	2	0	2	
26	Drying rack				TCTA	1	0	1	
	Wooden drying rack				NAFASI	0	0	2	
27	Imhoff cones		1000		TCTA	4	0	4	
28	Imhoff cone stand				TCTA	2	0	2	
29	Complete Retort Stand				TCTA	1	2	2	
30	HQ meter holder	HACH			TCTA	1	0	1	
31	Tong				TCTA	0	0	1	
32	Rainfall gauge				TCTA	0	3	1	
33	Watch Glass		100		TCTA	0	8	10	
34	Stirring bars				TCTA	0	2	2	
35	Ritriding Rod				TCTA	1	0	1	
36	Sample Carriers				NAFASI	0	0	3	
37	Forceps				TCTA	5	2	3	

**ANNEXURE J**  
**MINIMUM STAFFING REQUIREMENTS**

## THE OPERATION AND MAINTENANCE OF THE AMD TREATMENT PLANT AT EASTERN BASIN PERSONNEL TO OPERATE THE PLANT

### MINIMUM STAFFING REQUIREMENTS

The Eastern Basin AMD treatment plant is classified as Class A under the “DWS Water Services Act 1997. Regulations Relating to Compulsory National Standards for Process Controllers and Water Services Works” dated 23 October 2005.

**The Operator shall ensure that Eastern Basin AMD treatment plant has the following resources as a Minimum Staffing requirement:**

CLASS OF WORKS:			
DESIGNATION	NO	Level*	FUNCTION
Responsible Manager (Note 1) (BSc, BEng or Equivalent NQF 8)	1	S	Responsible for the overall management of the contract and will be the liaison between Employer and Operator.
Operations Manager (Note 1) (BSc, BEng or Equivalent NQF 8)	1	S	Responsible for overall operation of the Facility
Site Supervisor (BSc, BEng or Equivalent NQF 8)	1	S	Provide assistance to Operations Manager
Maintenance Manager (GMR 2.1, Note 1) (BSc, BEng or Equivalent NQF 8)	1	S	Responsible for overall maintenance of the Facility Generated power is greater than 3 000 kW and therefore required by Law
Process Engineer (BSc, BEng or Equivalent)	1	S	Responsible for the quality of the discharged treated water
Process Technician (BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	1	M	Provide assistance to Process Engineer
Administrator/HR	1	M	Responsible for admin and HR matters
HSE Officer (Qualified Environmentalist) (BSc/BEng/BTech Environmental & SAMTRAC, HIRA Certificate)	1	M	Responsible for all Health, Safety and Environmental related matters on site
Process Controllers (Registered Class VI)	4	S	Shift workers providing assistance to Process Engineer
Process Controllers (Registered Class V or VI)	4	J	Shift workers providing assistance to Snr Process Controllers
Process Controllers/Shift Attendants (Registered Class V or VI)	4	M	Shift workers providing assistance to Snr Process Controllers
Laboratory Analyst (Snr) (BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	1	M	Responsible for the operation of Laboratory and Testing
Laboratory Analyst (Jr) (BSc/BEng/BTech/National Diploma or Equivalent NQF 6 or higher)	2	J	Provide assistance to Snr Laboratory Analyst
Laboratory Assistant	1	J	Provide assistance to both Laboratory Analysts
Mechanical Fitters (or suitably experienced)	2	M	Responsible of mechanical work

<b>CLASS OF WORKS:</b>			
<b>DESIGNATION</b>	<b>NO</b>	<b>Level*</b>	<b>FUNCTION</b>
(Trade Test)			
Mechanical assistant (Trade Test)	2	J	Provide assistance to mechanical fitters
Electrician with control and MV switching (Red seal level)	2	M	Responsible for electrical work
Electrical assistants (Trade Test)	2	J	Provide assistance to the Electrician
Instrument Technician (Trade Test)	1	M	Responsible for all instrumentation work on site
General Workers	6	J	Responsible for general work onsite
<b>TOTAL</b>	<b>39</b>		

**\*S = Senior, M = Middle and J = Junior**

**Note 1: GMR 2.1 is a requirement and any of the site-based management personnel (i.e. Responsible Manager, Operations Manager or Maintenance Manager) shall show proof of accreditation. The accreditation will be required on award.**

## **PART C4: SITE INFORMATION**

### **C4.1 LOCATION**

**Refer to process description on Annexure B**

## **C4.2 PROJECT SITE DESCRIPTION**

**Refer to process description on Annexure B**

**D2: PRO-FORMA DOCUMENTS**

**Project Interim Report (ED105P)**

cidb PROJECT ASSESSMENT SCHEME; STANDARD FOR INDIRECT TARGETING PROJECT INTERIM REPORT To be completed for each qualifying enterprise	
Section A: Employer Information	
cidb Employer Number	<input type="text"/>
Employer Name	<input type="text"/>
	<input type="text"/>
Section B: Contractor / JV Information	
cidb Contractor Registration Number of main / lead contractor	<input type="text"/>
Name of contractor	<input type="text"/>
cidb Contractor Registration Number of Joint Venture Partner 2	<input type="text"/>
Name of contractor /Joint Venture	<input type="text"/>
cidb Contractor Registration Number of Joint Venture Partner 3	<input type="text"/>
Name of contractor /Joint Venture	<input type="text"/>
cidb Contractor Registration Number of Joint Venture Partner 4	<input type="text"/>
Name of contractor /Joint Venture	<input type="text"/>

**Project Completion Report (ED101P)**

cidb PROJECT ASSESSMENT SCHEME; STANDARD FOR INDIRECT TARGETING PROJECT COMPLETION REPORT To be completed for each qualifying enterprise	
Section A: Employer Information	
cidb Employer Number	<input type="text"/>
Employer Name	<input type="text"/>
	<input type="text"/>
Section B: Contractor / JV Information	
cidb Contractor Registration Number of main / lead contractor	<input type="text"/>
Name of contractor	<input type="text"/>
cidb Contractor Registration Number of Joint Venture Partner 2	<input type="text"/>
Name of contractor /Joint Venture	<input type="text"/>
cidb Contractor Registration Number of Joint Venture Partner 3	<input type="text"/>
Name of contractor /Joint Venture	<input type="text"/>
cidb Contractor Registration Number of Joint Venture Partner 4	<input type="text"/>
Name of contractor /Joint Venture	<input type="text"/>
Contact Person Title	<input type="text"/>
Initials	<input type="text"/>
Surname	<input type="text"/>

**Declaration (ED104P)**

cidb PROJECT ASSESSMENT SCHEME; STANDARD FOR INDIRECT TARGETING TARGETED ENTERPRISE DECLARATION To be completed for each targeted enterprise	
<b>Section A: Employer Information</b>	
cidb Employer Number	<input type="text"/>
Employer Name	<input type="text"/> <input type="text"/>
<b>Section B: Contract Data</b>	
cidb Contract Number	<input type="text"/>
Contract Title	<input type="text"/> <input type="text"/> <input type="text"/>
Date of Practical Completion	<input type="text"/>
Contract Amount at Award(Inclusive of VAT)	
R	<input type="text"/> .00
<b>Section C: Main Contractor / JV Information</b>	
cidb Contractor Registration Number of main / lead contractor	<input type="text"/>