



for Ikageng Sewage Treatment Plant Operations

Contents:	No of pages
Part C1 Agreements & Contract Data	
Part C2 Pricing Data	
Part C3 Scope of Work	

CONTRACT No.

PART C1: AGREEMENTS & CONTRACT DATA

Contents:	No of pages
C1.1 Form of Offer and Acceptance	1
[to be inserted from Returnable Documents at award stage]	
C1.2a Contract Data provided by the <i>Employer</i>	10
C1.2b Contract Data provided by the <i>Contractor</i>	2
[to be inserted from Returnable Documents at award stage]	
C1.3 Proforma Guarantees	2

C1.2 TSC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
		A: Priced contract with price list
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		X1: Price adjustment for inflation
		X2: Changes in the law
		X17: Low service damages
		X18: Limitation of liability
		X19: Task Order
		Z: <i>Additional conditions of contract</i>

Ikageng Sewage Treatment Plant Operations

of the NEC3 Term Service Contract April 2013¹
(TSC3)

10.1	The <i>Employer</i> is (name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Tel No.	
	Fax No.	
10.1	The <i>Service Manager</i> is (name):	C Mngqibisa
	Address	Duvha Power Station PO BOX 2199 Witbank 1035
	Tel	013 6900 217
	Fax	
	e-mail	Mngqibcl@eskom.co.za
11.2(2)	The Affected Property is	Duvha Power Station.
11.2(13)	The <i>service</i> is	Ikageng Sewage Treatment Plant Operations
11.2(14)	The following matters will be included in the Risk Register	Poor quality changes in incoming raw sewage effluent received
11.2(15)	The Service Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa.
13.1	The <i>language of this contract</i> is	English.
13.3	The <i>period for reply</i> is	5 working days.
2	The <i>Contractor's</i> main responsibilities	Data required by this section of the core clauses is also provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data
21.1	The <i>Contractor</i> submits a first plan for acceptance within	1 weeks of the Contract Date.
3	Time	
30.1	The <i>starting date</i> is.	December 2026 or Earlier
30.1	The <i>service period</i> is	60 months

¹ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902 www.ecs.co.za

4	Testing and defects	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
5	Payment	
50.1	The <i>assessment interval</i> is	Monthly
51.1	The <i>currency of this contract</i> is the	South African Rand
51.2	The period within which payments are made is	Monthly
51.4	The <i>interest rate</i> is	the publicly quoted prime rate of interest (calculated on a 365 day year) charged by from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and (ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.
6	Compensation events	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
7	Use of Equipment Plant and Materials	The contractor supplies all material, consumables, equipment, tools, labour & transport required for performing the work. (Unless otherwise instructed by the Employer representative)
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	As stated for "Format TSC3" available on http://www Eskom co za/live/content php Item ID = 9248 (See Annexures A for basic guidance)
83.1	The <i>Employer</i> provides these insurances from the Insurance Table	<i>As stated for in the Employer's Annual Construction All Risk Insurance Policy (Format A) available on request from Eskom Group Insurance.</i>

Ikageng Sewage Treatment Plant Operations

83.1	The <i>Employer</i> provides these additional insurances	<i>As stated for in the Employer's Annual Construction All Risk Insurance Policy (Format A) available on request from Eskom Group Insurance.</i>
83.1	The <i>Contractor</i> provides these additional insurances:	
83.1	The minimum amount of cover for insurance against loss and damage caused by the <i>Contractor</i> to the <i>Employer's</i> property is	The amount of the deductibles payable in terms of the event described in the Employer's Annual Construction All Risk Insurance Policy (Format A) available on request from Eskom Group Insurance.
83.1	The insurance against loss of or damage to the <i>works</i> , Plant and Materials is to include cover for Plant and Materials provided by the <i>Employer</i> for an amount of	Amount of contract value
83.1	The minimum amount of cover for insurance in respect of loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Service for any one event is:	Whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i>.
83.1	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rands).
9	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
10	Data for main Option clause	
A	Priced contract with price list	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	2 weeks.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i>	The person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
W1.2(3)	The <i>Adjudicator nominating body</i> is:	The Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers (London) (see www.ice-sa.org.za) or its successor body.

W1.4(2)	The <i>tribunal</i> is:	Arbitration												
W1.4(5)	The <i>arbitration procedure</i> is	The latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.												
	The place where arbitration is to be held is	South Africa												
	The person or organisation who will choose an arbitrator													
	- if the Parties cannot agree a choice or	The Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.												
	- if the arbitration procedure does not state who selects an arbitrator, is													
12	Data for secondary Option clauses													
X1	Price adjustment for inflation													
X1.1	The <i>base date</i> for indices is													
	The proportions used to calculate the Price Adjustment Factor are:	<table> <tr> <td>proportion</td><td>linked to index for</td><td>Index prepared by</td></tr> <tr> <td>0.</td><td></td><td></td></tr> <tr> <td></td><td>non-adjustable</td><td></td></tr> <tr> <td>1.00</td><td></td><td></td></tr> </table>	proportion	linked to index for	Index prepared by	0.				non-adjustable		1.00		
proportion	linked to index for	Index prepared by												
0.														
	non-adjustable													
1.00														
X2	Changes in the law	There is no reference to Contract Data in this Option and terms in <i>italics</i> are identified elsewhere in this Contract Data.												
X17	Low service damages	KPI 1 Equipment Availability and Reliability 1.1 Response time request. The amount of time taken to respond must be limited to two (2) hours 1.2 Use of defective tools and expired material when dosing. All tools to be suitable for use and no expired material should be used												
X17.1	Any damages that are caused by the <i>Contractor</i> will be deducted from the <i>Contractor</i> during assessment. Below is a table with the risks and penalties:													
	- Amount for penalties up to maximum of 5% of the contract													
	Limitation of liability													
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to	R0.0 (zero Rand)												
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	the amount of the deductibles relevant to the event described in the "Format A" (Annual Construction All Risk Insurance Policy available on request from Eskom Group Insurance												

Commented [VS1]: Victoria to include

X18.3	The <i>Contractor's</i> liability for Defects due to his design of an item of Equipment is limited to	The greater of - the total of the Prices at the Contract Date and - the amounts excluded and unrecoverable from the <i>Employer's</i> insurance (other than the resulting physical damage to the <i>Employer's</i> property which is not excluded) plus the applicable deductibles in the <i>Employer's</i> assets and works / maintenance policies available on request from Eskom Group Insurance
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> , for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	the total of the Prices other than for the additional excluded matters. The <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for - loss of or damage to property (other than the <i>Employer's</i> property, Plant and Materials), - death of or injury to a person and - Infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	At the end of each shift cycle
X19	Task Order	
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	Five days of receiving the Task Order
Z	The <i>additional conditions of contract</i> are	Z1 to Z11 always apply.

Z1 Cession delegation and assignment

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

- Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Service Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.

Ikageng Sewage Treatment Plant Operations

- Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Service Manager* within thirty days of the notification or as otherwise instructed by the *Service Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Service.
- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Ethics

- Z4.1 Any offer, payment, consideration, or benefit of any kind made by the *Contractor*, which constitutes or could be construed either directly or indirectly as an illegal or corrupt practice, as an inducement or reward for the award or in execution of this contract constitutes grounds for terminating the *Contractor's* obligation to Provide the Service or taking any other action as appropriate against the *Contractor* (including civil or criminal action).
- Z4.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Service if the *Contractor* (or any member of the *Contractor* where the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations) is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices.
- Such practices include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the *Employer* or other people or organisations and including in circumstances where the *Contractor* or any such member is removed from the an approved vendor data base of the *Employer* as a consequence of such practice.
- Z4.3 Notwithstanding the provisions of core clause 90.2, the procedures on termination in terms of this clause are P1, P2 and P4 as stated in the core clause 92 and the amount due is A1 and A3 as stated in core clause 93.

Z5 Confidentiality

- Z5.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z5.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.
- Z5.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which

Ikageng Sewage Treatment Plant Operations

is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.

- 25.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- 25.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z6 Waiver and estoppel: Add to core clause 12.3:

- 26.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z7 Health, safety and the environment: Add to core clause 27.4

- 27.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the “Principal Contractor” (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) (“the Construction Regulations”) for the Affected Property;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the *service*; and
 - undertakes, in and about the execution of the *service*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor’s* direction and control, likewise observe and comply with the foregoing and must comply with the provisions of the HCS Regulations in GNR 1179 of 25/08/1995 as amended in 2003.
- 27.2 The *Contractor*, in and about the execution of the *service*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor’s* direction and control, likewise observe and comply with the foregoing.

Z8 Provision of a Tax Invoice and interest. Add to core clause 51

- 28.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer’s* procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.
- 28.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2

is then calculated from the delayed date by when payment is to be made.

- Z8.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z9 Notifying compensation events

- Z9.1 If the *Contractor* does not notify a compensation event within eight weeks of becoming aware of the event, he is not entitled to a change in the Prices.

Z10 Employer's limitation of liability

- Z10.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z10.2 The *Contractor's* entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the *Employer's* liability under the indemnity is limited to compensation as provided for in core clause 63 and X19.11 if Option X19 Task Order applies to this contract.

Z11 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

- Z11.1 or had a business rescue order granted against it.

Annexure A: Insurance provided by the Employer

These notes are provided as guidance to tendering contractors and the Contractor about the insurance provided by the Employer. The Contractor must obtain its own advice. Services provided in a TSC3 contract could include some element of construction or refurbishment as well as a continuous maintenance or operational service activity. If an event occurs which causes loss or damage, a claim could be made either against the Employer's "works" type policy which may be in place for the Employer's portion of the Affected Property concerned or against the Employer's assets policy which may be in place for the Employer's portion of the Affected Property concerned, or both.

1. The cover provided and the deductibles under the works policy are different to those under the assets policy. Each policy has a range of applicable deductibles depending on the location of the Affected Property and the nature of the insurable event.
2. The *Contractor* is required in terms of Contract Data for clause 83 to provide cover for the deductibles in the insurance provided by the *Employer*. This can be provided from his own resources on a 'self insured' basis or obtained by him from his own insurers.
3. Tendering contractors should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below and may not be the cover required by the tendering contractor or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 83.2. In terms of clause 83.1 "the *Contractor* provides the insurances stated in the Insurance Table except any insurance which the *Employer* is to provide". Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.
4. If Marine Insurance is required the *Contractor* needs to obtain a copy of the latest edition of Eskom's Marine Policies Procedures available on request from Eskom Group Insurance .

5. Further information and full details of all Eskom provided policies and procedures may be obtained from Eskom Group Insurance :

C1.2 Contract Data

Part two - Data provided by the *Contractor*

Notes to a tendering contractor:

1. Please read both the both the NEC3 Term Service Contract April 2013 and the relevant parts of its Guidance Notes (TSC3-GN)² in order to understand the implications of this Data which the tenderer is required to complete.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is	%
	The <i>subcontracted fee percentage</i> is	%
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the <i>Contractor's</i> plan is in:	
21.1	The plan identified in the Contract Data is contained in:	
24.1	The key people are: 1 Name: Job: Responsibilities:	

² Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 5391902 or www.ecs.co.za

Qualifications:
Experience:
2 Name:
Job
Responsibilities:
Qualifications:
Experience:

CV's (and further key person's data including CVs) are
in _____.

A	Priced contract with price list		
11.2(12)	The <i>price list</i> is in _____		
11.2(19)	The tendered total of the Prices is	R	

PART 2: PRICING DATA

TSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	2
C2.2	The <i>price list</i>	[●]

C2.1 Pricing assumptions: Option A

The *conditions of contract*

How work is priced and assessed for payment

Clause 11 in NEC3 Term Service Contract, June 2005 (TSC3) core clauses and Option A states:

- Identified and defined terms** 11
- 11.2 (12) The Price List is the *price list* unless later changed in accordance with this contract.
- (17) The Price for Services Provided to Date is the total of
- the Price for each lump sum item in the Price List which the *Contractor* has completed and
 - Where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.
- (19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

Function of the Price List

Clause 54.1 in Option A states: "Information in the Price List is not Service Information". This confirms that instructions to do work or how it is to be done are not included in the Price List but in the Service Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Service in accordance with the Service Information". Hence the *Contractor* does **not** Provide the Service in accordance with the Price List. The Price List is only a pricing document.

Link to the *Contractor's* plan

Clause 21.4 states "The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each plan which he submits for acceptance". Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 plan in such a way that operations shown on it can be priced in the *price list* and result in a satisfactory cash flow in terms of clause 11.2(17).

Preparing the *price list*

It will be assumed that the tendering contractor has read Pages 14, 15 and 73 of the TSC3 Guidance Notes before preparing the *price list*. Items in the *price list* may have been inserted by the *Employer* and the tendering contractor should insert any additional items which he considers necessary. Whichever party provides the items in the *price list* the total of the Prices is assumed to be fully inclusive of

everything necessary to Provide the Service as described at the time of entering into this contract.

- 1 As the *Contractor* has an obligation to correct Defects (core clause 42.1) and there is no compensation event for this unless the Defect was due to an *Employer's* risk, the lump sum Prices and rates must also include for the correction of Defects.
- 2 If the *Contractor* has decided not to identify a particular item in the *price list* at the time of tender the cost to the *Contractor* of doing the work must be included in, or spread across, the other Prices and rates in the *price list* in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.
- 3 There is no adjustment to lump sum prices in the *price list* if the amount, or quantity, of work within that lump sum item of service later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event. See Clause 60.1.
- 4 Hence the Prices and rates tendered by the *Contractor* in the *price list* are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk.
- 5 The Contractor does not have to allow in his Prices and rates for matters that may arise as a result of a compensation event. It should be noted that the list of compensation events includes those arising as a result of an *Employer's* risk event listed in core clause 80.1.

Format of the *price list*

(From page 73 of the TSC3 Guidance Notes)

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for an item of work which is the rate for the work multiplied by the quantity completed, the tendering contractor enters the rate which is then multiplied by the Expected Quantity to produce the Price, which is also entered.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity column.

C2.2 the *price list*

Item no.	Description	Quantity	Rate per month	Total per year
1.	DWA Class V operator (site manager)	1		
2.	DWA Class 4 operator (site supervisor)	1		
3	DWA Class 3 operator (shift worker)	4		
4	DWA Class 2 operator (shift worker)	4		
5	Safety officer	1		
6	Labour	1		

Overtime rates

Item no.	Description	Normal rate	Overtime rate Saturday	Overtime rate Sunday	Overtime rate Public Holiday
1.	DWA Class V operator (site manager)	Hr.			
2.	DWA Class 4 operator (site supervisor)	Hr.			
3	DWA Class 3 operator (shift worker)	Hr.			
4	DWA Class 2 operator (shift worker)	Hr.			
5	Safety officer	Hr.			
6	Labour	Hr.			

NB: RATES INCLUDE ALL RELEVANT COST**Consumables**

Item no.	Description	Quantity	Rand/kg or each	Monthly	Total Per year	Five-year total
1.	Accredited lab analysis	4/Month				
2.	Internal monitoring analysis	monthly				
3	Effluent dosing chemicals (Chlorine based)	monthly				
4	PPE	year				

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Ikageng Sewage Treatment plant Operations

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Revision: 0

Page: 19 of 26

5	Housekeeping: - normal house keeping					
6	Operational consumables: - Bacteria antiseptic soap - Surgical gloves - Rubber gloves - Musk (suitable for sewage plant) - Toilet paper - Plant documentation - Printing paper & ink - Cleaning material					
Item no.	Description	Quantity	Rand/kg or each	Monthly	Total Per year	Five-year total
7	Hepatitis annual surveillance s for employees	1/year				
8	Green drop implementation requirements	Once off				
9	Hazardous biological Agent's surveillance	1/year				
10	Monthly reports generation	monthly				
11						
12						
13						
14						

The total of the Prices

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PART 3: SCOPE OF WORK

The scope of work entails the plant operation and maintenance of vegetation growth around the ponds, chemistry analysis of the effluent in accordance with SANAS 17025 and housekeeping. The operation of the plant is governed by Water Services Act 108 of 1997/ Regulation 2834

Purpose

The purpose of this document is to outline the scope of work for Ikageng Sewage Plant Duvha Power Station, which is to be carried out by an appointed contractor.

Applicability

This document is only applicable to Duvha power station.

NORMATIVE / INFORMATIVE References

Normative

- [1] ISO 9001 Quality Management Systems.
- [2] National Water Act General Limits for Discharge: NATIONAL WATER ACT 36 OF 1998
- [3] ISO 17025

Informative

- [1] Health and Safety requirements
- [2] Environmental requirements
- [3] Site regulations and access control SAS0012
- [4] Operating instruction UI 382-171996

Definitions

Disclosure Classification

Controlled Disclosure: **Controlled Disclosure to external parties (either enforced by law, or discretionary).**

Abbreviations

Abbreviation	Description
SHEQ	Safety, Health, Environment and Quality
PTW	Permit to wok
QM	Quality management

Roles and responsibilities

2.5.1 Appointed contractor

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The contractor shall:

- Work within the parameters of the scope of work.
- Ensure that PTW is in place before start of each work.
- Conduct a risk assessment each day before the start of every work.
- Execute the scope of work as per the employer's specification.
- Execute the scope of work with compliance to the Occupational Health and Safety.

2.2.2 Project Manager

Must ensure that:

- All work is executed in accordance with the legal requirements (Occupational Health and Safety Act 85 of 1993).
- Scope of work is executed and completed on the set timeline or date.
- The work is carried out by competent persons.

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Ikageng Sewage Treatment Plant Operations**Obligation of the service provider**

- The contractor shall implement and maintain a green drop system program for the operation of the sewage plant.
- The service provider shall ensure adequate operational monitoring – sampling sites and frequencies according to the license and best practices.
- Weekly final effluent results shall be done by an accredited laboratory and monthly reports shall include original reports from the accredited laboratory
- The plant shall be controlled and supervised by suitable qualified experienced employees who have been classified in terms of Regulation 17, Water Services Act 108 of 1997/regulation 17
- The service provider shall assume full responsibility for compliance with relevant statutory requirements and bylaws (Example NEMA, Water Act, Audits, relevant ISO requirements etc.)
- Persons employed at water works shall be in accordance with the requirements of plant's registration which is class C.
- The plant shall be manned and supervised on 24/7 bases (four (4) shift roster)- A minimum of two operators per shift shall be adhered to for safety purposes.
- The service provider shall have a documented Wastewater Risk Abatement Plan (W2RAP) in place and prioritise risks with mitigation measures to address inadequacies.

Service provider requirements for the service

- The Service provider provides qualified operators for the service.
- The Service provider provides tools, appropriate PPE, equipment and consumables to carry out the work.
- Service provider shall provide transportation of its personnel to and from to work site.
- The Service provider ensures the safety of own personnel, other contractors, and Eskom employees in the vicinity of the works by complying to the OSH Act and its Regulations.
- The Service provider plans and executes the work and provides a detailed plan for each planned maintenance opportunities.
- The Service provider performs quality control on their own work as per pre-approved quality control plans submitted to the Eskom Project Manager.
- Activities completed to be approved by an Eskom Project Manager.

Monthly assessments and reports

- The Service provider will be assessed on the 15th day of the month based on KPI determined and agreed upon by the two parties which shall include the following as a minimum: -
 - Employees signed work attendants register.
 - Daily operational plant records
 - Graphically trends of chemically analysed parameters
 - Records of plant defects and risk
 - Chemical analysis reports from an accredited laboratory
 - Full complement of staff correctly classified by department of water and sanitation
 - Housekeeping of the plant.

Ikageng Sewage Treatment Plant Operations

Constraints on how the Service provider render Service

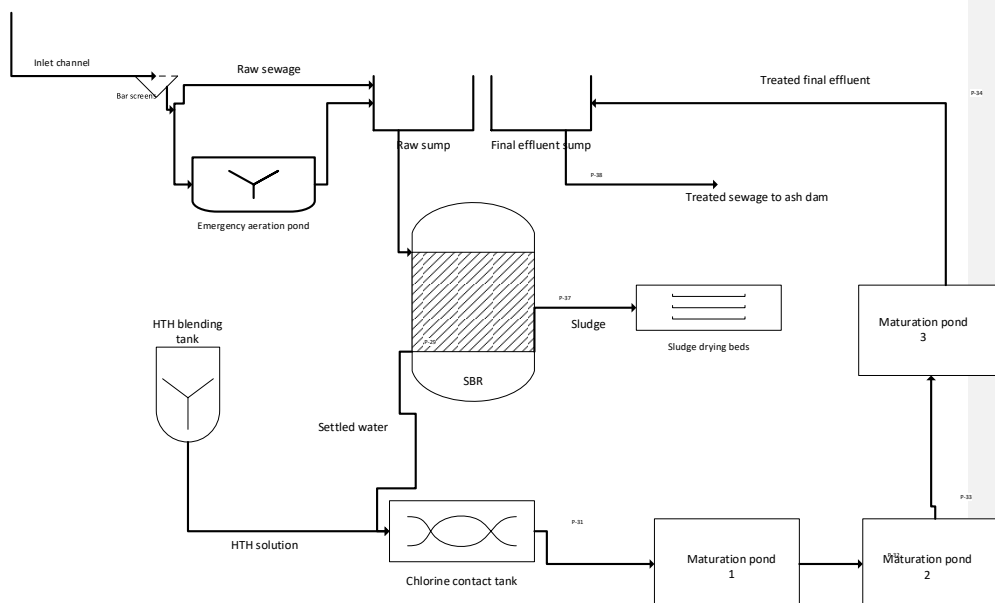
- The Service provider shall receive instruction from authorized personnel of Duvha Power Station to perform allocated tasks.
- Tasks to be completed in the allocated time frame provided and agreed to only when task order is issued by the Eskom project manager.
- Activities completed to be approved by an Eskom quality representative or the relent system engineer where stipulated.
- The plant operation shall comply to operational instruction Document Identifier: 382-171996

Operation work

System Layout and Process flow

Below is a process flow diagram of the sewage treatment plant.

Figure 1: Ikageng Sewage treatment plant PFD



Performance Requirements

Treated effluent standard

The table below lists the treated effluent quality that the Sewage Treatment Plant is expected to achieve.

Table 1: Required treated effluent quality as required by water licence.

Ikageng Sewage Treatment Plant Operations

Substance/Parameter	Limit
pH	5.5-9.5
Ammonia (ionised and un-ionised) as Nitrogen (mg/l)	3
Nitrate (as N)	15 mg/l
Free chlorine	0.25mg/l
Ammonia (as N)	1 mg/l
COD	75 mg/l after algae removal
Faecal coliform units	0 per 100 ml
Orthophosphate (as P)	1 mg/l

1.1 Specifications and legal documentation as attached in disc supplied

Specific environmental legislation to adhere to are:

The Contractor must ensure compliance to the following at all times:

i) South African Acts:

- The Environment Conservation Act (Act 73 of 1989) NEMA
- The Atmospheric Pollution Prevention Act (Act 45 of 1965) NEMWA
- The Occupational Health and Safety Act (Act 85 of 1993)
- The Road Traffic Act (Act 29 of 1989) NWA
- The Health Act (Act 63 of 1977) CARA
- The Hazardous Substances Act (Act 15 of 1973) NEMBA

Subsequent amendments to any of the above Acts are also implied.

ii) Eskom Policies and Procedures:

- ESKPBAAD6 Environmental Management Policy
- ESKPBAAA9 Environmental Impact Assessment
- ESKPVAAL7 Environmental Impact Assessment
- ESKPBAAA3 Air Quality Management Policy
- ESKPBAAD4 Herbicide Management
- ESKASAALO The Safe Use of Pesticides and Herbicides
- ESKPBAAA8 Energy and Environmental Policy and Strategy
- ESKPBAAAC4 Waste Management Policy and Strategy
- GEM6 An Eskom Purchasing Policy for Buying Environmentally Friendly Products
- ESKADAAJ4 Water Management Policy
- ESKADAAJ5 Waste Management Policy
- ESKADAAP7 Investigation of Major Incidents
- GGS0350 Generation Fire Risk Management
- GEM BULLETIN 5 Problem Plant Species on Generation Sites.

PART 4: ATTACHMENTS

Ikageng Sewage Treatment Plant Operations**ATTACHMENT A: Health & safety****7 REQUIREMENTS AND RESPONSIBILITIES**

Eskom, as the *Employer* in terms of section 8 of the OHSA, has the overall accountability and responsibility for the health and safety of all persons involved during construction work. This is managed by means of various agreements, which are part of the interpretation of this procedure, as required in terms of section 37.1 of the OHSA. In this capacity Eskom must ensure that employees have their OHSA duties explained to them.

7.1 Client (Eskom)

The client may appoint an agent on a site and project specific basis to act on its behalf in terms of the duties and responsibilities imposed on the client in terms of legislation and this procedure. This appointment shall be properly documented.

The Client shall ensure that the Agent it appoints has the necessary competence and resources to perform the required duties and when appointed shall take the responsibilities imposed on the Client by the Construction Regulations and where applicable by this procedure.

7.1.1 The Project Managers shall:

- As far as is reasonable and practicable develop a comprehensive project plan that includes reference to all SHE issues.
- Ensure that designers are made aware of their roles and responsibilities.
- Where applicable, provide to the designer:
 - Eskom-specific SHE criteria to be applied to the designs.
 - Environmental Impact Assessment report.
- Ensure that the project team conduct a baseline site-and project-specific risk assessment in relation to all relevant hazards.
- Prepare and provide the SHE specifications that shall be based on the baseline site-and project- and scope of work specific risk assessment, identifying the existing and potentially significant residual hazards that a competent and resourced contractor would not have been expected to know. The SHE specifications should include:
 - Any relevant SHE information about the specific construction work to be performed.
 - Include all the applicable and relevant information contained in the Eskom documents pertaining to the project and scope of work. Extracts or the entire Eskom document must be included in the SHE specification. Refer to Annexure 1 for additional minimum requirements for SHE specifications.
- Ensure that the Principal Contractors submitting tenders have made detailed provision for the cost of SHE measures for the construction work.
- Ensure if a Principal Contractor intends to use a subcontractor/s to perform work on the construction project, that this arrangement shall be indicated by the Principal Contractor during the tendering stage or at the commencement of work. The Principal Contractor shall indicate who his / her subcontractors are and provide evidence that the subcontractor/s have the necessary competence and resources to carry out the work safely and to ensure a duty of care to the environment. The Project Manager has the right to determine who works on his / her project.
- Ensure that the Principal Contractor is registered and in good standing with the Compensation Commissioner or with a licensed compensation insurer, prior to and for the duration of the contracted work.
- Ensure that tendering Principal Contractors provide a detailed SHE plan, based on the SHE specifications provided as well as any other SHE considerations arising from the Principal Contractors' construction activities.

Ikageng Sewage Treatment Plant Operations

- In cases where internal Eskom departments perform construction work within Eskom, the requirements of this procedure shall be adhered to.
- After the selection and appointment of the Principal Contractor or internal service provider have been concluded, the Client and the Principal Contractor or internal service provider must complete and sign the 'Notification of Construction Work'. The Principal Contractor or internal service provider shall forward this notification to the Provincial Director, prior to the commencement of work and retain evidence of such notification.
- The Project Manager shall audit the work that is being executed against the approved SHE plan at the intervals as mutually agreed upon, but not less than once a month.
- All Project Managers involved in construction work shall be registered with the South African Council for the Project and Construction Management Professions (SACPCMP).
- Ensure that all Eskom employees involved in construction work receive essential training as determined by a training needs analysis.
- Not appoint a Principal Contractor to perform construction work, unless the Project Manager is reasonably satisfied that the Principal Contractor, which he intends to appoint, has the necessary competence and resources to carry out the work in a safe and healthy manner and ensure the duty of care to the environment.
- In order for Eskom to fulfil its responsibility to support government and Eskom initiatives, employ emerging contractors that require guidance and assistance that is reasonably practicable.
- Appoint each Principal Contractor in writing.
- Where subcontractors are appointed by the Principal Contractor, ensure that the Principal Contractor supplies the applicable Eskom SHE specifications to the subcontractor/s.
- Stop the Principal Contractor or subcontractors from continuing with work if such work is not in accordance with the SHE plan or Eskom requirements. Any Eskom employee or contractor can stop an activity, which poses a threat to the health and safety of person(s) or a risk of degradation to the environment. Any person can report to the Project Manager any unsafe or unhealthy practices, or conditions which pose a threat to the environment. The Project Manager shall issue non-conformance reports for the circumstances giving rise to the stoppage, the actions taken and any corrective measures required.
- Then there are changes in the scope of work and or work environment (e.g. climatic changes; amendments to Eskom rules and or legislative amendments), review (and revise if necessary) the affected sections of the SHE specification and baseline site-and project - specific risk assessment and provide it to the Principal Contractor. The Principal Contractor shall then review (and revise if necessary) the SHE plan and the activity-based risk assessments. The Project Manager must then ensure that the provisions in the SHE plan are adequate and thereafter approve and sign off the plan, prior to recommencing the work affected by the changed scope.
- Ensure that the Principal Contractors audit their subcontractors on their compliance with the approved SHE plan as per the requirements of the SHE file.
- Shall ensure that no visitor enters construction sites without having first received a SHE briefing in the form of induction and thereafter the relevant risk-based PPE, where reasonably practicable.
- Ensure, prior to the commencement of construction work, that all persons involved in any construction work have received the Client's project specific induction training.
- The Project Manager must ensure that the Principal Contractor is made aware of his / her requirement to hand over the SHE file on completion of the contracted work. The SHE file shall contain all the requirements as per Annexure 2.
- Ensure that all contractors receive Duvha Power Station SHE induction training.
-
- Keep documented records of all training

7.2 SAFETY HEALTH AND ENVIRONMENT PLAN

Ikageng Sewage Treatment Plant Operations

- The SHE plan shall be based on the requirements of the OHS act as well as per Duvha SHE Procedure for contractors
- Principal contractors will be held responsible for non-compliance by their sub-contractors.

7.3 SAFETY HEALTH AND ENVIRONMENT FILE

- SHE file will contain all the documentation as required by the OHS Act as well as the checklist Duvha Specifications and the copy of the safety file will be kept at SRM office.
- Duvha Power Station SRM Department will conduct regular audits on the contractors SHE file and premises to ensure compliance with the legal requirements and Duvha SHE procedure for contractors.
- At completion of contract, the SHE file will be included in the consolidated file as per the requirements of the Construction Regulations 5(8), and will be handed over to the Project leader.
- No contractor will be allowed to work at Duvha Power Station before the SHE file is approved, and all other requirements are complied with.

7.4 NOTIFICATION OF CONSTRUCTION WORK (CR3)

- Duvha Power Station will notify the Department of Labour of construction work in case of Outages. For other projects, notification of construction work will be the responsibility of the Contractors.
- ARNF 367 form will be used to notify the department of labour

7.5 STATUTORY APPOINTMENTS

- Refer to Annexure C Checklist for all required appointments.
- All required statutory appointments will be done in writing.
- The appointment letter must indicate company footers as well company Logo (Letterhead)
- Only competent people can be appointed and proof of competency must accompany the appointment
- An appointment will include the following
 - Clear reference to the act or regulation under which the person doing the appointment is authorised to do so.
 - The date, name and signature of the person doing the appointment.
 - The area of responsibilities.
 - The duties to be performed.
 - Clear reference to the act or regulation under which the appointee is appointed.
 - The name of the person appointed.
 - The date, signature and the acceptance of the person appointed
 - Any termination of any appointment will be done in writing and a copy placed on file

7.6 LETTER OF GOOD STANDING (CR 4(1)(G))

- No Contractor will be allowed to perform any work activities on site without a valid letter of good standing
- The contractor must be in good standing with the compensation for the duration of the project

7.7 RISK ASSESSMENTS (CR7)

- The project leader will provide the contractor with risk that already exists pertaining to the project.

Ikageng Sewage Treatment Plant Operations

- A risk assessment will be compiled for every task to be performed as well as: -
 - Transportation of passengers and goods.
 - Site establishment.
 - Use of all equipment.
- No principal contractor will be allowed to do any work without a proper Risk Assessment.
- Every principal contractor will have a proper risk assessment at his / her arrival at Duvha Power Station. Before commencement of any work, every principal contractor will adapt his risk assessment to the prevailing hazards and conditions.
- Attendance register for the hazards and related working procedures, reflecting the date of training and the names and signatures of all trainees will be kept in the SHE file.
- See annexure D, Hazard checklist for a list of possible points to consider and include in a risk assessment.

7.8 PERSONAL PROTECTIVE EQUIPMENT

- The *Contractor's Employer* shall issue to all his employees on site personal protective equipment **WITH VISIBLE COMPANY LOGO FOR BOTH TOP AND TROUSER THAT IS APPROVED BY SABS.**
- Long sleeve personal protective equipment shall be worn in the plant at all times.
- The equipment shall be worn where required and where it is indicated by symbolic safety signs.
- Personal protective equipment shall be maintained in a good and clean condition.
- The equipment shall be checked on a regular basis to ensure that it is being worn in the right place at the right time
- Damaged PPE shall be replaced immediately by the *Contractor* at no cost to the *Employer*.
- Records of issue shall be kept.