

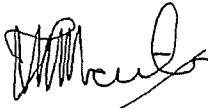
 Eskom	Works Information	Document Number: 366-495322	
		Date: January 2023	Rev 0
		Page: 1 of 35	
Title: <b>Works Information</b> <b>Provision of Water Quality Monitoring Services at Kusile Power Station Project</b>		Document type <b>Works Information</b>	
Compiled by  <b>Jeffrey Mashau</b> Senior Supervisor Kusile Power Station Project	Agreed by  <b>Thobile Nzimande</b> Contracts Manager Kusile Power Station Project	Authorised by  <b>Mosiwa Malbi</b> Site Services Manager Kusile Power Station Project	
Revision	Description of Revisions	Approval Date	

## Part 3: Scope of Work

Document reference	Title	No of pages
	This cover page	1
C3 1	<i>Employer's Service Information</i>	33
	Total number of pages	34

## C3.1: EMPLOYER'S SERVICE INFORMATION

### Contents

<b>Part 3: Scope of Work.....</b>	<b>2</b>
<b>C3.1: Employer's service Information.....</b>	<b>3</b>
<b>1 Description of the service .....</b>	<b>6</b>
1 1 Executive overview	6
1 2 <i>Employer's requirements for the service</i>	6
1 3 Water quality monitoring	6
1 3 1 Routine water quality monitoring	6
1 3 2 Collection and analysis of special samples	7
1 3 3 Response monitoring	7
1 4 Cleaning and disinfection of potable water tanks	7
1 5 Partnership Agreement/ Site Specific Agreement	7
1 6 Reports	7
1 7 Interpretation and Terminology	8
1 7 1 Abbreviations	8
1 8 Standards, Specifications and Procedures	8
1 8 1 Standards List	8
1 8 2 Eskom Procedure List	9
1 8 3 Specifications List	10
<b>2 Management Strategy and Start Up .....</b>	<b>11</b>
2 1 <i>The Contractor's Plan for the Service</i>	11
2 1 1 Contractor's Office	11
2 2 Management Meetings	11
2 3 Contractor's Management, Supervision and Key People	11
2 4 Provision of Bonds and Guarantees	11
2 5 Documentation Control	12
2 6 Invoicing and Payment	13
2 7 Contract Change Management	13
2 8 Records of Defined Cost to be kept by the <i>Contractor</i>	13
2 9 Insurance Provided by the <i>Employer</i>	14
2 10 Training Workshops and Technology Transfer	14
2 11 Design and Supply of Equipment	14
2 12 Things provided at the end of the <i>service period</i> for the <i>Employer's</i> use	14
2 12 1 Equipment	14
2 12 2 Information and other things	14
2 13 Management of work done by Task Order	14

<b>3</b>	<b>Health and Safety, the Environment and Quality Assurance .....</b>	<b>14</b>
3 1	Health and Safety Risk Management	14
3 2	Environmental Constraints and Management	15
3 3	Quality Assurance Requirements	15
<b>4</b>	<b>Procurement .....</b>	<b>15</b>
4 1	People	16
4 1 1	Minimum Requirements of People Employed	16
4 1 2	B-BBEE and Preferred Scheme	16
4 1 3	Supplier Development and Localisation	16
4 2	Subcontracting	16
4 2 1	Preferred Subcontractors	17
4 2 2	Subcontract Documentation, and Assessment of Subcontract Tenders	17
4 2 3	Limitations on Subcontracting	17
4 2 4	Attendance on Subcontractors	17
4 3	Plant and Materials	17
4 3 1	Specifications	17
4 3 2	Correction of Defects	17
4 3 3	Contractor's Procurement of Plant and Materials	17
4 3 4	Tests and Inspections before Delivery	17
4 3 5	Plant & Materials provided "free issue" by the Employer	17
<b>5</b>	<b>Working on the Affected Property .....</b>	<b>18</b>
5 1	<i>Employer's</i> Site Entry and Security Control, Permits, and Site Regulations	18
5 1 1	Security and Access	18
5 1 2	Access Control for Persons	18
5 1 3	Removal of Persons from the Project Site and other places, if any, as may be specified under the Contract as forming part of the Site	18
5 1 4	Removal of Goods from the Project Site	18
5 1 5	Access Control for Vehicles	19
5 1 6	Visitors	19
5 1 7	Firearms	19
5 1 8	Project Site Fences	19
5 1 9	Helicopter Traffic	19
5 1 10	Contractor's Security	19
5 1 11	Cleanliness and Housekeeping	20
5 1 12	Waste Removal and Disposal	20
5 1 13	Signage	20
5 1 14	Works Area Limits	21
5 1 15	Project Site Traffic	21
5 1 16	Dust Suppression	21
5 2	People restrictions, hours of work, conduct and records	21

5 2 1	Hours of Work	21
5 2 2	Competence Testing of Contractor's Personnel	21
5 2 3	Anti-poaching Undertaking	21
5 2 4	Transportation of Contractor's Personnel	22
5 2 5	Canteen	22
5 2 6	Project Site Induction Programme	24
5 2 7	Substance Abuse Testing	24
5 2 8	Accommodation Policy	25
5 2 9	Industrial Action Policy	25
5 3	Health and Safety Facilities on the Affected Property	26
5 3 1	Medical Facilities	26
5 4	Environmental Controls, Fauna and Flora	26
5 5	Cooperating with and Obtaining Acceptance of Others	26
5 6	Records of <i>Contractor's</i> Equipment	26
5 7	Equipment Provided by the <i>Employer</i>	26
5 8	Site Services and Facilities	26
5 8 1	Provided by the <i>Employer</i>	26
5 8 2	Provided by the Contractor	33
5 9	Hook ups to Existing Works	33
5 10	Tests and inspections	33
5 10 1	Description of Tests and Inspections	33
5 10 2	Materials Facilities and Samples for Tests and Inspections	33
<b>6</b>	<b>List of drawings and Documents.....</b>	<b>34</b>
6 1	Drawings and documents issued by the <i>Employer</i>	34

# 1 Description of the service

## 1.1 Executive overview

The works to be performed by the Contractor shall include the following

- a) Water quality monitoring
- b) Cleaning and disinfection of potable water tanks, disposing of dirty water making use of 8000L water tanker with fitted generator and or vacuum component, for any work elevated to a height more than 2m above ground level, the cherry picker shall be used,
- c) Testing and reporting of any alerts

## 1.2 Employer's requirements for the service

The scope of work covers water quality monitoring, cleaning, and disinfection of potable water tanks at Kusile Power Station Project

## 1.3 Water quality monitoring

### 1.3.1 Routine water quality monitoring

The Contractor shall conduct routine monitoring of the quality of potable water in areas of the plant as directed by the Employer's Service Manager. Routine water quality monitoring shall include the following

- a) The daily inspection of all water tanks servicing the Canteen area, collection of potable water samples (for analysis not limited to microbiological, operational, and chemical), testing of samples, reporting- and interpretation of water analytical results. Sampling points will be indicated by the Employer
- b) The weekly inspection of all registered sample points (inclusive of all water tanks, potable water trucks, Kusile WTW), collection of potable water samples, testing of samples, reporting- and interpretation of water analytical results. Sampling points will be indicated by the Employer
- c) The collection of clear water flowing into the wetland, the testing of samples, the reporting and interpretation of effluent quality results based on the customary chemical analysis. Sampling points will be indicated by the Employer as and when required
- d) ICP-MS Scan on comprehensive list of Trace Elements on ADDD, SDD and HRD as and when required using a SANAS approved laboratory
- e) A full water analysis report shall be submitted within seventy-two (72) Hours of the sample being collected
- f) The Contractor shall make use of SANAS Accredited Laboratory in accordance with ISO/IEC 17025 2005
- g) The Contractor shall submit the method statement for approval by the Employer, prior commencement of the sampling tasks
- h) Water sampling must be conducted in accordance with the approved methodologies which complies with South African National Standard
- i) Transportation of samples must be in way that will prevent in route contamination of samples
- j) Sample container must not be reused to prevent cross contamination
- k) All Covid -19 Protocols must be observed during water sampling

### 1.3.2 Collection and analysis of special samples

The Contractor shall conduct ad-hoc monitoring of the quality of potable water in areas of the plant as directed by the Employer's Service Manager. Ad-hoc water quality monitoring shall include the collection of potable water samples, testing of samples, reporting- and interpretation of water analytical results. Sampling points will be indicated by the Employer. Water quality monitoring report shall be submitted within seventy-two (72) hours of the sample being collected.

### 1.3.3 Response monitoring

The Contractor shall conduct corrective action during water quality failures and when the water sample exceeds the numerical limits, the corrective action required will be guided by the impact and consequence of the non-compliant determinants.

## 1.4 Cleaning and disinfection of potable water tanks

The Contractor shall conduct physical cleaning of potable water tanks on site by using high pressure cleaning equipment and as directed by the Service Manager. Cleaning shall be conducted every second month or as required. The potable water tanks shall be disinfected in cases where the free chlorine levels are below the recommended level of 0.5 mg/l and when turbidity levels exceed the prescribed Class I water quality standard or as required, contractor shall be responsible to load wastewater and disposal, for the tank elevated to the height more than 3m, a lifting equipment shall be used.

The Contractor shall submit the method statement for approval by the Employer, prior commencement of the cleaning and disinfection tasks. A list of potable water tanks will be provided. (See Appendix B)

## 1.5 Partnership Agreement/ Site Specific Agreement

Project Attendance (PA) bonus will be applicable to this contract. The Service Provider's employee shall be entitled to the PA bonus, this excludes the Non-Scheduled employees. It shall be calculated as follows: 15.5 hours accumulated by the employees per month paid by the Employer and 0.5 hours accumulated by the employees per month paid by the Contractor. PA bonuses are payable to the employees at the end of the year based on their work attendance. Refer to section 12.3 in Appendix C.

- **N.B. The number of Potable Water Tanks may decrease over the contract duration subject to site requirements at any given time.**

## 1.6 Reports

The following report shall be submitted:

- Weekly water quality monitoring report
- Water quality monitoring report for samples including special samples shall be submitted within seventy-two (72) hours of samples being collected
- Preliminary water quality monitoring report, as required
- Certification of Analysis (Monthly)

## 1.7 Interpretation and Terminology

### 1.7.1 Abbreviations

Abbreviation	Meaning of the abbreviation
SD&L	Supplier Development and Localisation
SHE	Safety Health and Environment
QCP	Quality Control Plan
CPA	Cost Price Adjustment
PLA	Project Level Agreement
SSA	Site Specific Agreement
B-BBEE	Broad-Based Black Economic Empowerment
SES	Standard Environmental Specification
CEMP	Construction Environmental Management Plan
RoD	Record of Decision
WTW	Water Treatment Works
ICP-MS	Inductively Coupled Plasma- Mass Spectrometry

## 1.8 Standards, Specifications and Procedures

### 1.8.1 Standards List

The latest revisions of the following SANS specifications form part of the contract

Document Number	Specification / Code / Standard Title
ISO 9001	International Organisation for Standards Quality Management System
SANS 241-1 2006 Edition 6 1	Drinking water
SANS 241-2 2011 Edition 1	Drinking water Part 2 Application of SANS 241-1
ISO/IEC 17025 2005	General requirements for the competence of testing and calibration laboratories



**1.8.2 Eskom Procedure List**

The following Eskom procedures form part of the contract

<b>Document Number</b>	<b>Revision</b>	<b>Specification / Code / Standard Title</b>
32-727	Latest	Safety, Health, Environmental & Quality Policy
32-95	Latest	Occupational Health and Safety Incident Management Procedure
240-131838225	Latest	Occupational Health and Safety Incident Management Definitions and Classification Parameters Standard
203-847	Latest	Kusile Traffic Management Plan
203-6880	Latest	Kusile Waste Management Plan
Report No 4446/401281	Latest	Construction Environmental Management Plan
QM-58	Latest	Supplier Contract Quality Requirements Specification
240-132210324	Latest	Non-Conformance Process
32-136	Latest	Contractor Health and Safety Requirements
203-42702	Latest	LV Mini-Sub Power Supply Application Procedure

### 1.8.3 Specifications List

The latest revisions of the following specifications form part of the contract

Document Number	Specification / Code / Standard Title
ISBN0621 -16296-5	Handling and Disposal of Hazardous Waste in terms of Government Legislation as proclaimed by the Department of Water Affairs and Forestry Act 1994
OHS Act 85 OF 1993	Occupational Health and Safety act of South Africa and its Regulations
Act 36 of 1998	National Water Act, 1998
240-143052367	Kusile SHE specification
240-105658000	Supplier Quality Management Specification
SANS 1200 Series	Standardized specification for civil engineering Construction Series

## 2 Management Strategy and Start Up

### 2.1 The Contractor's Plan for the Service

#### 2.1.1 Contractor's Office

During the execution of the Works at the Project Site, the Contractor shall maintain a suitable office at the Project Site in the area allocated for that purpose by the Employer, which shall be the headquarters of the Contractor's Representative and authorised to receive drawings, instructions or other communications or notices under the Contract

The Contractor shall maintain, at the Contractor's Project Site office, one complete, up-to-date copy of the Contract and all Contract related documents (including Contractor's Documents, drawings and documents issued by and to the Contractor, Compensation Events, Progress Reports, correspondence, non-conformance reports etc ) Without limitation the Contractor shall maintain at the Contractor's Project Site office one up-to-date copy of all approved shop drawings, product data, samples, and other submittals required of the Contractor These documents shall be available to the Employer at all times

### 2.2 Management Meetings

The following requirements for conducting Project Site meetings apply to the Works The Contractor and all Sub-Contractors shall actively participate in, and adhere to the Employer's requirements and other procedures initiated for the purpose of maintaining the Project Site administrative control The Contractor and all Sub-Contractors shall attend other Project Site meetings when deemed required by the Employer to coordinate the Works or the Project Works

Title and Purpose	Approximate Time & Interval	Location	Attendance by:
Progress feedback meeting (Activity Scrum Session)	Mon, Wed & Fri at <u>07 30</u>	Auditorium 2 Boardroom	Employer and Contractor Site Representative
Environmental management meeting	Bi - monthly	CM building	Employer and Contractor's Environmental Officer
Safety management meeting	Monthly	CM building	Employer and Contractor's Safety Officer/Manager
Support Services Risk meeting	Monthly, <u>Second Tuesday</u> of the Month	Site Small Boardroom	Support Services Contractors

### 2.3 Contractor's Management, Supervision and Key People

The Contractor shall provide the Employer with a detailed organogram of all staff and management on the contract This must be revised quarterly and must reflect any changes to the staff and management structure

The Employer reserves the right to audit and verify the structure

### 2.4 Provision of Bonds and Guarantees

Not Applicable

## 2.5 Documentation Control

The Contractor will submit the following documents to the Employer for review, the Employer will review the documents for acceptance and inform the Contractor if the documents have been accepted or if it is not accepted and stating the reasons of not accepting the documentation. The Employer will give the Contractor reasonable time which will be agreed to between the Contractor and the Employer to respond or re-submit the documents. The documents are as follows

Title and purpose	Frequency
Weekly Water Analysis Report	Weekly
Full water analysis report	As required
Cleaning programme for water tanks	As required
Application for excavation permit	When required
Power application permit	When required
Risk Register	Monthly
SD&L Reports	N/A
Safe Disposal Certificate (SDC)	When required

All correspondence of either commercial or technical nature, whether hard copy or email, either to Contractor or from Contractor shall clearly include the following information file number, package number, contract number and subject matter

Documents shall be delivered in electronic format (Microsoft Office 2003 compatible or Adobe Acrobat (pdf) files) In addition, a document list shall be delivered in Microsoft Excel format that contains the following fields "document name", "document type", "version number", "date created" and "created by"

## 2.6 Invoicing and Payment

Within one week of receiving a payment certificate from the Employer in terms of Core Clause 51 1, the *Contractor* provides the Employer with a tax invoice, by no later than the first day of the month, showing the amount due for payment equal to that stated in the Employer's payment certificate

### The Contractor shall address the Tax Invoice to:

Eskom Holdings SOC Limited  
Finance Department  
Megawatt Park  
Email InvoicesgrpcapitalKCT@eskom.co.za

### **ONLY ORIGINAL INVOICES WILL BE ACCEPTED.**

### The following must be stated on the Tax Invoice:

- Name and address of the *Contractor* and the Employer,
- The contract number and title,
- *Contractor's* VAT registration number,
- The *Employer's* VAT registration number 4740101508,
- Description of service provided for each item invoiced based on the Price List, and
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT

## 2.7 Contract Change Management

The Employer may instruct changes to the scope at any time, each instruction shall set out the change and the date on which it becomes effective, and must be issued to the Contractor in writing to be valid

## 2.8 Records of Defined Cost to be kept by the Contractor

The Contractor must keep all documentation related to the compensation events, quotes and instructions from the Employer for the period of 5 years after contract completion for audit purposes

## **2.9 Insurance Provided by the *Employer***

The insurance policy provided by the Employer will be dealt with as specified in Clause 86 1 TSC

## **2.10 Training Workshops and Technology Transfer**

Not Applicable

## **2.11 Design and Supply of Equipment**

Not Applicable

## **2.12 Things provided at the end of the *service period* for the *Employer's* use**

### **2.12.1 Equipment**

None

### **2.12.2 Information and other things**

At the end of the service period the Contractor will be required to provide the Employer with the following

- The Contractor's handover Safety file

## **2.13 Management of work done by Task Order**

Not Applicable

# **3 Health and Safety, the Environment and Quality Assurance**

## **3.1 Health and Safety Risk Management**

- The Contractor shall comply with The Occupational Health and Safety Act 85 of 1993 and its regulations, furthermore the contractor must conform to the health and safety requirements contained in Kusile Safety, Health and Environmental Specification as updated
- The contractor shall conform to Eskom's Business Unit & Site work Instructions Procedures and Standards this includes Doc 32-95 for Incident management, Doc 32-727 for Safety, Health, Environment and Quality Policy and Doc 32-136 Contractor Health and Safety Requirements etc
- The Employer's Safety Officers shall inspect the Contractor Working Areas and Facilities for compliance to Eskom's standards
- The contractor shall be audited monthly by the employer's Safety Officer

### 3.2 Environmental Constraints and Management

The Contractor shall comply with the environmental criteria and constraints stated in the following

- Kusile Environmental Management Plan (EMP) as updated
- Standard Environmental Specification (SES)
- Kusile Waste Management Plan (unique identifier 203 6880)
- Kusile Sewerage Management Plan Construction Phase Document (unique identifier 203 - 32115),
- Record of Decision (RoD)
- Water Use licences (WULs)
- Appointment of qualified Environmental Officer as per EMP requirements and the
- Method statements as per EMP/ SES requirements
- Signed Environmental Policy
- Aspects and impacts register

### 3.3 Quality Assurance Requirements

The Contractor shall comply with the quality requirements as stated in QM-58

## 4 Procurement

The Contractor provides the following procurement services in performing the scope

- Preparation of Employer approved supplier and Sub-Contractor's lists for equipment and contracts to be submitted to the Employer for review and approval
- Follows the least cost and time procurement strategies
- Contract management services for the selection, appointment and management of Sub-Contractors requires to execute the scope
- The services of all buyers, contracts officers, inspectors, expeditors, and other personnel necessary to procure and deliver all plant, material, equipment, supplies and services necessary to provide the scope
- Receives and evaluates all bids/quotations and compiles a bidders evaluation report detailing the technical, commercial and costing components of each bid
- Obtains the Employers' approval prior to committing any contracts or orders
- Obtains delivery dates from Sub-Contractors and suppliers in order to realize the Completion Date,
- Receiving of invoices, verification thereof in terms of purchase orders and contract provisions, certification of invoices as being correct and payable and supply of correct invoices to the Employer within
- Management of and negotiating of all suppliers and Sub-Contractors compensation events and recommendations to the Employer as to the validity, amount and payment of such events
- Determination of penalties payable by suppliers and Sub-Contractors and recommendation to the Employer as to the enforcement of such penalties prior to any communication to suppliers and Contractors
- Ensuring that all suppliers and Sub-Contractors, from whom the Contractor procures equipment and materials do not retain, encumber or reserve title to such items

## 4.1 People

### 4.1.1 Minimum Requirements of People Employed

The Contractor will be required to recruit within the Nkangala District Municipality, including any other areas that are within 65 km radius from the Kusile Construction Site. Kusile Power Station employment procedure will apply.

### 4.1.2 B-BBEE and Preferred Scheme

The Contract shall

- Maintain the Required B-BBEE Recognition Level for the duration of the Agreement
- Provide Eskom with a valid Verification Certificate and such other information as Eskom may reasonably request, in respect of which the Contractor claims maintenance for the duration of the Agreement of the Required B-BBEE Recognition Level. For the purpose of this clause 'verification Certificate' means a verification certificate and the accompanying documentary proof confirming the B-BBEE Status of a particular entity as issued by an accredited verification agency
- Comply with and fulfil its obligations in respect of the Supplier Development and Localisation and the Industrialisation Programme (the latter, if any) in accordance with and as provided for in the Supplier's SD&L & Localisation Obligations Schedule

Without limiting or derogating from Eskom's other rights under the Agreement including Eskom's rights to terminate the Agreement, Eskom shall be entitled to claim (and to deduct from the consideration payable) a penalty equal to ZAR 300 000 00 (three hundred thousand Rand) if the Contractor fails to maintain the Required B-BBEE Recognition Level for the Stated Time, subject to the proviso, however, that the penalty shall not be applied if the Contractor re-achieves the Required B-BBEE Recognition Level within 184 days of first losing it and thereafter maintains the Required B-BBEE Recognition Level for the balance of the Agreement.

### 4.1.3 Supplier Development and Localisation

The Contractor complies with and fulfils the Contractor's obligations in respect of the Accelerated and Shared Growth Initiative – South Africa in accordance with the Contractor's SD&L Compliance Schedule.

The Contractor shall keep accurate records and provide the Employer with reports on the Contractor's actual delivery against the SD&L criteria stated in the contract. The reporting templates will be provided on contract award. The Contractor's failure to comply with his SD&L obligations constitutes substantial failure on the part of the Contractor to comply with his obligations under the contract.

## 4.2 Subcontracting

This Contract does not constitute an agreement of employment, partnership, joint venture or agency between Eskom and the Contractor and shall not give rise to any relationship of employer and employee, master and servant or principal and agent between Eskom and the Contractor or between Eskom and any employee, agent or sub-Contractor of the Contractor. Accordingly, neither the Contractor nor Eskom shall have the power, nor purport to make a contract in the name of the other, to grant or pledge credit of the other, to incur liability on behalf of the other, or to employ any person on behalf of the other.



The Contractor shall not be entitled to sub-contract the whole of the services but shall, subject to Eskom's consent (which consent shall only be valid if given in writing and signed by the Eskom Representative), be entitled to sub-contract selected parts of its obligations in terms of this Agreement to any other person/s, provided that such sub-contracting shall not relieve the Contractor of its obligations and the Contractor shall remain liable for all and any acts or omissions of such person/s as though they were acts or omissions of the Contractor

The Contractor shall not be entitled to cede, delegate, assign or otherwise transfer any of its rights and/or obligations without the prior written consent of Eskom, which consent shall not be unreasonably withheld

#### **4.2.1 Preferred Subcontractors**

Not Applicable

#### **4.2.2 Subcontract Documentation, and Assessment of Subcontract Tenders**

Not Applicable

#### **4.2.3 Limitations on Subcontracting**

Not Applicable

#### **4.2.4 Attendance on Subcontractors**

Not Applicable

### **4.3 Plant and Materials**

#### **4.3.1 Specifications**

The Contractor is responsible for providing plant and material necessary to provide the services

#### **4.3.2 Correction of Defects**

The Contractor shall provide maintenance and repair of all the plant necessary to provide the services. All defects to the works shall be rectified as specified in the document QM 58

#### **4.3.3 Contractor's Procurement of Plant and Materials**

The Contractor may be required to provide the Employer with a technical data sheet of the plant or material supplied to the Employer. A guarantee and warranties' certificate may also be required for any plant and material supplied by the Contractor to the Employer

#### **4.3.4 Tests and Inspections before Delivery**

Not Applicable

#### **4.3.5 Plant & Materials provided "free issue" by the Employer**

None

## **5 Working on the Affected Property**

### **5.1 Employer's Site Entry and Security Control, Permits, and Site Regulations**

#### **5.1.1 Security and Access**

The Employer will provide perimeter security and access control for the Project Site. Strict access control shall be implemented 24 hours a day at all entrances to the Project Site. All persons and vehicles entering or exiting the Project Site may be subjected to searches and the Employer reserves the right to refuse entrance to Project Site to any person not meeting security and/or access requirements.

From time to time, and as required, the Employer will issue policies and procedures regarding Project Site security and access control. These policies and procedures shall be strictly adhered to by the Contractor. The Employer shall be entitled, at his discretion, to amend or relax the Project Site security and/or access requirements to deal with emergencies or other circumstances justifying such amendment or relaxation.

Any breach of security must be reported to the Employer immediately.

#### **5.1.2 Access Control for Persons**

The Contractor's Personnel and any visitors on the Project Site must be in possession of a valid identification card supplied by the Employer. Applications for identification cards shall be made in the form prescribed by the Employer. The identification cards and finger print identification shall be used to gain access to the Project Site and only persons with legitimate business on the Project Site and in possession of such identification cards will be allowed access.

Applications for identification cards and fingerprint imaging shall be made in good time prior to access being required. Lost, stolen or damaged cards shall be reported to the Employer immediately. A fee shall be charged for replacement cards.

Identification card holders will be required to produce their identification cards for a photo to face and fingerprint check at the security check points. Where a card holder's right of access to the Project Site is withdrawn, his identification card will be electronically cancelled. It is the responsibility of the Contractor to ensure the card is returned to the Employer.

#### **5.1.3 Removal of Persons from the Project Site and other places, if any, as may be specified under the Contract as forming part of the Site**

The Employer may remove from the Project Site (or from any other places, if any, as may be specified under the Contract as forming part of the Site) any person who poses a risk to the Project Works or to the progress thereof, or who poses a risk to security or to the health and safety of persons at the Project Site (or at such other places, if any, as may be specified under the Contract as forming part of the Site).

The Employer furthermore remove from the Project Site (or from any other places, if any, as may be specified under the Contract as forming part of the Site) any person who ceases, for any reason, to have legitimate business thereon.

If any such person was permitted access as Contractor's Personnel or as a visitor of the Contractor, the Contractor shall, at the request of the Employer, take all steps necessary to ensure his removal from the Project Site (or from such other places forming part of the Site, as the case may be).

#### **5.1.4 Removal of Goods from the Project Site**

All persons removing inter alia materials, equipment, toolboxes, temporary facilities etc from the Project Site must be in possession of a valid gate release permit. Applications for general or specific gate release permits shall be made in the form prescribed by the Employer.

### **5.1.5 Access Control for Vehicles**

Only a limited number of Contractor and Subcontractor non-construction vehicles will be allowed onto the Project Site. As a general rule, however, Contractors' and visitors' personal vehicles are not allowed within the Project Site and must be parked in the designated area and the Contractor is required to collect his visitors from the access point.

Vehicle entry discs will be issued at the discretion of the Employer on receipt of an application signed by the Contractor. Applications for vehicle entry discs shall be made in a form prescribed by the Employer.

### **5.1.6 Visitors**

Before entering the Project Site, visitors (meaning any person other than the Contractor's Personnel) must be in possession of a valid identification card supplied by the Employer.

Applications shall be made in a form prescribed by the Employer prior to access being required and visitors must be in possession of positive identification.

The Contractor's visitors shall be subject to all Project Site rules and regulations including those related to Health & Safety and discipline. As a minimum requirement, visitors must wear safety shoes, hard hats and any other personal protective equipment as required by the Employer and must be accompanied by their hosts at all times whilst on the Project Site.

### **5.1.7 Firearms**

Fire-arms will not be permitted on the Project Site (nor at other places, if any, as may be specified under the Contract as forming part of the Site). This restriction does not, however, apply to the South African Police Services (SAPS) in the pursuance of official duties.

### **5.1.8 Project Site Fences**

The modification or removal of Project Site fences is strictly prohibited unless otherwise instructed by the Employer.

### **5.1.9 Helicopter Traffic**

In addition to compliance with applicable Law, helicopter landings at the Project Site (except emergency aid Helicopters) require the prior approval of the Employer. Applications for landing shall be submitted in the form prescribed by the Employer. Applications shall include the following details, as a minimum:

- Purpose of visit
- Date of landing
- Estimated time of arrival on and departure from Project Site
- Number and names of passengers, and
- Company represented and registration number of helicopter

### **5.1.10 Contractor's Security**

The Contractor is solely responsible for the protection and security of the Works and all areas allocated to him, including his allocated lay-down areas and areas outside the Project Site, if any, which are specified under the Contract as forming part of the Site.

For areas outside the Project Site which are specified under the Contract as forming part of the Site, the Contractor shall also be responsible for implementing access control for persons (including

Contractor's Personnel and visitors) and vehicles. Such access control shall be to the satisfaction of the Employer and shall be subject to the direction and control of the Employer.

#### **5.1.11 Cleanliness and Housekeeping**

The Contractor shall maintain a high standard of cleanliness during the conduct of his activities on the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site). The Contractor shall, at all times maintain, clean and attend to the upkeep of the Site and such other areas as may be allocated for storage of materials, site offices, etc. to the satisfaction of the Employer. The Contractor shall at all times keep these areas, clean and free from accumulation of waste materials and refuse regardless of the source.

During sweeping and dusting, the Contractor shall ensure that a minimum amount of dust is liberated into the atmosphere. Cleaning by vacuum cleaners is preferred and the use of compressed air for cleaning is prohibited.

#### **5.1.12 Waste Removal and Disposal**

The Contractor is responsible for the prompt removal of all waste to a designated disposal area. The disposal area will be on or in the vicinity of the Project Site and will be designated by the Employer. Waste must only be disposed of at a designated area.

For the purpose hereof, "waste" means any matter, whether liquid or solid or any combination thereof, which is a by-product, emission, residue or remainder of any process or activity carried out in connection with the Works and which is not reused on the Site in the ordinary course of carrying out the Works within 7 (seven) days of maintenance.

The Contractor shall provide an adequate number of marked bins and containers at offices, in yards, at workshops and on the Site for the temporary storage of waste. These bins and containers shall be to the satisfaction of the Employer.

The Contractor shall be required to segregate certain items of waste by type as designated by the Employer. Bins and containers shall be emptied, and waste removed to the designated area at least once a week. All the temporary storage areas for bins and containers must be kept tidy and shall not constitute a nuisance to others. The Contractor shall take all steps required to avoid the spillage of waste alongside the bins and containers and during removal and disposal.

All waste that cannot be contained in either a bin or container must be placed on a temporary waste site the position of which shall be to the satisfaction of the Employer. The waste shall be removed as soon as possible but, in any event, at least once a week. No burning of waste shall be allowed on the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) unless otherwise approved by the Employer.

Hazardous waste shall be dealt with in accordance with the safety, health and/or environmental requirements of the Contract, as applicable, and the Contractor is solely responsible for the proper disposal thereof in accordance therewith.

#### **5.1.13 Signage**

No signage shall be erected by the Contractor at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) without the prior specific or general approval of the Employer. The positioning and content of signage, whether required by applicable Law and/or otherwise required to be displayed by the Contractor under the Contract, shall be subject to applicable policies and procedures issued by the Employer from time to time.

No Contractor notice boards will be allowed on the main road, other than signs necessary to facilitate deliveries, but the Contractor will be permitted to erect his own notice board on the Project Site, in the vicinity of the Site, or at other places, if any, as may be specified under the Contract as forming part of the Site, the positioning of which, must have the prior approval of the Employer.

#### **5.1.14 Works Area Limits**

The Employer will designate the working area boundary limits and assign for the Contractor's use access roads, parking areas, storage areas, existing facilities areas and construction areas. The Contractor shall not trespass in or on areas not so designated. The Contractor shall be responsible for keeping Contractor's Personnel out of areas not designated for Contractor's use, except, in the case of isolated work located within such areas for which the Contractor shall have been authorised under the Work Co-ordination Process.

#### **5.1.15 Project Site Traffic**

The Contractor shall comply with the Employer's directions for the movement of traffic, vehicular or pedestrian, at the Project Site. The Contractor shall interfere as little as possible with Project Site traffic, vehicular or pedestrian, during the performance of the Works. When necessary to cross, obstruct or close roadways or walks, the Contractor shall provide advance notice to the Employer, obtain the permission from the Employer and maintain suitable detours or other expedients for the accommodation of other Project Site traffic. In making open cuts across traffic paths, the Contractor, unless otherwise approved by the Employer, shall cut only one-half of the traffic paths at a time.

These Project Site traffic provisions shall likewise apply to places, if any, outside the Project Site as may be specified under the Contract as forming part of the Site.

#### **5.1.16 Dust Suppression**

Except as otherwise directed by the Employer, the Contractor shall provide dust suppression for the Contractor's yard and for the Contractor's working areas. The Employer will, however, provide dust suppression for roads and other common areas which are not used exclusively or primarily by the Contractor.

### **5.2 People restrictions, hours of work, conduct and records**

#### **5.2.1 Hours of Work**

Working hours on the Construction site is from 7 00 till 17 00, Monday to Friday. Because the Contractor does not fall within the Site-Specific Agreement (SSA), the Contractor would be expected to work during weekends as and when instructed by the Employer.

#### **5.2.2 Competence Testing of Contractor's Personnel**

Contractor's Personnel to be employed at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) for any semi-skilled or skilled operation may be tested by the Employer at any time at the Project Site. This may include, at the Employer's discretion, the actual performance of the operation and/or training and testing related to performance of the operation. The Employer reserves the right to prevent any person from carrying out any operation that such person is not fit or qualified to perform. The satisfactory passing of the induction operation test requirements will result in the certification of the Contractor's Personnel to perform that specific operation on the Project Site (and/or at such other places, if any, as may be specified under the Contract as forming part of the Site). This certification shall not reduce in any way the Contractor's responsibilities to perform the Works as per the Contract requirements, including in a safe manner. The certification may be revoked by the Employer if such person ceases to be fit or qualified to perform the work in question at any time.

#### **5.2.3 Anti-poaching Undertaking**

The Contractor shall not recruit or attempt to recruit staff and labour from amongst the personnel of Other Project Contractors during the execution of the Project Works.

**5.2.3.1 This restriction shall not, however, prevent the Contractor from recruiting a person where:**

- 5 2 3 1 1 That person has been demobilised or the employment of that person has been terminated for any reason other than by resignation
- 5 2 3 1 2 The person has resigned, and a period of 90 days has lapsed from the date of resignation, or
- 5 2 3 1 3 The person has been released by the Other Project Contractor for employment by the Contractor (evidenced by written confirmation to this effect by the Other Project Contractor)

Notwithstanding the above, if a person has been dismissed by any other Project Contractor for misconduct or for poor performance, he shall not be employed by the Contractor on the Project Site (or at any other places, if any, as may be specified under the Contract as forming part of the Site) without the prior approval of the Employer

**5.2.4 Transportation of Contractor's Personnel**

Due to the remoteness of the Project Site, the Contractor is required to provide suitable mass transportation facilities to and from the Project Site (and/or to and from other places, if any, as may be specified under the Contract as forming part of the Site) for Contractor's Personnel, particularly for unskilled and semi-skilled workers

The Employer will provide a bus loading and unloading area and bus parking outside the Project Site entrance for the Contractor's use. An unloading area for the Contractor's Personnel at the Contractor's yard will be permitted by prior arrangement with, and subject to the approval of the Employer

Without limiting the Contractor's other obligations under the Contract relating to transport of persons, the Contractor shall ensure that Contractor's Personnel are transported only in licensed and roadworthy vehicles, driven by licensed drivers, which are fit for purpose, properly maintained and which comply with applicable Law as a minimum. Transport of Contractor's Personnel in the back of trucks, tractors or light delivery vehicles is strictly prohibited

**5.2.5 Canteen**

The Employer will provide a Project Site canteen. The canteen will make available a mid-shift meal during the established break period. The mid-shift meal for the Contractor's unskilled and semi-skilled workers who are residents of the Contractors' Village is provided at the cost of the Employer. In order to ensure uniformity of meal benefits, the Employer will provide the same meal for the Contractor's other unskilled and semi-skilled workers at the Project Site, at the cost of the Contractor. Distribution of the meal service shall be at staggered periods at the meal services building on the Project Site (and, as the Project Works progress, at several temporary meal stations at various locations on the Project Site) to minimise the duration of the meal period.

All other foodstuffs supplied by the Project Site canteen to the Contractors' skilled and managerial staff will be charged for in the ordinary course and will be for the account of the Contractor or Contractor's Personnel (as may be arranged between them)

Meal Specification	
<b>Lunch</b>	<p>Kusile Power Station Construction Site and Contractors Village (weekends/public holiday/shift workers/unforeseen circumstances)</p> <ul style="list-style-type: none"><li>• Protein 200-250gr (one meat per serving with alternative)<ul style="list-style-type: none"><li>o Beef</li><li>o Lamb</li><li>o Chicken</li></ul></li><li>• Starch (100gr)</li><li>• Pap (200gr)</li><li>• Vegetables (80gr)</li><li>• Salad (80gr)</li><li>• Dessert (hot or cold pudding of any kind)</li><li>• Juice (250ml)</li></ul>

No other food or beverage services will be allowed on the Project Site unless approved by the Employer

### 5.2.6 Project Site Induction Programme

The Employer will provide a generic Project Site induction program for personnel and visitors to the Project Site. This program will include, as appropriate, information regarding identification and access, work rules, environmental protection, industrial relations, health & safety, Project information, and miscellaneous Project Site-specific requirements. All persons entering the Project Site will be required to attend induction training and to attend repeat induction training as appropriate. The induction training is expected to take up two to three hours. Contractor's Personnel must be in possession of a valid identification card and medical fitness certificate in order to undergo induction training.

The provision of a Project Site induction program by the Employer does not, however, relieve the Contractor of his obligation to ensure that Contractor's Personnel and visitors receive appropriate induction training and the Employer assumes no liability by providing induction training.

### 5.2.7 Substance Abuse Testing

There shall be zero tolerance for substance abuse at the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site).

Throughout the Works at the Project Site (and/or to other places, if any, as may be specified under the Contract as forming part of the Site), periodic seminars and instruction programs may be given by the Employer on the recognition of the characteristics, behaviours, detection, and reporting of substance abuse and persons fitness for duty. All Contractor's supervisory personnel, (including superintendents and foremen), and other key Contractor's Personnel involved at in the Works at the Project Site (and/or to other places, if any, as may be specified under the Contract as forming part of the Site) shall be required to attend this training and the Contractor shall make Contractor's Personnel available for and encourage their participation in these programs.

Any person who is, or appears to the Employer to be, under the influence and/or has failed or refused to submit to a substance abuse test may be refused access to the Project Site. If such person is Contractor's Personnel, the Contractor shall take necessary steps against such person (including disciplinary action, where appropriate, and the removal of the person from the Project Site or from other places, if any, as may be specified under the Contract as forming part of the Site).

Being "under the influence" includes the presence of drugs or alcohol in a person's system (whether detectable through behaviour and/or testing) to the extent the person's faculties are in any way impaired and/or to the extent the person is unable to perform work in a safe and productive manner. Insofar as the consumption of alcohol is concerned, alcohol levels in the blood in excess of 0.02 percent shall be considered as being under the influence. Without limitation, persons shall likewise be considered to be under the influence where the presence of drugs or alcohol corresponds to or exceeds accepted medical standards or those prescribed under applicable Laws.

The Employer shall be entitled to conduct random testing of any person at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) and/or require the Contractor to test any Contractor's Personnel suspected of being under the influence of any substance or suspected of being in possession of alcohol or drugs.

The Contractor shall, at his cost, put in place measures (including all required testing capabilities) necessary to ensure compliance herewith. The measures to be employed by the Contractor will include a drug detection and prevention program which will include, but not be limited to, the following:



#### 5.2.7.1 Pre-Assignment Testing

Contractor's Personnel at the Project Site must pass a pre-assignment drug screening / alcohol test. This pre-assignment test must be undertaken within ten days prior to reporting for work to the Project Site. Contractor's Personnel will only be permitted initial access to the Project Site against evidence of this test having been passed and such person having been certified drug / alcohol free to the Employer's satisfaction. Contractor's Personnel who visit the Project Site on a short-term basis (being not longer than 14 days unless otherwise approved by the Employer) are not subject to this pre-assignment drug testing requirement.

#### 5.2.7.2 Continuing Random Drug Testing

The Contractor shall conduct periodic unannounced (random) testing at the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site) at least once each month. The date of such testing shall be selected using a means that, to the Employer's satisfaction, randomly selects the date within the time frame specified, so that the date is unpredictable to the potential subject of the testing.

Contractor's supervisory personnel at the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site) will not be informed of the date of testing and the selected Contractor's Personnel will not be notified until the morning of the selected day.

Contractor's Personnel to be tested shall be selected using a means which, to the Employer's satisfaction, randomly selects the number of subjects (10% minimum) from among the pool of all Contractor's Personnel actually at the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site). Possible subjects shall include all Contractor's Personnel present at the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site) on the day selected for random testing, including those who have been selected for testing on previous occasions. The subjects shall be identified by a unique and individual identification number. It is therefore conceivable that an individual could be selected to undergo testing more than one time in any given period.

##### **Testing shall, as a minimum:**

- 5.2.7.2.1 Comprise onsite enzyme immunoassay screening and/or colorimetric alcohol saliva screening, and
- 5.2.7.2.2 Include for cocaine, opiates, amphetamines, and marijuana

The Contractor shall be required to confirm all positive tests by gas chromatography / mass spectrometry laboratory analysis (or by other means acceptable to the Employer).

The Contractor shall provide regular updates of these random tests to the Employer. All positive tests shall be reported to the Employer immediately and in writing. Evidence that Contractor's Personnel has passed a substance test shall be provided to Employer within three days of completion of the test.

#### 5.2.8 Accommodation Policy

No accommodation will be provided by the Employer. The Contractor will be required to recruit within the Nkangala District Municipality municipality, including any other areas that are within 65 km radius from the Kusile Construction Site.

#### 5.2.9 Industrial Action Policy

The Contractor shall comply with the Partnership Agreement (PA) conditions as applicable.

### **5.3 Health and Safety Facilities on the Affected Property**

#### **5.3.1 Medical Facilities**

The Employer will provide a trauma and rescue medical facility at the Project Site to provide initial medical treatment to Project Site personnel. The facility will be staffed with professional medical personnel. These personnel will be on the Project Site when significant construction operations are in progress. The Contractor shall be responsible for all emergency transportation including ambulances and helicopters.

### **5.4 Environmental Controls, Fauna and Flora**

The Contractor shall comply with the environmental criteria and constraints stated in Kusile Environmental Management Plan (EMP) as updated.

### **5.5 Cooperating with and Obtaining Acceptance of Others**

Except as directed by the Employer, the Contractor shall in no way interfere with, remove, adjust or operate plant, materials and/or equipment of or being supplied or operated by Other Project Contractors. Without derogating from the foregoing, the Contractor shall not cut reinforcing steel, remove concrete, drill holes into concrete or structural steel, weld on to reinforcing bars or structural steel without the approval of the Employer. The Contractor shall, at all times, keep the work of Other Project Contractors free from dropping, dripping and spattering of materials used in the Works.

### **5.6 Records of Contractor's Equipment**

The Contractor is responsible for replacement and replenishment of equipment and vehicle. Asset registers of such equipment shall be maintained by the Contractor and shall be audited by the Employer from time to time.

### **5.7 Equipment Provided by the Employer**

None

### **5.8 Site Services and Facilities**

#### **5.8.1 Provided by the Employer**

##### **5.8.1.1 General**

The Employer will, at his expense, arrange for, develop and maintain the various facilities and services indicated in the attached Project Site Facilities and Services Matrix at or near the Project Site, as applicable. These services and facilities are provided on the basis detailed below.

**Project Site Facilities & Services Matrix**

<b>Site Facilities, Utilities and Services</b>		<b>Provided by</b>		<b>Details</b>
<b>Item</b>	<b>Contractor</b>	<b>Employer</b>		
<b>Field Office</b>				
Field office structure	X			
Field office furniture	X			
Field office equipment	X			
Field office supplies	X			
Artisan change facilities	X			
Fabrication shops	X			
<b>Tools</b>				
Erection tools	X			
Special erection tools	X			
<b>Equipment</b>				
Construction equipment	X			
Contractor construction elevator	X			
Contractor equipment operator testing	X			
<b>Communication</b>				
Internet connection	X			
Radio & cell phone communication	X			
<b>Telephone</b>				
Construction telephone main service line		X		
Construction telephone line connection to Contractor field office	X			
Contractor's telephone equipment and system wiring	X			
<b>Compressed Air</b>				
Construction compressed air source	X			
Construction compressed air distribution	X			
<b>Electrical Power</b>				
Construction main power source and maintenance		X		
Construction power primary distribution system and maintenance		X		
Construction power Contractor's distribution system	X			
Construction power Contractor's distribution system maintenance	X			
Construction power energy usage payment		X		
<b>Construction Lighting</b>				
Structures interior temporary lighting and maintenance	X			
Contractor specific work area temporary lighting and maintenance	X			
General areas site lighting and maintenance		X		
Contractor areas site temporary lighting and maintenance	X			

Site Facilities, Utilities and Services		Provided by		Details
Item	Contractor	Employer		
<b>Water - potable and non-potable</b>				
Construction water source		X		
Construction water Contractor's distribution and maintenance system	X			
Construction water usage payment		X		
Drinking water distribution	X			
<b>Heat</b>				
Temporary heating facilities/system	X			
<b>Sanitary Facilities</b>				
Construction primary sanitary facilities and maintenance		X		
Contractor's structures construction sanitary facilities and maintenance	X			
<b>Access Roads</b>				
Primary access roads and maintenance		X		
Contractor specific access roads and maintenance	X			
Primary access road dust control		X		
General Work-related dust control	X			
Provide construction parking area and maintenance		X		
<b>Storage Facilities</b>				
Onsite lay-down space		X		
Contractor storage area maintenance	X			
Construction warehousing	X			
Tool storage facilities	X			
Climate controlled storage facilities	X			
Construction equipment fuelling facilities	X			
<b>Security</b>				
Overall site security		X		
Contractor specific areas security	X			
Overall site security access card and finger print system and materials		X		
<b>Medical Facilities</b>				
Onsite first aid/medical services		X		
Project emergency ambulance		X		
Heliport Area		X		
<b>Fire Protection</b>				
Construction fire protection – fire extinguishers	X			
Construction fire protection - stand pipe	X			
Overall site fire brigade participation	X			
Construction fire equipment & vehicles		X		
<b>Clean up</b>				
General refuse offsite disposal		X		
Contractor general refuse collection and onsite disposal	X			

Site Facilities, Utilities and Services		Provided by		Details
Item	Contractor	Employer		
Contractor field office cleaning service	X			
Hazardous waste disposal and clean up / rehabilitation	X			
Concrete source				
Concrete source	X			
Concrete usage payment	X			
Concrete test facilities and testing	X			
Scaffolding				
Scaffolding supply/erection	X			
Welding				
Welder testing	X			
Welder test facilities	X			
Welding/cutting consumables	X			
Railroad				
Railroad siding install & maintenance			None	
Food Services				
Allowed onsite - Yes/No	No	Yes		
Canteen		X		
Canteen fee payment	X			

All facilities or services not specifically indicated as provided by the Employer in the attached Project Site Facilities and Services Matrix, but required for the Works (including roads, assigned lay-down yard improvements, and access needed by the Contractor in the performance of the Works), shall be provided, maintained and removed when no longer required, by the Contractor. Except as otherwise stated in the Contract, all Contractor provided facilities and services shall be to the satisfaction of the Employer.

The provision or cessation of such Contractor provided facilities or services, and the erection, installation and removal thereof and/or of related equipment, requires the Employer's approval.

#### **5.8.1.2 Areas for Contractor's Yards and Offices**

The Employer has indicated on the drawings the areas assigned to the Contractor for offices and laydown yard. The Contractor may erect temporary offices, stores and other similar structures necessary to carry out the Works on the area at the Project Site allocated to him for this purpose by the Employer.

Any such temporary offices, stores and other similar structures shall be erected to the satisfaction of the Employer. The Contractor shall not be permitted to occupy any other areas on the Project Site. The Contractor shall fence the yard area allocated to him with a 1.8m security fence to the satisfaction of the Employer.

The Employer shall clear and roll the ground initially allocated to the Contractor to ensure normal load bearing capacity under reasonably anticipated construction conditions. The Employer shall provide roads from the terrace to the boundary of the Contractor's yard. The Contractor shall provide all roads within his area and shall, at his own cost, maintain the whole of this area including buildings, offices and other structures. Should the Contractor require additional areas he shall request same, in the form prescribed by the Employer, indicating the additional area/s required. The Employer reserves the right to not provide any additional areas. The Employer shall not, however, be obliged to clear or roll any additional areas allocated to the Contractor.

The Contractor shall submit to the Employer an initial drawing and/or description indicating proposed layout and utilisation of the Contractor's allotted storage areas. The drawing and/or written description shall be kept current, shall indicate the location and description of all stored items under the responsibility of the Contractor, and shall be submitted to the Employer as updates are made.

#### **5.8.1.3 Project Site Roads and Parking**

The Employer will provide and maintain construction parking and general use roads on the Project Site. A construction parking lot will be located outside the main security fence for Contractor's Personnel and visitors. Parking facilities will be limited. Contractor's Personnel and visitors failing to park as directed while using this lot may have their vehicle removed and/or be banned from future use of the lot.

A limited number of Contractor and Sub-Contractor non-construction vehicles will be allowed onto the Project Site. The Employer's approval and an appropriate permit will be required as authorisation for such vehicles to be brought on to the Project Site.

#### **5.8.1.4 Communication Services**

The Contractor shall be responsible for his own internet connectivity.

The Employer will provide for an analogue / digital telephone line and connection point in the area assigned for Contractor's Site office. The Contractor shall provide all wiring, hardware, and equipment from this point to points of use and shall pay all service charges for his use of the telephone system. The number of lines will be determined by the Employer, subject to availability. The Contractor's application for telephone services shall be made in the form required by the Employer. There is cellular network coverage in the Project Site area. The Contractor shall make his own arrangement for cellular connectivity and shall pay all service charges for his use of the cellular communication network.

The Contractor shall make his own arrangements for radio communication at the Project Site, if required. The installation of radio communication equipment at the Project Site is subject to the approval of the Employer.

#### **5.8.1.5 Post Box**

A post box for the receipt of external mail will be allocated for the Contractor's use at the Employer's Project Site Office. The Employer and the Contractor shall be entitled to use this post box for general Project Works correspondence to the Contractor.

#### **5.8.1.6 Fire Fighting and Fire Protection**

The Contractor shall comply with all applicable Laws and the Project fire protection requirements, as amended from time to time, in respect of fire protection requirements during construction. The Contractor alone shall be responsible for providing adequate fire protection.

Without limitation, the Contractor shall provide adequate fire protection equipment in each warehouse, office, and other temporary structures, and in each work area being occupied to the satisfaction of the Employer. Access to sources of fire water shall be identified and kept open at all times. Suitable fire extinguishers shall be provided in enclosed areas, in areas which are not accessible to fire water, or in areas which may be exposed to fire that cannot be safely extinguished with water. Each fire extinguisher shall be of a type suitable for extinguishing fires that might occur in the area in which it is located. In areas where more than one type of fire might occur, the type of fire extinguisher required in each case shall be provided. Each extinguisher shall be securely placed and maintained in a convenient, clearly identified location for accessibility in the event of fire. The Contractor shall check and service fire extinguishers as required by the applicable Law and standards.

Additionally, where the Works include elevations, the Contractor shall provide a dry firewater standpipe at a convenient location at the Site to which a pump truck (supplied by others) could be connected to provide water at the various upper elevations of the building. Hose connections and hoses shall also be provided at these elevations. Any operation with potential for starting a fire shall include a designated fire watch person.

Only work procedures which minimise fire hazards to the extent practicable shall be used. Combustible debris and waste materials shall be collected and removed from the Project Site each day. Fuels, solvents, and other volatile or flammable materials shall be stored away from the construction and storage areas in correctly marked, safe containers.

Unless specified in the Contract for a particular application, untreated canvas, paper, plastic, and other flammable flexible materials shall not be used on the Project Site for any purpose. Corrugated paper and other flammable packing materials will not be permitted for the storage or handling of materials in any areas where they present a fire hazard. If such flammable materials are on Plant or Materials that arrive at the Project Site, they shall be removed and replaced with an acceptable covering before the Plant or Materials are moved from the Contractor's yard into working areas.

Acceptable flexible materials for covering in the working areas shall be waterproof and flame resistant.

#### **5.8.1.7 Water**

The Contractor shall exercise economy in use of the water obtained from the Employer.

Potable water use shall be limited to servicing Project Works related activities requiring potable quality water. The Contractor shall provide, install, maintain, and remove when no longer required all pipes, fixtures, equipment, and metering (if necessary) from the Employer supplied source to the point of Contractor's use. Pipes shall be placed at least 900 mm underground or as otherwise

approved by the Employer and on routes approved by the Employer. Installation shall meet all applicable codes and standards and be to the satisfaction of the Employer at all times.

#### **5.8.1.8 Electricity**

The Employer will supply electrical power for construction purposes at mini substations established on the Project Site until the issue of the Taking-Over Certificate for the Works or for the last Section (as may be applicable).

Electrical power to the Project Site is provided via a 22kV ring supply as well as a 22kV sub-station. The 22kV ring supply furnishes power to mini substations throughout the Project Site. Prior to furnishing power to the Contractor, a standard "Application for Power" form shall be completed and submitted to the Employer. The request must be made at least 2 (two) weeks prior to power supply being required. Power supply shall only be provided in the following 400V, 3-phase, 4-wire ratings: 20, 40, 63, 80, 100, 225, 250 and 400 amps.

The Contractor shall have indicated his requirements in the Tender. Neither the Employer nor the Employer shall, however, be bound to approve any revised requirements.

The Contractor shall use electricity efficiently in the course of the execution of his Works on the Project Site. There shall be no charge for electricity used for construction purposes, unless the Contractor's use thereof is unreasonable.

The Contractor shall take all necessary precautions not to damage the construction power supply during performance of the Work. No connection shall be made to the permanent installation of the Kusile Power Station electrical reticulation system without the prior approval of the Employer.

The Employer shall endeavour to provide a safe and reliable power supply with interruptions kept to a minimum. No guarantees of power supply quality are, however, given and power supply interruptions of extended duration may occur without warning.

The Employer shall, where practicable, give reasonable notice of interruption of supply. Planned outages are normally arranged and advised for low activity periods such as Sundays and limited to 8 hours. The Employer, however, reserves the right, in case of uncontrollable interruptions, emergency, or when it is not reasonably practicable to give notice, to cut off the supply without warning.

To this end the Contractor shall make arrangements, at his own expense, to guarantee continuity and quality of power for all activities where same is required and shall furthermore be considered to have allowed for all Costs and time for 12 hours of power related interruptions to the Works at the Project Site per rolling 28-day period.

#### **5.8.1.9 Sanitation and Sewage**

The Employer will provide and operate a sewage treatment plant and general use toilet facilities at the Project Site. Until this plant and toilet facilities are in operation and to supplement Contractor's remote work areas, the Employer will provide the necessary sanitary facilities for all Contractors. This will include chemical toilets and toilets with holding tanks as needed. Routine maintenance and emptying of these facilities shall be based on the level of usage to assure sanitary and health requirements are met. The Contractor shall provide, maintain, and remove when no longer needed, all pipe, pumps, and hardware to connect the sewage treatment plant to his office facilities from a connection point designated by the Employer. Installations shall be to the satisfaction of the Employer.



#### **5.8.1.10 Lighting**

The Employer will provide and maintain general use Project Site lighting in the form of pole or mast mounted lighting fixtures. This general use lighting will comprise area lighting at the construction parking area and the Project Site entrance, at the site office areas, immediately outside the Boiler and Turbine houses and near power centres.

No local or Project Works lighting will be provided by the Employer. Accordingly, all temporary local lighting required by the Contractor, including lighting required to comply with the applicable Law, shall be provided by the Contractor at his own expense.

#### **5.8.2 Provided by the Contractor**

Facilities provided by the Contractor are described in Project Site Facilities & Services Matrix as paragraph 5.8.1.1.

### **5.9 Hook ups to Existing Works**

The performance of the Works which affects the Employer's operations, or the systems of Other Project Contractors shall be scheduled to be performed only at times approved by the Employer. The procedure for carrying out work which of necessity interrupts the Employer's operations, or the systems of Other Project Contractors, or imposes abnormal operating conditions on their systems, is subject to the Work Co-ordination Process and the approval of the Employer.

### **5.10 Tests and inspections**

#### **5.10.1 Description of Tests and Inspections**

The Contractor is responsible for providing quality inspections as per the scope requirements and rectifies all defects within agreed time period.

The Contractor shall supply the end of job documentation associated with the services. The end of job documentation consists of the signed off (where applicable) completion forms of acceptance by the Employer.

#### **5.10.2 Materials Facilities and Samples for Tests and Inspections**

Not Applicable

## 6 List of drawings and Documents

### 6.1 Drawings and documents issued by the *Employer*

This is the drawing and documents issued by the *Employer* at or before the Contract Date and which apply to this contract

Drawing number	Revision	Title
Appendix A 146838-OUYX-S3825	Latest	Site Layout
Appendix B		List of Potable Water Tanks at Kusile Power Station
Appendix C		PA/SS Agreement (Section 12 3 only applicable)
Appendix D		SHE Specification Rev 6
Appendix E		32-136-Contractor Health and Safety Requirements
Appendix F		240-77471499 Annexure B Acknowledgement form rev 3
Appendix G		Environmental Record of Decision (ROD) and Appeals
Appendix H		Standard Environmental Specification
Appendix I		Supplier QM Category 4 – Method Statement Template 240-126469599 (Rev 2)
Appendix J		Supplier Quality Management Specification (QM58-240-105658000)
Appendix K		Category 4 List of Tender Returnable Documents 240-12248652 (Rev 7)
Appendix L		Form A Cat 4 Tender & Contract Quality Requirements for 240-105658000 and Quality Requirements for ISO 9001 Standard - 240-68099512 (Rev 9)