

#### TENDER DOCUMENT

#### **FOR**

BID NO: SCMU3-23/24-0742-HO: SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS

#### THREE VOLUME APPROACH:

**VOLUME 1 – TENDERING PROCEDURES VOLUME 2 – RETURNABLE DOCUMENTS** 

**VOLUME 3 – DRAFT CONTRACT** 

#### PREPARED FOR:

Eastern Cape Department of Health Dukumbana Building, Independence Avenue P.O. Box X0038 BHISHO 6505

#### PREPARED BY:

Eastern Cape Department of Health Dukumbana Building, Independence Avenue P.O. Box X0038 BHISHO 6505

NAME OF SUPPLIER:		
CRS NUMBER:		

**FEBRUARY 2024** 

	CONTENTS			
Volume	Number	Heading		
		Tendering Procedures		
Volume 1	T1.1	Tender Notice and Invitation To Supplier		
	T1.2	Tender Data		
	T1.3	Annex F: CIDB Standard Conditions of Tender		
		Returnable Documents		
		Administrative compliance		
	SBD1	Invitation to Bid: Part A and B		
	T2.2y	Proof of Registration with Centralized Supplier Database		
	SBD 4	Declaration of Interest		
	SBD 6.1	Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2022		
	T2.2v	CIPC - company registration certificate with percentage (%) of ownership and ID copies		
	T2.2r	Compulsory Enterprise Questionnaire		
	T2.1	List of Returnable Schedules/Documents		
Volume 2	T2.2n	Record of Addenda to Supplier Documents		
Volume 2	T2.2u	CIDB grading certificate – Proof of registration		
	T2.2a	Resolution for Signatory		
		NB: Mandatory Documents		
	C1.1a	Final Summary Page		
	C1.1	Signed Form of offer and acceptance		
	C2.2	Preliminaries and General & Bill of Quantities		
	T2.2b	Resolution of Board of Directors to Enter into Consortium or Joint		
		Venture (JV) Agreements		
	T2.2c-1	Schedule of Proposed Subcontractors		
	T2.2c-2	Schedule of Proposed Particulars of Mechanical and Electrical		
	T0.0.1	Subcontractors		
	T2.2d	Schedule of Plant and Equipment		
	T2.2e	Schedule of Imported Material and Equipment		
	T2.2f	Bank Rating		
	T2.2x	References		
	T2.3	Returnable schedules or documents: Annexures related to evaluation		
	T2.2z	Valid letter of Good standing (COIDA)		
	Annexure A1	Method Statement (Summary Task)		
	Annexure A2	Method Statement (Critical Path)		
	Annexure A3	Method Statement (Timelines)		
	Annexure B1	Key personnel qualifications (Construction manager)		
	Annexure B2	Key personnel qualifications (Construction Supervisor)		
	Annexure B3	Key personnel qualifications (OHS Safety officer)		
	Annexure B4	Key personnel qualifications (Skilled installation staff)		
	Annexure C1	Key personnel experience (Construction manager) Attach CV		
	Annexure C2	Key personnel experience (Construction Supervisor) Attach CV		
	Annexure C3	Key personnel experience (OHS Safety officer) Attach CV		
	Annexure C4	Key personnel experience (Skilled installation staff) Attach CV		

		Draft Contract		
	Part C1: Agreement and Contract Data			
	C1.1	Form of Offer and Acceptance		
	C1.2	Contract Data		
	C1.3	Fixed Performance Guarantee		
	C1.4	Agreement in terms of section 37 (2) of the OH &S Act (Act no 85 of 1993)		
	Part C2: Pr	ricing Data		
	C2.1	Pricing Instructions		
olume 3	C2.2	Bills of Quantities		
	C2.3	Dayworks Schedule		
	Part C3: Scope of Work			
	C3.1	Scope of Works		
	C3.6	Health and Safety Specification		
	C3.7	HIV/AIDS Specification with Schedules A to C		
	Part C4: Site Information			
	C4.1	Site Information as per Scope of Works		
	Part C5	Technical Specification		
	C5	Technical Specification		

**VOLUME 1: TENDERING PROCEDURES** 

# T1.1: TENDER NOTICE AND INVITATION TO SUPPLIER

# T1.1: TENDER NOTICE AND INVITATION TO SUPPLIER THE EASTERN CAPE DEPARTMENT OF HEALTH INVITES SUPPLIERS FOR:

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Any reference to words "Bid" or Bidder" herein and/or in any other documentation shall be construed to have the same meaning as the words "Supplier" or "Tender".

The attention of Suppliers is drawn to the eligibility criteria in the table below. Suppliers are required to familiarise themselves thoroughly with the conditions of Supplier as contained in the Supplier Data (T1.2) and the Standard Conditions of Supplier (T1.3) which form part of the Supplier document. Only Suppliers that are responsive to responsiveness criteria contained in the table below are eligible to have their Suppliers evaluated:

$\leq$	Joint ventures are eligible to submit tenders provided that:  They have a signed joint venture agreement
	Only Suppliers who have access to a suitably qualified and experienced contract manager who will be the single-point of accountability and responsibility for the management of the contract works as described in clause F.2.1.2 shall be eligible to have their Tenders evaluated. <i>Experience must be on Boilers And Calorifiers equipment installation and maintenance industry.</i>
$\leq$	Only Suppliers who have access to a suitably qualified and experienced contract supervisor as described in clause F.2.1.3 shall be eligible to have their Tenders evaluated. <i>Experience must be on Boilers And Calorifiers equipment and maintenance industry.</i>
	Suppliers that are responsive to the criteria stated above shall be evaluated further in accordance with the conditions of Supplier as stipulated in the Tender Data (T1.2) and the Standard Conditions of Tender (as amended), which form part of this Tender document.

#### Preferences are offered to Suppliers in accordance with the points systems as below:

⊠ 80/20 Preference point scoring system	
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Preference:		Price:	
SPECIFIC GOALS 20 Points Status Level:		Price:	80 Points
Total must equal:	20 Points	Total must equal:	80 Points

#### 1. AVAILABILITY OF SUPPLIER DOCUMENTS:

- ☐ Tender documents may be freely downloaded from Tender portal <a href="www.echealth.gov.za/tenders">www.echealth.gov.za/tenders</a> OR <a href="www.echealth.gov.za/tenders">www.echealth.gov.za/tenders</a> OR <a href="www.echealth.gov.za/tenders">www.echealth.gov.za/tenders</a> OR
- A compulsory clarification meeting with the representatives of the Employer will take place as follows:

Date: 19 March 2024

Time:

Venue: John Tremble Hall, Frere Hospital,

Amalinda, East London 10:30am – 11:30am

#### 2. ENQUIRIES RELATED TO TENDER DOCUMENTS MAY BE ADDRESSED TO:

Procurem	nent Contact:	Ms Thabisa Notshe	E-mail	thabisa.notshe@echealth.gov.za
Tel. No.	040 608 9641			

#### 3. DEPOSIT / RETURN OF TENDER DOCUMENTS:

The closing time and date for submission of Tender is 11:00am on the **12 April 2024** where Tenders will be opened to the public. The following must be noted by all Suppliers;

- 1. Telegraphic, telephonic, telex, facsimile (faxed), email and late Tenders will not be accepted.
- 2. The requirements for sealing, addressing, delivery, opening and assessment of Tenders are stated in the Tender Data (T1.2)
- 3. All Suppliers must be submitted on the official, hardcopy documents issued with the bid including any addenda issued to prospective Suppliers by the Department.
- 4. Tender documents must be deposited in the Tender box at the address indicated below:

#### **DEPOSITED IN THE TENDER BOX AT:**

Department of Health Global Life Centre, SCM Unit c/o Phalo Avenue and R63 (opposite Engen Garage) BHISHO

#### **COMPILED BY:**

Section	Department	Date
Engineering and Technical Services	Lukhozi Consortium	February 2024

**T1.2: TENDER DATA** 

#### **T1.2: TENDER DATA**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Clause	
number	
	The conditions of Supplier are the Standard Conditions of Supplier as contained in Annex F of Board Notice 136 of 2015 in Government Gazette No. 38960 of 10 July 2015, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of Suppliers as an Annex to this Tender Data.
	The Standard Conditions of Supplier make several references to the tender Data for details that apply specifically to this Tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of Supplier. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Supplier to which it mainly applies.
	The following variations, amendments and additions to the Standard Conditions of Supplier as set out in the Tender Data below shall apply to this Supplier:
F.1.1	Add the following:
	The employer is the Eastern Cape Department of Health Global Life Center
	c/o R63 and Phalo Avenue
	Bhisho
F.1.2	Add the following:
	Tender documents issued by the Employer comprise of:
	Volume 1: Tendering Procedures
	T1.1 Tender Notice and Invitation to Supplier
	T1.2 Tender Data T1.3 Annex F: CIDB Standard Conditions of Tender
	Volume 2: Returnable Documents
	SBD1 Invitation Bid: Part A and B
	SBD4 Declaration of Interest
	SBD6.1 Preference Points Claim Form in Terms of the Preference Regulations 2022 T2.2r Compulsory Enterprise Questionnaire
	T2.1 List of Returnable Schedules/Documents
	C1.1a Final Summary Page
	C2.2: Preliminaries and General & Bills of Quantities
	T2.2a Resolution of Signatory
	T2.2b Resolution of Board of Directors to Enter into Consortium or Joint Venture (JV) Agreements
	T2.2c-1 Schedule of Proposed Subcontractors
	T2.2c-2 Schedule of Proposed Particulars of Mechanical and Electrical Subcontractors T2.2e Schedule of Proposed Imported Material and Equipment
	T2.2f Bank Rating
	T2.2g Specific goals claimed (CIPRO certificate) T2.2n Record of Addenda to Supplier Documents
	T2.2y Proof of Registration with Centralized Supplier Database
	T2.2u CIDB grading certificate – Proof of registration
	T2.2v CIPC – company registration certificate T2.2x References
	T2.2z Valid Letter of Good Standing

T2.3 Returnable schedules or documents: Annexures related to evaluation.

Annexure A1: Method Statement (Generic)

Annexure A2: Method Statement (Summary Task)

Annexure A3: Method Statement (Programme with Timelines and Resources)

Annexure B1: Key personnel qualifications (Maintenance manager)

Annexure B2: Key personnel qualifications (Maintenance Supervisor)

Annexure B3: Key personnel qualifications (OHS Safety officer)

Annexure B4: Key personnel qualifications (Skilled installation/maintenance staff)

Annexure B5: Proof of business address

Annexure C1: Key personnel experience (Maintenance manager)

Annexure C2: Key personnel experience (Maintenance Supervisor)

Annexure C3: Key personnel experience (OHS Safety officer)

Annexure C4: Key personnel experience (Skilled installation/maintenance staff)

#### **Volume 3: The Draft Contract**

#### Part C1: Agreement and Contract data

C1.1: Form of offer and Acceptance

C1.2: Contract Data

C1.3: Fixed Performance Guarantee

C1.4: Agreement in terms of section 37(2) of the OH&S Act (Act no 85 of 1990)

#### Part C2: Pricing Data

C2.1: Pricing Instructions

C2.2: Bills of Quantities

#### Part C3: Scope of Works

C3.1: Scope of Works

C3.6: Health and Safety Specification

#### Part C4: Site Information

C4.1: Site Information as per Scope of Works

	Add the following:
	The employer's agent:
F.1.4	Lukhozi Consortium
F1.6.1	Add the following to the clause: The Department reserves the right to not accept the tender from the tenderer with the highest number of points, or award any contract.
F1.6.3	Add the following: A two-stage system will not be followed.
F.2.1	Add the following:
	Only those Tenderers who satisfy the following eligibility criteria are eligible to submit tenders:
	1. 1 Tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in ac Contractor grading designation equal to or higher than a Contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for Class ME, Grade 6 ME PE or higher construction work, are eligible to have their tenders evaluated.
	2. Joint ventures are eligible to submit tenders provided that:
	<ul> <li>2.1 Every member of the joint venture is registered with the CIDB;</li> <li>2.2 The lead partner has a Contractor grading designation in Class ME, Grade 6 ME PE or higher construction work;</li> <li>2.3 The combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal or higher than the a Contractor grading designation determined in accordance with the sum tendered for Class ME, Grade 6ME PE or higher construction work or a value determined in accordance with Regulations 25 (1B) or 25 (7A) of the Construction Industry Development Regulations; and</li> <li>2.4 The joint venture is registered on Central Supplier Database or proof of application</li> </ul>
	<ul> <li>2.5 All members of the joint venture must submit copies of the returnable documentations or original where it is so stipulated for all members.</li> <li>2.6 In the case of a Partnership/Joint Venture/Consortium the tax clearance must be the Partnership/Joint Venture/Consortium or individual valid tax clearance certificates for all the members of the Partnership/Joint Venture/Consortium.</li> <li>2.7 In the case of a Partnership/Joint Venture/Consortium the CIPRO certificates must be submitted indicating percentage of ownership for specific goals points scoring, failing which the tenderer will score zero points.</li> <li>2.8 The partner of the JV must be registered with CIDB with a grading that is not lower than one level of the required grading.</li> </ul>

F2.2	Add the following to the clause:
	Accept that the Employer will not compensate the Tenderer for any costs incurred in attending briefing session, negotiation meetings or any meeting or interviews in the office of the Employer or Employer's agent (if required).
F.2.7	For particulars regarding a pre-Tender site inspection meeting, see Tender Notice and Invitation to Supplier T1.1
	"A compulsory briefing session will be held and no compensation will be paid for attendance at this meeting. Tenderers must be represented by a person who is suitably qualified and experience to comprehend the extent of the work involved and who is at the employ of the prospective tenderer.
	The tenderer's representative must sign the attendance register in the name of the tendering entity. Addenda will be issue to and tenders will be received only from those tendering entities appearing in the attendance register of the briefing session."
F.2.12	No alternative tenders are allowed.
F.2.13.2	Replace sub-clause F.2.13.2 with the following; Return all returnable documents to the employer after completing them in their entirety by writing in <b>non-erasable ink</b>
F.2.13.3	Add the following: Parts of each Supplier offer communicated on paper shall be submitted as an original, plus 0 (nought) copies.
F.2.13.4	Add the following: The Supplier shall be signed by a person duly authorized to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, in the form of a joint venture agreement, in which it is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorized to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. Failure to provide the joint venture agreement, bound with the Supplier submission, on the date and time of the closing of the bid, shall render the Supplier non-responsive.
F.2.13.5	Add the following: The employer's address for delivery of Supplier offers and identification details to be shown on each Supplier offer package are:  Location of Supplier box: Department of Health Physical address: Eastern Cape Department of Health Global Life Center, SCM Unit c/o Phalo Avenue and R63 Bhisho
	Identification details: Tender No. SCMU3-23/24-0742-HO Title of Supplier: SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS Sealed Tender with the identification details on the envelope must be placed in the appropriate official Tender box at the abovementioned address

F.2.13.6	Add the following: A two-envelope procedure will not be followed.	
F2.13.9	Telephonic, telegraphic, telefax, facsimile or e-mailed tender offers will not be accepted.	
F.2.13.10	Add the following: By signing the offer part of C1.1 Form of Offer and Acceptance the Supplier declares that all information provided in the Supplier submission is correct and free of misrepresentation.	
F.2.15.1	Add the following to F.2.15.1: The closing time for submission of Supplier offers is as stated in the Tender Notice and Invitation to Supplier. Telephonic, telegraphic, telex, facsimile or e-mailed Supplier offers will not be accepted.	
F.2.16.1	Add the following to F.2.16.1: The Supplier offer validity period is <b>12 weeks.</b>	
F.2.17	Insert the following at the end of the last sentence of the note: "elect to do so, provided that the competitive position of the preferred Supplier is not affected"	
	A Supplier may be rejected as non-responsive if the Supplier fails to provide any clarification requested by the employer within the time for submission stated in the employer's written request for such clarification. The clarification of a Supplier offer includes the provision of the priced bills of quantities (Part C2.2: Bills of Quantities).	
F.2.18	Add the following:	
	The tenderer will be required to submit his fully priced Bills of Quantities (complete document inclusive of all parts) together with this tender.	
F.3.4	Add the following: The opening of the tender offers will take place immediately after the closing time of tenders.	
F.3.8	<ol> <li>Add the following:         <ul> <li>Suppliers will be considered non-responsive if, inter alia:</li> <li>the Supplier has failed to attend the compulsory briefing meeting;</li> <li>the Supplier is submitted by Telegraphic, telephonic, telex, facsimile (faxed) or email media or if the Supplier is submitted late.</li> <li>the Supplier does not comply with the eligibility criteria listed in F2.1 above;</li> <li>The resolution for signatory is not attached to the Supplier submission on a company letterhead.</li> </ul> </li> <li>the Supplier has failed to fully complete and sign SBD1, SBD4 &amp; the Compulsory Enterprise Questionnaire. Failure to submit the required information shall be subjected to a request from SCM to the bidder to submit the required information within 7 days of the request. Failure to comply with such request will result in the bid being deemed non-responsive</li> </ol>	

#### F.3.11.1 *Add the following:*

This is a two-stage evaluation process:

Stage 1: Administrative compliance and Mandatory documentation

Stage 2: Evaluation for price and preference

The following procedure will be used to evaluate tender offers received:

- a. Open and record tender offers received
- b. Determine whether or not tender offers are complete.
- c. Determine whether or not tender offers received are responsive, and reject non-responsive tenders.
- d. Score tender evaluation points for each price
- e. Confirm that tenderers are eligible for the preferences claimed and, if so, score tender evaluation points for preferencing.
- f. Calculate total tender evaluation points
- g. Rank tender offers from the highest number of tender evaluation points to the lowest.
- h. Perform a risk analysis on the tenderer having the highest ranking/number of points to ascertain if the submission presents an acceptable risk to the employer.
- Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

The Employer shall in the evaluation of tender offers take due account of the Tenderer's past performance in the execution of similar engineering works of comparable magnitude, and the degree to which possesses the necessary technical, financial and other resources to enable him to complete the Works successfully with the contract period. The tenderer shall be required to satisfy the Employer and the Engineer as to his ability to perform and complet3 the Works timeously, safely and with satisfactory quality, and furnish details in section T2.2z of contracts of a similar nature and magnitude which they have successfully executed in the past.

The Employer is restricted in accordance with clause 7.(c)(iii) of the Construction Regulations, 2014, to only appoint a contractor to whom he is satisfied has the necessary competencies and resource to carry out the work safely.

Submitting inferior and inadequate information relating to health and safety shall be regarded as justifiable and compelling reasons not to accept the tender offer of the tenderer scoring the highest number of tender evaluation points.

## F.3.11.3 The procedure for the evaluation of responsive tenders is **Method 1: Administrative**, **Price and Specific Goals**

F.3.11.7	Add the following:
	The financial offer will be scored using Formula 2 (Option 1):
	$\begin{split} N_{FO} &= (1-(P\text{-}P_\text{M})/P_\text{m}) \text{ x W}_1 \\ \text{Where.} \\ N_{FO} &= \text{number of Supplier evaluation points awarded for financial offer} \\ W_1 &= \text{the maximum possible number of Supplier evaluation points Tender} \\ P_\text{M} &= \text{the comparative offer of the most favourable Supplier offer} \\ P &= \text{the comparative offer of the Supplier offer under consideration} \end{split}$
F.3.11.8	Up to 100 minus $W_1$ (refer F.3.11.7 above) Supplier evaluation points will be awarded to Suppliers according to their SPECIFIC GOALS status level, determined in accordance with section 9(1) of the Broad-Based Black Economic Empowerment Act (No 53 of 2003), and who have submitted original valid or valid, certified copies of SPECIFIC GOALS status verification certificates issued by either a verification agency accredited by the South African Accreditation System (SANAS) or a sworn affidavit in terms of the amended SPECIFIC GOALS codes. The points will be awarded as follows, based on the SPECIFIC GOALS status level of the Supplier:

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Historically Disadvantaged Individuals Ownership	20% (4)	
Women Ownership	20% (4)	
Youth Ownership	20% (4)	
Disability Ownership	20% (4)	
Military Veterans Ownership	10% (2)	
Locality Ownership (Eastern Cape)	10% (2)	
TOTAL	100% (20)	

A trust, consortium or joint venture will qualify for points for their SPECIFIC GOALS status level as a legal entity, provided that the entity submits their SPECIFIC GOALS status level certificate. A trust, consortium or joint venture will qualify for points for their SPECIFIC GOALS status level as an unincorporated entity, provided that the entity submits their consolidated SPECIFIC GOALS scorecard as if they were a group

#### F.3.11.10 Add the following new sub-clause:

The Employer will perform a risk analysis in respect of the following:

- (a) reasonableness of the financial offer
- (b) reasonableness of unit rates and prices
- (c) the Suppliers ability to fulfil its obligations in terms of the tender document, that is, that the Supplier can demonstrate that he/she possesses the necessary professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience, reputation, personnel to perform the contract, etc.

#### F.3.13.1 Supplier offers will only be accepted if: a) the Supplier is registered and in good standing with the South African Revenue Service (SARS) or proof that he or she has made arrangement with SARS to meet his or her outstanding tax obligations. This will be verified by the Employer on the Centralized Supplier Database. Where the recommended bidder is not tax compliant, the bidder will be notified of the non-compliant status and be granted seven (7) working days to rectify their compliance status with the SARS. The bidder must thereafter provide the Department with proof of its tax compliance which must be verified via the CSD or eFiling. b) the Supplier or any of its directors is not listed on the Register of Supplier Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; c) the Supplier or any of its directors is not listed on the Database of Restricted Suppliers kept by the National Treasury and updated from time to time; c) the Supplier has not: i) abused the Employer's Supply Chain Management System; d) The Supplier has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Supplier's ability to perform the contract in the best interests of the employer or potentially compromise the Supplier process. F.3.17 Add the following: The number of paper copies of the signed contract to be provided by the Employer is one.

#### F.4 ADDITIONAL CONDITIONS OF TENDER The additional conditions of Tender are: **Invalid Tender** F.4.1 Suppliers shall be considered invalid and shall be endorsed and recorded as such in the Supplier opening record, by the responsible official who opened the Tender, in the following circumstances: a) if the Supplier offer is not submitted on the Form of Offer and Acceptance bound into this Tender document (form C1.1, Part C1: Agreements and Contract Data); b) if the Form of Offer and Acceptance has not been completed or has not been signed by the authorised representative of the Supplier c) if the Form of Offer and Acceptance is signed, but the name of the Supplier is not stated or is indecipherable. d) if the Supplier offer is not completed in non-erasable ink; F.4.2 **Negotiations with preferred Suppliers** The Employer may negotiate the final terms of a contract with Suppliers identified through a competitive Supplying process as preferred Suppliers provided that such negotiation: a) does not allow any preferred Supplier a second or unfair opportunity; b) is not to the detriment of any other Supplier; and c) does not lead to a higher price than the Supplier as submitted. Minutes of any such negotiations shall be kept for record purposes F.4.3 General supply chain management conditions applicable to Supplier In terms of its Supply Chain Management Policy the Employer may not consider a Supplier unless the provider who submitted the Supplier: a) has furnished the Employer with that provider's: identification number or company or other registration number; and • tax reference number and VAT registration number, if any; b) has indicated whether: the provider is in the service of the state, or has been in the service of the state in the previous twelve months: the provider is not a natural person, whether any of the directors, managers, principal shareholders or stakeholders is in the service of the state, or has been in the service of the state in the previous twelve months: or whether a spouse, child or parent of the provider or of a director, manager, shareholder or stakeholder referred to above is in the service of the state, or has been in the service of the state in the previous twelve months. Irrespective of the procurement process followed, the Employer is prohibited from making an award to: a person who is in the service of the state; a juristic entity of which any director, manager, principal shareholder or stakeholder is in the service of the state: an advisor or consultant contracted with the Employer; or a person, advisor or corporate entity involved with the tender specification committee, or a director of such corporate entity.

In this regard, Suppliers shall complete Returnable Schedules: Compulsory Enterprise Questionnaire. Failure to complete this schedule will result in the Supplier not being

considered further.

#### F.4.4 Combating abuse of the Supply Chain Management Policy

In terms of the its Supply Chain Management Policy, the Employer may reject the Supplier of any Supplier if that Supplier or any of its directors has:

- a) failed, during the last five years, to perform satisfactorily on a previous contract with the Employer or any other organ of state after written notice was given to that Supplier that performance was unsatisfactory;
- b) abused the supply chain management system of the Employer or has committed any improper conduct in relation to this system;
- c) been convicted of fraud or corruption during the past five years;
- d) will fully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
- e) been listed with the Register of Supplier Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or has been listed on National Treasury's database as a person or juristic entity prohibited from doing business with the public sector.

In this regard, Suppliers shall complete Part T2.2: Returnable Schedules: Certificate of Independent Supplier Determination and Declaration of Supplier's Past Supply Chain Management Practices. Failure to complete these schedules will result in the Supplier not being considered further.

#### F.4.6 Claims arising after submission of Supplier

No claim for any extras arising out of any doubt or obscurity as to the true intent and meaning of anything contained in the Conditions of Contract, Scope of Work and Pricing Data, will be admitted by the Employer after the submission of any Tender and the Supplier shall be deemed to have:

- 1) read and fully understood the whole text of the Contract Data, Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract.
- 2) visited the site of any proposed works.
- 3) requested the Employer or his duly authorized agent to make clear the actual requirements of anything contained in the Scope of Work and Pricing Data, the exact meaning or interpretation of which is not clearly intelligible to the Supplier.
- 4) received any Addenda to the Supplier documents which have been issued in accordance with the Employer's Supply Chain Management Policy.

Before submission of any Supplier, the Supplier should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing indistinct, or if the Pricing Data contain any obvious errors, the Supplier must apply to the Employer's Agent at once to have the same rectified, as no liability will be admitted by the Employer in respect of errors in any Supplier due to the foregoing.

#### F.4.7 | Imbalance in Supplier rates

In the event of Supplier rates or lump sums being declared by the Employer to be unacceptable to it because they are either excessively low or high or not in proper balance with other rates or lump sums, the Supplier may be required to produce evidence and advance arguments in support of the Supplier rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the supplied rates or lump sums objected to, it may request the Supplier to amend these rates and lump sums along the lines indicated by it.

The Supplier will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the Supplier offer as Supplied or, if applicable, the corrected total of prices in accordance with F.3.9.3. Should the Supplier fail to amend his tender in a manner acceptable to the Employer, the Employer may reject the Tender.

- F.4.8 The Employer shall not formally issue Tender documents in electronic format as contemplated in F.2.13.2 and F.2.13.3 and shall only issue Supplier documents in hardcopy. An electronic version of the issued Tender documents may be made available to the Supplier, upon written request in terms of this clause, subject to the following:
  - (a) Electronic copies of the contract document, or parts thereof, will only be provided to Suppliers who have been issued with the Tender documents as contemplated in F.1.2 in hardcopy.
  - (b) The electronic version shall not be regarded as a substitute for the issued Tender documents.
  - (c) The Employer shall not accept tender submitted in electronic format. Suppliers may not complete and submit a printed copy of the electronic version of the Tender document or part thereof. Only those Suppliers that have been completed on the issued hard copy Tender document shall be considered.
  - (d) The Employer accepts no responsibility or liability arising from any reliance on or use of the electronic version provided in terms of this clause. The Employer further does not guarantee that the electronic version corresponds with the issued Tender documents in all respects. Suppliers are alerted to the fact that electronic versions of the Tender documents may not reflect any notices or addenda that amend the Tender document.
  - (e) Any non-compliance with these provisions, including effecting any unauthorized alterations to the Supplier document as contemplated in F.2.11, shall render the Tender invalid. The Employer reserves the right to take any action against such Supplier allowed in law including, in circumstances where the Supplier had already been awarded, the right to cancel the contract.
  - (f) In requesting the electronic version of the Tender document or parts thereof, the Supplier is deemed to have read, understood and accepted all of the above conditions.

## **VOLUME 2: RETURNABLE DOCUMENTS**

# T2.1 LIST OF RETURNABLE DOCUMENTS

#### T2.1: LIST OF RETURNABLE SCHEDULES/DOCUMENTS

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

#### T2.2: RETURNABLE SCHEDULES REQUIRED FOR SUPPLIER EVALUATION PURPOSES

	Returnable Documents	Number of pages issued	Returnable Document
SBD1	Invitation to Bid: Part A and B	2	⊠ Yes □ No
SBD 4	Declaration of Interest	2	⊠ Yes □ No
SBD 6.1	Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2022	4	⊠ Yes No
T2.2r	Compulsory Enterprise Questionnaire	3	⊠ Yes No
T2.1	List of Returnable Schedules/Documents	2	⊠ Yes No
C1.1a	Final Summary Page	1	⊠ Yes  No
C2.2	Fixed Charge and Value related Items Applicable to All Work & Bill of Quantities	14	Yes No
T2.2a	Resolution for Signatory	1	⊠ Yes □ No
T2.2b	Resolution of Board of Directors to Enter into Consortium or Joint Venture (JV) Agreements	2	⊠ Yes □ No
T2.2c-1	Schedule of Proposed Subcontractors	1	⊠ Yes □ No
T2.2e	Schedule of Imported Material and Equipment	1	⊠ Yes No
T2.2f	Bank Rating	1	⊠ Yes ☐ No
T2.2v	Specific goals claimed (CIPRO certificate)	1	⊠ Yes □ No
T2.2n	Record of Addenda to Supplier Documents	1	⊠ Yes □ No
T2.2z	Valid Letter of Good Standing	1	⊠Yes □ No

#### T2.2: OTHER DOCUMENTS REQUIRED FOR SUPPLIER EVALUATION PURPOSES

No.	Document Name	Number of pages issued	Returnable Document
Annexure A1	Method Statement (Generic)	1	⊠ Yes □ No
Annexure A2	Method Statement (Summary Tasks)	1	⊠ Yes ☐ No
Annexure A3	Method Statement (Programme with Timelines and planned Resources)	1	⊠ Yes No
Annexure B1	Key Personnel qualification (Maintenance manager)	1	⊠ Yes No
Annexure B2	Key Personnel qualification (Maintenance supervisor)	1	⊠ Yes No
Annexure B3	Key Personnel qualification (OHS Safety officer)	1	⊠ Yes No
Annexure B4	Key Personnel qualification (Skilled installation/maintenance staff)	1	⊠ Yes No
Annexure B5	Proof of Business address	1	⊠ Yes No
Annexure B6	Company Experience	1	⊠ Yes No
T2.2g	Specific Goals claimed (Cipro Certificate)	1	⊠ Yes No
T2.2y	Proof of Registration with Centralized Supplier Database	1	⊠ Yes No
T2.2v	CIPC – company registration certificate	1	⊠ Yes No
T2.2x	References	4	⊠ Yes No
T2.3	Returnable schedules or documents		⊠ Yes □ No

(The following list of returnable schedules/documents is duplicated from the tables above however these will not appear in duplicate within the Tender document. The purpose is to bring to the Suppliers' attention the list of returnable documents/schedules that shall be incorporated into the contract)

#### T2.2: OTHER DOCUMENTS REQUIRED TENDER EVALUATION PURPOSES

No.	Document Name	Number of pages issued	Returnable Document
T2.2n	Record of Addenda to Supplier Documents	1	⊠ Yes □ No
T2.2e	Schedule of Key Personnel: Contract Supervisor	1	⊠ Yes □ No
SBD 6.1	Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2022	4	⊠ Yes □ No

#### T2.2: OTHER DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

C1.1	Form of Offer and Acceptance	2	⊠ Yes □ No
C1.2	Contract Data	7	⊠ Yes □ No
C2.2	Fixed Charge and Value related Items Applicable to All Work & Bill of Quantities & Final Summary		⊠ Yes □ No

# T2.2: RETURNABLE SCHEDULES REQUIRED FOR SUPPLIER EVALUATION PURPOSES

#### **T2.2a: RESOLUTION FOR SIGNATORY**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

#### **MUST BE ON COMPANY LETTERHEAD**

#### A: CERTIFICATE OF AUTHORITY FOR SIGNATORY

Signatory for companies shall confirm their authority hereto by attaching a duly signed and dated copy of the relevant resolution of the board of directors to this form. This must be on a company letterhead.

An example is given below:		
"By resolution of the board of o	directors passed at a meeting held on	
Mr/Ms,	whose signature appears below, has been duly authorised to	
sign all documents in connection	on with the Supplier for Contract No	
and any Contract which may a	rise there from on behalf of (Block Capitals)	
SIGNED ON BEHALF OF THE	E COMPANY:	
IN HIS/HER CAPACITY AS: _		
DATE:		
SIGNATURE OF SIGNATORY	<b>/</b> :	
WITNESSES:		
1	SIGNATURE:	
2	SIGNATURE:	

## T2.2b: RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES

JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND  (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS	
TENDER No.	SCMU3-23/24-0742-HO
RESOLUTION of a	meeting of the Board of *Directors / Members / Partners of:
(Legally correct full	name and registration number, if applicable, of the Enterprise)
	(place)
	(date)
RESOLVED that:	
1. The Enterprise su Enterprises:	ubmit a Bid /Supplier, in consortium/Joint Venture with the following
orming the Consort	orrect full names and registration numbers, if applicable, of the Enterprises ium/Joint Venture)  Department of Health in respect of the following project:
(Project description	as per Bid /Supplier Document)
Bid Number: Document)	( Bid Number as per
2. *Mr/Mrs/Ms:	
n *his/her Capacity Enterprise)	as:(Position in the
and who will sign as	s follows:
	uthorised to sign a consortium/joint venture agreement with the parties list

be, and is hereby, authorised to sign a consortium/joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium/joint venture, in respect of the project described under item 1 above.

3. The Enterprise accepts joint and several liability with the parties listed under item 1 for the due fulfilment of the obligations of the joint venture deriving from, and in any way connected with, the Contract to be entered into with the Department in respect of the project described under item 1 above.

this joint venture agreement and the Contract with the Department in respect of the project under item 1 above: Physical address: Postal Code \_\_\_\_\_ Postal Address: Postal Code \_\_\_\_\_ Telephone number: Fax number: NAME CAPACITY SIGNATURE 1 2 3 4 5 6 7 8 9 10 11 12 13 Note: **ENTERPRISE STAMP** 1. \* Delete which is not applicable 2. NB. This resolution must be signed by all the Directors / Members / Partners of the Bidding Enterprise 3. Should the number of Directors / Members/Partners exceed the space available above, additional names and signatures must be supplied on a separate page

4. The Enterprise chooses as its domicilium citandi et executandi for all purposes arising from

#### T2.2c-1: SCHEDULE OF PROPOSED SUBCONTRACTORS

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

IEI	NDER NO.	SCIVI	U3-23/24-U/42-NU		
	We notify you that it is our intention to employ the following subcontractors for work in this contract.				
	If we are awarded a contract, we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.				
	Name and addr of proposed Subcontractor	ess	Nature and extent of work	Value of Work	Subcontractor CIDB grading
1.					
2.					
3.					

Signed	Date	
Name	Position	
Supplier		

#### T2.2e: SCHEDULE OF KEY PERSONNEL

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

The Supplier is referred to clause F.2.1.3 of the Tender Data and shall insert in the spaces provided below details of the key personnel required to be in the employment of the Supplier or a specialist consultant/firm, in order for the Supplier to be eligible to submit a Tender for this project. The Curriculum Vitae of the individual must be appended to this schedule.

Notwithstanding having appended the Curriculum Vitae of the key personnel to this schedule, the Supplier must **also** append to this schedule in terms of clause F.2.1.3, a statement for the individual identified, which indicates any field(s) of specialization and any recent experience that is relevant to this particular project (which may or may not have formed part of the individual's CV). Suppliers should indicate what particular aspect of the project the specialization or experience is relevant to.

Name	Qualifications	No. of Years Specified Experience

Signed	Date
Name	D
Name	Position
Supplier	

#### **T2.2f: BANK RATING**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers must submit a bank rating from a recognized financial institution as required in clause. F.2.1.4 of the Tender Data. The bank rating must be attached to this schedule. Failure to comply with the requirements of F.2.1.4 shall result in the Tender not being evaluated further.

#### Minimum of Grade C bank required.

#### **Bank Rating**

Bank Rating Certificate  Annexure F as per returnable list	Bank rating of A: Undoubted for the amount of enquiry – Good to do business with	Annexure F as per returnable list Bank rating certificate issued by the bank.
	Bank rating of B: Good for the amount of the enquiry – Amount is well within the capacity of ordinary business commitments	Annexure F as per returnable list Bank rating certificate issued by the bank.
	Bank rating of C: Good for amount quoted if strictly in the way of business – Unlikely to commit themselves beyond their means	Annexure F as per returnable list Bank rating certificate issued by the bank.

Signed	Date
Name	Position
Supplier	

#### T2.2n: RECORD OF ADDENDA TO SUPPLIER DOCUMENTS

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

_			
subm	We confirm that the following communications received from the Employer before the submission of this Supplier offer, amending the Tender documents, have been taken into account in this Supplier offer:		
	Date	Title or Details	
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Attacl	n additional pages if more	e space is required.	
5	Signed	Date	
	Name	Position	
Sı	upplier		

<sup>\*</sup>This document must form part of the returnable schedules as it is referenced in the offer portion of the Form of Offer and Acceptance.

### T2.2r: COMPULSORY ENTERPRISE QUESTIONNAIRE

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

		ust be furnished. In the f each partner must be		of a joint venture, separate enterprise pleted and submitted.			
Section 1:	Name of enterprise:						
Section 2:	Section 2: VAT registration number:						
Section 3: Name*	Particulars o	f sole proprietors and Identity number*	d parti	ners in partnerships Personal income tax number*			
* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners							
Section 5:		f companies and clos		•			
Company re	gistration numb	oer					
Close corpo	ration number						
	ration namber .						
Tax reference	ce number						
Section 6:	Record of ser	vice of the state					
Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:							
a member of any municipal council a member of any provincial legislature a member of the National Assembly or the National Council of Province a member of the board of directors of any municipal entity an official of any municipality or municipal entity  a member of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) a member of an accounting authority of any national or provincial public entity an employee of Any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) a member of an accounting authority of any national or provincial public entity or provincial public entity or a member of any provincial public entity or a member of any provincial public entity or a member of any provincial public entity or a member of the board of directors of any municipal entity an employee of any provincial department, national or provincial public entity or a member of any provincial publi							

If any of the above boxes are marked, disclose the follow
---

Name of sole proprietor, partner, director, manager, principal	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
shareholder or stakeholder		Current	Within last 12 months

<sup>\*</sup>insert separate page if necessary

#### Section 7: Record of spouses, children and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months been in the service of any of the following:

a member of any municipal council a member of any provincial legislature

a member of the National Assembly or the National Council of Province

a member of the board of directors of any municipal entity

an official of any municipality or municipal entity

an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)

a member of an accounting authority of any national or provincial public entity an employee of Parliament or a provincial legislature

Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		current	Within last 12 months

<sup>\*</sup>insert separate page if necessary

The undersigned, who warrants that he/she is duly authorised to do so on behalf of the enterprise:

- i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Supplier Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I / we are not associated, linked or involved with any other Tendering entities submitting Supplier offers and have no other relationship with any of the Suppliers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest:
- iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed	 Date	
Name	 Position	
Enterprise name		

<sup>\*</sup> The schedule should be used where Suppliers are subject to the Local Government: Municipal Finance Management Act

## T2.2v: CIPC – Company registration certificate

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Tenderer to submit necessary company registration certificate.

T2.2z: Valid Letter of Good Standing

	1 = 1 = 1
PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Tenderer to submit valid and up to date Letter of Good Standing certificate relevant to their services (COIDA)

## SBD 1: INVITATION TO BID - PART A

YOU ARE HEREBY INVITE	DTO	BID FOR REC	QUIREM	ENTS OF TH	E EC D	EPARTN	IENT OF HE	ALTH		
				G DATE:	12 Ap	ril 2024			TIME:	11:00
DESCRIPTION AND BU	JLED I	MAINTENANO O CITY) AND	CE FOR	BOILERS IN ER 4 (NMB A	CLUST	ER 2 (C	HRIS HANI A ARTMAN) FO	AND . OR A	JOE GQABI), ( PERIOD OF 3	CLUSTER 3 (AMATHOLE 6 MONTHS
THE SUCCESSFUL BIDDE										
BID RESPONSE DOCUME	NTS M	IAY BE DEPO	SITEDI	N THE BID B	OX SITI	JATED A	T (STREET	ADDF	RESS)	
Tender Box Department of Health Global Life Centre SCM Unit c/o Phalo A	Tender Box Department of Health									
Bhisho										
SUPPLIER INFORMATION										
NAME OF BIDDER										
POSTAL ADDRESS										
STREET ADDRESS							ı			
TELEPHONE NUMBER		CODE					NUMBER			
CELLPHONE NUMBER				T			T	1		
FACSIMILE NUMBER		CODE					NUMBER			
E-MAIL ADDRESS										
VAT REGISTRATION NUM	BER						Т	1		
		TCS PIN:				OR	CSD No:			
SPECIFIC GOALS STATUS	3	☐ Yes				GOA	CIFIC LS		Yes	
LEVEL VERIFICATION		□ Na				STAT		$  \Box$	Ma	
CERTIFICATE   [TICK APPLICABLE BOX]		□ No LEVEL SWORN □ No AFFIDAVIT								
IF YES, WHO WAS THE					AIII	DAVII				
CERTIFICATE ISSUED BY										
AN ACCOUNTING OFFICE CONTEMPLATED IN THE	RAS		AN A(		OFFIC	ER AS (	CONTEMPLA	ATED	IN THE CLOS	SE CORPORATION ACT
CLOSE CORPORATION AC	CT		A VE	RIFICATION	AGENC	Y ACCF	REDITED BY	/ THE	SOUTH AFF	RICAN ACCREDITATION
(CCA) AND NAME THE APPLICABLE IN THE TICK	R∩X	( _ A		SYSTEM (SANAS) A REGISTERED AUDITOR						
711 7 2107 1522 11 7 1 12 11 0 11	Don		NAME		<i>-</i>	·				
[A SPECIFIC GOALS STATUS LEVEL VERIFICATION CERTIFICATE/SWORN AFFIDAVIT(FOR EMEs& QSEs) MUST BE										
SUBMITTED IN ORDER	TO Q	UALIFY FOR	R PREF	ERENCE P	OINTS	FOR SE	PECIFIC GO	DALS	5]	
I. ARE YOU THE ACCREDITED		 Yes		□ No	II.	ΔRE	YOU A			
REPRESENTATIVE IN		103		110			SED SUPPLI	ER		
SOUTH AFRICA FOR THE						THE GO			Yes	No
GOODS /SERVICES /WORKS OFFERED?		[IF YES ENCLOSE PROOF]			/SERVICES/WORKS OFFERED?   IIF YES ANSWER			SWER PART B:3 BELOW ]		
III. SIGNATURE OF										
BIDDER	.				IV.	DAT	Έ			
V. CAPACITY UNDE										
(Attach proof of authority t										
sign this bid; e.g. resolutio										
of directors, etc.)					1 100	T01	AL DID DDI			
VI. TOTAL NUMBER OF ITEMS OFFERED					VII. (ALL	TOT	'AL BID PRIO IVE)	٦E		
BIDDING PROCEDURE EN	IQUIRI	ES MAY BE	DIRECT	ED TO:		TECHN	IICAL INFOR	RMAT	ION MAY BE [	DIRECTED TO:
DEPARTMENT		ECDOH					ACT PERSON		Thabisa No	
CONTACT PERSON	1	Ms Thabisa	Notsh	те		TELEP! NUMBE		(	040 608 964	1
TELEPHONE NUMBER	- 0	040-608 964	<b>1</b> 1				-IN MILE NUMBE	R		
FACSIMILE NUMBER							. ADDRESS		thabisa.nots	she@echealth.gov.za
E-MAIL ADDRESS	<u>t</u>	habisa.not	she@e	echealth.go	ov.za					

## PART B TERMS AND CONDITIONS FOR BIDDING

-	DI	n	GI	IDM	IISSI	$\cup$ V	ī
	DI	u	٦ι		IIOOI	UN	н

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR ONLINE
- 1.3. SUPPLIERS MUST REGISTER ON THE CENTRAL SUPPLIER DATABASE (CSD) TO UPLOAD MANDATORY INFORMATION NAMELY: (BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS; AND BANKING INFORMATION FOR VERIFICATION PURPOSES). SPECIFIC GOALS CERTIFICATE OR SWORN AFFIDAVIT FOR SPECIFIC GOALS MUST BE SUBMITTED TO BIDDING INSTITUTION.
- 1.4. WHERE A BIDDER IS NOT REGISTERED ON THE CSD, MANDATORY INFORMATION NAMELY: (BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS MAY NOT BE SUBMITTED WITH THE BID DOCUMENTATION. SPECIFIC GOALS CERTIFICATE OR SWORN AFFIDAVIT FOR SPECIFIC GOALS MUST BE SUBMITTED TO BIDDING INSTITUTION.
- 1.5. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER LEGISLATION OR SPECIAL CONDITIONS OF CONTRACT.

#### 2. TAX COMPLIANCE REQUIREMENTS

- 2.1 SUPPLIERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 SUPPLIERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.
- 2.4 SUPPLIERS MAY ALSO SUBMIT A PRINTED TCS TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-SUPPLIERS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE PROOF OF TCS / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

## 3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

3.1.	IS THE BIDDER A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? NO	YES	
3.2.	DOES THE BIDDER HAVE A BRANCH IN THE RSA? NO	YES	
3.3.	DOES THE BIDDER HAVE A PERMANENT ESTABLISHMENT IN THE RSA? NO	YES	
3.4.	DOES THE BIDDER HAVE ANY SOURCE OF INCOME IN THE RSA? NO	YES	

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN, IT IS NOT A REQUIREMENT TO OBTAIN A TAX COMPLIANCE STATUS / TAX COMPLIANCE SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.

#### 4. SPECIAL CONDITIONS OF BID

- 4.1 In the event where the recommended Bidder has failed to comply with the conditions as set out in the letter of award, the client shall notify the recommended Bidder of his/her failure to comply and recommend for award the next bidder that scored the highest points. The Conditions as set out in the letter of award are as follow:
  - a. Proof of having All risk, public liability and support insurances as stipulated in the contract.
  - b. Submission of a Construction Safety, Health and Environmental Plan.
  - c. Contract Guarantee (as selected in the tender document)
- 4.2 An appointment letter/acceptance letter does not constitute a contract or commencement date of a contract. The recommended Bidder is required to sign an official contract with the Department.

## SBD 4: DECLARATION OF INTEREST

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

#### **BIDDER'S DISCLOSURE**

### I. PURPOSE OF THE FORM

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

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

## 2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest I in the enterprise?

Employed by the state?

YES/NO

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

Full Name	Identity Number	Name of institution	State

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

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

#### 3 DECLARATION

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium2 will not be construed as collusive bidding.

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

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

- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT. I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF

PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN

MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signature	Date
Position	Name of bidder

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

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

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

#### I. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
  - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
  - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

## 1.2 To be completed by the organ of state

(delete whichever is not applicable for this tender).

The applicable preference point system for this tender is the 80/20 preference point system.

The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
  - (a) Price; and
  - (b) Specific Goals.

## 1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

## 2. **DEFINITIONS**

- (a) "tender" means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) "price" means an amount of money tendered for goods or services, and includes all

applicable taxes less all unconditional discounts;

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

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

## 3.1. POINTS AWARDED FOR PRICE

### 3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20

$$Ps = 80\left(1 - \frac{Pt - Pmin}{Pmin}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration
Pmin = Price of lowest acceptable tender

## 3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

#### 3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20

$$Ps = 80 \left( 1 + \frac{Pt - P max}{P max} \right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

## 4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table I below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
  - (a) an invitation for tender for income-generating contracts, that either the 80/20 preference

point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

(b) any other invitation for tender, that either the 80/20 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

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

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

(Note to organs of state: Where either the 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Historically Disadvantaged Individuals Ownership	20% (4)	
Women Ownership	20% (4)	
Youth Ownership	20% (4)	
Disability Ownership	20% (4)	
Military Veterans Ownership	10% (2)	
Locality Ownership (Eastern Cape)	10% (2)	
TOTAL	100% (20)	

- a) Service providers must submit proof of its Specific Goals points claimed / status of contributor.
- b) The Specific Goals supporting documents required to verify claimed points may inline with the specified requirements include:
  - Historically Disadvantaged Individuals Ownership: Proof of ownership (CIPRO certificate) with id no.
  - Women Ownership: Ownership: Proof of ownership (CIPRO certificate) with id no.
  - Youth Ownership: Ownership: Proof of ownership (CIPRO certificate) with id no.
  - Disability Ownership: Proof of ownership (CIPRO certificate) with valid medical documentary proof.
  - Military Veterans Ownership: Proof of ownership (CIPRO certificate) with valid proof of veteran status.
  - Ownership: Proof of business address (municipal account or valid lease agreement)
  - Updated CSD report

## **DECLARATION WITH REGARD TO COMPANY/FIRM**

4.3.	Name of company/firm
4.4.	Company registration number:

4.5. TYPE OF COMPANY/ FIRM

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

- 4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:
  - i) The information furnished is true and correct;
  - ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph I of this form;
  - iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
  - iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have
    - (a) disqualify the person from the tendering process;
    - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
    - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
    - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
    - (e) forward the matter for criminal prosecution, if deemed necessary.

SIGNATURE(S) OF BIDDER(S)		
SURNAME AND NAME: DATE:		
ADDRESS:		

# T2.2: OTHER DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

T2.2g: SPECIFIC GOALS CLAIMED (CIPRO CERTIFICATE)

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers must attach CIPRO CERTIFICATE.

## T2.2y: Proof of Registration with Centralized Supplier Database

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers must attach Full CSD report.

## Annexure A1: Method Statement (Generic)

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers are required to submit a method statement.

## **Annexure A2: Method Statement (Summary Task)**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers are required to submit a summary task. The summary task must indicate the major tasks and subtasks of the works. Contractor must indicate how they would approach the works to achieve the required outcomes from start to end of the project.

## **Annexure A3: Method Statement (Programme with Timelines and Resources)**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers are required to submit Programme with timelines such as a Gantt Chart (quarterly and biannual inspections) and planned resources (human resources and tools).

## Annexure B1: Key Personnel Qualification (Maintenance manager)

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers are required to submit proof of maintenance manager's experience (CV) and qualifications. All certified documents must not be older than three (3) months.

Maintenance Manager Mechanical/Electrical Engineering, Construction Project Management	Electrical / Mechanical Engineering Degree with Registration as per Act 43 of 2000 (Candidate Registration will not be accepted)	Attached certified copies of qualification
	OR  Electrical / Mechanical Engineering Diploma with Registration as per Act 43 of 2000 (Candidate Registration will not be accepted)  OR	Attached certified copies of qualification
	Trade certificate (Issued by the Department of Labour)	Attach certified copies

## **Annexure B2: Key Personnel Qualification (Maintenance supervisor)**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers are required to submit proof of maintenance supervisor's experience (CV) and qualifications.

All certified documents must not be older than three (3) months.

Construction Supervisor Mech./Elect. Engineering, Construction Project Management	Electrical or Mechanical Engineering Diploma WITH minimum one year post qualification experience on Boilers And Calorifiers  OR	Attached certified copies of qualification
	Trade certificate (Issued by the Department of Labour), or higher qualification <b>WITH</b> minimum one year post qualification experience <b>on</b> Boilers And Calorifiers	Attached certified copies of qualification

## **Annexure B3: Key Personnel Qualification (OHS Safety officer)**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers are required to submit proof of OHS safety officer's experience (CV) and qualifications. All certified documents must not be older than three (3) months.

# Annexure B4: Key Personnel Qualification (Skilled installation/maintenance Staff)

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers are required to submit proof of Skilled installation/maintenance staff experience (CV) and qualifications. All certified documents must not be older than three (3) months.

## **Annexure B5: Proof of Business address**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers are required to submit proof of business address (municipal account or valid lease agreement not later than 3 months). All certified documents must not be older than three (3) months.

## **Annexure B6: Company Experience**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Suppliers are required to submit proof of company experience in the field of BOILERS AND CALORIFIERS.

Tenderers are required to submit work experience that has minimum value of R 3 million in the last 5 years.

## Reference No. 1

## T2.2x: References

PROJECT NAME	JOE GQABI)	D MAINTENAN ), CLUSTER 3 ( SARAH BAART	(AMATHOL	E AND BUFFA	ALO C	R 2 (CHRIS HANI AI ITY) AND CLUSTEF IONTHS			
TENDER No.	SCMU3-23/2	SCMU3-23/24-0742-HO							
Sir/Madam,									
We are in the proces	ss of evaluatinຸ	9			_for th	ne above project.			
They have listed you isted below by tickin f you have any ques	g the appropria	ate boxes. Plea	ase return ι	upon completi					
NAME OF EMPLOYER		ME OF DJECT	PE (Start	TRACT RIOD and End ate)	VA	VALUE OF WORK			
				,					
1. QUALITY									
EXCELLENT	VERY GOO	D GC	OOD	FAIR		POOR			
5 2. TIME PERFO	·		3	2		1			
EXCELLENT	VERY GOO	D GO	OOD	FAIR		POOR			
5	4		3	2		1			
3. FINANCIAL	PERFORMAN	CE		1					
EXCELLENT	VERY GOO	D GC	OOD	FAIR		POOR			
5	4		3	2	1				
4. COMMENTS Project Manager/Pri	ncipal Agent:								
E-mail Address:									
Signature:		Date:							
Place Company S	tamp Here								

Reference No. 2				
Reference No. 2				
PROJECT NAME	JOE GQABI), CLU		LE AND BUFF	USTER 2 (CHRIS HANI AN ALO CITY) AND CLUSTER F 36 MONTHS
TENDER No.	SCMU3-23/24-074	•		
Sir/Madam,				
We are in the proce	ss of evaluating			_for the above project.
listed below by tickin		xes. Please return	upon completi	ormance on the criteria ion as soon as possible.
NAME OF EMPLOYER	NAME OF PROJECT	Γ PI (Star	NTRACT ERIOD t and End Date)	VALUE OF WORK
1. QUALITY				<u> </u>
EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5 2. TIME PERFO	4 ORMANCE	3	2	1
EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1
3. FINANCIAL	PERFORMANCE			
EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
4. COMMENTS	3:	3	2	1
Project Manager/Pri	incipal Agent:			
Tel. No:				
E-mail Address:				
Signature:	Date:			<u>—</u>
Place Company S	tamp Here			

## Reference No. 3

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

	(NMB AND SARA	H BAART	MAN) FOR	A PERIOD OF	36 M	IONTHS	
TENDER No.	SCMU3-23/24-0742-HO						
Sir/Madam,							
We are in the process	of evaluating				for th	ne above project.	
They have listed you listed below by ticking If you have any quest	the appropriate bo	xes. Plea	ase return ເ	upon completion			
NAME OF EMPLOYER	NAME OF PROJECT		PE (Start	TRACT RIOD and End ate)	VALUE OF WORK		
1. QUALITY							
EXCELLENT	VERY GOOD	GC	OOD	FAIR		POOR	
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2. TIME PERFO	RMANCE						
EXCELLENT	VERY GOOD		OOD	FAIR		POOR	
5	4	3		2	1		
3. FINANCIAL P	ERFURWANCE						
EXCELLENT	VERY GOOD		OOD	FAIR		POOR	
5	4	,	3	2		1	
4. COMMENTS:							
Project Manager/Prin	cipal Agent:						
Tel. No:							
E-mail Address:							
Signature:	Date:						
Place Company Sta	ımp Here						

JOE GQABI), CLU	ISTER 3 (	AMATHOL	E AND BUFFA	ALO CITY) AND CLUST	
SCMU3-23/24-074	2-HO				
•					
s of evaluating				_for the above project.	
g the appropriate bo	xes. Plea	ase return	upon completi		
_		PE (Start	VALUE OF WORK		
VERY GOOD	GC	OOD	FAIR	POOR	
4	;	3	2	1	
RMANCE					
VERY GOOD	GOOD		FAIR	POOR	
4 PERFORMANCE	3		2	1	
VERY GOOD	GC	OOD	FAIR	POOR	
4	3		2	1	
ncipal Agent:					
Date:					
amp Here					
	JOE GQABI), CLU (NMB AND SARA)  SCMU3-23/24-074  s of evaluating as a reference. Play the appropriate bottons please do not project to pr	JOE GQABI), CLUSTER 3 (INMB AND SARAH BAART SCMU3-23/24-0742-HO  s of evaluating	JOE GQABI), CLUSTER 3 (AMATHOL (NMB AND SARAH BAARTMAN) FOR SCMU3-23/24-0742-HO  s of evaluating	as a reference. Please evaluate the Suppliers perform appropriate boxes. Please return upon completitions please do not hesitate to contact us.    NAME OF PROJECT   CONTRACT PERIOD (Start and End Date)	

## **VOLUME 3: CONTRACT**

# PART C1: AGREEMENT AND CONTRACT DATA

### C1.1 FORM OF OFFER AND ACCEPTANCE

### OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a Contract for the procurement of:

CONTRACT NUMBER: SCMU3-23/24-0742-HO

CONTRACT NAME: SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS

The Tenderer, identified in the offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the tender schedules, and by submitting this offer has accepted the conditions of tender.

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

	e prices inclusive of Value-Added Tax is:		
			Rand (in words)
and acceptance and period of validity state	cepted by the Employer by signing the accepta returning one copy of this document to the Te d in the Tender Data, whereupon the Tenderer s of the Conditions of Contract identified in the	nderer I become	pefore the end of the es the party named as
For and on behalf of	the Tenderer:		
Name			
Capacity			
Signature		Date:	
Name and address of	tenderer:		
Witness Signature		Date:	

#### **ACCEPTANCE**

By signing this part of this form of offer and acceptance, the Employer identified below accepts the Tenderer's offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract data. Acceptance of the Tenderer's offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this agreement and in the Contract that is the subject of this agreement.

The terms of the Contract are contained in:

Part C1: Agreements and Contract data (which includes this agreement)

Part C2: Pricing data
Part C3: Scope of work

Part C4: Site Information and drawings and documents or parts thereof, which may be

incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto, as listed in the returnable schedules as well as any changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be duly signed by the authorised representative(s) of both parties.

The Tenderer shall, within two weeks after receiving a completed copy of this agreement including the schedule of deviation (if any), contact the Employer's Agent (whose details are given in the Contract data) to arrange the delivery of any securities, bonds, guarantees, proof insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract data at or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

#### For and on behalf of the Employer:

Name			
Signature		Date:	
Name and address of	f employer:		
Witness Name			
Witness Signature		Date:	

### **SCHEDULE OF DEVIATIONS**

#### Notes:

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

A Tenderer's covering letter shall not be included in the final Contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, be the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

| Subject<br>Details |   | <br> | ٠. |
|--------------------|---|------|------|------|------|------|------|------|------|------|------|----|
| Subject<br>Details | t | <br> |    |
| Subject<br>Details | t | <br> |    |
| Subject<br>Details | t | <br> |    |
| Subject<br>Details | t | <br> |    |
|                    |   | <br> |    |

By the duly authorized representatives signing this schedule of deviations, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

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

## Part 1– Data provided by the Employer

Clause	Statement		Data
1. Ge	neral		
1	e conditions of contract are the core uses and the clauses for main		
Opt	tion:	Α	Priced contract with price list
1	pute resolution Option I secondary Options	W1	Dispute resolution procedure
		X1	Price adjustment for inflation
		X13	Performance Bond
		X17	Low service damages
		X18	Limitation of liability
		X19	Task Order
		X20	Key Performance Indicators
	he NEC3 Term Service Contract oril 2013)		

10.1	The Employer is (name):	Eastern Cape Department of Health
	Address	Department of Health Global Life Centre Corner Phalo Avenue and R63 (opposite Engen garage) Bhisho 5605
	Represented By: Tel No. Fax No.	Mr Lamkelo Mdingi

10.1	The Service Manager is (name):	Lukhozi Consortium
	Tel	
	e-mail	
	The Service Manager is (name):	Mr Bruce Maliti
11.2(2)	The Affected Property is	Joe Gqabi and Chris Hani District Health Facilities in the Eastern Cape Province as per Service Information
11.2(13)	The service is	Scheduled and Re-Active Maintenance works
11.2(14	The following matters will be included in Risk register	N/A

11.2(15)	The Service Information is in	The Contract Part 1: Service Information - Scope of Works. Works Information and all documents and drawings to which it makes reference.
12.2	The law of the contract is the law of	the Republic of South Africa
13.1	The language of this contract is	English
13.2	The period for reply is	7 days

<ol><li>The Contractor's responsibility (If the optional statement for this section is not used, no data will be required for this section)</li></ol>			
21.1	The Contractor submits a first Plan for	2 weeks of the Contract Date acceptance within	

3. Ti	me	
30.1	The starting date is	at the Site Handover Meeting Date.
30.2	The service period is	36 Months.
4. Te	esting and defects	Special testing may be requested by the Service

Manager.

	Payment	Mandala
50.1	The assessment interval is	Monthly
51.1	The currency of this contract is the	South African Rand
51.2	The period with which payments are made is	30 Days after submission of a valid TAX Invoice to the Employer
51.4	The interest rate is	(i) zero percent above the publicly quoted prime rate of interest (calculated on a 365-day year) charged by from time to time by the South African Reserve Bank (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

6. Compensation Events	(if the optional statement for this section is not used, no data will be required for this section
These are additional compensation	N/A events

	7. Use of Equipment Plant and Materials	No data is required for this section of the conditions of contract.
	8. Risks and Insurance	
80	These are additional Employer's risks	N/A
83	1 The Employer provides these insurances from the Insurance Table	N/A

83.1	The Employer provides these additional insurances	N/A	
83.1	The minimum amount of cover for insurance against loss and damage caused by the Contractor to the Employer's property is	R 5 000 000.00	
83.1	The insurance against loss of or damage to the works, Plant and Materials is to include cover for Plant and Materials provided by the Employer to an amount of	R 5 000 000.00	
83.1	The minimum amount of cover for insurance in respect of loss of or damage to property (except the Employer's property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the Contractor) arising from or in connection with the Contractor's Providing	R 5 000 000.00	
83.1	the Service for any one event is: The Minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Contractor arising out of and in 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 Contractor's common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less that R 5 000 000.00	
9. Te	ermination	No data is required for this section of the conditions of contract.	f
10. Data	for main Option Clauses		
Α	Priced Contract with Price List	Option A	
20.5 T	he Contractor prepares forecasts of the final total of the Prices for the whole of the service at intervals of no longer than	4 Weeks	
11. Data			
	for Option W1		
W1.1	for Option W1  The Adjudicator is (Name)	The person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civengineering Panel of Adjudicators by the party intend to refer a dispute to him. (See www.icesa.org.za)	vil
W1.1		successor body) of the South African Institution of Civ Engineering Panel of Adjudicators by the party intend	vil
W1.1	The Adjudicator is (Name)  Address  Tel. No,  Fax No.	successor body) of the South African Institution of Civ Engineering Panel of Adjudicators by the party intend	vil
W1.1	The Adjudicator is (Name)  Address  Tel. No,	successor body) of the South African Institution of Civengineering Panel of Adjudicators by the party intend to refer a dispute to him. (See www.icesa.org.za)  The Chairman of ICE-SA a joint Division of the South	vil ding
	The Adjudicator is (Name)  Address  Tel. No, Fax No. Email	successor body) of the South African Institution of Civ Engineering Panel of Adjudicators by the party intend to refer a dispute to him. (See www.icesa.org.za)	vil ding

If the Parties cannot agree a choice If the procedure does not state who selects an arbitrator, is 12. Data for Secondary Option Clauses X1 Price Adjustment for Inflation The base date for indices is X1.1 **Tender Closing Date** The proportions used to calculate the Price Adjustment Factor are: Note: Requirements for CPA/Price Proportion Index prepared Linked to Index by inflation is that Prices must be Fixed and for (Source) Firm for the First 12 months of the contract and only subject to escalation thereafter. A minimum of 10% of the contract price / prices is not adjustable throughout the life of the contract Non-Adjustable\*\* 100% X13 Performance Bond X13.1 The Contractor gives the Employer a The Tenderer must provide a Performance Bond in the performance bond form of a Fixed Performance Guarantee by means of a Bank Guarantee, or from an Insurer approved by the Service Manager, in the amount of 2.5% of the Awarded Contract Value, once the Contract has been awarded to him. This Bond must be given to the Employer with in four (4) weeks of the Contract Date. X17 Low Service Damages X17.1 The service level table is in As per Demerit Table in Contact Data – Annexure CD1 X18 Limitation of Liability X18.1 The Contractor's liability to the Employer for R0.0 (zero Rand) indirect or consequential loss is limited to X18.2 For any one event, the Contractor's liability to R2 500 000.00 the Employer for loss of or damage to the Employer's property is limited to The Contractor's liability for Defects due to X18.3 The greater of his design of an item of Equipment is limited the total of the Prices at the Contract Date and to R2 500 000 The Contractor's liability to the Employer for X18.4 all matters arising under or in connection with N/A this contract, other than the excluded matters, is limited to The end of liability date is 3 Months after the end of the Service Period. X18.5

The person or organization who will choose The Chairman for the time being or his nominee of the

Association of Arbitrators (South Africa) or its successor

an arbitrator

X19	Task Order	
	The Contractor submits a Task Order programme to the Service Manager within	Authorization to commence with any Task will be done by Task Order. This Task Order will be issued to the Contractor by the Service Manager. Maintenance Turn- around times are stated in the Works Instructions under specification clause GM7.
X20	Key Performance Indicators	Key performance Indicators will be used to monitor Contractor performance on a monthly basis

## Part Two – Data provided by the *Contractor*

Clause	Statement	Data

10.1	The Contractor is (Name):	
	Address:	
	Tel No.	
	Fax No.	
11.2(8)	The Direct Fee Percentage is	%
	The Subcontracted Fee Percentage Is	%
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the Contractor's plan is in:	
21.1	The plan identified in the Contract Data is contained in:	
24.1	The Key Persons are:	
	Name :	
	Job:	
	Responsibilities :	
	Qualifications :	
	Experience	
	Name :	
	Job:	
	Responsibilities :	
	Qualifications :	
	Experience	
		CV's and further key person's data are in
A	Priced Contract with Price List	
11.2(12)	The price list is in	
11.2(19)	The tendered total of the Prices is	
X1	Price adjustment for inflation	

Proportion	Linked to Index for	Index prepared by (Source)
	Non-Adjustable**	
100%		

## **Annexure CD1 – Demerit Table and Penalty Calculation System**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

Attach document here

# ANNEXURE CD1: DEMERIT TABLE AND PENALTY CALCULATION SYSTEM

If the Contractor fails to remedy any sub-standard work within the time frame stipulated by the Service Manager, the conditions as per GM 3.1 will apply.

The contractor will incur demerit points for specific measurable poor performance incidents which can lead to the early termination of the Contract as described below.

DESCRIPTION	DEMERIT POINT
Failure to submit the Functional Condition Assessment Report by the due date	1 point/ week that the report is late
Exceeding the maximum allowable response and resolve time for a P1 Breakdown	3 points/ incident
Exceeding the maximum allowable response and resolve time for a P2 Breakdown	2 points/ incident
Exceeding the maximum allowable response and resolve time for a P3 or P4 Breakdown	1 point/ incident
Not meeting the Planned Maintenance Performance KPI	1 point/ incident
Not meeting the Rework Rate KPI	1 point/ incident
Not meeting the Contractor Contactability KPI	1 point/ incident

The demerit points will accumulate and trigger the following actions:

ACCUMULATED DEMERIT POINTS	ACTION
6	Service Manager to discuss Contractor's performance deviation and agree on improvement measures. If improvement measures are successful and the Contractor has been consistently meeting the required KPI targets for the following two months, the demerit points can be cancelled by the Service Manager.

Service Manager to issue notice that Contractor is in Breach of Contract and that Contract Can be terminated if the Contractor does not improve his performance in line with the agreed improvement measures.

15	Service Manager to Terminate Contract as per Clause 9 of the NEC3 Term Service Contract.
----	--

Poor performance by the Contractor due to late payments by the Employer will not incur demerit points.

Financial penalties, as per the requirements of Secondary Options Clause X17, will be applied on the effected payments at 1% penalty per demerit point by the Service Manager, in the month that the demerit points are allocated to the Contractor.

## **Annexure CD2 – Key Performance Indicator Listing**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

## ANNEXURE CD2: KEY PERFORMANCE INDICATOR LISTING

The following Key Performance Indicators (KPI's) will be applicable to this Contract and must be monthly updated and reported on by the Service Manager:

KPI Name	KPI Equation		Frequency	Target	
Emergency Job Rate	=	Total Number of Emergency Jobs Done  Total Number of Jobs Done  X 100%		Monthly	<10%
Planned Maintenance Performance	=	Total Number of Scheduled Planned Maintenance Jobs Completed  Total Number of Planned Maintenance Jobs Scheduled  X 100%		Monthly	100%
Cost Estimation Accuracy	=	Total Actual Cost of Work  Total Estimated Cost Of Work	X 100%	Monthly	100%
Response Performance	=	Number of Service Calls Completed within Targeted Response Time  Total Number of Service Calls	X 100%	Monthly	100%
Rework Rate	=	Number of Jobs Requiring Rework  Total Number of Jobs Done	X 100%	Monthly	0%
SHEQ	=	Number of SHEQ Incidents Involving the Contractor		Monthly	0
Contractor Contactability	=   tre		Monthly	0	

The Service Manager must also ensure that the following items are routinely inspected and reported on by the Site Representative for each Health Facility:

1. Compliance with general maintenance requirements as specified in the Service Information.

- 2. Manner in which preventative and corrective maintenance is carried out.
- 3. Manner in which the Maintenance Control Plan is implemented and updated.
- 4. Manner in which Task Orders received from the Service Manager is dealt with.
- 5. Manner in which records are kept as required by the Service Information as well as the Occupational Health and Safety Act, Act No 85 of 1993 as amended.
- 6. Quality of services carried out for the month prior to the inspection.

**Note:** The aim of the above inspection is to determine that all the requirements of the specification have been complied with. Should the Service Manager believe that one or more maintenance items referred to above, have been neglected or totally ignored by the Contractor he may decide to implement demerit points as penalty as per X17 for each type of non-compliance found during the inspection.

## C1.3 CIDB ADJUDICATOR'S AGREEMENT

This agreement is made on th	(naı	me of company / organisation	) of
	(ad	ddress) and	
		(address) (the Parties) and (name) of	l
(the Adjudicator).			
<ul> <li>The Adjudicator hereby accordance with the Pro</li> <li>The Parties bind themse accordance with the Pro</li> <li>The Parties and the Adjuand shall endeavour to</li> </ul>	erences shall be/have djudication Procedure, r has been requested to ws:  s of the Adjudicator and the accepts the appointment cedure.  Ives jointly and severally to cedure as set out in the Coldicator shall at all times in ensure that anyone acti	been* referred to adjudica (hereinafter called "the Proco act.  e Parties shall be as set out in the and agrees to conduct the adoption pay the Adjudicator's fees and	e Procedure. Ijudication in expenses in adjudication them will do
refused. 5 The Adjudicator shall info	orm the Parties if he intend the adjudication and he s	ls to destroy the documents whic shall retain documents for a furtl	h have been
SIGNED	SIGNED by:	SIGNED by:	
by: Name:	Name:	Name:	
Witness Name:	Witness:  Name	Witness:  Name:	
Address:	Address:	Address:	

Date:	Date: Date:
Contra	act Data
1	The Adjudicator shall be paid at the hourly rate of R in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	<ul> <li>The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to:</li> <li>(a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs.</li> <li>(b) Telegrams, telex, faxes, and telephone calls.</li> <li>(c) Postage and similar delivery charges.</li> <li>(d) Travelling, hotel expenses and other similar disbursements.</li> <li>(e) Room charges.</li> <li>(f) Charges for legal or technical advice obtained in accordance with the Procedure.</li> </ul>
3	The Adjudicator shall be paid an appointment fee of R This fee shall become payable in equal amounts by each Party within days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not* currently registered for VAT.
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

Delete as necessary

## C1.4 CONFIRMATION OF RECEIPT OF CONTRACT (PRO FORMA)

The Tenderer, (now Contractor), identified in the Offer part of this Agreement, hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) on:

The	(day) of	(mor	ıth)	(y	⁄ear)
At				(p	lace)
It is hereby agreed tha	at the official commen	cement date of the C	ontract will t	oe:	
The	(day) of	(mor	nth)	(y	⁄ear)
For and on behalf of	the Contractor:				
Name					
Capacity					
Signature			Date:		
Witness Name					
Witness Signature			Dat	Α.	

**PART C2-1: PRICING DATA** 

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

## C2.1 Pricing Data

#### **GENERAL NOTES**

#### 1 Documents

The Schedule of Quantities form part of the Document and must be read in conjunction with the other parts forming the Document in order to gain the full meanings of the descriptions of the work to be done and materials and equipment to be used.

### 2 Alterations

No alterations, erasure or addition is to be made in the text of the Schedule of Quantities. Should any alteration, erasure or addition be made, it will not be recognised and the original wording of the Schedule of Quantities will be adhered to.

#### 3 Issue of Schedule of Quantities in Electronic Format

The Engineers will make the Schedule of Quantities available to Tenderers in electronic (Microsoft Excel Workbook) format, upon request.

If utilised for tender submission, the Tenderer will be responsible for ensuring the correctness of all calculations. The Consulting Electrical Engineers cannot be held responsible for any arithmetic inaccuracies in the electronic Schedule of Quantities.

#### 4 Pages

Before submitting his Tender, the Tenderer must check to ensure all pages have been included and are distinct. Should any obvious errors be found the Engineer is to be notified immediately to have them corrected as no liability whatsoever will be admitted by the Engineer in respect of errors in the Tender due to the foregoing.

### 5 Responsibility

The responsibility for the accuracy of the quantities written into the Schedule of Quantities remains with the person who prepared the Schedule of Quantities. The Tenderer shall be relieved of the responsibility of measuring quantities at the Tender stage, and the Tender Price submitted shall be in respect of the quantities set out in the Schedule of Quantities.

The Tenderer will be required to make his assessment of items such as brackets, fixings, etc., from details stated in the Schedule of Quantities and shall make allowances therefore within the rates tendered.

Tenderers shall make due allowance in their rates for any item of incidental or contingent work, labour and materials not contained in the Schedule of Quantities, but deemed necessary for the successful completion of the Works.

#### 6 Offered rates in the Schedule of Quantities

The rates in the Schedule of Quantities shall be final and no further adjustment will be made.

## 7 Currency

All the offered rates in the Schedule of Quantities shall be in South African Rands (R). Any items purchased overseas must be converted to local currency with all exchange rates and export charges.

## 8 Unit Rates

Unless a separate rate for the supply and the installation of any item is specifically called for, the supply and installation costs of any items shall be fully included in the unit price.

The description of each item shall, unless otherwise stated herein, be held to include making, conveying and delivering, unloading, storing, unpacking, hoisting, setting, fitting and fixing in position, cutting and waste, patterns, models and templates plant, temporary works, return of water establishment charges, profit and all other obligations arising out of the Conditions of Contract.

## 9 Variations

Variations in the scope and extent of the work included in the Schedule of Quantities shall be allowed in order to meet the Employer's requirements and shall be measured and costed at the rates entered in the Schedule of Quantities, where appropriate, forming an addition to or deduction from the total of the Schedule of Quantities. Any items or variations for which rates have not been added in the Schedule of Quantities shall be agreed and priced as non-scheduled items in accordance with the provisions of the contract.

The rules governing the extent and costing of the variations shall be those provided for in the Conditions of Contract and Variations to Sub-contract.

Variations to the planning before the work has been executed shall be priced as above. Alterations to work already executed cannot necessarily be priced as above and must be reviewed on its merits.

The appropriate portions of the Preliminary & General Costs are to be adjusted proportionately to the nett additions or omissions of the variations to the contract

## 10 Preliminary and General

Tenderers are to note that no allowances have been made in the Schedules of Quantities for the pricing of "Preliminary & General" items.

Tenderers shall therefore, include the "Preliminary & General" component of their Tender Price in their tendered rates for the respective items of equipment / Work.

### 11 Provisional Sums

All Provisional Sums shall be expended only as directed by the Client and Engineer and any balance remaining shall be deducted from the amount of the Sub-contract sum. No work for which Provisional Sums are provided shall be commenced without written instructions from the Engineer.

All Provisional Sums may be utilised in full or in part. These Provisional Sums may be deleted in full or in part if not required.

#### 12 Contingency Sums

All Contingency Sums shall be expended only as directed by the Client and Engineer. No work for which Contingency Sums are provided shall be commenced without written instructions from the Engineer.

All Contingency Sums may be utilised in full or in part. These Contingency Sums may be deleted in full or in part if not required.

## 13 Dayworks

The rates included for daywork shall not form part of the Tender Price, but Tenderers shall note that this item must be regarded as provisional and will only be payable to the Sub-contractor if and when a written order to this effect has been issued.

## 14 Value Added Tax

This Schedule of Quantities shall be priced nett, excluding VAT.

VAT shall only be added at the Summary at the end of the Schedule of Quantities for the Principal Contract.

## 15 Adjustment

The Employer reserves the right to adjust arithmetical errors in the extension of rates and totals in the Tender, and the Tenderer will be informed of the effect of any corrections on his Tender Sum prior to the award of the Contract. In no case will tendered rates be adjusted when correcting such errors.

In the event of there being tendered rates or prices which are declared by the Employer to be

unacceptable to him, because they are either excessively low or high or not in proper balance with other rates, the Tenderer may be required to produce evidence and advance arguments in support of the tendered rates or prices objected to. If after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or prices objected to, he may request the Tenderer to amend these rates and prices along the lines indicated by him.

The Tenderer may or may not thereupon alter and amend the rates and prices objected to and such other related prices as are agreed to by the Employer. Should the Tenderer fail to amend his Tender in a manner acceptable to the Employer, or at all, it may prejudice his Tender.

In the case of Tenders with Schedule of Quantities, the total corrected Tender Price in the Tender Form shall constitute the Sub-contract Sum. Tenderers are advised to check their extensions and additions. In the case of a Lump Sum Tender, the original uncorrected Tender Price shall be considered. The Engineer shall negotiate adjustments to the rates tendered in order to correct the arithmetical extension or addition, whilst the Tender Price as submitted, remains unaltered.

In either case, the Tenderer shall be notified of any arithmetical error in his Tender, and shall be given the opportunity to withdraw the Tender at this stage.

#### 16 Quantification

The successful Tenderer and the Employer or his Agent may agree that the total of any Schedule, including any variations by way of additions thereto or deductions there from, represents a fair and accurate quantification of the items set out in the Schedule of Quantities and the parties may agree final payment on that basis. In the event of any dispute as to the quantities, the disputed item or items shall be adjusted where necessary.

## 17 Ordering

The quantities in this Schedule of Quantities shall not be used for ordering materials. The onus is on the successful Tenderer to order the correct quantities of materials as per the drawings.

## 18 Payment

The measurement and payment of Work done shall be made in accordance with the unit price rates, and rates of pay listed in the Schedule of Quantities. No payment will be made for any item of associated work not specifically detailed in the Schedule of Quantities.

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

## **C2.2 Schedules of Quantities**

GENERAL MAINTENANCE AND REPAIR CONTRACT

CONTRACT REF. NO: SCMU5-.....HO Cluster/District: JG&CH, AM&BCM, NM&SB

ASSET TYPE: BOILERS AND CALORIFIERS

SCHEDULE 1: FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO ALL WORK

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	R	ATE	AM	IOUNT
1	GM 2.5 & 3.2	Verification of Spare Part Inventory on Site						
1.1		Bisho Hospital	No	10				
1.2		Butterworth Hospital	No	25				
1.3		Cofimvaba Hospital	No	9				
1.4		Cradock Hospital	No	8				
1.5		Frontier Hospital	No	25				
1.6		Komani Hospital	No	26				
1.7		Livingstone Hospital	No	25				
1.8		Tower Hospital	No	19	<b>-</b>			
2	GM 2.7	Compiling of Operating and Maintenance Manuals (Three sets of each equipment type per site)						
2.1		Bisho Hospital	No	10				
2.2		Butterworth Hospital	No	25				
2.3		Cofimvaba Hospital	No	9				
2.4		Cradock Hospital	No	8				
2.5		Frontier Hospital	No	25				
2.6		Komani Hospital	No	26				
2.7		Livingstone Hospital  Tower Hospital	No No	25 19	<u> </u>			
3	SS 8 & 9	Boiler Operator	INO	19				
	33003	·						
3.1		Bisho Hospital	Months	36				
3.2		Butterworth Hospital	Months	36				
3.3		Cofimvaba Hospital	Months	36				
3.4		Cradock Hospital	Months	36				
3.5		Frontier Hospital	Months	36				
3.6		Komani Hospital	Months	36				
3.7		Livingstone Hospital	Months	36				
3.8	0110.15	Tower Hospital	Months	36				
4	GM 2.15	Environmental Management Plan	Sum	1				
5	GM 2.15	Occupational Health and Safety Act Compliance Costs	Months	36				
6	SS15	IN-SERVICE TRAINING OF GRADUATES AND INTERNS: Provisional Sum to pay the costs associated with employing nominated Interns and Graduates for the duration of the Contract						
6.1		Interns	Months	36	R	5 000,00	R	180 000,00
6.2		Interns	Months	36	R	5 000,00	R	180 000,00
6.3		Graduates	Months	36	R	7 000,00	R	252 000,00
6.4		Graduates	Months	36	R	7 000,00	R	252 000,00
6.5		Direct Fee Percentage (Mark-up) to be charged by Contractor on amount above	%					
		ТОТА	L AL CARRIE	D FORW	ARD TO N	IEXT PAGE		

		TOTAL BROUG	HT FORW	ARD FRO	M PR	REVIOUS PAGE		
7		INSURANCE : LIMITATION OF LIABILITY (Amounts applicable for whole Contract)						
7.1		Provision for Public Liability Insurance (Minimium R10,000 000)	Months	36				
7.2		Provision for a Performance bond of not less than 2,5% of the Tender Value	Months	36				
7.3		Provision for General Contractors's Insurance (Minimium liability limit must be equal to the Contract Value)	Sum	1				
8	GM 3	MAINTENANCE CONTROL PLAN : Compiling of a Maintenance Control Plan for each Health Facility included in the Tender						
8.1		Bisho Hospital	Item	10				
8.2		Butterworth Hospital	Item	25				
8.3		Cofimvaba Hospital	Item	9				
8.4		Cradock Hospital	Item	8				
8.5		Frontier Hospital	Item	25				
8.6		Komani Hospital	Item	26				
8.7		Livingstone Hospital	Item	25				
8.8		Tower Hospital	Item	19				
9	SS16	PROVISION OF ASSET APPLICABLE ACCREDITED TRAINING: Arranging of Accredited Asset Applicable Training for Operating and Maintenance Staff as per SS16	Psum	1	R	1 200 000,00	R	1 200 000,00
9.1	Clause 11.2(8)	Direct Fee Percentage (Mark-up) to be charged by Contractor on amount above	%					
		TOTAL CARRIED FORWARD TO SUMMARY						

GENERAL MAINTENANCE AND REPAIR CONTRACT

CONTRACT REF. NO: SCMU5-.....HO

ASSET TYPE: BOILERS AND CALORIFIERS

SCHEDULE 2: FUNCTIONAL REPAIR SCHEDULE

TEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	GM 2.5	FUNCTIONAL CONDITION ASSESSMENT : Perform Functional				
		Condition Assessment Tasks for all Health Facilities included in the				
4.4		Tender Dish Harrist I	14	40		
1.1		Bisho Hospital	Item	10		
1.2		Butterworth Hospital	Item	25		
1.3		Cofimvaba Hospital	Item	9		
1.4		Cradock Hospital	Item	8		
1.5		Frontier Hospital	Item	25		
1.6		Komani Hospital	Item	26		
1.7		Livingstone Hospital	Item	25		
1.8		Tower Hospital	Item	19		
2	GM 6	PROVISION FOR SPECIAL TESTING BY SERVICE MANAGER: Lump sum provision for doing special tests per Health Facility as per the perogative of the Service Manager				
2.1		Bisho Hospital	Item	10		
2.2		Butterworth Hospital	Item	25		
2.3		Cofimvaba Hospital	Item	9		
2.4		Cradock Hospital	Item	8		
2.5		Frontier Hospital	Item	25		
2.6		Komani Hospital	Item	26		
2.7		Livingstone Hospital	Item	25		
2.8		Tower Hospital	Item	19		
2.9		Mark-up allowed for contractor on amounts above	Item	%		
3	GM 2.6	REPAIR SCHEDULE / BOILERS : Cost to compile a detailed repair		_		
Ů	O.W. 2.0	proposal with costing and options, for all the equipment that need to be restored to a fully functional condition				
3.1		Chamber	Item	18		
3,2		Shelves and racks	Item	18		
3,3		Door and door seals	Item	18		
3,4		Recorder	Item	18		
3,5		Steam piping and shut-off valve	Item	18		
3,6		Safety valve	Item	18		
3,7		Steam pressure reducing valves	Item	18		
3,8		Exhaust line	Item	18		
3,9		Indicator lights	Item	18		
3,10		Alarms	Item	18		
3,11		Temperature and pressure gauges	Item	18		
3,12		Solinoid valves	Item	18		
3,13		PLC (Where fitted)	Item	18		
3,14		Touch pad	Item	18		
3,15		Electrical panels, wiring and connections.	Item	18		
3,16		Isolators	Item	18		
3,17		Door interlocks	Item	18		
3,18		Integrated boiler (Where fitted)	Item	18		
3,19		Indicator lights	Item	18		
3,20		Control levers, cams and valves	Item	18		
3,21		Timer	Item	18		
3,21		I imer  Manual door locking mechanisms (Where fitted)		18		
		,	Item	18		
3,23		Log book	Item			
3,24	CMCC	Housekeeping	Item	18		
4	GM 2.8	REPAIR COST SUMS (Departmental Rates)		<u> </u>		
4.1		Travel Cost	km	1		
4.2		Travel Time	R/hr	1		

Cluster/District: JG&CH, AM&BCM, NM&SB

GENERAL MAINTENANCE AND REPAIR CONTRACT
CONTRACT REF. NO: SCMU5-........HO
ASSET TYPE: BOILERS AND CALORIFIERS
SCHEDULE 3: MAINTENANCE SERVICE SCHEDULE FOR BOILERS

Cluster/District: JG&CH, AM&BCM, NM&SB

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	BOILER QTY	QTY	RATE	AMOUNT
1	GM 3.2	MAINTENANCE WORKS: Standard servicing and planned Maintenance Costs including all parts, consumeables and lubricants, labour, travelling, accomodation and subsistence allowances					Note: Amount = Boiler QTY x QTY x Rate
1.1	GM 3.2	Bisho Hospital Boiler					
1.1.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline		3	12		
1.1.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	3	6		
1.1.3		Statutory Inspection (3 yearly) If no records are found on site a statutory inspection must be done ASAP after site hand over.	No	3	1		
1.2	GM 3.2	Bisho Hospital Boiler Fuel SupplySystem					
1.2.1		<b>Minor Service Cost:</b> Refer to tasks as per Three Monthly inspection guideline	No	3	12		
1.2.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	3	6		
1.2.3		Statutory Inspection (3 yearly) If no records are found on site a statutory inspection must be done ASAP after site hand over.	No	3	1		
1.3	GM 3.2	Butterworth Hospital BOILER					
1.3.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	2	12		
1.3.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	2	6		
1.3.3		Statutory Inspection (3 yearly) If no records are found on site a statutory inspection must be done ASAP after site hand over.	No	2	1		
1.4	GM 3.2	Cofimvaba Hospital BOILER					
1.4.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection quideline	No	2	12		
1.4.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	2	6		
1.4.3		Statutory Inspection (3 yearly) If no records are found on site a statutory inspection must be done ASAP after site hand over.	No	2	1		
1.5	GM 3.2	Cradock Hospital BOILER					
1.5.1	GIVI 3.2	Minor Service Cost : Refer to tasks as per Three Monthly inspection	No	1	12		
1.5.2		guideline  Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	1	6		
1.5.3		Statutory Inspection (3 yearly) If no records are found on site a statutory	No	1	1		
1.6	GM 3.2	inspection must be done ASAP after site hand over.  Frontier Hospital BOILER					
	GIVI 3.2	·					
1.6.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	2	12		
1.6.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	2	6		
1.6.3	01100	Statutory Inspection (3 yearly) If no records are found on site a statutory inspection must be done ASAP after site hand over.	No	2	1		
1.7	GM 3.2	Komani Hospital BOILER					
1.7.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	3	12		
1.7.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	3	6		
1.7.3		Statutory Inspection (3 yearly) If no records are found on site a statutory inspection must be done ASAP after site hand over.	No	3	1		
1.8	GM 3.2	Livingstone Hospital BOILER					
1.8.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	2	12		
1.8.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	2	6		
1.8.3		Statutory Inspection (3 yearly) If no records are found on site a statutory inspection must be done ASAP after site hand over.	No	2	1		
1.9	GM 3.2	Tower Hospital BOILER					
1.9.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	2	12		
1.9.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	2	6		
1.9.3		Statutory Inspection (3 yearly) If no records are found on site a statutory inspection must be done ASAP after site hand over.	No	2	1		
1.10	GM 3.2	Fire Fighting Training					
1.10.1		Fire Fighting Training per site for boiler operators and maintainers (once off)	sum		27		
				Т	OTAL C	CARRIED FORWARD TO SUMMARY	

GENERAL MAINTENANCE AND REPAIR CONTRACT
CONTRACT REF. NO: SCMU5-.......HO
ASSET TYPE: BOILERS AND CALORIFIERS

SCHEDULE 3: MAINTENANCE SERVICE SCHEDULE FOR CALORIFIERS Cluster/District: JG&CH, AM&BCM, NM&SB

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	BOILER QTY	QTY	RATE	AMOUNT
1	GM 3.2	MAINTENANCE WORKS: Standard servicing and planned Maintenance Costs including all parts, consumeables and lubricants, labour, travelling, accomodation and subsistence allowances					Note: Amount = Boiler QTY x QTY x Rate
1.1	GM 3.2	Bisho Hospital 450L Calorifier					
1.1.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	6	12		
1.1.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	6	6		
1.1.3		Pressure Testing Cost: Pressure test equipment Six Monthly with certificate laminated and installed near tested equipment.	No	6	1		
1.2	GM 3.2	Bisho Hospital 2500L Calorifier					
1.2.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	1	12		
1.2.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	1	6		
1.2.3		Pressure Testing Cost: Pressure test equipment Six Monthly with certificate laminated and installed near tested equipment.	No	1	1		
1.3	GM 3.2	Butterworth Hospital 400L Calorifier					
1.3.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	23	12		
1.3.2		Major Service Cost : Refer to tasks as per Six monthly inspection guideline	No	23	6		
1.3.3		Pressure Testing Cost: Pressure test equipment Six Monthly with certificate laminated and installed near tested equipment.	No	23	1		
1.4	GM 3.2	Cofimvaba Hospital 400L Calorifier					
1.4.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	7	12		
1.4.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	7	6		
1.4.3		Pressure Testing Cost: Pressure test equipment Six Monthly with certificate laminated and installed near tested equipment.	No	7	1		
1.5	GM 3.2	Cradock Hospital 400L Calorifier					
1.5.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	7	12		
1.5.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	7	6		
1.5.3		Pressure Testing Cost: Pressure test equipment Six Monthly with certificate laminated and installed near tested equipment.	No	7	1		
1.6	GM 3.2	Frontier Hospital 400L Calorifier					
1.6.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	23	12		
1.6.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	23	6		
1.6.3		Pressure Testing Cost: Pressure test equipment Six Monthly with certificate laminated and installed near tested equipment.	No	23	1		
1.7	GM 3.2	Komani Hospital 400L Calorifier					
1.7.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	23	12		
1.7.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	23	6		
1.7.3		Pressure Testing Cost: Pressure test equipment Six Monthly with certificate laminated and installed near tested equipment.	No	23	1		
1.8	GM 3.2	Livingstone Hospital 400L Calorifier					
1.8.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	23	12		
1.8.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	23	6		
1.8.3		Pressure Testing Cost: Pressure test equipment Six Monthly with certificate laminated and installed near tested equipment.	No	23	1		
1.9	GM 3.2	Tower Hospital 2200L Steam Powers Calorifiers					
1.9.1		Minor Service Cost: Refer to tasks as per Three Monthly inspection guideline	No	6	12		
1.9.2		Major Service Cost: Refer to tasks as per Six monthly inspection guideline	No	6	6		
1.9.3		Pressure Testing Cost: Pressure test equipment Six Monthly with certificate laminated and installed near tested equipment.	No	6	1		
	•					ED FORWARD TO SUMMARY	

GENERAL MAINTENANCE AND REPAIR CONTRACT

CONTRACT REF. NO: SCMU5-.....HO Cluster/District: JG&CH, AM&BCM, NM&SB (LUMP SUM ESTIMATES BY ENGINEER)

**BOILERS AND CALORIFIERS** ASSET TYPE:

SCHEDULE 3: TERM REPAIRS SUBJECT TO APPROVAL OF QUOTATION OF THE WORKS

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT		
1	1 GM 2.8 LABOUR RATES APPLICABLE TO UNSCHEDULED WORK: Labour rates that Contractor will charge for additional adhoc work that is not contained in Schedules 1 to 3.							
1.1		Technician	Hr	300				
1.2		Senior Artisan (Trade Tested & Additional Certification)	Hr	580				
1.3		Artisan (Trade Tested)	Hr	430				
1.4		Utility Man (Non-Trade Tested)	Hr	890				
1.5		Artisan Aid	Hr	500				
1.6		General Worker	Hr	990				
2	TRAVELLING: Travelling cost will be as per the rates for reimbursable expenses published monthly by the National Department of Public Works at the time of rendering the service/repair.							
2.1		Vehicle Travelling Estimate	Km	110 000				
3	GM 2.8.3	ACCOMMODATION AND SUBSISTENCE: Daily Rates per person that the Contractor will claim for approved trips lasting more than one day at a time.						
3.1		Accommodation	Per/night	60				
3.2		Subsistence	Per/day	60				
4	(10), GM	PROVISION TO COVER REPAIRS DURING THE TERM OF THE CONTRACT: Lump Sum Provision to cover repairs and breakdowns during the course of the Contract in addition to the agreed routine servicing of the Assets.	PSum	1	R 8 000 000,00	R 8 000 000,00		
5	Clause	DIRECT FEE PERCENTAGE (MARK-UP) ON MATERIALS AND SERVICES THAT IS NOT INCLUDED IN PRICE LISTS: Mark-up on proven cost for materials and/or Outsourced Services based on the Provisional sum listed in Item 4. above. (Apply % to provisional sum in Item 4 above when pricing the tender)	%	%				
	TOTAL CARRIED FORWARD TO SUMMARY							

## GENERAL MAINTENANCE AND REPAIR CONTRACT

CONTRACT REF. NO: SCMU5-.....HO
ASSET TYPE: BOILERS AND CALORIFIERS

SCHEDULE NUMBER	DESCRIPTION	TOTAL				
1	FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO ALL WORK					
2	FUNCTIONAL REPAIR SCHEDULE					
3	MAINTENANCE SERVICE SCHEDULE FOR BOILERS					
4	MAINTENANCE SERVICE SCHEDULE FOR CALORIFIERS					
5	TERM REPAIRS SUBJECT TO APPROVAL OF QUOTATION OF THE WORKS					
А	NETT TOTAL OF ESTIMATED COST OF WORKS					
В	ADD CONTINGENCIES 5% OF NETT TOTAL					
С	ESTIMATED COST OF WORKS (EXCL VAT)					
D	ALLOWANCE FOR VAT AT 15.0%					
Е	ESTIMATED COST OF WORKS (INCL VAT)					

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

## **DECLARATION (In respect of completeness of Tender)**

Department of Health Eastern Cape Department of Health Global Life Centre c/o R63 and Phalo Avenue Bhisho

I/We, the undersigned, do hereby declare that these are the properly priced Schedules of Quantities forming Part C2.2 of this Contract Document which contains 28 pages numbered 1 to 28 and in consecutive order in Volume 2 and the number of pages in consecutive order in Volume 2A as stated on page 1 thereof, upon which my/our tender for TENDER NO. SCMU3-23/24-0742-HO: SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS

has been based.

SIGNED ON B	EHALF OF	TENDERER:	 	 	 	 	 	 
DATE:			 	 				

PART C3: SCOPE OF WORKS

## **C3.1: SCOPE OF WORKS**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

This specification is for the repair, maintenance and proper functioning of the listed BOILERS AND CALORIFIERS equipment installations, for the duration of the Contract period:

## **CLUSTER 2,3&4**

<b>Equipment Type</b>	<b>Grand Total</b>
Boilers	18
Calorifiers	118
<b>Grand Total</b>	136

Details of the work required shall be as listed in the Price Lists which have been sub-divided into the following categories:

SCHEDULE 1: FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO ALL

WORK

**SCHEDULE 2:** FUNCTIONAL REPAIR SCHEDULE **SCHEDULE 3:** MAINTENANCE SERVICE SCHEDULE

SCHEDULE 4: TERM REPAIRS SUBJECT TO APPROVAL OF QUOTATION FOR THE

**WORKS** 

## ASSET REGISTER - BOILERS: CLUSTER 2, 3 & 4

Item no.	FACILITY	TYPE OF EQUIPMENT	MAKE	MODEL	SERIAL No.	Energy Source
1	Bisho Hospital	Boiler	John Thompson	431	72896	Coal
2	Bisho Hospital	Boiler	John Thompson	431	72894	Coal
3	Bisho Hospital	Boiler	John Thompson	431	72896	Coal
4	Butterworth Hospital	Boiler	John Thompson	TU180		Coal
5	Butterworth Hospital	Boiler	John Thompson	TU180	T4243	Coal
6	Cofimvaba Hospital	Boiler	John Thompson	S2000	72637	Heavy Fuel Oil
7	Cofimvaba Hospital	Boiler	John Thompson	S2000		Heavy Fuel Oil
8	Cradock Hospital	Boiler	John Thompson	TC200	73511	Heavy fuel oil
9	Frontier Hospital	Boiler	John Thompson	431	72791	Coal
10	Frontier Hospital	Boiler	John Thompson	431	72813	Coal
11	Komani Hospital	Boiler	John Thompson	381	72321	Coal
12	Komani Hospital	Boiler	John Thompson	381	72320	Coal
13	Komani Hospital	Boiler	John Thompson	381	72322	Coal
14	Livingstone Hospital	Boiler	John Thompson	N/A	71075	Heavy fuel oil
15	Livingstone Hospital	Boiler	John Thompson	M1000	73602	Heavy fuel oil
16	Tower Hospital	Boiler	John Thompson	351	72314	Coal
17	Tower Hospital	Boiler	John Thompson	351	72242	Coal
18	Tower Hospital	Boiler	John Thompson	351	72243	Coal

## **ASSET REGISTER - CALORIFIERS: CLUSTER 2, 3 & 4**

Item no.	FACILITY	TYPE OF EQUIPMENT	LOCATION	Capacity	Energy Source
1	Bisho Hospital	Calorifier 1	Kitchen	450L	Steam
2	Bisho Hospital	Calorifier 2	Laundry	450L	Steam
3	Bisho Hospital	Calorifier 3	Covid Wing	2500L	Steam
4	Bisho Hospital	Calorifier 4	Casualty ;X-ray	2500L	Steam
5	Bisho Hospital	Calorifier 5	Theatre & CSSD	2500L	Steam
6	Bisho Hospital	Calorifier 6	Nurses Home	2500L	Steam
7	Butterworth Hospital	23 Calorifiers	Various Areas	400L	Electricity
8	Cofimvaba Hospital	7 Calorifiers	Various Areas	400L	Electricity
9	Cradock Hospital	7 Calorifiers	Various Areas	400L	Electricity
10	Frontier Hospital	23 Calorifiers	Various Areas	400L	Electricity
11	Komani Hospital	23 Calorifiers	Various Areas	400L	Electricity
12	Livingstone Hospital	23 Calorifiers	Various Areas	400L	Electricity
13	Tower Hospital	6 Calorifiers	Various Areas	2200L	Electricity



## PART C3.1a

## EASTERN CAPE DEPARTMENT OF HEALTH

## STANDARD SPECIFICATION

**FOR THE** 

**GENERAL MAINTENANCE AND REPAIRS** 

OF

## **BOILERS & CALORIFIERS**

AT

**VARIOUS HOSPITALS AND HEALTH FACILITIES IN** 

THE

SCHEDULE MAINTENANCE OF BOILERS AND CALORIFIERS IN CHRIS HANI & JOE GQABI, BCM & AMATOLE, AND SARAH BAARTMAN & NELSON MANDELA REGIONS – HEALTH FACILITIES (36 MONTHS)

OF THE EASTERN CAPE PROVINCE

#### **CONTENTS**

- **GM 1 GENERAL**
- **GM 2 MAINTENANCE REQUIREMENTS**
- GM 2.1 CALL CENTRE
- GM 2.2 ASSET TYPE LEAD CONSULTING ENGINEER
- GM 2.3 CONTRACTOR'S RESPONSIBILITIES
- GM 2.4 TASK ORDERS
- **GM 2.5 FUNCTIONAL CONDITION ASSESSMENT**
- GM 2.6 FUNCTIONAL CONDITION ASSESSMENT REPORT
- GM 2.7 OPERATING AND MAINTENANCE MANUALS
- GM 2.8 RATES
- GM 2.9 REPAIR WORK
- **GM 2.10 MAINTENANCE WORK**
- GM 2.11 SUPPLY OF LABOUR, EQUIPMENT AND MATERIAL
- GM 2.12 SITE MAINTENANCE RECORD KEEPING
- GM 2.13 SERVICE SHEETS
- GM 2.14 VOLTAGE SURGES DUE TO LIGHTING AND OTHER CAUSES
- GM 2.15 SHEQ: SAFETY, HEALTH, ENVIRONMENTAL AND QUALITY
- GM 2.16 HIV / AIDS AWARENESS
- **GM 3 MAINTENANCE CONTROL PLAN**
- **GM 3.1 WORK QUALITY**
- GM 3.2 PRELIMINARY MAINTENANCE CONTROL PLAN
- **GM 3.3 MAINTENANCE CONTROL PLAN**
- GM 4 COMMUNICATION
- **GM 5 PERFORMANCE MEASUREMENT**
- GM 6 SPECIAL TESTING OF AN INSTALLATION
- **GM 7 MAXIMUM MAINTENANCE DOWN-TIME**
- GM 8 MEASUREMENT AND PAYMENT

# STANDARD SPECIFICATION FOR THE GENERAL MAINTENANCE AND REPAIRS OF BOILERS & CALORIFIERS

#### **GM 1 GENERAL**

The successful Contractor will be responsible for, and is expected to, maintain all the plant and installations detailed in the Price List and the Inventory of Equipment attached to this Contract.

The intention of this comprehensive maintenance Contract is to assess the current autoclaves and associated equipment's condition of each asset, repair what is needed, and maintain all equipment included as part of the Contract, in such a manner that, except for normal wear and tear, their condition don't deteriorate during the initial Service Period of 36 (thirty six) months. Instruction to proceed with any work related to this Contract shall be authorized by means of a Task Order from the Service Manager.

As skills transfer are an integral part of this Contract the Employer's Operating and Maintenance staff will be responsible for all operating and daily inspections on the equipment, unless otherwise specified in the relevant asset specific Supplementary Specification and/or Relevant Price List.

The Contractor is required to provide pricing for the following items in the Contract as expanded on in this specification for each asset type and equipment quantity as covered by this Tender:

- · Verify the Assets and update the Asset Inventory List that is provided with this Contract;
- Compile a Preliminary Maintenance Control Plan (Annexure I) to determine what routine servicing should take place on each type of equipment covered by the Contract, and at what frequency the services should take place during the Contract Period if this does not correlate to the Price List service frequency proposed by the Service Manager. With reference to the Price List and C3.1b Supplementary Specification requirements, the Contractor must submit an all-inclusive price and quantity of, for each Service Activity required. Service Activities may include Operations, Minor Services, Major Services or Statutory Inspections as detailed in the Supplementary Specification related to this bid as well as the Price List.
- Cost to do a full functionality test and condition assessment of all equipment and installations included in the Contract (after Contract award), and provide a priced key spare part pricelist for this equipment;
- Cost to provide a detailed Functional Condition Assessment Report based on the findings from the functionality test and condition assessment process.

It is to be noted that the aim of the maintenance Contract is NOT to replace random components at the beginning of the Contract in anticipation of a possible breakdown during the Service Period. Only known defects shall be repaired once approved by the Service Manager. It is the Contractor's responsibility to decide if he/she wants to visit each site and familiarize themselves with the actual condition of each installation before submitting a Tender, or to rely on the information as contained in the Inventory of Equipment that is attached to this Contract.

Maintenance of an installation shall be performed in accordance with the Boilers & Calorifiers **Service Information** which will include:

- This Standard Specification for the General Maintenance and Repairs of Electrical and Mechanical Installations.
- 2. The Technical Specifications that may be applicable,
- 3. The Supplementary Specification for this Asset Type,
- 4. The Operating and Maintenance Manuals (where applicable) for this Asset Type,
- 5. Relevant Inspection Check sheets for this Asset Type,
- 6. The Maintenance Control Plan per Health Facility,
- 7. All relevant SANS Standards and Legislation that is referred to in the above listed documents, and
- 8. All relevant drawings forming part of this Contract.

The main mechanical and electrical sections of a facility with their subsections as set out in the Service Information and in the Price List will each be deemed "an installation". Maintenance, as specified, will be applicable to all these installations.

All Contractors are to undergo an approximately three-hour long Contractor's induction process before being allowed to work at any of the sites. This induction shall cover the General Rules for Contractors on Site, the penalty system applicable to this Contract, as well as the minimum work quality standards for the work to be done on site.

Major equipment replacement, major upgrades and/or redesigned functionality will be handled outside of this Contract via a separate projects program, and are therefore not part of this Contract. The maintenance and repair work phase will run parallel to each other at the same time.

#### **GM 2 MAINTENANCE REQUIREMENTS**

- The Contractor will adhere to the Task Order and when completed, contact the Service Manager for formal approval and signing off, of the Task Order. The Engineering Representative will assist the Service Manager in verifying completed work.
- The Contractor is expected to be fully aware of his obligations in so far as this Contract is concerned and he shall attend to the maintenance procedure within the time limits specified for each class of maintenance procedure.
- The completed Task Order will be returned to the Service Manager, who will forward it to the Call Centre to log the completed Task Order into the system. When the completed Task Order is logged into the system the job will be closed.
- When a maintenance procedure cannot be completed within the specified downtime the Contractor should apply in writing to the Service Manager for an extension of time with reasons for the delay. This application should be submitted as soon as the details of the maintenance procedure and availability of spare parts are known.
- The Call Centre Manager will submit a weekly response performance report to the Service Manager, who will make a decision on the implementation of penalties which

will depend on the nature of each breakdown, as well as valid claims on delays received from the Contractor. The recorded report date and time as well as the recorded completion date and time will be regarded as sufficient and final proof for the proper administration of this aspect of the Contract.

### GM 2.2 SERVICE MANAGER

Eastern Cape Department of Health's agent will be appointed as **Service Manager** (Project Manager) to manage and administrate all work and financial aspects related to this particular bid. He/she will be supported on the ground by an Engineering Representative to verify workmanship and compliance of completed activities to Contract requirements. The Service Manager will be responsible for the following:

- Perform duties as per the NEC3 Term Services Contract Standard Clauses:
- Ensure that either he/she, or the Facility Specific Site Representative, visit the Facility and compile reports on the status of the Facility infrastructure that forms part of this bid;
- ii Liaise with the Call Centre and check on call outs;
- Determine routine maintenance work to be done, and issue Task Orders for routine maintenance and repairs/refurbishment/upgrades (that was accepted by the Employer), to the relevant Contractor;
- Consult and co-ordinate with the Program Lead Consulting Engineer as needed on specific maintenance aspects, designs and specifications to be done;
- Assess the completed work for the assessment period, consider the payment applications lodged by the Contractor during this period, Certify the payment due, and issue a Payment Certificate for the accepted work as per the Standard Contract clauses;
- vi Monitor the logging of regular maintenance work done;
- vii Prepare reports on maintenance and repair work done;
- viii Liaise with the hospital Site Representative regarding all work to be done on this asset type at the facility;
- ix Liaise with management of the facility;
- x Obtain approvals from the Employer where required for

#### **GM 2.3 CONTRACTOR'S RESPONSIBILITIES**

The Contractor shall maintain the complete installation as specified in the **Service Information** for the full Contract period subject to the agreed repairs and performance criteria.

Maintenance implies and shall include routine preventative maintenance on a schedule as approved by the Service Manager, corrective maintenance, as well as breakdown maintenance of all components of the specified installation.

The Contractor shall be responsible to perform all tasks as specified in this specification, subject to the requirements of the NEC3 Term Service Contract Standard Clauses. In addition, the Contractor must:

- Record work done, performance indicators, defects identified and/or corrected, and spares used;
- 2. Obtain work done sign-off on site as well as from the Engineering Representative;
- 3. Submit completed Task Orders and invoices to the Service Manager;
- 4. Attend scheduled project meetings with the Service Manager.

The Contractor shall, as part of his maintenance responsibilities repair or replace faulty equipment upon logging of a breakdown, within the down-time as defined in Paragraph GM 7, and against the Tendered rates as provided for in the Price List, and within the down-time as specified in the applicable Task Order. In the event of any repair item for which a rate is not available in the Price List, the rate as specified in the Task Order will apply.

## **GM 2.4 TASK ORDERS**

All works required to be done by the Contractor will be instructed by issuing of a **Task Order** by the **Service Manager**. No Works shall be conducted without a Task Order.

The Call Centre may issue breakdown and defects correction/repair Task Orders to the Contractor at any time during the Service Period, but they must all be copied to the Service Manager. The time for the completion of the Breakdown Task Order will be as per the allowable response times in Table 1 in Section GM 7.

If the exact nature and possible cost of rectifying a breakdown is not known when the Breakdown Task Order is issued to the Contractor, the task order will be issued with provisional information and costs estimates. The Contractor shall respond to such a Breakdown Task Order by traveling to the site to evaluate the breakdown (scope of repair work), estimate the realistic cost as well as downtime and provide feedback to the Service Manager to form the basis of the revised Task Order.

Should the Contractor not be able to complete the Breakdown Task Order within the agreed and approved time for completion, it shall be the Contractor's responsibility to obtain an extension of time from the Call Centre Manager. The written report shall clearly state the reasons for requiring the extension, as well as the actual extension period required.

Should the actual time for completion of the Breakdown Task Order exceed the agreed time

allowed, including any extension of time, the Contractor shall be liable for damages at the rate stated in the Task Order.

The Service Manager will issue Task Orders for the routine maintenance services, and approved repair/upgrade work once the Maintenance Control Plan has been approved and updated with the relevant information from the Repair Schedule as per GM 3.

Routine maintenance, approved repairs and breakdown repairs will all be done parallel to each other on the equipment as per the Maintenance Control Plan and Call Centre priorities.

### **GM 2.5 FUNCTIONAL CONDITION ASSESSMENT**

Immediately after handing over of the site, and having attended the Contractor's Induction Training Session, the Contractor shall start with a **detailed functional test and condition assessment process** of the specified installation/equipment at each Health Facility and **submit a detailed report** to the Service Manager regarding the functionality, performance and condition of the equipment. It is this Contract's intention that this task be completed within **two weeks** of each site handover to the Contractor, but the Service Manager will arrange and agree specific deliverable dates for each Health Facility with the Contractor in this regard as part of the Contractor's Maintenance Control Plan.

The following work shall be carried out during the time allowed for the execution of the Functional Condition Assessment:

- Verify the Asset Data from the Asset Inventory List in C4.1, obtain the additional asset information that might be required for a specific piece of equipment, and update the Inventory of Mechanical and Electrical Equipment for each Health Facility with make and model numbers, capacities and general condition, year of manufacture (age), additional equipment to be added to the list, and equipment to be deleted from the list (i.e. equipment not on site anymore), etc., as per the fields provided in the format provided by the Service Manager after Contract award.
- Prepare a clear A4 size line drawing of the building/ward/room in which the plant is installed, typically as per one of the two examples below, and show positions of the equipment schematically on this drawing. Please provide basic information regarding the general condition of the room/facility/building where the asset is located (this will assist to provide information to the facility repair teams), next to, or below the line drawing;

One line drawing per location per Health Facility must be provided and can be hand drawn, provided that the drawing is clear, neat and all info is readable. Where applicable the position of the equipment on the walls must be shown (i.e. autoclaves and associated equipment).

- Record the number/name of each piece of equipment on the line drawing. If no name/number exists on the equipment itself, allocate a descriptive number (i.e. Washer) and mark this on the equipment with a black permanent marker pen. Reference shall be made to this ID number in the defects listed in the Repair Schedules for each item of equipment to identify the equipment accurately.
- Verify what spare parts (if any) are available on site for the equipment covered by the Contract, as well as the condition there-off;

- Compile a Priced Spare Part List, (based on the Contractor's cost price for the spares) for the relevant spare parts required for a repair of all the types of equipment listed in the Asset Inventory, and indicate on this list what spares should be kept in stock on site for use by the site maintenance staff. The Employer however retains the right to negotiate the offered spare part prices with like type spares prices solicited through the Tender process, if they are not in line with national price norms.
- iv **Inspect the condition and test the functionality** of all components of the installation to confirm the extent of the repair work required (if any). If the equipment is not in an operable state record this and proceed with item 7 below;
- Verify if the equipment meets current standard technical specifications for the specific application (for example: a split system air conditioner may be functionally good and serviceable, but does not meet the criteria to operate inside an operating theatre or infection control area). Advise on an alternative if applicable. Please consult the Facility Manager when doing the assessment to get information regarding any issues that they are experiencing with the equipment.
- vi Verify the estimated remaining service life for the equipment based on the equipment's age and current condition. If the equipment is old and in a bad state it might be more cost effective to replace the unit rather than rebuilding it. Please advise in this regard;
- vii Should it be impossible to determine the details of the defect without dismantling the machine/equipment item, the Contractor shall nevertheless prepare an estimate with a cost breakdown for repairs he/she anticipates will be needed. After a written instruction has been received to repair the machine/equipment item, the final cost will be determined after the machine/equipment item has been dismantled for repairs. Equipment shall not be dismantled for inspections during the equipment functional condition assessment period.
- viii Compile a detailed Repair Schedule for each separate equipment unit (machine). This Repair Schedule will consist out of a clear identification of the equipment unit, a detailed description of what is wrong with the equipment unit, a detailed repair or replacement method statement (and explanation on why it is recommended that the unit be replaced if applicable), and an accurate detailed quote, with estimated lead times and a high-level project plan to enable the work to proceed if the approval to do so is granted by the Service Manager via a Task Order. (See GM 2.8 for the rates requirements)
- ix The Employer does not guarantee that any, or all, of the repairs/replacements recommended via the repair schedules, will be accepted for implementation by the Contractor. Accepted Repair Schedules will however become part of the Final Maintenance Control Plan once approved by the Employer, and will then be included in the work scheduled for this Contract. Depending on the cost and

complexity, equipment replacement recommendations might be transferred to the Repair Project Work Stream of the Employer's Mechanical and Electrical Equipment Repair Programme.

- Compare the identified defects of each item of equipment with the components already included under the standard minor and major services scopes in the Contract Price List, and remove costing for these from the repair requirements. Include all identified defects into the Functional Condition Assessment Report, but only price the defects not covered by the standard servicing scope of works. (See GM 3.2 (3) for costing of the standard services)
- xi Where applicable, **obtain copies of Statutory Inspection and Test Reports** from the Health Facility (if available) and attach these to the Defects Inspection Report.
- xii Submit the detailed Functional Condition Assessment Report to the Services Manager who shall thereafter demarcate any areas to be repaired and forward this information to the Contractor. Once approval is granted, the Service Manager will instruct the Contractor about the repair work to be done.

#### **GM 2.6 FUNCTIONAL CONDITION ASSESSMENT REPORT**

A Functional Condition Assessment Report must be compiled for each Health Facility, and shall contain the following:

- 1. The updated Asset Inventory List (both hard and electronic copies) completed in the Excel Format provided by the Service Manager after Contract Award;
- 2. Clear location identifiable layout line drawings of the equipment, with ID numbers and brief room/facility/building condition description as per GM 2.5 (2)
- 3. A list of spare parts, and their condition, that is currently available on site;
- 4. A priced spare part list of the typical spare parts that might be needed to do repairs on the equipment if it should breakdown or fail. The Contractor must also indicate on this spare part price list which consumable spare parts (i.e. fan belts, filters, oil, fuses, light globes, etc.) that can be replaced by the site maintenance staff, should be kept in stock at the Health Facility;
- 5. A summary of the equipment per Health Facility indicating:
- i Condition;
- ii If the equipment meets current technical specifications;
- iii Estimated remaining Service life before replacement will be due; and
- Recommended work to be done (i.e. service only, minor repairs required, major repairs required, replacement or upgrade recommended).
- 6. A Repair Schedule for each repair that is required. This information will be used to populate the Task Orders for accepted repairs, or feed the Tender document information in case it is moved to the Project Work Stream;

- 7. A description of the defect for which repair work is not easily identifiable with an estimate of the final cost for repairs. This item will typically apply to breakdowns or defects where the machine or equipment must be de-commissioned and at least partially dismantled before the extent of the work can be fully established;
- 8. Compile a list of equipment for which a Statutory Inspection and Test is, or will become due during the Contract period. Copies of previous Inspection and Test Certificates to be attached to the report (if available).

Should the Contractor not be able to complete the Functional Condition Assessment Report within the period as specified GM 2.5, it shall be his responsibility to obtain extension of the Functional Condition Assessment period from the Service Manager. The written report shall clearly state the reasons for the extension, as well as the actual extension required. An extension of time shall only be considered by the Service Manager if the Engineering Representative believes the Contractor has carried out the already completed portion of the report with the due diligence and attention to detail.

Should the actual time for the completion of the report exceed the specified time for completion, including any extension granted, the Contractor shall be liable to a payment reduction for the difference between actual and approved completion periods. The value of the payment reduction for each health facility shall be as specified in Section X18 of the Secondary Options Clauses of the Contract.

After the repair phase work and costs have been accepted, the Contractor shall commence with the known and approved repair work only after site access for repair work has been approved and the Task Order issued. The Contractor shall complete the work within the period allowed for the repair work as specified in the applicable Task Order.

#### **GM 2.7. OPERATING AND MAINTENANCE MANUALS**

The Contractor shall, where specified, and as part of the repairs to each installation, compile and submit a comprehensive Operating and Maintenance Manual based on the Original Equipment Manufacturer's requirements. The Contractor shall ensure through training that the operating and maintenance personnel of the Health Facility are conversant with the instructions as presented in the Operating and Maintenance Manual, as per SS 8 and SS 9.

The Operating and Maintenance Manual, as accepted by the Service Manager, shall be used as a basis for preventative maintenance. The Contractor shall perform all preventative and corrective maintenance as described in the Operating and Maintenance Manual. This shall be in accordance with the Standard and Supplementary Specifications.

The Operating and Maintenance manuals must be based on the updated Inventory of Equipment (C4.1) data after completion of the Functional Condition Assessment, and shall be updated with respect to Make, Model Number, Capacity and any other relevant data.

The Contractor must provide three (3) sets of each required Operating and Maintenance Manual as follows:

One set to be installed at a suitable position on a short chain, against a wall in the room/area where the equipment is located, or as otherwise instructed by the Service Manager for outside and spread out equipment; ii Two sets to the Services Manager.

The Operating and Maintenance Manuals must be delivered as soon as possible after the Functional Condition Assessment Report has been completed. Also see Section GM 3.3 (15).

Where several of the same equipment is in the same room/area, only one set of three Operating and Maintenance Manuals is required. If the same equipment is spread out throughout the health facility the Contractor must install one Operating and Maintenance Manual near each one, or group of the equipment unless otherwise instructed by the Service Manager. This does not apply to equipment like split air conditioners, etc. for which only one set of three Operating and Maintenance Manuals per make and model will be required. The Service manager will instruct the Contractor where to install the chained Operating and Maintenance Manual for equipment like air conditioners.

The Contractor will be required to install several Document Consoles (storage and writing platform units) with sleeve anchors or bolts, into the walls at different locations of each Health Facility, to secure and store the chained manuals and maintenance logs. A Provisional sum will be included for this in the Price List.

#### GM 2.8. RATES

Scheduled work is all planned routine servicing of the equipment at the all-inclusive Contracted Rates contained in Schedule 3 of the Contract. Unscheduled work is all repairs, breakdowns, special maintenance activities, special tests and/or replacement tasks, that is ordered via a Task Order by the Service Manager, in addition to the scheduled work. Payment for this work will be based on the Contracted Rates from Schedule 4.

Where no rates exist in the Contract, the itemized breakdown shall be accompanied by documentary proof from the Supplier, Manufacturer, Engineering Works, etc., where materials were bought or services out-sourced from. The Employer however retains the right to verify and test these rates against the market.

The Contractor shall submit quotes for all Unscheduled work with an itemized breakdown of the total cost involved for acceptance by the Service Manager, in a quotation as detailed below:

# **GM 2.8.1 MATERIALS AND OUTSOURCED SERVICES**

Unscheduled: List all items with quantities and rates as per

quotations or price lists obtained from suppliers or service providers (proven reasonable cost), and attach a copy of the quotation/price list to the quotation. Apply the Direct Fee Percentage (Mark-up %) to all proven reasonable material costs and outsourced services.

Direct Fee % (Mark-up %): Mark up percentage on proven cost to cover P's & G's,

overheads, profit, etc. as per Schedule 4 based on

NEC3

TSC Contract Data.

Scheduled: All materials required for Scheduled Servicing are

included into the pricing for the Service as per

Schedule 3.

#### GM 2.8.2 LABOUR

Unscheduled: List time required for travelling to and back from site

(subject to conditions contained in GM 2.8.3 below), actual repair and/or replacement, testing and commissioning time of all unscheduled items at the applicable labour rates as stated in Schedule 4. No Direct Fee % will be applicable to Contracted labour

rates.

Scheduled: Cost is included in Service costs as per Schedule 3.

# **GM 2.8.3 TRANSPORT AND ACCOMMODATION**

#### Unscheduled:

Traveling and Accommodation claims will be subject to the condition contained in GM 2.8.4 below. Travelling cost will be as per the rates for reimbursable expenses published monthly by the National Department of Public Works applicable at the time of rendering the service/repair. Allow for the actual distance travelled (and specify the reason for the traveling). All travel time and disbursements need to be supported by a Google Maps route planner printout for proof of travelling distance and time. Kilometre claims can be claimed from point of departure to destination and back, but must be linked to the indicated kilometres as per the Google Map attached and referenced to. The Contractor must submit proof of registration to verify the engine cubic capacity of the vehicle, in respect of any vehicle to be claimed for. Allow for the actual accommodation and disbursements (and specify the reason for the accommodation requirement) at the rates as per Schedule 4. Trips must be combined with Scheduled Servicing trips where possible, to minimize additional expenditure. Trips will be in accordance with the approved Maintenance Control Plan.

GM 2.8.4 The Employer requires that the Contractor be based in a location inside the Cluster or District Area that the Contract is awarded for. The home base (departure point) must therefore be located inside the Cluster Area. If the Contractor does not have a home base in the Cluster Area, the traveling rates (for both distance and labour) will be calculated based on a location inside the Cluster which will typically be the largest Town or City located inside the Cluster or District, as may be applicable as instructed by the Service Manager.

#### **GM 2.8.5 PROVISIONAL SUMS**

It is the Employer's sole discretion to decide on spending any, all or none of the Provisional Amounts listed in the different Price List Schedules of this Contract.

# **GM 2.9 REPAIR WORK**

#### **GM 2.9.1 Definitions**

#### 1. Defect

For this maintenance Contract, a defect shall mean a deficiency in any component of an installation which impairs the functionality of that component or equipment. Worn parts of a component which do not impair the functionality and/or performance of the component will not be regarded as a defect.

Defects may be classified in the following three groups:

# (i) Type A defect

Those deficiencies which can be rectified by proper maintenance only, i.e. set parameters of a control system, proper lubrication, balancing, alignment, set pressures on safety valves, cleaning and de-staining, etc.

# (ii)Type B defect

Those deficiencies which can only be rectified by replacing parts of, or the complete component as in the case of a breakdown or where a certain amount of upgrading is necessary such as the provision of anti-vibration mountings, removal of rust and re-painting, etc.

# (iii)Type C defect

Those deficiencies which are visible but which do not impair on the functionality of the installation or system yet, such as structural cracks in parts of a component, rust, bad workmanship during a previous Contract, etc.

Components in which abnormal noise and/or vibration is present shall be serviced in accordance with the Manufacturer's recommendations and if the noise and/or vibration persists, the deficiency will be classified as a defect.

# 2. Repairs

Repairs of an installation shall mean the elimination of the deficiencies classified as types B and C defects in Paragraph (1.) above.

The specific repair phase commences as indicated on the Task Order issued by the Service Manager for each approved repair. The repairs must be completed within the period as determined by the Task Completion Date as stated in the Task Order. Delay damages for late completion will be applicable as indicated on the Task Order.

Depending on the nature of the work and availability of funds access may be given at any time during the Service Period and not necessarily directly after site hand-over.

A representative of the user department or person in charge of the plant, system or building shall endorse the schedule after completion of the maintenance or servicing procedure to the effect that the maintenance or service is, to his opinion, completed satisfactorily and shall countersign the service schedule. Where necessary the Site Representative will inspect the work done and report his findings to the Service Manager.

#### GM 2.9.2 Scope of Repair Work

The repair work shall be completed within the time allowed for repairs for each installation as defined in the applicable Task Order. If the work is to be carried over two or more financial year's the work will be segmented and prioritized according to the Final Maintenance Plan. The Contractor will be informed of the work to be completed within each financial year. The starting date for repair work for the current financial year will be the date of acceptance of the measured Price List from the Functional Condition Assessment Report. The starting dates for subsequent years will be on 1 April of that particular year.

All repair work shall be executed using resources (labour, equipment materials and spare parts) that comply with the requirements of GM 2.11.

The said repair work shall be executed in accordance with the relevant codes of practice, standards, regulations, municipal laws and by-laws, manufacturers' specifications and codes of practice included in this specification.

#### **GM 2.10 MAINTENANCE WORK**

Maintenance work commences with the acceptance of the Tender bid and expires at the end of the Service Period. As compensation, the Contractor is paid the **remeasured** Contracted quantities, distributed in agreed intervals and amounts over the Service Period as per the Final Maintenance Control Plan, at the rate Contracted for the applicable maintenance work, subject to the requirements of GM 8.

#### **GM 2.10.1 ROUTINE PREVENTATIVE MAINTENANCE**

This entails the rendering of services and servicing of equipment according to a predetermined Maintenance Control Plan to:

- i Repair, lubricate, clean and service components of equipment, units or parts thereof for each installation at pre-scheduled intervals regardless of condition;
- ii Re-adjust, reset, clean, balance, corrosion protect all components of equipment, units or parts thereof for each installation, and
- iii Carry out all necessary and implied actions to maintain installations in a functional condition (i.e. replace or clean filters, replace or top up fluids, etc.)

Preventative maintenance shall be aimed at prevention or at least minimization of breakdowns.

#### **GM 2.10.2 CORRECTIVE MAINTENANCE**

This entails regular observation of the equipment, identifying impending breakdowns, maladjustment or anomalies of equipment, units or parts of installations and subsequent action to restore installations to a fully functional condition before a breakdown occurs.

The Maintenance Procedures for Corrective Maintenance shall be compiled by the Contractor and is included in the Maintenance Control Plan for each system or plant. Inspection items shall include, inter alia, the following:

# Checking for:

- i Unusual noise and vibration;
- ii Abnormal surface temperature of machines such as electric motors;
- iii High temperatures of equipment and wiring inside switchboards;
- iv Incorrect settings or operation of safety devices;
- Alarm conditions of any instrument or control panel;
- vi Gas or fluid leaks from the equipment or associated piping systems.

The frequency of corrective maintenance shall be determined by the Contractor himself in line with the recommendations from the Operating and Maintenance Manuals, and actual operational environment where the equipment is operating. This may vary from once every day for high-risk, sensitive installations to once a month for low-risk installations such as exhaust fans and office air conditioners. The frequency of corrective maintenance must be accepted by the Service Manager in the Maintenance Control Plan.

#### **GM 2.10.3 BREAKDOWN MAINTENANCE**

This entails repair and/or replacement of defective equipment, units or parts of installations following a breakdown that leaves the installation inoperable or unsafe, and subsequent action to restore the installation to their normal functional condition, within the maximum down-time allowed.

Breakdown repairs will be controlled via the Call Centre and approved Breakdown Repair Task Order process as per GM 2.1. A provisional amount will be included in the Contract Price List Schedules to cover Break Down Task Order expenditure.

# **GM 2.10.4 COMMENCEMENT OF SERVICE PERIOD**

The Contractor shall accept full maintenance responsibilities for each installation from the date on which the site has been handed over to the Contractor. An annual maintenance service shall be carried out on all installations during the period in which the Defects Inspection Report is compiled, or as soon as possible thereafter. If the current statutory compliance of a qualifying asset cannot be verified with the correct documentation of proof, a statutory inspection must be performed immediately after the first annual service has been completed.

For equipment or installations where the complete installation is shut down for the repair phase, no maintenance services will be required during the repair period.

# **GM 2.11 SUPPLY OF LABOUR, EQUIPMENT AND MATERIAL**

#### 1. Labour

Only competent, qualified personnel shall be allowed to execute all maintenance work.

# 2. Equipment

All tools, equipment and consumables required for performing maintenance work shall be supplied by the Contractor at his own cost (except where otherwise agreed to in writing and provided by the Employer). The Contractor may use already installed Employer equipment such as crawl beams and crawls, etc. provided that they obtain written approval from the site Maintenance/Technical Manager to do so. Such site approval will be based on the serviceability of the equipment, and upon confirmation of the Contractor's competency compliance in being able to use and operate this equipment during maintenance.

#### 3. Materials and Parts

All materials, spare parts, components, equipment and appurtenances necessary for the complete maintenance of each installation shall be supplied and installed by the Contractor at the rates and quantities as instructed by the Service Manager, after the Functional Condition Assessment Report as specified in GM 2.5 has been accepted.

Only original parts as specified by the Original Equipment Manufacturer may be used for replacement purposes. Generic or alternative parts will only be allowed if they comply fully with all the specifications of the original parts, but may only be used upon written acceptance by the Service Manager.

Substitute electronic components will be acceptable, **PROVIDED** that they are equal to, and of the same quality as, or superior to, the original components and are accepted, in writing, by the Service Manager.

All parts, spares and materials which are used, shall conform to the applicable SANS Specifications and shall, where possible, carry the SANS mark of approval.

Substitute parts, as well as the serial numbers (where available) of the original and new components, shall be entered on the service sheets and in the maintenance/repair log-book.

The Contractor shall obtain, and cede any supplier's or factory guarantee of repaired or replaced components to the Employer. All workmanship, new equipment, materials, components, systems, etc. used for servicing and repairs shall be guaranteed for 12 months unless otherwise agreed to in writing with the Service Manager. The guarantee cards for repaired or replaced components or equipment shall also be attached to service sheets and the maintenance/repair log-book. New equipment and system installations will in addition to the above requirements also have a twelve (12) month defects liability period, valid from the date of successful commissioning and hand over to the Employer as acceptance by the Service Manager.

All scrapped and/or removed parts and equipment that might be installed elsewhere, or that will not be returned to service again, must remain on site after removal or disassembly of the equipment as they remain the property of the Employer. The Maintenance/Technical Manager of the facility will indicate to the Contractor where to place these items after removal. Removal of any parts and/or equipment for whatever reason from site, may only occur with the written approval to do so by the Maintenance/Technical Manager subject to the rules and regulations

that the Employer has in this regard.

#### **GM 2.12 SITE MAINTENANCE RECORD KEEPING**

The Contractor shall provide and maintain hard-cover A4 size maintenance files for each installation for the duration of the Service Period. Copies of all schedules, checklists, breakdown reports, preventative maintenance records, component replacement records, service sheets, etc. shall be filed in these.

An A4 size register book shall be kept for all work performed on the equipment, to state the service technician's name, surname, date of work performed, and a short description of the work performed. This book must be installed on a short chain next to the relevant Operating and Maintenance Manual as per GM 2.7.

Copies of the site maintenance records and all service sheets, shall be submitted to the Service Manager at each monthly meeting, while copies of the service sheets must also accompany all claims and invoices.

Statutory Logbooks must be supplied and maintained on site for all statutory equipment such as pressure vessels, boilers and lifts.

#### **GM 2.13 SERVICE SHEETS**

Every service, repair, test, inspection, etc. related to the maintenance portion of the Contract, shall be fully described on a service sheet which must be completed and signed by the Contractor and attached to the Task Order when it is returned to the Service Manager. The following minimum information shall appear on service sheets:

- i The company name and address;
- ii A unique work sheet serial number;
- iii The corresponding Task Order unique number;
- iv The district and health facility names;
- The building/area name or alternatively the building/area code;
- vi The plant identity code and description;
- vii The nature of the call, i.e. P1, P2, P3 or P4 (see GM 7);
- viii A general description of the problem or purpose of the work to be done, alternatively the complaint as received by the Call Centre;
- A statement as to whether the individual system is operational or not in terms of the specification;
- Should the system not be operational (in case of a breakdown) the response time and repair time shall be recorded individually and details of a preliminary service sheet shall be forwarded to the Call Centre Manager;

- xi The description of the repairs/replacements carried out on each machine/equipment item on that specific system;
- xii A list of materials used for each machine/component. Where scheduled items are used, only the description can be listed. For non-scheduled items, a copy of the quotation must be attached to the service sheet;
- xiii A detailed report on the extent of the work done together with the total cost involved;
- xiv Suggestions to avoid similar future problems;
- xv A list of the Contractor's personnel responsible for the work with the date, starting time, completion time, distance travelled, and any accommodation and S&T costs;
- xvi Signature and name of the responsible Employer site technician/artisan/engineer and the Site Representative, confirming the work was completed to the required quality and performance standards, and that the equipment is operational again;
- xvii Signature and telephone number of the User of the equipment or the person who initiated a call or Task Order (if it was a defect, or breakdown).

Service sheets shall also be used for normal routine maintenance services and other non-maintenance activities such as training of the health facility's operating and maintenance personnel and administration duties of heads of firms when managing the Contract.

The Service sheets shall be completed in three categories as follows:

- 1. **For repairs on machines:** The same data as above must be captured with one service sheet to be completed for each repair (See below for grouping of like type equipment for servicing).
- 2. **For normal maintenance on an installation:** The same data as above must be captured with one service sheet to be completed for each service (See below for grouping of like type equipment for servicing).
- 3. **For Administration and Training:** In this case only the name of the Head of the Company is required on the service sheet with no other reference to Building- or Plant codes or machine ID numbers. A full description of the service provided must be included.

Copies of the completed Service Sheet and Task Orders must be attached to all invoices and shall be submitted to the Service Manager for discussions and acceptance.

An example of the Service Sheet is attached to the Contract Documentation as C7.

The standard requirement for normal services carried out on a specific plant is to complete one service sheet for all the equipment within any one building. This standard requirement applies to installations where all such machines can be serviced within a period of approximately five working days, but all equipment serviced must be listed on the service

sheet.

For larger installations where the time required for a maintenance service is more than five working days, the machines may be grouped together to form several groups within the building with the provision that each group can be serviced within a period of approximately five working days. One service sheet shall be completed for each group in a building, but all equipment included in the group must be listed on the service sheet.

For smaller installations where the complete installation inside a building can be serviced in less than one working day, the installations in more than one building may be grouped together, but all the equipment covered by the service sheet must be listed.

The definition of the groups must be determined by the Contractor and clearly specified in the Maintenance Control Plan for acceptance by the Service Manager.

#### GM 2.14 VOLTAGE SURGES DUE TO LIGHTING AND OTHER CAUSES

The area in which most of the sites are situated is known for heavy lightning storms. Damage caused by voltage surges due to lightning, phase imbalance, low and high voltages, power failures, etc. will be dealt with in the same manner as any other breakdown. Contractors are advised to investigate available surge protection systems, if any, on each plant during the Functional Condition Assessment stage, and to decide for themselves whether additional protection will be required or not.

The provision of additional surge protection systems shall form part of the repair activities, if accepted by the Service Manager, and the cost thereof must be allowed for in the Functional Condition Assessment Report.

Contractors may as an alternative provide and install one or more Universal Disturbance Analysers to record any voltage surges at their own cost. Breakdowns caused by voltage surges which can be proved beyond any doubt will be dealt with in the same manner as operational damage and other normal breakdowns.

# GM 2.15 SHEQ: SAFETY, HEALTH, ENVIRONMENTAL AND QUALITY

The Contractor must comply with all the Safety, Health, Environmental and Quality requirements as per C3.2 and GM 3.1, and must provide pricing to cover all the applicable requirements under this specification. The Contractor must take note of any specific Safety, Health and/or Environmental risks that might be highlighted in section SS 13.

#### **GM 2.16 HIV / AIDS AWARENESS**

The Contractor must comply with all the requirements as per C3.3, and must provide pricing to cover all the applicable requirements under this specification.

#### **GM 3 MAINTENANCE CONTROL PLAN**

The Contractor is responsible to compile a detailed Preliminary Maintenance Control Plan (Annexure I) as per GM 3.2 which he need to submit with his Tender Bid. This plan must contain the details of what maintenance will be done (itemized), how often, what resources will be involved, what spares and consumables will be used, how long it will take to perform the work, and the cost breakdown per service for a specific Asset Type. The Service Manager gave service interval recommendations in Schedule 3, but the Contractor can recommend

alternative intervals for consideration and approval by the Service Manager.

After Contract Award the Contractor will be required to expand the Preliminary Maintenance Control Plan to a Health Facility specific plan for each asset type with the assistance of the Service Manager.

#### **GM 3.1 WORK QUALITY**

Maintenance quality control shall be the responsibility of the Contractor who shall introduce a Maintenance Control Plan to assist him in ensuring that all preventative, corrective and breakdown maintenance is performed as described in the Service Information. The Contractor will be responsible to correct any sub-standard work that is discovered after the Contractor has done his work. The rework will be for the Contractor's own account and must be signed off by the Site Representative after completion.

If the Contractor fails to remedy any sub-standard work within the time frame stipulated by the Service Manager, the Service Manager may at his/her discretion appoint another Contractor to execute the repair work. In this case, the replacement Contractor will be paid with the funds that were earmarked for the first Contractor to do the work, and the first Contractor will not be paid for that specific work.

#### GM 3.2 PRELIMINARY MAINTENANCE CONTROL PLAN

A preliminary version of the Maintenance Control Plan, based on the Asset Inventory Data, must be submitted with the Contractor's Tender bid. This plan is a high-level plan on what maintenance tasks the Contractor will be performing on all the equipment across all Health Facilities covered by the Contract and must be completed on the forms of Annexure I. The information from the Preliminary Maintenance Control Plan will be expanded into that of the final Maintenance Control Plan as specified in Section GM 3.3 below. Details contained in this preliminary Maintenance Control Plan shall include:

- A Maintenance Schedule containing all the different tasks that will be performed on all the equipment covered by this Contract, and captured on the Preliminary Annual Equipment Maintenance Schedule Form contained in Annexure I.
- 2. A brief Capacity Statement where the Contractor describes his company's capacity and experience that will be applicable to this Contract. This must include a description and location of his home base (workshop/home/bakkie based, number of staff with qualifications and experience, what staff and/or Sub-Contractors will be used to support on the Contract, available tools and/or specialized equipment, transport capacity and where staff will be based, as well as capacity/ability to repair defective equipment (i.e. overhauling a pump or compressor);
- 3. A detailed Maintenance Task Planning Sheet (See Annexure I) for each of the Minor, Major, and other, service activities priced in the Price List. This Maintenance Task Planning Sheet will describe the pricing and details of scheduled maintenance activities to be performed during services conducted as per the recommendations of the Preliminary Annual Equipment Maintenance Schedule, and will also be used to populate the respective Task Order. These prices must be all inclusive and must include all labour,

service parts, lubricants and consumables, special equipment (if required), accommodation (if applicable) and any travelling and subsistence costs, etc. that might be applicable to do the service. The service price must indicate clearly if more than one piece of equipment will be combined for servicing during a single trip to avoid double payment for Travel and Subsistence related payments by the Employer.

- 4. The service methodology;
- 5. Preliminary grouping of equipment for maintenance purposes as per GM 2.13 (if applicable);
- A breakdown of which sub-Contractors will be used (as per T2.2c), and for what activities, by the Contractor in rendering the services required by this Contract Sub-Contractors must also be registered on the Treasury Central Supplier Database;

#### **GM 3.3 MAINTENANCE CONTROL PLAN**

One Maintenance Control Plan must be compiled for each Health Facility covered by the Contract. The Maintenance Control Plan shall be based on the Contractor's Preliminary Maintenance Control Plan information, and updated with the findings and data from the Functional Condition Assessment process. The Maintenance Control Plan shall be bound in a neat, A4 sized, ring bound document with a cover page and back cover and an original copy presented to the Service Manager. The contents of the document shall be indexed.

The Maintenance Control Plan will become the main plan for all work to be done under this Contract, as per the Main Contract Clauses, after the Contract has been awarded.

When the documents are compiled, the Contractor may reproduce relevant paragraphs from any of the specifications forming part of the Contract documents, or Operating and Maintenance Manuals, but should there be any discrepancies between such paragraphs and paragraphs in the Maintenance Control Plan and those in the Contract documents, those in the Contract documents shall be regarded as being correct and shall apply.

The Maintenance Control Plan shall also contain the following in addition to the items listed in Section GM 3.2:

- 1. Detailed Maintenance Schedule per equipment type, per Health Facility on the **Annual Equipment Maintenance Schedule Asset Specific** Form;
- 2. Remeasured service quantities for the routine services of Schedule 3 in the Price List, based on actual equipment condition and the ability to perform a service on them or not in their current condition. The Contractual payments will be based on these remeasured quantities, accepted by the Service Manager, and not on the original Tendered quantities which might have been based on incorrect information at the time;
- 3. A risk register containing all the foreseen risks that can have an impact on the cost and/or deliverables of this Contract as per the NEC3 Term Service Contract Standard Contract Clauses numbers 11.2(14), 16.1, and 16.4;

- 4. A summary of the repair and maintenance work to be carried out in terms of the Contract giving details of the conditions of the various installations at the facility affected by the activities under the Contract.
- 5. Details of how the Contractor intends to carry out the various types of maintenance work especially breakdown maintenance should breakdowns occur.
- 6. Details of the procedures agreed upon between the Service Manager and the Contractor on how breakdown calls will be handled (Call Centre process).
- 7. A list of organisations and persons directly involved with the Contract or whose requirements must be considered during the entire Service Period. Each person's position within his organisation as well as the applicable phone numbers shall be given. (See T2.2c)
- 8. Details of monthly meetings (dates, times and venues) to be held between the Contractor, Employer Representative and Site Representative.
- 9. Service Sheets and Reports to be submitted after every routine inspection (a copy of all reports, checklists, breakdown records, etc. for each system of an installation shall be kept on the site in a hardcover file);
- 10.A priced spare parts list for relevant spares that might be required for repairs and/or breakdowns for each equipment type. The Employer retains the right to negotiate the listed prices based on price comparisons with like type spares prices solicited through the Tender process;
- 11.A recommended spares list for items that should be held in stock at the facility;
- 12. Copies of the Repair Schedules from the Functional Condition Assessment process that has been approved to proceed;
- 13.An updated Cost Forecast of the estimated final total of the Prices for the whole of the services in consultation with the Service Manager at intervals as stated in the Contract Data Clause 20.5:
- 14. Procedures to address complaints and logged breakdowns.
- 15. Details of reports in electronic format, summarizing all inspections, together with inspection data such as nature of test, names of persons carrying out tests and inspection results. Detail of repairs and replacements, together with testing of repaired equipment shall also be reflected in this report, and shall be obtained from the service sheets.
- 16. Assistance to be given to the Service Manager and Engineering Representative with decisions regarding material, equipment and other recommendations.
- 17. An updated list of the inventory of equipment complete with the ID number (if available), make and model number, serial number, year of manufacture/age and capacity.
- 18. The Maintenance Control Plan shall be upgraded when its contents are no longer representative of actual conditions.

- 19. The Contractor shall check the contents of existing Operating and Maintenance Manuals (if available) and shall update or modify them and then incorporate applicable data into his own manuals. Where no manuals exist, the Contractor shall draw up his own Operating and Maintenance Manuals based on the OEM Operating and Maintenance manuals as per the requirements of GM 2.7.
- 20. The way maintenance data as recorded on service sheets will be captured and processed for submission to the Services Manager, for invoicing, and as part of the maintenance report.

Pertinent data contained in the Operating and Maintenance Manuals may be transferred to the Maintenance Control Plan to make it a document which can be used as an independent handbook for maintenance work in future.

#### **GM4 COMMUNICATION**

The Maintenance Control Plan (Paragraph GM 3.3) will provide, after agreement between the Contractor and the Service Manager, with the assistance of the Site Representative, for the following communication procedure to be implemented:

- 1. The Contractor shall establish a telephone and fax line and a cellular telephone connection to ensure that he can be reached at any time.
- 2. Should the Service Manager determine or suspect that preventative, corrective or breakdown maintenance is required, a call shall be logged through any communication channel available to reach the Contractor as soon as possible. This will be followed up with a Task Order.
- 3. Maximum down times will be as described in Paragraph GM 7.
- 4. All breakdown calls from the Health Facility will be reported to the Call Centre who will follow the procedure as detailed in Section GM 2.1.

#### **GM 5 PERFORMANCE MEASUREMENT**

The Contractor's performance shall be measured against the criteria specified in Section X20 of the Secondary Options Clauses of the Contract and C1.2b Annexure CD.

Poor performance by the Contractor will lead to penalties being imposed by the Service Manager as per X17 and C1.2b Annexure CD, and can lead to early termination of the Contract.

#### GM 6 SPECIAL TESTING OF AN INSTALLATION

An amount has been allowed in the Price List to cover the cost of additional tests that the Service Manager may request at his own discretion from time to time on the equipment and installations covered by this Contract. The Service Manager will have the sole authority to spend the amount or part thereof under sub-paragraph.

The Service Manager reserves the right to select, at random, component equipment and trade practices to be tested by the Contractor or independent authorities for compliance with specifications as specified in this Contract document.

The Contractor shall provide all equipment, tools and instruments required for such testing.

The Service Manager shall upon completion of the tests or inspections issue an inspection report including any corrective actions (if any) to be taken by the Contractor.

The Contracted markup percentage will be paid to the Contractor on the value of each payment made to the approved testing authority if any special testing is ordered by the Service Manager.

#### GM 7 MAXIMUM MAINTENANCE DOWN-TIME

After a breakdown, defect or complaint has been logged the Contractor will be expected to remedy the defect in the system/component with as little delay as possible, notwithstanding the maximum down-time allowed and listed in the following paragraphs or as stipulated in the Task Order. Should the Contractor not respond within the maximum down-time, the Service Manager may arrange, at the cost of the Contractor, for the necessary repair work to be done by others.

The Contractor shall respond to a breakdown registration by traveling to the site to evaluate the breakdown (scope of repair work), estimate the realistic cost as well as downtime and provide feedback to the Service Manager and Site Representative to form the basis of a Task Order.

Should the Contractor not be able to complete the required repair work within the maximum down-time period allowed, it shall be his responsibility to obtain extension of down-time from the Service Manager. The written report shall clearly state the reasons for the extension, as well as the actual extension required.

Extension of down-time will only be granted by the Service Manager if:

- 1. The maximum down-time is unreasonable in relation to the scope of the repair work required.
- The delivery time of a new component/subassembly/machine or spares
  required for the repair of the defective component/subassembly does not
  enable the Contractor to successfully complete the repair work within the
  maximum breakdown down-time allowed.

Should the actual down-time exceed the maximum down-time, the Contractor shall be penalized as per X17 and C1.2b Annexure CD.

PRIORITY	DESCRIPTION	RESPONSE
P1	Emergency (Life Threatening)	Immediate response from the time of logging a call and the emergency to be resolved (at least temporarily) within 8 hours
P2	Urgent	Immediate response from the time of logging a call and to be resolved within 12 hours
P3	Planned Maintenance Repairs	Scheduled Maintenance is to be scheduled and performed within 3 business days of the scheduled date
P4	Emergency Facility Repairs	7 Days planning and execution subject to supply chain regulations

Table 1: Maximum allowable response times

"Maximum down-time" shall mean the period of time allowed to repair a breakdown, and "actual down-time" shall mean the measured period from the instant when the breakdown was reported or located until the installation has been repaired to its functional specification.

A guideline classification for typical P1, P2, P3 and P4 breakdowns for each installation are specified in the Supplementary Specification for each asset type.

The job card (Task Order) issued for the repair will state whether the repair is regarded as P1, P2, P3 or P4 and it will be required of the Contractor to react accordingly.

#### **GM 8 MEASUREMENT AND PAYMENT**

Measurement and payment will be done as per the Secondary Options Clauses of the Contract. See X1, X13, X17, X18, X19 and X20, supplemented by C1.2b Annexure CD.

# **C3.6: HEALTH AND SAFETY SPECIFICATION**

PROJECT NAME	SCHEDULED MAINTENANCE FOR BOILERS IN CLUSTER 2 (CHRIS HANI AND JOE GQABI), CLUSTER 3 (AMATHOLE AND BUFFALO CITY) AND CLUSTER 4 (NMB AND SARAH BAARTMAN) FOR A PERIOD OF 36 MONTHS
TENDER No.	SCMU3-23/24-0742-HO

SEPTEMBER 2023 Version 3

#### TABLE OF CONTENT

- 1. INTRODUCTION AND BACKGROUND
- 2. KEY ROLE PLAYERS
- 3. LIST OF ABBREVIATIONS
- 4. **DEFINITIONS**
- 5. REFERENCES
- 6. PURPOSE OF THE PROJECT SPECIFIC HEALTH & SAFETY SPECIFICATION (PSHSS)
- 7. IMPLEMENTATION OF THE PROJECT SPECIFIC HEALTH & SAFETY SPECIFICATION (PSHSS)
- 8. APPLICATION
- 9. REQUIREMENTS AT TENDER STAGE
- **10. GENERAL REQUIREMENTS**
- 11. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT
- 12. GENERAL RISK MANAGEMENT
- 13. CCUPATIONAL HEALTH
- 14. RULES OF CONDUCT
- 15. SAFETY RULES WITH RESPECT TO WORK TO HEALTHCARE FACILITIES
- **16. PROJECT SPECIFIC RISKS**

# 1. INTRODUCTION AND BACKGROUND

- 1.1. The Construction Regulations No. 37305 of 7<sup>th</sup> February 2014 requires the Client to prepare a pre-construction Health and Safety Specification, with all existing risks identified.
- 1.2. The Eastern Cape Department of Health (ECDoH) is tasked to provide Healthcare operational facilities across the Eastern Cape.
- 1.3. The ECDoH has a responsibility to limit its risk by ensuring a zero tolerance and best practice approach to Contractors and those affiliated to a construction project. Thus, a high premium is placed on the health and safety (H&S) of ECDoH stakeholders, which include its employees, professional service providers, public and its physical assets.
- 1.4. The responsibilities that the Department and relevant stakeholders have toward its employees are captured in, but not limited to this document. The responsibilities stem from both moral, civil and a variety of legal obligations.
- 1.5. The Principal Contractor is to take due cognisance of the above statement.
- 1.6. The ECDoH, as the Client and where there is an appointed H&S Agent on its behalf, shall provide a Project Specific Health & Safety Specification (PSHSS) for the project and provide the Principal Contractor/s making a bid or appointed to perform construction work for the project, or parts thereof such documentation.
- 1.7. This Health and Safety Specification complies with the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations of February 2014.
- 1.8. This Health and Safety Specification is to be used as a management tool to comply with the Occupational Health and Safety Act.
- 1.9. This Specification has been prepared by the Eastern Cape Department of Health.

#### 2. **KEY ROLE PLAYERS**

# 2.1 Client

2.2 Principal Contractor

#### 3. LIST OF ABBREVIATIONS

AIA Approved Inspection Authority

BoQ Bill of Quantities

CC Compensation Commissioner

CR Construction Regulations

DMR Driven Machinery Regulations

DoL Department of Labour

FEMA Federated Employers Mutual Association

GAR General Administration Regulations

GSR General Safety Regulations

HCSR Hazardous Chemical Substances Regulations

HIRA Hazard Identification Risk Assessment

H&S Health and Safety

ER Engineer's Representative

LI Labour Intensive

OH Occupational Health

OHSA Occupational Health and Safety Act No. 85 of 1993 (as amended)

OHSS Occupational Health and Safety Specification
PSHSS Project Specific Health and Safety Specification

PC Principal Contractor

PPE Personal Protective Equipment

SANS South African National Standards (Authority)

SDS Safety Data Sheet

SMME Small, Micro, Medium Enterprise

SWP Safe Work Procedure

# 4. **DEFINITIONS**

4.1. The definitions used will be those set out in the Regulation Gazette N0 37305 of 7<sup>th</sup> February 2014 with the following additions:

#### 4.1.1. Client:

The Head of Department, Eastern Cape Department of Health

# 4.1.2. Designer:

Means a competent person appointed by the Client as Agent to design, supervise and monitor construction on their behalf.

# 4.1.3. **Hazard:**

Source of exposure to danger.

# 4.1.4. Hazard Identification and Risk Assessment (HIRA) and Risk Control:

Means a documented plan, which identifies hazards, assesses the risks and details the control measures and safe working procedures which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

# 4.1.5. Health and Safety Agent:

Means any person who acts as a representative for the Client in managing the overall health and safety work as their responsible person.

#### 4.1.6. Health and Safety Plan:

Means a documented plan which answers to the Project Specific Health and Safety Specification; including all the supporting documentation that indicate how the Principal Contractor or Contractor plans to manage H&S for the duration of the Contract.

# 4.1.7. Induction Training:

Means once off introductory training on general health and safety issues given to all employees and visitors to the site before commencement of work on site.

#### 4.1.8. **Risk**:

Means the probability or likelihood that a hazard can result in injury or damage.

# 4.1.9. **Regulation/s:**

Shall mean the relevant regulation/s promulgated in terms of the Occupational Health and Safety Act, No. 85 of 1993 and the Construction Regulations No. 37305 of 7<sup>th</sup> February 2014.

#### 4.1.10. Site:

Means the area in the possession of the Principal Contractor for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas, which are reasonably required for the activities for the Principal Contractor and approved for such use by the Designer.

#### 4.1.11. The Act:

Means, unless the context indicates otherwise, the Occupational Health and Safety Act, No. 85 of 1993 and Regulations promulgated thereunder, as amended.

# 5. **REFERENCES**

- 5.1 Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended).
- 5.2 Compensation for Injury and Occupational Diseases Act No. 100 of 1993 (as amended)
- 5.3 The Preferential Procurement Policy Framework Act 2000 and the Preferential Procurement Regulations 2017, the General Conditions of Contract (GCC)
- 5.4 Construction Regulations No. 37305 of 7th February 2014
- 5.5 SANS Code 10400 and others that are applicable.

# 6. PURPOSE OF THE PROJECT SPECIFIC HEALTH AND SAFETY SPECIFICATION (PSHSS)

- 6.1. The PSHSS is a performance specification to ensure that the Client and any bodies that enter into formal agreements with the Client, Principal Contractors and Contractors achieve an acceptable level of OHS performance.
- 6.2. To assist in achieving compliances with the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations of February 2014, to, as far as is practical, reduce or eliminate incidents or injuries.
- 6.3. No advice, approval of any document required by the PSHSS, such as hazard identification and risk assessments, or any other form of communication from the Client shall be

- construed as acceptance by the Client of any obligation that absolves the Principal Contractor from achieving the required level of performance and compliance with legal requirements.
- 6.4. Furthermore, there is no acceptance of liability by the Client, which may result from the Principal Contractor failing to comply with the PSHSS, i.e. the Principal Contractor remains responsible for achieving the required performance levels.
- 6.5. A Mandatary Agreement in terms of Section 37.2 of the OHSA will be signed between parties prior to any works commencing.
- 6.6. The PSHSS highlights the aspects to be implemented over and above the minimum requirements of current legislation.
- 6.7. Requirements may be changed should new risks or issues are identified that could not have been foreseen during the design phase of the project, or during the construction phase. Any new legislation or standards (legislated or determined by the (ECDoH) that are promulgated or accepted during the contract will automatically be applied.
- 6.8. Environmental management shall receive due attention as per the requirements of the Environmental Control Officer (ECO) but will be managed by the ECO directly.
- 6.9. The Contractor shall use this Specification as a basis for the drafting of his and any Subcontractors' Construction Health and Safety Plans.
- 6.10.The Specification sets out the requirements to be followed by all Contractors so that the Health and Safety of all persons who may be affected by the Construction Project will receive proper priority.
- 6.11.The Project Specific Risks that have been identified have been tabulated in this Specification.

# 7. IMPLEMENTATION OF THE PROJECT SPECIFIC OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS (PSHSS)

- 7.1. The project specific H&S specification (PSHSS) forms an integral part of the Contract, and PCs are required to make it an integral part of their Contracts with Contractors and Suppliers.
- 7.2. A PSHSS will be available for each level of Contract and Contractor and must be complied with.
- 7.3. This specification must be read in conjunction with the OHSA, Regulations thereto (as amended) and any other standards relating to work being done and ensure compliance thereto.
- 7.4. The information relative to the scope of the project, the works etc. are detailed in the tender, are to be considered when developing the H&S plan and associated documentation.

- 7.5. The summary of risks is included in the PSHSS.
- 7.6. The OHSA S.37.2 Mandatory Agreement must be fully completed by the PC, supplied by the Client.
- 7.7. No work may commence without written approval of the H&S plan by the Client or client's Agent.
- 7.8. Should there be changes in the scope of works, an amended PSHSS may be issued.
  - 7.8.1. Where amended PSHSSs are issued, the PC will be required to ensure a resubmission of an amended H&S plan for approval.
  - 7.8.2. Further to this, the PC must ensure that similar information must be provided as it applies to the works to all their Contractors, within 5 working days following notification thereof of such changes.
- 7.9. Non-conformances will be issued, and penalties or work stoppage will be issued where appropriate.
- 7.10. The Principal Contractor must forward a copy of the Health and Safety plan to all Subcontractors to enable them to prepare their own Health and Safety plans.

# 8. APPLICATION

- 8.1. This Specification is a compliance document drawn up in terms of the Occupational Health and Safety Act No. 85 of 1993, and the Construction Regulations of February 2014, and is therefore binding on the Contractor as well as the client.
- 8.2. All Contractors are to comply with the conditions of this Health and safety Specification.

# 9. **REQUIREMENTS AT TENDER STAGE**

- 9.1 Adequate pricing for H&S is required, and the appropriate section in the BoQ is to be completed.
  - 9.1.1. Failure to do so could result in the Tender being regarded as non-responsive.

# 10. GENERAL REQUIREMENTS

- 10.1.Summary of Risks identified during planning phase.
  - 10.1.1. The intention of the summary of findings from the project risk assessment is to highlight the residual risks identified during the planning phase.
  - 10.1.2. The full project risk assessment can be found in the tender document.
  - 10.1.3. The summary of risks provided is to point the contractor towards some risks he may not be aware of during tendering stage and while developing his formal risk assessments for the project.

- 10.1.4. The project risks and the management thereof should be included in the Principal Contractors (PC) risk assessments.
- 10.1.5. Where there are other Contractors appointed to do work, the PC is to ensure that Contractors include such information in their risk assessments.
- 10.1.6. The summary is to be developed following the completion of the project risk assessment, and to include the residual risks as they apply to the project.

# 10.2. Hazard Identification and Risk Assessment (HIRA)

- 10.2.1.At the tender briefing session, the client will highlight any Project Specific hazards or risks that may affect the work.
- 10.2.2. These hazards or risks are listed under section 18 of this Specification.
- 10.2.3. Tenderers are also advised to notify the client of any other risks or hazards that have not previously been identified.

# These risks are to be recorded and a recommended procedure for addressing each item agreed on and recorded.

- 10.2.4. The Principal Contractor is to conduct inspections of all BOILERS AND CALORIFIERS machines and associated tools and equipment before the commencement of the works.
- 10.2.5. The Principal Contractor shall ensure that all Contractors and workers are informed, instructed and trained by a competent person regarding any hazards, risks and related safe work procedures as part of the Induction process before any work commences and thereafter at regular intervals as the risks change and as new risks develop.
- 10.2.6. Proof of this training must be kept for inspection by the Client or Client's Representative.
- 10.2.7. The Principal Contractor shall be responsible for ensuring that all persons who could be negatively affected by the operations are informed and trained according to the hazards and risks and are conversant with the safe working procedures, control measures and other related rules (toolbox talk strategy to be implemented).
- 10.2.8. The format used for the risk assessment must make provision for the following information;
  - 10.2.8.1. Reference Number
  - 10.2.8.2. Project Name
  - 10.2.8.3. Identification of task assessed
  - 10.2.8.4. Date
  - 10.2.8.5. Risk assessment team & designation

- 10.2.8.6. Approval of risk assessment team.
- 10.2.8.7. Risk rating with matrix
- 10.2.8.8. Review date
- 10.2.8.9. Task steps
- 10.2.8.10. What can go wrong (Hazard)
- 10.2.8.11.The result (Risk)
- 10.2.8.12. Risk rating
- 10.2.8.13. Preventative Action (Control Measures)
- 10.2.9. The Principal Contractor is to ensure that all Hospital Staff and Management personnel that will be affected by the works are fully informed of the risks and hazards associated with the works.

# 10.3.Specified Hazardous Chemical Agents

10.3.1. Material Safety Data Sheets (MSDS) are to be provided for those products that will be utilised by the contractor.

# 10.3.2. Hazardous and potential situations

10.3.2.1. The Principal Contractor shall immediately notify other Subcontractors as well as the Client of any hazardous or potentially hazardous situations that may arise during performance of the contract.

# 11. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

# 11.1.**Scope**

- 11.1.1. The Specification covers the requirements for eliminating and mitigating incidents and injuries during the Scheduled Maintenance of Boilers And Clarifier's Equipment At Cluster 2,3 & 4 Health Facilities
- 11.1.2. The scope addresses legal compliance, hazard identification, risk assessment, risk control, and promoting a Health and Safety culture on the project.
- 11.1.3. The Specification also provides for the protection of those persons other than the persons at work.

# 11.2. Scope of Works

This specification is for the repair, maintenance and proper functioning of the listed Boilers and Calorifiers equipment installations for the duration of the Contract period:

#### Cluster 2,3 & 4

<b>Equipment Type</b>	<b>Grand Total</b>
Boilers	18
Calorifiers	118
<b>Grand Total</b>	136

Details of the work required shall be as listed in the Price Lists which have been sub-divided into the following categories:

SCHEDULE 1: FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO

ALL WORK

**SCHEDULE 2:** FUNCTIONAL REPAIR SCHEDULE

**SCHEDULE 3: MAINTENANCE SERVICE SCHEDULE** 

SCHEDULE 4: TERM REPAIRS SUBJECT TO APPROVAL OF QUOTATION FOR THE WORKS

# 11.3. Structure and Organisation of H&S Responsibility

Principal Contractor to provide a proper OHS organogram.

# 11.4. Health and Safety Plan Framework

The H&S aspects related to the project outlined in the previous sections are to be considered when drawing up the H&S Plan.

The PC is required to demonstrate competence by providing an H&S system that will address the requirements of the project.

# 11.5. Appointment of Competent Personnel

- 11.5.1. The CEO (OHSA S16.1) of the PC will take overall responsibility for the appointment of competent site staff for the duration of the project. Should the CEO not be personally involved in the project, the H&S responsibilities are to be delegated to the Site Agent (OHSA 16.2). Knowledge and training in H&S is required, and certificates indicating H&S training as well as experience to be included in CVs.
- 11.5.2. All other legal appointments are to be made with relevance to the type of work required.
- 11.5.3. All technical method statements are to be generated by senior site personnel, and the appropriate risk assessments developed therefrom in conjunction with the H&S Officer.
- 11.5.4. The Occupational Health and Safety Plan shall include the following, but is not limited to the following key appointments:

#### 11.6. Maintenance Manager

- 11.6.1. Competent Maintenance manager will be appointed to manage part or all the works and have training and/or experience in the area of responsibility.
- 11.6.2. Curriculum Vitae (CVs) and competency certificates are to be submitted for approval by the Client.
- 11.6.3. The Manager will be held responsible for the safety of working teams and subordinates.

11.6.4. The Principal Contractor must have in his employ a full-time competent person to manage all health and safety matters pertaining to this contract.

The person must possess the following competencies:

- Certificate for OHS legal training.
- Certificate for risk assessment and incident investigation training -certified copies to be provided.
- Supply a detailed CV of the health and safety person.
- Certified copies of certificates to be provided (no longer than 3 months of certification)

# 11.7. Appointment of Competent Contractors

- 11.7.1. The Principal Contractor is to ensure compliance with the Client's minimum standards and all legislative requirements.
- 11.7.2. The Principal Contractor is responsible to ensure that competent Contractors are appointed to carry out the work.
- 11.7.3. The same H&S standards required of the PC are to be applied to all Contractors.

# 12. GENERAL RISK MANAGEMENT

# 12.1. Health Risks and Medical Surveillance

- 12.1.1. The appropriate SDSs are to be obtained for all products and used to develop the H&S documentation as they relate to the works. The PC is to ensure and supervise safe use of the product and their inclusion into the risk assessment.
- 12.1.2. Workers will be exposed to noise, dust, biological, safety including ergonomic risks etc. from the general nature of the works.
- 12.1.3. All workers (including those of Contractors) are required to be in possession of a medical certificate of fitness issued by the Occupational Medical Practitioner prior to commencing work.

# 12.1.4. Lung Function test and audiograms a must be done in Medical.

- 12.1.5. Employees required to perform work at heights or from fall risk position must be medically fit to perform such work, such employee's medicals must specify "Fall Risk" or "Working at heights" in the exposure section of the annexure 3 template.
- 12.1.6. Annual medical surveillance is required (unless identified as being required more frequently), as well as an exit medical.
- 12.1.7. Arrangements for keeping medical records for the required time are to be noted.
- 12.1.8. It is preferable that the PC has a medical surveillance plan.
- 12.1.9. When working at a TB Hospital we need:
  - 1. Proper ventilation when working in areas.
  - 2. FFP 2 Mask to be worn when working in areas.
  - 3. Medicals must be done for all with Lung function test as a must.
  - 4. Employees must wear mask when working near patients areas.
  - 12.1.10. Failure to do so will be considered a serious offence.

# 12.2.General Environmental Conditions

- 12.2.1.Compliance with the Environmental Regulations (as amended), among others is required.
- 12.2.2. Copies of the relevant reports and actions taken in respect of these are to be placed in the H&S file.
- 12.2.3. Any spillages of substances which could be toxic to persons must be dealt with adequately. The Contractor must include his spillage removal system in the OHS Plan and waste management plan.
- 12.2.4. Failure to do so will be considered a serious offence.

# 12.3. Noise Risks

- 10.3. Contractor will be required to comply with the requirements of the Noise Induced Hearing Loss Regulations.
- 11. Audiometric testing of all workers is noted as required in the medical surveillance programme workers prior to work commencing.
- 12. Audiometry records are to be available in the H&S file.
- 13. Suitable SANS approved hearing protective equipment shall be issued and worn where noise levels are identified as equal to or greater than 85 db.
- 14. Failure to do so will be considered a serious offence.

# 12.4. <u>Emergency Procedures</u>

- 12.4.1. The Principal Contractor must prepare a detailed emergency procedure manual for approval by the Client prior to commencement of work on the site.
- 12.4.2. It is advised that the system should be simple and easy for any worker to follow.
- 12.4.3. All working teams should have knowledge and skills for emergency preparedness.
- 12.4.4. The emergency plan is to ensure the inclusion of local service providers where possible.
- 12.4.5. The general principals of emergency management are to be applied as it applies to the hierarchy of control and management.
- 12.4.6. The Contractor will provide the client with the following information regarding their response plans for dealing with emergencies:
  - 12.4.6.1. Contact person
  - 12.4.6.2. Details of emergency services
  - 12.4.6.3. Action to be taken in event of an emergency:

#### 12.4.6.3.1. Fire

- 12.4.6.3.2. Accident
- 12.4.6.3.3. Damage to hospital services
- 12.4.6.3.4. Hazardous substances
- 12.4.6.4. Persons to be notified in the event of an accident or emergency:

12.4.6.4.1. Client

# 12.5. First Aiders and First Aid Equipment

- 12.5.1. At least one competent, trained level 3 First Aiders is to be formally appointed for the project.
- 12.5.2. First aider is to be available at all times and be able to cover each working teams.
- 12.5.3. Appropriately stocked first aid kits, at least to the requirements of the Annexure to the GAR, are to be available at all times to assure continual availability and access on site.

# 12.6.Incident Management and Compensation Claims

- 12.6.1. The PC will ensure there is a management system to investigate all incidents.
  - 12.6.1.1. All serious incidents involving any form of disabling injury or fatality are to be reported to the Client immediately.
  - 12.6.1.2. A summary of incidents is to be included in the monthly report.
- 12.6.2. Failure to comply with emergency provisions will be considered a serious offence, and the operation or project may be stopped if deemed inadequate for the work at the time of assessment or site inspection.

# 12.7.Personal Protective Equipment (PPE) and Clothing

- 12.7.1. The PC is to provide a procedure as an addendum to indicate how PPE is managed within the Company.
- 12.7.2. The wearing of the identified SANS approved PPE at all times is non-negotiable.
- 12.7.3. Failure to comply will result in penalties being applied.

# 12.8. Occupational Health and Safety Signage

- 12.8.1. On-site H&S signage is required.
  - 12.8.1.1. Signage shall be posted up at working areas, or other potential risk areas/operations.
  - 12.8.1.2. These signs shall be in accordance with the requirements of the General Safety Regulations or SANS requirements as amended.

- 12.8.2. Signs shall be posted at areas of work on site indicating that maintenance, repair work is being conducted and that persons should take note of H&S requirements.
- 12.8.3. Failure to comply will result in penalties being applied.

# 12.9. Instruments and Test Equipment

12.9.1 All instruments and test equipment used shall be provided by the Principal Contractor and shall be accurately calibrated and maintained in good working order. Examples thereof are: Multimeter for checking electrical system.

# 12.10. Induction of Employees and Visitors, General H&S Training

- 12.10.1. A formal induction programme is to be submitted as an addendum for approval with the H&S plan.
  - <u>12.10.1.1.</u> Inductions must be carried out for all workers and visitors (including Client) to the site.
- 12.10.2. Pre-task training is required to ensure workers are familiar with the risks and H&S measures of the work or tasks to be done.
  - 12.10.2.1. Such training is to be done at least weekly.
  - 12.10.2.2. Records of inductions and pre-task training are to be kept in the H&S file.
- 12.10.3. Hospital/Facility rules -please see Annexure A- this should not be viewed as exhaustive, as each facility/hospital has its different hazards and risks.
- 12.10.4. From a maintenance perspective, each and every time the PC visits the facility/hospital the PC needs to provide and have available a list of who will be working on site and this will need to be verified by the relevant facility/hospital representative.
- 12.10.5.

#### 12.11. Working at Heights

- 12.11.1. A fall protection plan is to be available and supplied as an addendum to the H&S plan.
- 12.11.2. The fall protection plan must be appropriate for the project.
- 12.11.3. Method statements, appropriate risk assessments, safe work procedures and training are to be available prior to work commencing.
- 12.11.4. Should part of the works be contracted out, competent Contractors are to be appointed and submit documentation according to the project requirements.

#### 12.12. Mechanical and electrical installations

12.12.1. All mechanical installations are to be carried out in conformity with the manufacturer's instructions.

- 12.12.2. Method statements and risk analyses must be compiled for each type of installation.
- 12.12.3. A competent person must be designated to supervise the work.

# 12.13. Hand tools

- 12.13.1. No handmaid or damaged tools may be used on site.
- 12.13.2. Hand tools may only be used for its intended purpose.
- 12.13.3. A competent person must be appointed to inspect hand tools monthly.
- 12.13.4. Inspections need to be recorded on a register and each tool identified with a unique number.

# Inspection of equipment and tools.

The following items of equipment must be regularly inspected and maintained, and appropriate records kept.

- 1.1. First Aid dressing registers
- 1.2. Fire equipment
- 1.3. Portable electrical equipment
- 1.4. Stacking and storage inspections
- 1.5 Hazardous
- 1.6. Chemical Substances (HCS)
- 1.7. Ladders
- 1.8. Construction vehicles and mobile plant.
- 1.9. Health and Safety Representatives checklists.

# **12.14.** Ladders and ladder work

- 12.14.1. The Principal Contractor shall appoint a competent person in writing to inspect all ladders monthly and record such findings in a register.
- 12.14.2. Ladders are to extend one meter above a landing and must be secured at the top and have a secure, non-slip base.
- 12.14.3. All ladders that do not comply with Health and Safety standards are to be removed from the site immediately.

#### 13. OCCUPATIONAL HEALTH

# 13.1. Communication on Site

- 13.1.1. All H&S communication during the project between the Client and the PC will be done in writing, including the issue and responses to non-conformances and H&S audit results.
- 13.1.2. Failure to address issues timeously will be considered a serious offence.

#### 13.2. Care of Workers on Site (Welfare)

The Principal Contractor will need to liaise this at each hospital or health care facility or alternatively make provision for their employees.

#### 13.3. Discipline, Alcohol and Substance Abuse

- 13.3.1. All employees (management included) are to follow instructions given in the interest of H&S.
- 13.3.2. Disciplinary action is to be imposed on those who do not follow such instructions or company rules or policies.

13.3.3. No person is allowed to work or access site if under the influence of alcohol or other substances that could impact on their own or others safety.

# 13.4. WORKING IN LIMITED SPACE

The Principal Contractor needs to plan work properly in ensuring no disruption and or damage to Client property.

# 13.5. LOCK OUT PROCEDURES

- 13.5.1. The Principal Contractor must provide a detailed lock out procedure prior to any work commencing.
- 13.5.2. The procedures must be used to ensure that all energy sources are isolated and locked out before employees perform any servicing or maintenance activities.

# 13.6. MEDICAL SURVEILLANCE

13.6.1. All employees of the PC are required to be in possession of a medical certificate of fitness prior to commencing work issued by an Occupational Medical Practitioner.

# 13.7. WASTE MANAGEMENT

- 13.7.1. The Principal Contractor is to ensure that any waste generated on site is to be disposed off the same day.
- 13.7.2. The waste should not be disposed off on the facility/hospital premises.
- 13.7.3. After completing work, contractor to make sure the areas are neat and tidy.

# 13.8. NON CONFORMANCES

13.8.1. Should, at any time, the works, or part of the works, be stopped due to unsafe acts or non-compliance with the clients Spec or PC's H& S Plan: the PC shall have no claim for the extension of time or any other compensation.

# 13. Rules of Conduct.

- 13.1.1. Workers MAY NOT partake, possess or sell drugs or alcoholic beverages on site.
- 13.1.2. Any employee or visitor whose action and demeanour show symptoms of possible narcosis or drunkenness shall be removed from site.
- 13.1.3. Workers MAY NOT indulge in practical jokes, horseplay, fighting or gambling.
- 13.1.4. Workers MAY NOT destroy or tamper with safety devices, symbolic signs or wilfully and unnecessarily discharge fire extinguishers.
- 13.1.5. Workers MAY NOT bring onto site or have in their possession a firearm or lethal weapon.
- 13.1.6. Workers MAY NOT assault, intimidate or abuse any other person.
- 13.1.7. Workers MAY NOT operate construction equipment (vehicles or plant) without the necessary training and authorisation.
- 13.1.8. Workers MAY NOT display insubordination toward any Supervisor, Foreman or Manager in respect to carrying out of properly issued instructions or orders for Health and Safety reasons.

- 13.1.9. Workers MAY NOT enter any area where they have no business unless authorised to do so by the person in charge.
- 13.1.10. Workers MAY NOT negligently, carelessly or wilfully cause damage to property of others.
- 13.1.11. Workers MAY NOT refuse to give evidence or deliberately make false statements during investigations.
- 13.1.12. Workers MAY NOT work on site without appropriate induction training & proof thereof.
- 13.1.13. The Contractor MAY NOT start any task without performing a risk assessment & training of the employees who will be involved in the work.
- 13.1.14. All workers are to display their identification tags at all times.
- 13.1.15. NO SMOKING will be permitted within the hospital facilities grounds unless in a designated smoking area in the site camp.
- 13.1.16. Workers are NOT to interfere with the duties of the hospital, its staff, patients or visitors.
- 13.1.17. The Principal Contractor shall keep and maintain Health and Safety records to demonstrate compliance with this Specification, with the Occupational Health and Safety Act, and with the Construction Regulations.
- 13.1.18. The Principal Contractor shall ensure that all records of incidents/accidents, emergency procedures, training, inspections, audits, etc., are kept in the Health and Safety file.
- 13.1.19. The Principal Contractor shall ensure that all Subcontractors maintain the Health and Safety file.

# 13.2. Compliance with the Rules of Conduct.

- 13.2.1. The Principal Contractor, Subcontractors and all employees under their control, including any visitor brought onto site must adhere to the Rules of conduct on site, as listed above.
- 13.2.2. These Rules of Conduct must also be adhered to by any of the following who visit the Site:
- 13.2.2.1. Professional Team
- 13.2.2.2. Hospital Management and Staff
- 13.2.2.3. ECDoH Employees
- 13.2.2.4. Direct Contractors

- 13.2.2.5. Trade Representatives
- 13.2.2.6. Any other visitors to the Site.

# 14. SAFETY RULES WITH RESPECT TO WORK TO HEALTH CARE FACILITIES

- 14.1. All persons on the premises shall obey the ECDoH & facilities' Health and Safety rules, procedures and practices.
- 14.2. All work shall be carried out within normal working hours except certain essential works which may need to be carried out after hours or over weekends arrangements for such work to be agreed in advance between the Contractor and the facility.
- 14.3. Emergency / Firefighting equipment belonging to the premises is not to be interfered with.
- 14.4. Emergency Exits and Escape Routes, including Temporary Escapes Routes are not to be obstructed.
- 14.5. No persons shall carry out or initiate an unsafe / unhygienic act or operation whilst on the premises.
- 14.6. Workers are not to interfere with the duties of the hospital, its staff, patients or visitors.
- 14.7. The Contractor shall maintain good housekeeping standards in the areas being worked on throughout the duration of the contract.
- 14.8. The health facility reserves the right to search any person entering or leaving the health facility premises.
- 14.9. All workers must wear proper identification labels at all times The Contractor will be asked to remove persons without identification from the premises.
- 14.10. The Contractor will not be permitted to use any tools or equipment belonging to the health facility.
- 14.11. The Contractor is to ensure that noise is kept to a minimum so as not to unduly interfere with the functioning of the adjacent facilities.
- 14.12. The Contractor is to ensure that dust from the works is properly contained so as not to cause problems with the normal functioning of the adjacent facilities.

# 15. PROJECT SPECIFIC RISKS

- 15.1. Risks applicable to the planned maintenance work at the various health facilities.
  - 15.1.1. Working at the existing health facility site next to a building that contains essential medical supplies and will remain in operation throughout the contract period.
  - 15.1.2. The existing health facility is a high-risk security area and the Contractor must ensure that the security of the areas not being worked on is not compromised.

- 15.1.3. The Contractor will have to coordinate with the health facility Management and Staff regarding the switching on and or off the mains supply during works should need arise.
- 15.1.4. Where necessary the Contractor is to provide temporary security screens to ensure the security of areas being worked on.
- 15.1.5. The Contractor having to access the work areas through the existing Hospital building/corridors/walkways that are functional.
- 15.1.6. The transporting of materials in and out of the work areas without compromising the security of the remaining occupied areas.
- 15.1.7. The limiting of noise maintenance and repairs activities.
- 15.1.8. Keeping the escape routes clear and unobstructed.
- 15.1.9. Working in confined spaces.
- 15.1.10. Ergonomic risks from the maintenance activities.
- 15.1.11. Safety risks from live electricity.
- 15.1.12. Falls from heights when doing maintenance activities.
- 15.1.13. Biological risks from the BOILERS AND CALORIFIERS equipment with infectious linen.
- 15.1.14. Environmental risks from the oil spillages, improper disposal of medical waste.

#### 16. HEALTH AND SAFETY FILE

- **16.1.** The documentation submitted and approved following the awarding of the contract will be used to form the H&S file.
- **16.2.** The H&S file is required to be laid out in a logical manner, and documentation filed within the file is to be easily accessible.
- **16.3.** The following completed information shall be included (but not be limited to) as part of the index:
  - 16.3.1. The PSHSS;
  - **16.3.2.** The H&S Plan and the approval by Client;
  - 16.3.3. Appointment by Client;
  - 16.3.4. Mandatory agreement with Client;
  - **16.3.5.** Detailed list of Contractors with contact details, appointments, Mandatories etc., H&S specifications issued;
  - **16.3.6.** Record of Competencies (CVs) and appointments;

<b>16.3.8.</b> Permits;			
16.3.9. Method statements;			
16.3.10.	Risk assessments;		
16.3.11.	Safe work procedures;		
16.3.12.	Emergency and injury management;		
16.3.13.	Material Safety data sheets		
16.3.14.	Medical surveillance records;		
16.3.15.	Registers;		
16.3.16.	Records of audits, minutes etc.		
16.3.17.	Temporary electrical installations where applicable.		
16.3.18.	Employee records (relevant for the project).		

**16.3.7.** Training Records;

RESPONSIBILITY	SIGNATURE	DATE
CLIENT'S AGENT SIGNATURE:		
CLIENT SIGNATURE:		

# **PART C4: SITE INFORMATION**

#### **C4.1: SITE INFORMATION**

PROJECT NAME	SCHEDULE MAINTENANCE OF BOILERS AND CALORIFIERS IN CHRIS HANI & JOE GQABI, BCM & AMATOLE, AND SARAH BAARTMAN & NELSON MANDELA REGIONS – HEALTH FACILITIES (36 MONTHS)
TENDER No.	SCMU3-23/24HO

#### **C4 Site Information**

#### 1. GENERAL

- a) The Standard for Uniformity in Construction Procurement published in terms of the Construction Industry Development Board (CIDB) Act, 2000 (Act no 38 of 2000), the Standardized Construction Procurement Documents for Engineering and Construction Works as issued by the CIDB and any other relevant documentation pertaining thereto must be studied and all principles in this regard must be applied to all procurement documentation, practices and procedures.
- b) The Supplier must acquaint themselves fully with all matters pertaining to this section in order to enable prospective Suppliers to price for all eventualities.
- c) All hospitals are functional, caution must be taken in terms of contractor movement and noise.
- d) The employer will advise and confirm where the stripped materials need to be disposed.

#### 2. LIST OF FACILITIES IN CLUSTER 2,3 & 4

Item no.	FACILITY	REGION
1	BISHO HOSPITAL	Buffalo City Health sub-District
2	BUTTERWORTH HOSPITAL	Mnquma Local Municipality
3	COFIMVABA HOSPITAL	Intsika Yethu Local Municipality
4	Cradock Hospital	Inxuba Yethemba Local Municipality
5	Frontier Hospital	Enoch Mgijima Local Municipality
6	Komani Hospital	Enoch Mgijima Local Municipality
7	Livingstone Hospital	Nelson Mandela Health Sub-District
8	Tower Hospital	Raymond Mhlaba Local Municipality



# PART C4.1a

# EASTERN CAPE DEPARTMENT OF HEALTH

# SUPPLEMENTARY TECHNICAL SPECIFICATION FOR THE

**GENERAL MAINTENANCE AND REPAIRS** 

OF

**BOILERS AND STEAM OPERATED CALORIFIERS** 

**AT** 

**VARIOUS HOSPITALS AND HEALTH FACILITIES IN** 

CLUSTER 2,3 & 4
(CHRIS HANI & JOE GQABI, BCM & AMATHOLE AND
SARAH BAARTMAN AND NESLON MANDELA REGIONS)

OF THE EASTERN CAPE PROVINCE
FEBRUARY 2024

#### JUNE 2023

# SUPPLEMENTARY TECHNICAL SPECIFICATION FOR REPAIRS TO BOILERS AND STEAM OPERATED CALORIFIERS

Tab	le	of	C	on	te	nt	ts
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SS1	GENERAL	3
SS 2	EQUIPMENT INSTALLATION	
SS 3	SCOPE OF WORK	3
SS 4	INSPECTION OF THE SITE	4
SS 5.	STATUTORY AND REGULATORY REQUIREMENTS	5
SS 6.	GENERAL REQUIREMENTS FOR REPAIR AND MAINTENANCE	
	CONTRACTS	5
SS 7	ROUTINE SERVICING AND MAINTENANCE WORK	4
_	TRAINING OF THE DEPARTMENT'S MAINTENANCE STAFF	
_	TRAINING OF DEPARTMENTS OPERATING STAFF	
	COMPETENT PERSON ON SITE	
	CLASSIFICATION OF BREAKDOWNS	
SS 12.	PENALTIES	g
SS 13.	SPECIAL SAFETY, HEALTH, ENVIRONMENTAL AND QUALITY	
	REQUIREMENTS	
SS 14.	SPECIAL TOOLING REQUIREMENTS	9

# SUPPLEMENTARY TECHNICAL SPECIFICATION FOR THE

#### **GENERAL MAINTENANCE AND REPAIRS**

**OF** 

# BOILERS AND STEAM OPERATED CALORIFIERS

#### SS 1. GENERAL

This specification is for the repair and fixed term maintenance of Boilers and steam operated calorifier installations at various hospitals of Cluster 2, 3 & 4 (JG & CH; BCM & ADM and NM & SBM).

This specification shall be read in conjunction with the Service Information which will include the Standard Specifications for the General Maintenance and Repairs to Electrical and Mechanical Installations, Standard Technical Specifications that may be applicable, the Supplementary Specification, the Operating and Maintenance Manuals (where applicable) and the Maintenance Control Plan, as well as the General Conditions of Tender and all Schedules and Drawings forming part of the Tender.

Where specifications and/or drawings are at variance this Supplementary Specification will have preference over both the Standard Specifications and the Drawings.

Maintenance and servicing shall be carried out strictly as stated in the service schedules and after each service a copy of the service schedule duly completed and signed shall be submitted to the responsible Service Manager.

#### SS 2. EQUIPMENT INSTALLATIONS

The following equipment installations shall be maintained and repaired as part of this contract:

- 1. Boiler;
- 2. Boiler water Treatment Plant and associated Piping and storage;
- 3. Boiler Feed Water supply;
- 4. Boiler Fuel Feed Plant;
- 5. Boiler Fuel Storage Plant;
- 6. Boiler House Hot wells;
- 7. All steam pipes, valves and manifolds;
- 8. Steam operated calorifiers and related fixtures and fittings.

#### SS 3. SCOPE OF WORK

This specification is for the repair, maintenance and proper functioning of Boiler and steam operated calorifier installations for the duration of the Contract period, in the following Health facilities:

- 1. Bisho Hospital (10 Units)
- Butterworth Hospital (25 Units)
- 3. Cofimvaba Hospital (9 Units)
- 4. Cradock Hospital (8 Units)
- 5. Frontier Hospital (25 Units)
- 6. Komani Hospital (26 Units)
- 7. Livingstone Hospital (25 Unit)
- 8. Tower Hospital (19 Units)

Details of the work required shall be as listed in the Price Lists which have been sub-divided into the following categories:

SCHEDULE 1: FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO ALL

WORK

SCHEDULE 2: FUNCTIONAL REPAIR SCHEDULE
SCHEDULE 3: MAINTENANCE SERVICE SCHEDULE

SCHEDULE 4: TERM REPAIRS SUBJECT TO APPROVAL OF QUOTATION FOR THE

WORKS

Note: The repair work included in Schedules 1 to 4 has been subdivided for each health facility where applicable.

The repair and maintenance phases shall run in parallel. The equipment to be repaired and maintained is listed under the Asset Registers of Equipment.

The maintenance work (Minor and Major Services) required on the equipment listed in the Asset Register, will be as per the pricing of the Schedule 3 and 4 Price List, but subject to the scheduling of the final Maintenance Control Plan as per paragraph GM 3.3. All work must comply to the minimum requirements set by the Standard Specifications for the General Maintenance and Repairs to Electrical and Mechanical Installations, and this Supplementary Technical Specification for the Boiler and Boiler Auxiliary installations.

The repair work will be as per the Schedule 3 and 4 of Price List, but subject to work being approved from the Repair Schedule as per GM 2.6. Due to limited funds and as specified in paragraph GM 2.8, some of the repair work may be stretched over two or more financial years. The repair work for the first financial year will commence only after the Repair Schedule has been accepted and the relevant repairs approved by the Service Manager. The Contractor will be issued with a written instruction (Task Order as per GM 2.4) to proceed with the specified work.

#### SS 4. INSPECTION OF THE SITE

Due to the large number of and area over which the Health Facilities covered by this Contract is spread, it is the Contractor's own choice if he wants to inspect the sites prior to tendering to ascertain the condition of the equipment or rely solely on the information provided as part of the Tender Documentation and single site tender briefing meeting. No further claims due to non-compliance with this requirement shall be entertained.

#### SS 5. STATUTORY AND REGULATORY REQUIREMENTS

The latest edition, including all amendments up to the date of tender, of the specifications, publications and codes of practice listed in the Standard Specification for Boiler and Boiler Auxiliary Equipment shall be read in conjunction with this specification and shall be deemed to form part thereof.

All equipment that is subject to regular statutory inspections such as pressure vessels and Boilers, shall be prepared for statutory inspections and tests only when the validity of the existing certificates has expired. This work will form part of the maintenance phase of the contract. All certificates for Boilers and calorifiers must be laminated and hung in the walls and to be always displayed.

#### SS 6. GENERAL REQUIREMENTS FOR REPAIR AND MAINTENANCE CONTRACTS

Whenever reference is made in the specifications to repairs and/or repair phase it shall mean the repairs required to the installation to bring the installation up to a standard, as described in the Standard Specifications for the General Maintenance and Repairs to Electrical and Mechanical Installations. In general, the repair work shall commence only after the Functional Condition Assessment Report has been approved and the quantities verified.

Critical repairs may be carried out immediately with the approval of the Service Manager but will be priced as per the guidelines of GM 2.8.

#### ROUTINE SERVICING AND MAINTENANCE WORK SS 7.

Maintenance of the Boiler and steam operated calorifiers may include, but is not limited to inspect, service and/or replace the following:

- 1. Piping
- 2. Boilers
- 3. Pressure Gauges
- 4. Water Gauges
- 5. Level Controllers and Pressure Switches
- 6. Temperature Gauges
- 7. Safety Valves
- 8. Stokers and Feeders
- 9. Electrical Equipment
- 10. Boiler Water Treatment Plant (Water Softening) and Boiler Feed Water
- 11. Blowdown Valves and Blowdown Pots
- 12. Hot wells
- 13. Statutory Inspection
- 14. All safety systems
- 15. Electrical control panel, switchgear, warning lamps and wiring
- 16. Electrical meters
- 17. Electrical installation (lighting, socket outlets etc.)
- 18. Signage
- 19. Training
- 20. Housekeeping

#### SS 8. TRAINING OF THE DEPARTMENT'S MAINTENANCE STAFF

It is required of this contract that the Contractor arrange for the theoretical and practical training of at least three maintenance personnel employed by the Department at each Health Facility specified in the Supplementary Specification. The Contractor shall ensure that the training is carried out by persons well qualified for the various tasks and shall call upon the services of experts from the various component manufacturers for assistance if need be.

#### SUPPLEMENTARY SPECIFICATION

The Contractor shall ensure that his own maintenance personnel are sufficiently qualified for the duties required.

Maintenance staff must receive enough instructions to ensure that they are fully conversant with the equipment concerned, and so that they can understand what the impact of their actions (or lack thereof) will be on the equipment. This training of the Health Facility's Employees shall be for a minimum duration of 40 hours, which shall include, but not necessarily be limited to, instruction on the operation and maintenance of the following items:

- 1. Piping
- 2. Boilers
- Pressure Gauges
- Water Gauges
- Level Controllers and Pressure Switches
- 6. Temperature Gauges
- 7. Safety Valves
- 8. Stokers and Feeders
- 9. Electrical Equipment
- 10. Boiler Water Treatment Plant (Water Softening) and Boiler Feed Water
- 11. Blowdown Valves and Blowdown Pots
- 12. Hot wells
- 13. Statutory Inspection
- 14. Steam piping and related fixtures
- 15. Condensate piping and related fixtures
- 16. Pipe bridges and other supporting structures
- 17. Tanks and pumps
- 18. Calorifier vessels
- 19. Insulation and cladding
- 20. Drain and safety valves and piping
- 21. Anodes
- 22. Pressure gauges
- 23. Stop cocks
- 24. Fusible plugs
- 25. U-tubes and coils
- 26. Steam condensate separator
- 27. Condensate line valves on separator
- 28. Strainers
- 29. Main steam valves
- 30. High limit protection unit
- 31. High limit cut-out shuttle valve and trigger
- 32. Temperature control valve
- 33. Fail safe actuator unit
- 34. Pneumatic controls
- 35. High limit temperature sensor
- 36. Capillary tubes
- 37. Control valves
- 38. All safety systems
- 39. Electrical control panel, switchgear, warning lamps and wiring
- 40. Electrical meters
- 41. Electrical installation (lighting, socket outlets etc.)
- 42. Signage
- 43. Training
- 44. Housekeeping

The training should be aligned to the general tasks contained in the Inspection and Servicing Guideline for the Boiler and steam operated calorifiers and incorporating OEM Operation and Maintenance Manuals.

Due to the added risk of fire in the boiler house the Contractor must provide pricing to train at least one Boiler Operator per shift in basic firefighting.

#### SS 9. TRAINING OF DEPARTMENTS OPERATING STAFF

The Contractor shall be responsible for the training of the Department's operating staff after the maintenance and/or repairs has been completed. Operating staff must receive enough instructions to ensure that they are fully conversant with the equipment concerned, and so that they can understand what the impact of their actions (or lack thereof) will be on the equipment. Operating staff shall be instructed on:

- The general operating method of the plant;
- 2. Starting and stopping instructions;
- Stopping the plant or unit in emergency and warning against restarting after an emergency unless a competent person is present;
- 4. Positions and normal settings of control equipment;
- 5. Normal operating temperatures, pressure, differential pressures etc.;
- 6. Safety measures, especially against high voltages;
- 7. Normal liquid levels in sumps, etc.;
- 8. Operational checks on sight glasses, running amperages, etc.;
- Name, address and telephone number of the competent person responsible for the maintenance of the plant or unit.
- 10. Statutory Log Book (Update maintenance and service records into Log Book)

The operating and maintenance manual must be available during the training of operating staff. Operating staff must also be made conversant with the contents of the manual.

All instrumentation such as thermometers, pressure gauges, manometers, etc. shall be marked at the operating point under normal conditions. Such markings shall be neatly done on the scale itself and not on the protecting glass cover.

#### SS 10. COMPETENT PERSON ON SITE

It is not a condition of contract that a Competent Person must be full time on site. Payment reductions will however be imposed if repairs are not carried out within the time limitations specified in Paragraph GM 7. Tenderers are therefore advised to evaluate the additional expense required for a competent person on site to ensure quick response against the possibilities of payment reductions, before submitting a tender.

Only personnel suitably qualified and certified competent as per Occupational Health and safety act should perform activities such as external inspections and pressure tests. Proof of qualification and competency shall be requested before any work is carried out.

#### SS 11. CLASSIFICATION OF BREAKDOWNS

The classification of breakdowns specific to Boiler and Boiler Auxiliary shall be as follows in line with the requirements of GM 7:

#### 1. Piping

P1 = Steam and Hot water leaks (especially where it is accessible by staff and the public)

#### 2. Boilers

- (P1 = general focus on damage to boiler and risk to personnel)
- P1 = Over pressure and / or temperature of the boiler system
- P2 = Focus on Boiler not at risk, but failure of the equipment will shut the boiler down
- P3 /4 Boiler can continue operating, but must be monitored closer till repair is done.

#### 3. Level Controllers and Pressure Switches

P1 = Any fault with the Level Controllers (including Mowbrey Controller) and Pressure Switches

#### 4. Temperature Gauges

P2 = Any high temperature reading or failure of a Temperature Gauge

#### 5. Safety Valves

P1 = any failure or operation of a safety device

#### 6. Stokers, Feeders, ID and FD Fans

- P2 = Stoker or chain grate breakdown or malfunction (if grate malfunctions the operator must implement relevant emergency shut down procedure to protect the chain grate)
- P2 = Fan failure (as boiler will shut down)

#### 7. Electrical Equipment

- P1 = Any failure on instrumentation (implement applicable boiler emergency procedure)
- P2 = Any electrical failure of boiler control system and drives (implement applicable boiler emergency procedure)

#### 8. Boiler Water Treatment Plant (Water Softening) and Boiler Feed Water

- P1 = Boiler Feed Water failure
- P3 = Water Softener Plant failure
- P3 = If main Feed Water Pump failed and Stand-by Feed Water Pump is running. If no pump operable = P1

#### 9. Blowdown Valves and Blowdown Pots

P3/4 = Malfunction of Blowdown Valves and Pots

#### 10. Hot Wells

P2 = Hot Wells overflowing or leaking

PRIORITY	DESCRIPTION	RESPONSE
P1	Emergency (Life Threatening)	Immediate response from the time of logging a call and the emergency to be resolved (at least temporarily) within 8 hours
P2	Urgent	Immediate response from the time of logging a call and to be resolved within 12 hours
P3	Planned Maintenance Repairs	Scheduled Maintenance is to be scheduled and performed within 3 business days of the scheduled date
P4	Emergency Facility Repairs	7 Days planning and execution subject to supply chain regulations

#### SS 12. PENALTIES

Penalties applicable to this specification will be as per the criteria specified in Section X17 of the Secondary Options Clauses of the Contract.

#### SS 13. SPECIAL SAFETY, HEALTH, ENVIRONMENTAL AND QUALITY REQUIREMENTS

In addition to the general SHEQ requirements applicable as per GM 2.15, the following additional requirements will apply to this Boiler and Boiler Auxiliary Plant:

Due to the type of equipment and risk of injury to personnel working on them, it is of the utmost importance that the relevant staff are supplied with and trained in the use of the relevant PPE while working on the boiler and boiler auxiliary plant equipment.

This as a minimum must include:

- · Safety Boots
- Boiler Suit
- High Temperature gloves
- Clear Safety glasses
- Clear face shield
- Hearing protection
- Dust Mask for when working with coal, soot and ash
- Neoprene/Rubber gloves for working with liquid fuels and chemicals

#### SS 14. SPECIAL TOOLING REQUIREMENTS

In addition to the general tooling that the Contractor should have, the following additional requirements will apply to Boilers and Boiler Auxiliary Plant:

Bearing Stethoscope

- Vibration Measurement Pen
- Infrared Temperature Gun
- Combustion analyser
- Flow measurement devices to measure fuel, water and steam flows



# STEAM BOILER THREE MONTHLY INSPECTIONS

#### Note:

Three Monthly inspections must be conducted by competent contractor.

Three Monthly inspections will include daily inspections.

Results and findings must be entered in the boiler log book and signed by the relevant contractor.

UNIT LOCATION	MAKE OF UNIT
MODEL No.	SERIAL NUMBER

ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMEN DED REMEDIAL ACTION
1.0	General			
	As per daily inspections			
2.0	Piping and valves (Inside Boiler House)			
2.1	As per daily inspections.			
2.2	Check that all steam traps are in good working condition			
2.3	Check and clean all strainers			
2.4	Check all piping and manifolds for leaks			
3.0	Boilers			
3.1	As per daily inspections			
3.2	Check hand hole and mud hole covers for leaks. Renew gaskets if necessary			
3.3	Inspect the coupling. Ensure that it is good condition and that all bolts are tight			
3.4	Lubricate bearings at least once per week			
3.5	Check the control panel. Gauges must be clean and legible. Control knobs must not be cracked or broken. Replace any missing levers or control knobs			
3.6	Check that all wiring is clean and tidy and properly secured			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
4.0	<u>Appurtenances</u>			
4.1	Pressure gauges			
	a) As per daily inspections b) Check that the pressure gauges are properly supported. (Do not rely on the pressure gauge tubing to support the gauge)			
4.2	Water gauges			
	a) As per daily inspections			
4.3	Level controllers and pressure switches			
4.1	a) As per daily inspections			
4.2	Temperature gauges			
	As per daily inspections			
4.3	Safety valves			
	<ul><li>a) As per daily inspections</li><li>b) Use the proving lever and ensure that the safety valve opens easily.</li></ul>			
4.4	Stokers and feeders			
	a) As per daily inspections			
	b) Lubricate chains and sprockets. Check chain tension and adjust if necessary			
	c) Check oil level in gearbox			
	d) Where V-belts are fitted ensure they are tensioned correctly and that the guards are in place			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
5.0	a) As per daily inspections b) Inspect front and rear side seal and replace if necessary c) Check all carbofrax blocks and replace if necessary d) Inspect undergrate dampers and ensure lever can move dampers freely e) Check air guide vanes f) Ensure chain grate is tensioned properly g) Check the operation of the soot blowers h) Check the fire door davits i) Open fire doors and check the reversal chambers. They must be free of soot and coal dust j) Inspect ash removal door k) Inspect FD and ID fans. Check couplings and/or belt drives. Ensure guards are in place l) Where VSD's are fitted they must be tested through the full range of operation m) Check fan ducting n) Check the boiler chimney and chimney stay wires where fitted Where cyclones are fitted check that they			
6.0	are working properly  Vertical boilers			
	<ul> <li>a) As per daily inspections</li> <li>b) Check the variable speed gearbox and drive. Lubricate all points.</li> <li>c) Check the V-belt tension and adjust if necessary</li> <li>d) Check the retort tuyers and deadplate. (Replace if cracked or damaged.)</li> <li>e) Check the fuseable plug</li> <li>b) Check the chimney and chimney stay wires where fitted</li> </ul>			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
7.0	Electrical equipment			
	a) As per daily inspections			
	b) Check that isolators can be operated without having to open the panel doors			
	c) Check that earthing conductors are connected and protected			
	d) Check the indicating and running lights and alarms to make sure they are functioning properly.			
8.0	Water softening plant and chemical dosing			
	a) As per daily inspections			
9.0	Blowdown valves			
	As per daily inspections			
	Open and close blowdown valve to check operation. Valve must move freely and shut off properly			
10.0	Heavy Fuel oil and diesel fired boilers			
	a) As per daily inspections			
10.1	Burners			
	a) Inspect the fuel atomizing nozzles.     Replace if necessary			
	b) Clean the ignition rods			
	c) Clean the photo cell			
11.0	<u>Fuel Tanks</u>			
	a) Inspect the fuel tanks			
	a) Clean and service fuel heaters if installed			
	b) Check the bund walls for cracks and holes			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
12.0	Maintenance Tasks			
12.1	Blow down the water columns(Open cocks slowly to prevent float damage) Ensure level recovers quickly when drain cocks are closed.			
12.2	Blow down the bottom of the boiler			
12.3	Track boiler pressure and temperature to determine that it is keeping up with the load.			
12.4	Take a stack temperature reading to determine how efficiently the boiler is working. (50°C-100°C above steam or water temperature)			
12.5	Monitor water supply and condensate return temperatures			
12.6	Check furnace and observe flame for evidence of impingement and sooting.			
12.7	Take water samples and ensure the water is clean and sediment free.			
12.8	Conduct an evaporation test on the low water level controls to ensure proper operation. For boilers with burners ensure burner shut off at the low water point			
12.9	Check the single point positioning system of the burner, if applicable, look for wear, slip and hysteresis.			
12.10	Observe the operation of the modulating controls. While watching the pressure gauge ensure that the modulating controls are switching at the set points.			
12.11	Pull out the flame scanner to ensure the burner shuts off at the prescribed time.			









# CALORIFIER THREE MONTHLY INSPECTIONS

#### Note:

Three Monthly inspections must be conducted by competent contractor.

Three Monthly inspections will include daily inspections.

Results and findings must be entered in the boiler log book and signed by the relevant contractor.

UNIT LOCATION	MAKE OF UNIT	
MODEL No.	SERIAL NUMBER	

ITEM	DESCRIPTION	CHECK	READING	COMMENT/ RECOMMENDED REMEDIAL ACTION
1	Generally inspect the equipment for external damage or leaks.			
2	Isolate the electrical supply and remove cover			
3	Ensure the terminal box is clean and dry			
4	Ensure that all electrical wiring is intact and connected correctly according to manufacturer's recommendations			
5	Check and test that the heating element insulation is at least 2 mega ohms			
6	Check the continuity of all elements			
7	Place the cover back on its place and check its gasket			
8	Ensure that the earth continuity is maintained between all exposed conductive material and main site structure.			
9	Check setting of each thermostat and recalibrate where needed			









COMMENTS	/ RECO	MME	ENDATIO	NS				
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# STEAM BOILER SIX MONTHLY INSPECTIONS

#### Note:

Six monthly inspections must be conducted by a competent contractor.

The Six monthly inspection will include all checks as listed hereunder.

Results and findings must be entered in the boiler log book and signed by the relevant contractor.

UNIT LOCATION	MAKE OF UNIT	
MODEL No.	SERIAL NUMBER	

ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
1	General			
1.1	Inspect boiler house to ensure housekeeping is being done. Floors, walls and windows must be clean and dust free.			
1.2	Check that nothing is being stored near or against the boiler and causing obstruction.			
1.3	Boiler operators must have a clear unobstructed view of the pressure gauges.			
1.4	Operators must be able to reach the gauge glass blow down valves.			
1.5	Operators must have easy access to the control panel			
1.6	Check that lighting in the boiler house is adequate			
1.7	All covers for cable and pipe trenches must be in place			
1.8	Provision must be made for the operator to access the crown and safety valves.			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
1.9	Hot wells must be fitted with level indicators positioned where the operators can read them from the firing floor, as well as high and low level alarms.			
1.10	Check that firefighting equipment is available and in good operating condition			
1.11	Check that all signage is in place			
1.12	An enlarged copy of the relevant section of the Occupational Health and Safety Act and Regulations, framed and mounted a wall where it can easily be read			
1.13	Check that the boiler log books and service records are available and kept in a safe place			
1.14	Check log book. If not one to be provided			
1.15	Record work done and findings in boiler log book			
2	Piping and valves (Inside Boiler House)			
2.1	Check all steam and feed water piping for leaks			
2.2	Check all isolating valves for leaks			
2.3	Check all insulation and cladding on steam and condensate lines			
2.4	Check that all steam traps are in good working condition			
2.5	Check and clean all strainers			
2.6	Check that all pipes are correctly supported			
2.7	Ensure that the hot well overflow piping is routed to a covered drain			
2.8	Check that the hot well manhole is closed during normal boiler operation			
2.9	Ensure that the blow off piping from the boiler safety valves extends at least 2m above the boiler house			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	roof. (Blow off piping should not protrude out of the side of the building			
2.10	Check that the safety valves' drain pipes lead down into the floor drains			
3	Boilers			
3.1	Inspect the boiler and ensure that it is clean and wiped down at least once per shift			
3.2	Check that the insulation and cladding is in good condition			
3.3	Inspect the boiler shell for leaks and other anomalies			
3.4	Check hand hole and mud hole covers for leaks. Renew gaskets if necessary			
3.5	Check the feed water pumps and piping. Ensure that there are no leaks			
3.6	Check the feed water pump bearings. (Noise, vibration and temperature) Use bearing stethoscope, vibration pen infrared gun			
3.7	Check that feed water isolation valves and reflux valves are in good working condition and not leaking			
3.8	Check that the feed water pumps meet the required duty			
3.9	Inspect the coupling. Ensure that it is good condition and that all bolts are tight			
3.10	Lubricate bearings at regular intervals			
3.11	Check the control panel. Gauges must be clean and legible. Control knobs must not be cracked or broken. Replace any missing levers or control knobs			
3.12	Check that all wiring is clean and tidy and properly secured			
3.13	Check all instrumentation and indication. (Warning lights and alarm			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	bells on the controllers.)			
3.14	Ensure that all gauges are reading accurately			
3.15	Check all instrumentation and indication. (Warning lights and alarm bells on the controllers.)			
4	Appurtenances			
4.1	Pressure gauges			
	<ul> <li>a) Check that all pressure gauges have been calibrated</li> <li>b) Pressure gauge glasses must be clean and scratch free</li> <li>c) Check that all pressure gauges have white face plates with black lettering</li> <li>d) Check that the maximum working pressure is marked with a red line on the face plate. (Not on the glass)</li> <li>e) Check that the pressure gauge stop cocks are in good working condition</li> <li>f) Check that the pressure gauges are properly supported. (Do not rely on the pressure gauge tubing to support the</li> </ul>			
4.2	gauge) Pressure gauges			
	<ul> <li>a) Check that the water gauge glass tubes are and in good condition. Glasses must not be cracked or discoloured</li> <li>b) Check water gauge glasses for leaks. Ensure seals are in good condition</li> <li>c) Check water gauge glass covers. (They should be manufactured from tempered glass) They must be clean and sound</li> <li>d) Check that the chevron plates are clean and properly positioned</li> <li>e) Check that the gauge glass stop cocks are in good working</li> </ul>			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	condition f) Check that the gauge glass blow-down valves are in good condition			
4.3	Level controllers and pressure switches			
	<ul> <li>a) Check that the level controllers are working correctly</li> <li>b) With the covers removed operate the switches manually to ensure that they operate freely</li> <li>c) Check the level controller floats. Ensure that they move smoothly inside the tubes</li> <li>d) Check that the floats trigger th switches at the correct height</li> <li>e) Check the level controller blow down valves. They must open and close freely</li> </ul>	Э		
4.4	Temperature gauges			
	a) Check that the temperature gauges have been calibrated     b) Gauges should have white face plates with black lettering			
4.5	Safety valves			
	<ul> <li>a) Check that the boiler is fitted with at least two safety valves. (A single valve with dual pots i acceptable)</li> <li>b) Safety valves covers must be in place and locked</li> <li>c) Check that the safety valves have been pressure tested and that the test certificates are kept with the log books</li> <li>d) Safety valves must not be allowed to simmer. (Plugs and seats must be lapped if necessary to ensure that the valves seal properly</li> <li>e) Ensure that a proving lever is available. Safety valve must be proved regularly to ensure it is not stuck and opens freely</li> </ul>			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
5	Stokers and feeders			
5.1	Check coal elevators and feeders			
5.2	Check stoker drive mechanisms. (Gearbox, chains and sprockets)			
5.3	Lubricate chains and sprockets. Check chain tension and adjust if necessary			
5.4	Ensure chain guard is in place			
5.5	Check oil level in gearbox			
5.6	Check electric motor. Ensure that the motor mounting bolts are secure. Check vibration and temperature. Ensure that the motor fan cover is in place and unobstructed			
5.7	Where V-belts are fitted ensure they are tensioned correctly and that the guards are in place			
5.7	Horizontal boilers			
	<ul> <li>a) Inspect chain grate for damage and missing links. Check link pins</li> <li>b) Inspect front and rear side seal and replace if necessary</li> <li>c) Check all carbofrax blocks and replace if necessary</li> <li>d) Inspect undergrate dampers and ensure lever can move dampers freely</li> <li>e) Check air guide vanes</li> <li>f) Ensure chain grate is tensioned properly</li> <li>g) Check condition of tubes. (Fire side) Wire brush if necessary</li> <li>h) Inspect wearing strips and replace if necessary</li> <li>i) Check sliding plates (Drive side and non-drive side)</li> <li>j) Check front shaft, grate sprockets and bosses</li> <li>k) Check rear roller and shaft</li> <li>l) Check the guillotine door. Ensure it can be raised and lowered easily</li> <li>m) Check all boiler internal refractories including the ignition arch</li> </ul>			









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ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	n) Check the operation of the soot blowers o) Check the fire door davits p) Open fire doors and check the reversal chambers. They must be free of soot and coal dust Inspect ash removal door r) Inspect FD and ID fans. Check couplings and/or belt drives. Ensure guards are in place s) Inspect dampers and ensure that they operate freely t) Where VSD's are fitted they must be tested through the full range of operation u) Check fan ducting v) Check the boiler chimney and chimney stay wires where fitted where cyclones are fitted check that they are working properly			
5.8	Vertical boilers			
	<ul> <li>a) Check the coal hopper</li> <li>b) Check the variable speed gearbox and drive. Check lubrication</li> <li>c) Check the electric motor.  Ensure that the motor mounting bolts are secure.  Check vibration and temperature. Ensure that the motor fan cover is in place and unobstructed</li> <li>d) Check the V-belt tension and adjust if necessary</li> <li>e) Check the FD fan and if fitted the ID fan</li> <li>f) Check the retort tuyers and deadplate. (Replace if cracked or damaged.)</li> <li>g) Check that the air path around the retort and under the deadplate is clear and unobstructed</li> <li>h) Check the fuseable plug</li> <li>i) Check the chimney and chimney stay wires where fitted</li> </ul>			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
6	Electrical equipment			
6.1	Check that electrical circuit drawings are available for reference purposes			
6.2	Check that all warning lights and meters are working			
6.3	Check that control panels are locked			
6.4	Check that isolators can be operated without having to open the panel doors			
6.5	Check that all wiring is clean and tidy			
6.6	Check that cables are protected where there is danger of them being damaged			
6.7	Check that earthing conductors are connected and protected			
6.8	Check control panel instruments and indication (Warning lights and alarms)			
6.9	Check that lighting is adequate			
7	Water softening plant and chemical dosing			
7.1	Check that the water softener installation is clean and tidy			
7.2	Check that the water softener is operating correctly and that salt is available for regeneration			
7.3	Check piping for leaks			
7.4	Check the chemical dosing pump. Ensure that it is working properly and can deliver at the required pressure			
7.5	Ensure an adequate supply of chemicals			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
8	Blowdown valves			
8.1	Check that the blowdown valve can be opened and closed easily			
8.2	Check that the blowdown valve is not bypassing			
9.0	Boiler Test			
9.1	Test boiler operation (Functioning of all systems			
9.2	Test flue gasses. (Residual oxygen, CO and NOx) Set air/fuel ratio for optimum combustion.			
9.3	Reset combustion using a combustion analyzer if necessary.			
10	Heavy Fuel oil and diesel fired boilers			
10.1	Service burners at intervals as required by the manufacturer, but at least every six months			
10.2	Check the fuel consumption. (Compare with manufacturers fuel consumption figures)			
10.3	Where there is a large discrepancy, check the operation of the air damper and ensure that the atomizing nozzles are the right size			
10.4	Replace fuel filters			
10.5	Check fuel lines for leaks			
10.6	Inspect all fuel line valves			
10.7	Remove the cover and clean the burner			
10.8	Inspect the fuel atomizing nozzles. Replace if necessary			
10.9	Clean the ignition rods			
10.10	Clean the photo cell			
10.11	Inspect the fuel tanks			
10.12	Clean and service fuel heaters if installed			
10.13	Ensure that all fuel spills are cleaned up properly			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
10.14	Ensure that the bund area around the tanks is clean			
10.15	Check the bund walls for cracks and holes			
10.16	Check that fuel tanks are fitted with breathers			
10.17	Check that fuel tank filler caps are locked			
10.18	Check that fuel tanks have a tamper proof valve immediately adjacent to the tank on the fuel supply line			
11	TRAINING			
11.1	Train client operators in general operation, daily maintenance and correct set points of the plant			
12.0	Bi-annual maintenance tasks.			
12.1	Properly shut down the boiler and open the access doors to expose the fireside of the boiler.			
12.2	Thoroughly clean the tubes and tube sheets.			
12.3	On the waterside check for heavy scaling and bridging of the tubes with scale. Remove all scale build up by chemical treatment.			









## CALORIFIER SIX MONTHLY INSPECTIONS

#### Note:

Six Monthly inspections must be conducted by competent contractor.

Six Monthly inspections will include daily inspections.

Results and findings must be entered in the calorifier log book and signed by the relevant contractor.

UNIT LOCATION	MAKE OF UNIT	
MODEL No.	SERIAL NUMBER	

ITEM	DESCRIPTION	CHECK	READING	COMMENT/ RECOMMENDED REMEDIAL ACTION
1	Examine and clean strainers			
2	Check the set temperature and record, adjust if needed			
3	Check setting of each thermostat and adjust if required.			
4	Check all valves and draincocks for correct operation			
5	Check operation of the calorifier primary controls and adjust where necessary			
6	Check the manhole cover, bolt head and access cover for correct fit and any signs of leakage.			
7	Check and log water temperatures at 25% taps in a schedule to ensure that each tap is checked at least once per annum.			
8	Blow down where possible to remove sediment and sludge			
9	Check setting of each thermostat and recalibrate where needed			
10	Test all safety devices and thermostatic controls.			
11	Examine mountings, connections and thermal insulation			
12	Clean and examine thermometers and altitude gauges			
13	Examine vent pipes, ensure that are clear			









#### Notes:

- 1. Normal service components are to be included as part of the routine service
- 2. Faulty equipment must be reported and recommendations made for remedial action (see schedules below)
- 3. Where electrical equipment is perceived to be faulty this must be reported (see schedules below)
- 4. Should components of the installation no longer comply with the latest regulations this must be noted. (see schedules below)

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Six monthly Ir	nspection	n Sheet		
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## STEAM BOILER STATUTORY INSPECTIONS

#### Note:

Statutory inspections must be conducted by a competent contractor

The statutory inspection will include all inspections and services as listed hereunder.

All NDT (Non Destructive Testing) and pressure tests must be witnessed by an approved Independent Inspection Authority.

After recommissioning the employer may call for a functionality test to be performed on the boiler.

UNIT LOCATION	NIT LOCATION		
MODEL No.		SERIAL NUMBER	

ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
1	General			
1.1	Inspect boiler house to ensure housekeeping is being done. Floors, walls and windows must be clean and dust free.			
1.2	Check that nothing is being stored near or against the boiler and causing obstruction.			
1.3	Boiler operators must have a clear unobstructed view of the pressure gauges.			
1.4	Operators must be able to reach the gauge glass blow down valves.			
1.5	Operators must have easy access to the control panel			
1.6	Check that lighting in the boiler house is adequate			
1.7	All covers for cable and pipe trenches must be in place			
1.8	Provision must be made for the operator to access the crown and safety valves.			









	4 HEALTH			
ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
1.9	Hot wells must be fitted with level indicators positioned where the operators can read them from the firing floor, as well as high and low level alarms.			
1.10	Check that firefighting equipment is available and in good operating condition			
1.11	Check that all signage is in place			
1.12	An enlarged copy of the relevant section of the Occupational Health and Safety Act and Regulations, framed and mounted a wall where it can easily be read			
1.13	Check that the boiler log books and service records are available and kept in a safe place			
1.14	Check log book. If not one to be provided			
1.15	Record work done and findings in boiler log book			
2	Piping and valves (Inside Boiler House)			
2.1	Check all steam and feed water piping for leaks			
2.2	Check all isolating valves for leaks			
2.3	Check all insulation and cladding on steam and condensate lines			
2.4	Check that all steam traps are in good working condition			
2.5	Check and clean all strainers			
2.6	Check that all pipes are correctly supported			
2.7	Ensure that the hot well overflow piping is routed to a covered drain			
2.8	Check that the hot well manhole is closed during normal boiler operation			
2.9	Ensure that the blow off piping from the boiler safety valves extends at least 2m above the boiler house			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	roof. (Blow off piping should not protrude out of the side of the building			
2.10	Check that the safety valves' drain pipes lead down into the floor drains			
3	Boilers			
3.1	Inspect the boiler and ensure that it is clean and wiped down at least once per shift			
3.2	Check that the insulation and cladding is in good condition			
3.3	Inspect the boiler shell for leaks and other anomalies			
3.4	Check hand hole and mud hole covers for leaks. Renew gaskets if necessary			
3.5	Check the feed water pumps and piping. Ensure that there are no leaks			
3.6	Check the feed water pump bearings. (Noise, vibration and temperature) Use bearing stethoscope, vibration pen infrared gun			
3.7	Check that feed water isolation valves and reflux valves are in good working condition and not leaking			
3.8	Check that the feed water pumps meet the required duty			
3.9	Inspect the coupling. Ensure that it is good condition and that all bolts are tight			
3.10	Lubricate bearings at regular intervals			
3.11	Check the control panel. Gauges must be clean and legible. Control knobs must not be cracked or broken. Replace any missing levers or control knobs			
3.12	Check that all wiring is clean and tidy and properly secured			
3.13	Check all instrumentation and indication. (Warning lights and alarm			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	bells on the controllers.)			
3.14	Ensure that all gauges are reading accurately			
3.15	Check all instrumentation and indication. (Warning lights and alarm bells on the controllers.)			
4	Appurtenances			
4.1	Pressure gauges			
	<ul> <li>a) Check that all pressure gauges have been calibrated</li> <li>b) Pressure gauge glasses must be clean and scratch free</li> <li>c) Check that all pressure gauges have white face plates with black lettering</li> <li>d) Check that the maximum working pressure is marked with a red line on the face plate. (Not on the glass)</li> <li>e) Check that the pressure gauge stop cocks are in good working condition</li> <li>f) Check that the pressure gauges are properly supported. (Do not rely on the pressure gauge tubing to support the gauge)</li> </ul>			
4.2	Pressure gauges			
	<ul> <li>a) Check that the water gauge glass tubes are and in good condition. Glasses must not be cracked or discoloured</li> <li>b) Check water gauge glasses for leaks. Ensure seals are in good condition</li> <li>c) Check water gauge glass covers. (They should be manufactured from tempered glass) They must be clean and sound</li> <li>d) Check that the chevron plates are clean and properly positioned</li> <li>e) Check that the gauge glass stop cocks are in good working</li> </ul>			









HEALTH					
ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION	
	condition f) Check that the gauge glass blow-down valves are in good condition				
4.3	Level controllers and pressure switches				
	<ul> <li>a) Check that the level controllers are working correctly</li> <li>b) With the covers removed operate the switches manually to ensure that they operate freely</li> <li>c) Check the level controller floats. Ensure that they move smoothly inside the tubes</li> <li>d) Check that the floats trigger the switches at the correct height</li> <li>e) Check the level controller blow down valves. They must open and close freely</li> </ul>				
4.4	Temperature gauges				
	a) Check that the temperature gauges have been calibrated     b) Gauges should have white face plates with black lettering				
4.5	Safety valves				
	<ul> <li>a) Check that the boiler is fitted with at least two safety valves. (A single valve with dual pots is acceptable)</li> <li>b) Safety valves covers must be in place and locked</li> <li>c) Check that the safety valves have been pressure tested and that the test certificates are kept with the log books</li> <li>d) Safety valves must not be allowed to simmer. (Plugs and seats must be lapped if necessary to ensure that the valves seal properly</li> <li>e) Ensure that a proving lever is available. Safety valve must be proved regularly to ensure it is not stuck and opens freely</li> </ul>				









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
5	Stokers and feeders			
5.1	Check coal elevators and feeders			
5.2	Check stoker drive mechanisms. (Gearbox, chains and sprockets)			
5.3	Lubricate chains and sprockets. Check chain tension and adjust if necessary			
5.4	Ensure chain guard is in place			
5.5	Check oil level in gearbox			
5.6	Check electric motor. Ensure that the motor mounting bolts are secure. Check vibration and temperature. Ensure that the motor fan cover is in place and unobstructed			
5.7	Where V-belts are fitted ensure they are tensioned correctly and that the guards are in place			
5.7	Horizontal boilers			
	<ul> <li>a) Inspect chain grate for damage and missing links. Check link pins</li> <li>b) Inspect front and rear side seal and replace if necessary</li> <li>c) Check all carbofrax blocks and replace if necessary</li> <li>d) Inspect undergrate dampers and ensure lever can move dampers freely</li> <li>e) Check air guide vanes</li> <li>f) Ensure chain grate is tensioned properly</li> <li>g) Check condition of tubes. (Fire side) Wire brush if necessary</li> <li>h) Inspect wearing strips and replace if necessary</li> <li>i) Check sliding plates (Drive side and non-drive side)</li> <li>j) Check front shaft, grate sprockets and bosses</li> <li>k) Check rear roller and shaft</li> <li>l) Check the guillotine door. Ensure it can be raised and lowered easily</li> <li>m) Check all boiler internal refractories including the ignition arch</li> </ul>			









	/ HEALTH		1	
ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	n) Check the operation of the soot blowers o) Check the fire door davits p) Open fire doors and check the reversal chambers. They must be free of soot and coal dust lnspect ash removal door r) Inspect FD and ID fans. Check couplings and/or belt drives. Ensure guards are in place s) Inspect dampers and ensure that they operate freely t) Where VSD's are fitted they must be tested through the full range of operation u) Check fan ducting v) Check the boiler chimney and chimney stay wires where fitted check that they are working properly			
5.8	Vertical boilers			
	<ul> <li>a) Check the coal hopper</li> <li>b) Check the variable speed gearbox and drive. Check lubrication</li> <li>c) Check the electric motor.  Ensure that the motor mounting bolts are secure.  Check vibration and temperature. Ensure that the motor fan cover is in place and unobstructed</li> <li>d) Check the V-belt tension and adjust if necessary</li> <li>e) Check the FD fan and if fitted the ID fan</li> <li>f) Check the retort tuyers and deadplate. (Replace if cracked or damaged.)</li> <li>g) Check that the air path around the retort and under the deadplate is clear and unobstructed</li> <li>h) Check the fuseable plug</li> <li>i) Check the chimney and chimney stay wires where fitted</li> </ul>			
6	Electrical equipment			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
6.1	Check that electrical circuit drawings are available for reference purposes			
6.2	Check that all warning lights and meters are working			
6.3	Check that control panels are locked			
6.4	Check that isolators can be operated without having to open the panel doors			
6.5	Check that all wiring is clean and tidy			
6.6	Check that cables are protected where there is danger of them being damaged			
6.7	Check that earthing conductors are connected and protected			
6.8	Check control panel instruments and indication (Warning lights and alarms)			
6.9	Check that lighting is adequate			
7	Water softening plant and chemical dosing			
7.1	Check that the water softener installation is clean and tidy			
7.2	Check that the water softener is operating correctly and that salt is available for regeneration			
7.3	Check piping for leaks			
7.4	Check the chemical dosing pump. Ensure that it is working properly and can deliver at the required pressure			
7.5	Ensure an adequate supply of chemicals			
8	Blowdown valves			
8.1	Check that the blowdown valve can be opened and closed easily			
8.2	Check that the blowdown valve is not bypassing			
	not bypassing			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
9	Statutory Inspection (Required to be done 3 yearly in terms of the OHS Act and Regulations) (An authorized third party inspection authority should witness and sign off this inspection)			
9.1	Remove all insulation and cladding			
9.2	Chemically clean the water side of the boiler to remove all scale			
9.3	Mechanically clean the fire side of the boiler to remove scale, soot and slag			
9.4	Check the boiler shell internally and externally for corrosion. (Particular attention to be paid to the area around the 'boiling line' on the inside of the shell			
9.5	Check the shell for bulging			
9.6	Check the tubes and tube plates for corrosion			
9.7	Check tubes for hogging and sagging			
9.8	Check the tube ends for leaks. Re- expand if necessary			
9.9	Carry out thickness tests on the shell and tubes			
9.10	Check all shell welds. (Dye penetrant or MP test for cracks)			
9.11	Inspect the ligaments between the tubes for cracks. (Dye penetrant)			
9.12	Check the stay tubes and stay rod welds			
9.13	Check the flue for flame erosion and pitting			
9.14	Check the flue for distortion			
9.15	Check the flue welds for cracks			
9.16	Blank off all openings into the pressure envelope and conduct pressure tests			
9.17	Service and test all appurtenances			
9.18	Check all alarms and sirens are working properly			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED
				REMEDIAL ACTION
9.19	Grit blast and paint the outside of the boiler shell if necessary			
9.20	Replace all insulation and cladding			
9.21	Recommission boiler			
9.22	Test boiler operation			
9.23	Test flue gasses. (Residual oxygen and CO) Set air/fuel ratio for optimum combustion			
10	Heavy Fuel oil and diesel fired boilers			
10.1	Service burners at intervals as required by the manufacturer, but at least every six months			
10.2	Check the fuel consumption. (Compare with manufacturers fuel consumption figures)			
10.3	Where there is a large discrepancy, check the operation of the air damper and ensure that the atomizing nozzles are the right size			
10.4	Replace fuel filters			
10.5	Check fuel lines for leaks			
10.6	Inspect all fuel line valves			
10.7	Remove the cover and clean the burner			
10.8	Inspect the fuel atomizing nozzles. Replace if necessary			
10.9	Clean the ignition rods			
10.10	Clean the photo cell			
10.11	Inspect the fuel tanks			
10.12	Clean and service fuel heaters if installed			
10.13	Ensure that all fuel spills are cleaned up properly			
10.14	Ensure that the bund area around the tanks is clean			
10.15	Check the bund walls for cracks and holes			
10.16	Check that fuel tanks are fitted with breathers			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
10.17	Check that fuel tank filler caps are locked			
10.18	Check that fuel tanks have a tamper proof valve immediately adjacent to the tank on the fuel supply line			
11	TRAINING			
11.1	Train client operators in general operation, daily maintenance and correct set points of the plant			









## Notes:

- 1. Normal service components are to be included as part of the routine service
- 2. Faulty equipment must be reported and recommendations made for remedial action (see schedules below)
- 3. Where electrical equipment is perceived to be faulty this must be reported (see schedules below)
- 4. Should components of the installation no longer comply with the latest regulations this must be noted. (see schedules below)

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## CALORIFIER EQUIPMENT SERVICING

## Note:

Six Monthly service to include all minor service Tasks (eg. daily/weekly/monthly etc) in Major or Annual Service tasks.

The following is a generic service regime. All services are to be carried out in accordance with manufacture's servicing specification where this Task List included below does not include manufacture's servicing specifications.

All services shall be undertaken and signed off by a registered person.

UNIT LOCATION	MAKE OF UNIT	
MODEL No.	SERIAL NUMBER	

DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
General			
Calorifiers should be installed in rooms or chambers with lockable doors or gates to prevent access by un-authorised persons			
Check that signage is in place			
Check that the floor is sloped towards the outside of the room or that adequate provision is made to drain away any water that leaks from the vessel			
Ensure that there are no leaks from the vessel shell or any of the fittings and attachments			
Check that the vessel is properly insulated and cladded			
Check that the vessel drain pipe is lead into a suitable channel or drain			
Check that a safety valve is fitted to the vessel and that the safety valve discharge pipe is lead into a suitable channel or drain			
Remove the inspection opening cover			
Check that the inside surfaces are free of scale and corrosion			
Check anodes and replace if			
	General  Calorifiers should be installed in rooms or chambers with lockable doors or gates to prevent access by un-authorised persons  Check that signage is in place  Check that the floor is sloped towards the outside of the room or that adequate provision is made to drain away any water that leaks from the vessel  Ensure that there are no leaks from the vessel shell or any of the fittings and attachments  Check that the vessel is properly insulated and cladded  Check that the vessel drain pipe is lead into a suitable channel or drain  Check that a safety valve is fitted to the vessel and that the safety valve discharge pipe is lead into a suitable channel or drain  Remove the inspection opening cover  Check that the inside surfaces are free of scale and corrosion	General  Calorifiers should be installed in rooms or chambers with lockable doors or gates to prevent access by un-authorised persons  Check that signage is in place  Check that the floor is sloped towards the outside of the room or that adequate provision is made to drain away any water that leaks from the vessel  Ensure that there are no leaks from the vessel shell or any of the fittings and attachments  Check that the vessel is properly insulated and cladded  Check that the vessel drain pipe is lead into a suitable channel or drain  Check that a safety valve is fitted to the vessel and that the safety valve discharge pipe is lead into a suitable channel or drain  Remove the inspection opening cover  Check that the inside surfaces are free of scale and corrosion	Calorifiers should be installed in rooms or chambers with lockable doors or gates to prevent access by un-authorised persons  Check that signage is in place  Check that the floor is sloped towards the outside of the room or that adequate provision is made to drain away any water that leaks from the vessel  Ensure that there are no leaks from the vessel shell or any of the fittings and attachments  Check that the vessel is properly insulated and cladded  Check that the vessel drain pipe is lead into a suitable channel or drain  Check that a safety valve is fitted to the vessel and that the safety valve discharge pipe is lead into a suitable channel or drain  Remove the inspection opening cover  Check that the inside surfaces are free of scale and corrosion









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	necessary			
1.11	Check that the temperature gauge is in good condition and reading correctly			
1.12	Where pressure gauges are fitted, ensure that they are in good condition and reading correctly			
1.13	Check the fusible plug. (If fitted)			
1.14	Check that adequate lighting is provided			
1.15	Where the valves on the calorifiers are pneumatically controlled the valves, pressure regulators and stop cocks must be inspected to ensure that they are in good condition and working properly			
2	Steam Calorifiers			
2.1	Where indented u-tubes are used for heat transfer, disconnect steam and condensate piping, withdraw the indented u-tube battery			
2.2	Pressure test the u-tubes. Replace any leaking tubes			
2.3	Where heating tube coils are used, disconnect the steam and condensate lines, black of one end of the tube coil and pressure test			
2.4	Check the steam/condensate separator on the steam supply line			
2.5	Check the condensate line valves from the separator			
2.6	Check the condensate line strainer and sight glass after the steam line separator			
2.7	Check the main steam valve			
2.8	Check and test the high limit protection unit			
2.9	Check and test the high limit cut- out unit shuttle valve and trigger			







	MEALIH		1	
ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
2.10	Check and test the temperature control valve			
2.11	Check and test the fail-safe actuator unit			
2.12	Check and test the high limit temperature sensor			
2.13	Check and test the normal temperature sensor and adjustment screw			
2.14	Where the temperature sensors are mounted in pockets or thermowells ensure that they are filled with the correct fluid. (Refer to the OEM manuals)			
2.15	Check all the capillary tubes			
2.16	Check and clean out the strainer on the condensate return line			
2.17	Check the reflux valve on the condensate return line			
2.18	Check the sight glass on the condensate return line			
2.19	Check the shut-off valve on the condensate return line			
3	Electric Calorifiers			
3.1	Check that there is a wiring diagram inside the electrical control panel			
3.2	Check that all electrical wiring is clean, tidy and properly secured			
3.3	Check that the electrical panel is a lockable unit and that the mains isolator can be operated without having to open the door			
3.4	Check that the panel door can only be opened when the isolator is in the off position			
3.5	Check that there is a voltmeter mounted in the door panel			
3.6	Check that there is an ammeter for			









ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	each phase mounted in the door panel. (Where there is only one ammeter check that there is a selector switch provided to switch between phases.)			
3.7	Check that each element has its own circuit breaker			
3.8	Check that all the heating elements have the same rating			
3.9	Check that the heating elements are covered with protective caps			
3.10	Check that the heating elements are wired to balance the load on the phases			
3.11	Where timers are fitted check and ensure that they are working correctly			
3.12	Check that the contactors are clean			
3.13	Check the thermostat and ensure that it is working correctly			
3.14	Where the thermostat is mounted in a pocket or thermowell ensure that it is filled with the correct non corrosive fluid. (Refer to the OEM manual)			
3.15	Where indication and warning lamps are provide check that they are all in working condition			
3.16	Where a PLC is used to control the temperature. The controller must be tested through the full temperature range and the set temperatures checked to ensure they hold steady			
4	Hot water pipes, support structures, gantries and bridges			
4.1	Check hot water lines for leaks			
4.2	Check all valves are operating correctly			
4.3	Check re-circulating pump/s are			







ITEM	DESCRIPTION	CHECK	READING	COMMENT/RECOMMENDED REMEDIAL ACTION
	running			
4.4	Check all pipes are properly supported			
4.5	Check all insulation is in good condition			
4.6	Check all hanger brackets and replace where necessary			
4.6	Where people are working at height ensure that scaffolding and ladders are properly certified and that safety harnesses are being used			
4.7	Check all structures for corrosion, particularly at the bases			
4.8	Remove rust and repair any corroded sections of structural steelwork			
5	TRAINING			
5.1	Train client operators in general operation, daily maintenance and correct set points of the plant			









## Notes:

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COMMENTS / RECOMMENDATIONS	
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