	Kusile Power Station: Environmental Specification for Kusile Power Station Boiler Tubes Manipulation/bending during the Planned Outages, Unplanned Outages on an “as and when required” Basis for the period of (5) years	Document Identifier	KUS-20250797	Rev	1
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Project Name: Kusile Power Station Boiler Tubes Manipulation/bending during the Planned Outages, Unplanned Outages on an “as and when required” Basis for the period of (5) years

Scope of the project:


The SOW for this contract is detailed as follows:

- a) The work will include all planned outages and unplanned outages as per scope of work.
- b) Detailed SOW of bending/manipulating of boiler tubes System
- c) Contractor to provide bending procedures to be approved by Eskom for all manipulations that will be done, prior bending.
- d) All bending must conform to EN12852 code requirements.
- e) All bending must be tested and approved by engineering, metallurgist and AIA prior procedure is approved.
- f) Capabilities to bend up to 20mm thickness when requires.
- g) Typical bends that will be required attached in spreadsheet.
- h) Boiler tube bends range from radius of 80 to 200, and with bend angles up to 180°, and all in accordance with EN10216 requirements

Eskom Environmental Management Officer

Name: Muwanwa Sinthumule

Date: 10/09/2025

Signature: 

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CONTROLLED DISCLOSURE

1. Introduction

Eskom's responsibility and commitment is to ensure protection of environment within which it operate and minimisation of environmental impact in line with its Safety, Health, Environmental and Quality Policy (SHEQ), along with legislative obligations.

This environmental specification specifies minimum requirements which are required to be met for the specific contract and for the duration of the contract period by contractors and where required, the delivery organisation.

2. Supporting Clauses

2.1 Scope

This document is applicable to all contractors, partners and suppliers doing work at all areas under direct control of Eskom Kusile Power Station.

2.1.1 Purpose

To ensure that all contractors and suppliers working for and on behalf of Kusile Power Station comply with environmental requirements during procurement and operation stages of the works.

2.1.2 Applicability

This document shall apply throughout Kusile Power Station procurement processes and operation stages of the works.

2.1.3 Effective date

From the date of signatures.

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

- [1] Environmental management Systems (ISO 14001) requirements
- [2] National Environmental management Act No 107 of 1998
- [3] Kusile Power Station Operational Environmental Management Plan (240-96626258)
- [4] 240-106963417 Kusile Power Station Environmental Requirements for Contractors and Suppliers
- [5] 240-105776552 Kusile Power Station Waste Management Work Instruction
- [6] 240- Kusile Power Station Oil/Chemical clean-up and Rehabilitation Work Instruction

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[7] 32-727: Safety Health Environmental Quality Policy.

2.2.2 Informative

[8] 32-726 Mandatory SHE Requirements for Eskom Procurement and Supply Chain Management

[9] 32-727: Safety Health Environmental Quality Policy.

[10] National Environmental Management Act 1998 (Act 107 of 1998).

[11] National Environmental Management Waste Act 2008 (Act 59 of 2008)

[12] Hazardous Substances Act 1973 (Act 15 of 1973)

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2.3 Definitions

- 2.3.1 Contractor:** Any employer formally contracted (directly or indirectly) by Eskom Kusile Power Station and who performs work, supplies a service, product, equipment or material for the purposes of advancing Eskom Kusile Power Station's business or other interests. This includes personal contractors (i.e. consultants) and third-party contractors i.e. vendors, suppliers, agents, joint ventures, principal contractors and subcontractors.
- 2.3.2 Environmental Management Plan:** It is a programme/plan of action for achieving organisational objectives relating to the mitigation of environmental impacts of its activities, products and services.
- 2.3.3 Environmental Management System:** The part of the overall management systems that includes organisational structure planning activities, responsibilities, practices procedures and resources of developing, reviewing and managing the environmental policy (ISO 14001).
- 2.3.4 Duty of care to the environment:** Anybody who causes or has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing, or recurring. If such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, such person must minimise and rectify such pollution or degradation of the environment.
- 2.3.5 Environment:** Surrounding within which an organization operates, including air, water, land, natural resources, flora, fauna, humans and their interactions.
- 2.3.6 Environmental aspect:** Element of an organisation's activities or products or services that interacts or can interact with the environment.
- 2.3.7 Environmental Policy:** Overall intentions and direction of an organization related to environmental as formally expressed by top management.
- 2.3.8 Environmental impact:** Change to the environment, whether adverse or beneficial, wholly or partially resulting from the environmental aspects of an organisation.

2.4 Abbreviations

Abbreviation	Explanation
SHEQ Policy	Safety, Health, Environmental and Quality Policy
EMP	Environmental Management Plan
MSDS	Material Safety Data Sheets
NEMA	National Environmental Management Act

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2.5 Roles and Responsibilities

2.5.1 The Contractor and or Supplier

- a) Shall be responsible for implementing the requirements of this Specification
- b) Ensure that the environmental documentation as stipulated in this document are kept safe and available
- c) Ensure compliance to environmental requirements and applicable environmental legislation

2.5.2 Kusile Senior Environmental Advisor or Officer Environmental Management

- a) Shall be responsible for evaluating compliance to this Specification during the various phases of the procurement and works;
- b) Conduct regular audit to ensure compliance to the environmental specification and other applicable environmental legislation.

2.6 Process for Monitoring

Compliance to this specification will be monitored during tender evaluation, ad-hoc inspections and by internal audits.

2.7 Related/Supporting Documents

240-106963417 Kusile Power Station Environmental Requirements for Contractors and Suppliers.

3. Specification

3.1 Scope of work

A copy of the scope of works must be retained by the contractor. The scope of work for this contract is detailed in the document:

3.2 Environmental Requirements

Note 1: In the event of any perceived conflict between the “environmental laws” and the contract documents, the Contractor shall, prior to commencing the work, refer such conflict to the Project Management Team for clarification.

Note 2: Environmental protection shall include, but not be limited to, noise pollution, gaseous emissions, noxious and/or offensive odours, liquid and solid waste separation and collection, spillage clean-up and rehabilitation of contaminated area.

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3.3 Environmental Rules

Duty of care and remediation of environmental damage - Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorized by law or cannot reasonably be avoided or stopped, to minimize and rectify such pollution or degradation of the environment.

Polluter Pay Principle - The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimizing further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.

Zero Liquid Effluent Discharge Policy - All Contractors shall abide to Eskom Zero Liquid Effluent Discharge through the process of reuse and recycling.

Waste - all waste shall be stored in marked and labelled containers, and as per Kusile Power Station Waste Management Work Instruction 240-105776552 and be disposed of at a permitted disposal site. Records of waste disposed including safe disposal certificate must be maintained.

Spillages - All spills/emergency incidents should be reported to the Supervisor and Environmental Officer(s) immediately on occurrence. Incidents should be investigated to prevent reoccurrence and clean-up, or rehabilitation should be done as per Kusile Power Station Oil/Chemical spillage clean-up and rehabilitation process 240-110383662.

Oil storage - oils shall be stored in bunded areas/impermeable tanks to prevent spillages. Where oil is disposed, disposal certificate must be submitted to the Environmental Department.

3.4 Environmental Instruction

The contractor and or supplier shall have a documented and implemented environmental management system e.g. environmental policy, operational procedures relating to their activities, aspects/impacts register etc.;

3.4.1 Environmental Aspect and Impact Register

- a) The contractor and or supplier shall prepare an environmental aspect and impact relating to their activities that will be carried out. The aspect and impact register must also indicate the mitigations/ environmental management plan on how the impact will be mitigated. The Environmental Management Plan/Mitigation Measures must be in line with Eskom Kusile Power Station's OEMP and any other applicable environmental legislation.
- b) The environmental aspect and impact register must indicate the aspect rating matrix. Where significant aspect, an environmental objective must be developed and maintained.
- c) The environmental aspect and impact must be communicated to all employees and proof of communication be maintained.

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3.4.2 Induction

The contractor and or supplier employees shall be inducted on the environmental requirements before commencement with work. Proof of induction must be retained.

3.4.3 Environmental Training Matrix

- a) The contractor must identify the training needs aligned to the scope of work/ activities then develop the training matrix.
- b) Proof of training and awareness must be maintained.
- c) The contractor shall appoint trained and competent personnel in writing, who will have the responsibilities of implementing all environmental requirements.

3.4.4 Environmental Incident registers and investigation reports

- a) All environmental incidents must be reported within 24 hours or immediately to Kusile Environmental Department.
- b) Immediate measure must be taken to prevent/minimise environmental pollution where incident occurs e.g. Use saw dust to contain the spillage, e.g. extinguish the fire.
- c) All incidents must be investigated within 24 hours and Kusile Environmental representative must be part of the investigation.
- d) The contractor is responsible to remediate the impact associated with the incident.

3.4.5 Non-conformances

Non-conformance and incident reporting and investigations shall be done by the contractor, such reports must include but not limited to the following information:

- i. The cause of the non-conformance/incident;
- ii. The proposed actions to correct and prevent recurrence.
- iii. Eskom Kusile Power Station shall issue non-conformances where there are deviations from Eskom Kusile Power Station Procedures and any other environmental requirements.

3.4.6 Hazardous Substances registers and SDS

- a) All hazardous substances to be used onsite must be stored in bunded area (110% capacity).
- b) The SDS for all hazardous substances must be kept onsite.
- c) Oil spill kit/absorbent must be kept close to the hazardous storage area to use in case of accident.
- d) The hazardous substance register must be maintained.

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3.4.7 Waste Management

- a) The contractor is responsible to ensure that waste is stored in allocated bins.
- b) No mixing of waste is allowed, no burning of waste is allowed.
- c) No waste should be stored on the ground, and full bins must be reported to Environmental Department.
- d) Initiative to recycle waste must be implemented.
- e) Contractors are not allowed to remove waste from site unless permitted/authorised by the Environmental Department.
- f) Good housekeeping must be maintained at contractors laydown areas and working areas.

3.4.8 Audit reports

- a) Environmental Department will conduct regular audits/inspection. Where non-conformance is recorded, the contractor will submit action plan for correction/preventative measures.
- b) The audit report will be maintained.

3.4.9 Environmental Objectives

The contractor must develop environmental objectives for each financial year. The environmental objectives must be updated and communicated to employees. The environmental objectives must include the significant aspects.

3.4.10 Environmental improvement opportunities

The contractor must identify areas of improvements, the improvements should also take into account the significant aspects where applicable.

3.4.11 Emergency Management

The art of emergency preparedness and response is to minimise the effects of any emergency and to restore normal activities as soon as practical. The supplier must develop their own emergency response in their work premises. The Eskom employees attending training must be made aware of the emergency process and the assembly points. Where any office and or site is located within any Local Authorities area, then the plans must include their involvement. Emergency preparedness. Periodic emergency drills must be undertaken to test the effectiveness of the plan. This must be recorded and provided on request.

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3.4.12 SHE policy

A SHE policy is a statement of intent and a commitment by the organisation's CE and senior management in relation to the relevant environmental roles and responsibilities, the achievement of their strategic objectives, values of integrity, customer satisfaction, excellence, and innovation.

The policy must be displayed in a prominent place within the workplace. A copy of the policy must be filed and the policy must be communicated to all employees and proof of communication be retained.

3.5 Records to be kept during execution of service/scope onsite

The following minimum records shall be kept on all sites (the documentation must be in accordance to the scope of work:

- a) Contractor site specific Environmental Management Plan;
- b) Aspects/Impacts register and proof of communication
- c) Incident registers and investigation reports;
- d) Non-conformance register;
- e) Public Complaints register;
- f) Waste disposal register;
- g) Hazardous Substances registers and SDS where applicable;
- h) Records of audit reports and audit findings close-out, where applicable;
- i) Records of inspections conducted.
- j) Environmental Training matrix
- k) Proof of environmental awareness
- l) Proof of communication of SHEQ Policy
- m) Emergency drill reports

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3.6 Tender Submission Documentation

The following documentation shall be submitted with all tender submissions:

- a) Environmental Policy that is in line with ISO 14001:2015 signed by the CEO or co of the company.
- c) Aspect and impact register or an environmental management plan (relevant to the scope of work)
- d) Environmental Management System Certificate (if certified) if not, an environmental management system manual or procedures
- e) Waste Management Procedure or work instruction.
- f) Proof of training of persons performing activities that could have significant impact on the environment

g) Acceptance

This document has been seen and accepted by:

Full Name and Surname	Designation
Christopher Nani	General Manager
Sipho Shabangu	Risk and Assurance Manager
Lesiba Kgobe	Environmental management Manager
Matshidiso Kgafane	Procurement Manager
Vuyo Mokoena	Human Resource Manager

h) Revisions

Date	Rev.	Compiler	Remarks
August 2025	1	Cylia Malebana.	Environmental specification document.

i) Development Team

The following people were involved in the development of this document:

- a) Cylia Malebana.
- b) Lesiba Kgobe.

j) Acknowledgements (if applicable)

None.

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