	Procedure	Medupi Power Station Project
---	-----------	------------------------------

Title: **Medupi Identification and Application of Environmental Operational Controls**

Document Identifier: **348-687105**

Alternative Reference Number: **200-73969**

Area of Applicability: **Medupi Power Station Project**

Functional Area: **Environmental Management**





Revision: **06**

Total Pages: **12**

Next Review Date: **September 2024**

Disclosure Classification: **Controlled Disclosure**

Current Change Note **CN100131**

Compiled by	QA, Interface & Governance Review	Functional Responsibility	Authorized by
 M Boshomane Senior Advisor Environmental	 B Mgidlana Quality Manager	 E Marell Environmental Manager	 Z Shange General Manager Acting: Medupi GCD
Date: 2021/09/28	Date: 2021/09/27	Date: 28/09/2021	Date: 2021/09/30

Content

	Page
1. Introduction.....	3
1.1 Scope.....	3
1.2 Purpose.....	3
1.3 Applicability	3
1.3.1 Effective date.....	3
2. Normative/Informative References.....	3
2.1.1 Normative.....	3
2.1.2 Informative.....	4
2.2 Definitions	4
2.3 Abbreviations	5
2.4 Roles and Responsibilities	5
2.5 Related / Supporting Documents.....	6
3. Procedure.....	6
3.1 Definition of Project-wide Operational Controls.....	6
3.2 Project-wide Operational Control.....	6
3.3 Contractor Controls	7
4. Process for Monitoring.....	7
4.1 Key Performance Areas and Indicators	7
4.2 Document Review and Self-Assessment.....	9
4.2.1 Document Self-Assessment	9
4.2.2 Revision Period	9
4.3 Training Requirements	9
4.4 Acceptance	9
5. Revisions.....	10
6. Development Team	10
Appendix A – Process Self-Assessment Checklist.....	1

Tables

Table 1: RACI Matrix	5
Table 2 KPAs/KPIs	8

1. Introduction

1.1 Scope

This process applies to all Environmental Operational Controls pertinent to the Medupi Construction Site and activities deemed to form part of such, under relevant Contractual arrangements.

TM, supported by Principal Contractors, will apply this Procedure.

Principal Contractors shall undertake the following activities in support of this Procedure:

- Apply specific Operational Control mechanisms, as Employers in their own right;
- Be subject to site-wide Operational Control mechanisms employed by the TM.

1.2 Purpose

The objective of this procedure is to:

- Define how Operational Controls are identified and applied to mitigate relevant Environmental Impacts on the Medupi project.
- Provide a framework for Operational Control to prevent environmental degradation and pollution, as well as compliance to applicable legislation, Client and international standard requirements.

1.3 Applicability

This document shall apply throughout Medupi Power Station Construction activities, excluding activities handed over to the client, Generation.

1.3.1 Effective date

Authorisation date will be the effective date

2. Normative/Informative References

2.1.1 Normative

Document Title	Document Number
Project Execution Plan	200 5919
Project Quality Plan	200 1679
Development and Change of Medupi QMS Documents	200 5665
Document and Record Management Procedure	200 1680
Unit Construction Procedure Manual	200-163680

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.

Document Title	Document Number
Medupi EMS Scope and Manual	200-73971
Medupi Environmental Policy	200-73979
Environmental Performance monitoring and measurement Procedure	200-73970
Environmental Communications Procedure	200-38432
Document Title	Document Number
Medupi Power Station, s.4 Employer Policy and Procedures – Part 9; Safety, Health and Environmental Requirements Schedule (also known as the HSE specification/Agreement)	200-10609
Procedure for the Identification and Assessment of Environmental Aspects and Impacts	200-73975
The Environmental Management Plan for the Medupi Coal-fired Power Station in the Lephalale Area, Limpopo Province – The Construction Phase	200-35208
Medupi Sewage management Work Instruction	200-109294
Medupi Waste management Work Instruction	200-73768
Medupi Stockpile Management Plan	200-53820
Medupi Fire Management Plan	200-112099
Medupi Land Management Plan	200-79130
Medupi Alien and Invasive Plant Species Plan	200-85677
Medupi Water Management Plan	200-12141
Medupi Coal Stockyard Operational Management Plan	200-117339
Medupi Traffic Management Plan	200-114263
Rehabilitation Strategy and Implementation Plan for Medupi power Station (RISP)	200-233672
Medupi Integrated Water and Waste Management Plan	200-237399

2.1.2 Informative

- ISO 9001:2015 Quality Management System
- ISO 14001:2014 Environmental Management System

2.2 Definitions

Term	Definition
-------------	-------------------

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.

Method Statement	Written document detailing the key activities of a task to be performed in order to avoid or minimize environmental impacts as reasonably as practicable.
Operational Control	Means and methods employed by the TM and Contractors, to manage identified significant Aspects and avoid or minimize Impacts. May also be referred to as Mitigating Actions or Risk Control Measures. These usually relate to written instruction, specification or process.
Life cycle	Consecutive and interlinked stages of a product(or service) system, from raw material acquisition or generation from natural resources to final disposal.

2.3 Abbreviations

Abbreviation or Acronym	Description
ECO	Environmental Control Officer
EMP	Environmental Management Plan
ISO	International Standards Organisation
TM	Team Medupi

2.4 Roles and Responsibilities

The parties or stakeholders responsible **(R)** and accountable **(A)** or to be consulted **(C)** and/or informed **(I)** relative to the implementation and maintenance of this QMS procedure are defined in the Procedure RACI Matrix documented below:

Table 1: RACI Matrix

RACI Matrix							
Process Step/Activity	TM Construction Manager	TM Unit Area Manager	TM Contracts Manager	TM Environmental Manager	TM Environmental Practitioner	ECO	PCs Environmental Practitioner
Define Project-wide Operational Controls	I	I	I	R,A	R	C,I	I
Apply Project-wide Operational Controls	I	R,I	R	R,A	R,C	I	R

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.

Define and apply Scope of Work- specific Operational Controls	I	I	I	C,I	C,I	I	R, A
Submit relevant Operational Controls		I	R	I	C, I	I	R,A
Review and Accept relevant Operational Controls		I	R,C	A,C,I	R	C,I	C

2.5 Related / Supporting Documents

All control work instructions

3. Procedure

3.1 Definition of Project-wide Operational Controls

- As per the definition of Operational Controls (Section 3.2), project operational controls are also set out in the Procedure for the Identification and Assessment of Environmental Aspects and Impacts.
- Environmental operational controls are described in the Medupi EMP200-35208), which makes up part of the Project Agreements (Medupi Power Station, S.4 Employer Policy and Procedures – Part 9; Safety, Health and Environmental Requirements Schedule) with Contractors.
- Operational Controls may also be developed based on the outcomes of the assessment of significance for Aspects and associated Impacts.

3.2 Project-wide Operational Control

- TM shall develop Operational Controls during the life of the Project to address certain environmental issues (e.g Waste management, Rehabilitation, plan, etc. that affects the whole site. These specific operational controls shall act as guidelines, in line to which the Contractor shall develop their own site-specific operational controls to address the specifics of a given issue.
- These Site-wide operation controls shall be communicated to the Contractor in line with environmental communications procedure.
- TM staff shall comply with Operational Controls and rules set in place by Contractors within specific Contractor-controlled work areas.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.

- Life cycle approach (cradle to grave) shall at all times form part of operational controls; effort shall be made to entrench the philosophy to all contractors/service providers and employees.

3.3 Contractor Controls

- Contractors shall develop their own Operational Controls as Employers in their own right, within their relevant scopes of work.
- Contractor Operational Controls shall as a minimum, comply with requirements of TM Project-wide Operational Controls. It is important to note that Contractors are expected to adapt Project-wide Operational Controls to their specific Scope of Work.
- Contractors are required to submit their site specific EMP and Method Statements as specified by the Medupi EMP to TM and the ECO prior to commencement of work.
- Contractor EMP and Method Statement shall include the operation control methods to address the requirements of Project HSE Specifications, significant aspects and the Medupi EMP. HSE Plans are reviewed and accepted by TM Environmental practitioner.
- The TM Environmental practitioner shall communicate acceptance/rejection of Contractor EMP / Method Statements to the relevant Contracts Manager, who will communicate such to the Contractor.
- The Contractor/service provider shall not be allowed to commence Works unless the Environmental Management Plans/Method Statements have been reviewed and accepted by the TM Environmental Department. Environmental requirements shall form part of the tender evaluation requirements, this shall form part of the life cycle approach where issues are addresses from cradle to grave.(e.g. raw material supplies, waste contractors, transporters etc.)
- TM will Environmental may as part of the Life Cycle approach go as far as ensuring the suppliers , contractors suppliers as well as other service providers are assessed , evaluated or inspected on an ad-hoc basis to ensure due diligence as part of ensuring Environmental protection.
- Contractors shall keep up to date copies of their EMP and Method Statements at their particular Construction Areas.
- Method Statements for any new specific activity planned shall be submitted to TM Environmental practitioner and the ECO for review and acceptance as per practical timeframe agreements with the contractor prior to specific activity being planned to be undertaken.
- Monitoring and measurement of Contractor conformity is further expanded upon in the TM Environmental Performance Monitoring and Measurement Procedure and Medupi EMP.

4. Process for Monitoring

4.1 Key Performance Areas and Indicators

The following Key Performance Areas / Indicators (KPA's / KPIs) shall be measured, analysed and reported. The Process Owner shall be accountable, and assign the responsibility at the frequency as indicated below, documented as part of the QMS measurement, analysis and improvement initiative.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.

Table 2 KPAs/KPIs

Key Performance Area	Key Performance Indicator	Measure Frequency	Responsibility	Records
All Contractor-required Documentation in place	EMP and Method Statement Plans approved prior to Contractor Works commencement	As applicable	Environmental Practitioner as per unit area	Acceptance and Comments Documentation
Adhoc Method Statements received and reviewed	Contractor environmental method statements approved before Contractor undertakes activity	Ongoing	Environmental Practitioner as per Discipline	Acceptance and Comments Documentation
Document control	Retain and store records generated as a result of this document as defined in the Procedure 200-1680 "Document and records Management".	Annually or as required	Environmental Practitioner	As generated by the procedure
Revision of Document	Revision requirements in line with Medupi Procedures PPZ 200 5665 "Development and Change of Medupi QMS Documents" and PPZ 200 1680 "Document and Record Management"	Annually or as required	Environmental Manager	New revised document

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.

4.2 Document Review and Self-Assessment

4.2.1 Document Self-Assessment

The “Process Owner” identified on the front page of this document along with departmental personnel and the project QMS Engineer shall undertake a “self-check” review of the process defined in this document at six monthly intervals, commencing from the effective date of this document, to check:

- a) the process / procedure operational integrity
- b) process efficiency
- c) the level of stakeholder knowledge and implementation.

Participants and results of the “self-check” review shall be documented by the Process Owner in the “Self-Assessment Checklist” (***QMS Template No. QMS PTZ 200 - 75592***) included as an Appendix to this procedure which shall be issued to medupiga@eskom.co.za by the Process Owner once completed.

Process Owner shall proceed with any revision requirements in line with Medupi Procedures

PPZ 200 5665 “Development and Change of Medupi QMS Documents” and PPZ 200 1680 “Document and Record Management”

4.2.2 Revision Period

All EMS documents shall undergo a compulsory three yearly revision.

4.3 Training Requirements

Training in operational requirements of this procedure may be undertaken by the respective Process Owner and Line Managers.

4.4 Acceptance

This document has been seen and accepted by:

Name	Designation
Brenda Mgidlana	Quality Manager
E Marell	Environmental Manager
T Biyela	Senior Construction Manager
Z Shange	General Manager Acting: Medupi GCD

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.

5. Revisions

Date	Rev.	Compiler	Remarks
2021/07/15	06	M Boshomane	Three yearly Review with minor changes e.g. change in management
2018/01/28	05	M Boshomane	Three Yearly Review
2015/10/26	04	L Ramono	Annual Review

6. Development Team

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


- M Boshomane
- S Mamabolo
- D Mudzielwana
- M Sebonego
- E Marell

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.

Appendix A – Process Self-Assessment Checklist

	MEDUPI POWER STATION PROJECT	Template Identifier	348-655890	Rev	1
		Document Identifier	348-999407	Rev	0
		Effective Date	25 June 2019		
		Next Review Date	25 June 2022		
TITLE: Document Self-Assessment Checklist					

Discipline: Quality		Applicable Document No.:348-687105 Medupi Identification and Application of Environmental Operational Controls				Self-Assessment Date:
Item No	Ref Section	Self-Assessment Question	Compliant			Comment
			Yes	Part	No	
1.	5.2	Are Operational Controls set out in the Aspects and Impacts Procedure?				
2	5.2	Are Operation Controls described in the Medupi EMP?				
3	5.2	Are Operation Controls developed based on the outcome of the assessment of significance for Aspects and associated Impacts?				
4	5.3	Are Operation Controls applied by TM staff?				
5	5.3	Has the TM developed Operational Controls?				
6	5.3	Are the Site-wide operations controls communicated to the Contractor in line with environmental communications procedure?				
7	5.4	Do Contractors develop and implement their own Operational Controls in line with project wide operations controls?				

Public

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.


File Name: 348-655890 Document Self-Assessment Checklist Rev 1

Page 1 of 2

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.

	MEDUPI POWER STATION PROJECT				Template Identifier	348-655890	Rev	1
					Document Identifier	348-999407	Rev	0
					Effective Date	25 June 2019		
					Next Review Date	25 June 2022		
TITLE: Document Self-Assessment Checklist								
8	5.4	Do Contractors submit EMP and Method Statements to the TM prior the commencement of works?						
11	5.4	Do Contractors keep up to date copies of their EMP and Method Statements at their particular Construction Areas?						
12	5.4	Are Method Statements for any new specific activity planned submitted to TM Environmental practitioner and the ECO for review and acceptance as per practical timeframe agreements with the contractor prior to specific activity being planned to be undertaken?						
Comments:								
Self-Assessment by:	Name:	Position:	Revision Required. (Yes / No)		Planned Revision Date:			

Public

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

File Name: 348-655890 Document Self-Assessment Checklist Rev 1

Page 2 of 2

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg. No 2002/015527/30.