

	<p align="center"><b>Scope of Work</b></p>	<p><b>Generation/Matimba Power Station/ Risk and Assurance</b></p>
---	--	--

Title: Monthly Inspection and maintenance of firefighting equipment

Document Identifier: **N/A**

Alternative Reference Number: **240-160759163**

Area of Applicability: **Matimba Power Station**

Functional Area: **Risk and Assurance**

Revision: **0**

Total Pages: **11**

Next Review Date: **N/A**

Disclosure Classification: **Controlled Disclosure**

**Compiled by**

**Supported by**

**Approved by**

*moabi ml*




**Lazarus Moabi**  
Senior Advisor Fire  
Risk Management

**Simon Mavhungu**  
Safety Manager

**Thembi Makhubele**  
Risk and Assurance  
Manager

Date: 2021/04/19

Date: 2021/04/23

Date: 2021/04/26

<b>Content</b>	<b>Page</b>
<b>RISK AND ASSURANCE.....</b>	<b>1</b>
<b>1. PROJECT DETAILS.....</b>	<b>3</b>
<b>2. INTRODUCTION TO THE SCOPE STATEMENT.....</b>	<b>3</b>
<b>3. NORMATIVE REFERENCE .....</b>	<b>3</b>
<b>4. PROJECT DELIVERABLES .....</b>	<b>4</b>
<b>5. PROJECT SCOPE DESCRIPTION (PROGRESSIVELY ELABORATED) .....</b>	<b>4</b>
5.1 Service Provider/Partner .....	4
5.2 Process for Monitoring .....	4
<b>6. DOCUMENT CONTENT .....</b>	<b>4</b>
<b>7. CONTRACT SCOPE EXCLUSIONS.....</b>	<b>10</b>
<b>8. CONTRACT ACCEPTANCE CRITERIA.....</b>	<b>10</b>
<b>9. CONTRACT ASSUMPTIONS.....</b>	<b>11</b>
<b>10. CONTRACT CONSTRAINTS .....</b>	<b>11</b>
<b>11. PROJECT REFERENCES.....</b>	<b>11</b>
<b>12. PROJECT ADDITIONAL INFORMATION .....</b>	<b>11</b>
<b>13. DOCUMENT ACKNOWLEDGEMENT .....</b>	<b>11</b>

**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.

## 1. PROJECT DETAILS

<b>Project Description</b>	Monthly inspection of firefighting equipment, and maintenance as and when required at Matimba Power Station, for a contract period of five years.	
<b>Operating Unit &amp; Project Office:</b>	Generation	Matimba Power Station
<b>Contract Manager:</b>	Lazarus Moabi	
<b>Engineer / Discipline Manager:</b>	Thembi Makhubele	

## 2. INTRODUCTION TO THE SCOPE STATEMENT

The project scope statement is the definition of the project, i.e. what needs to be accomplished. It enables the project team to perform detailed planning, guides the project team's work during execution, and provides the baseline for evaluating whether requests for changes or additional work are contained within or outside the project's boundaries.

The degree and level of detail to which the project scope statement defines the work that will be performed and what work is excluded can determine how well the project management team can control the overall project scope. Managing the project scope, in turn, can determine how well the project management team can plan, manage, and control the execution of the project.

## 3. NORMATIVE REFERENCE

- [1] ISO 9001 Quality Management Systems.
- [2] Occupational Health and Safety Act (Act No. 85 of 1993).
- [3] Disaster Management Act (Act No. 57 of 2002).
- [4] Fire Brigade Services Act (Act No. 99 of 1987)
- [5] National Building Regulations and Building Standards Act (Act No. 103 OF 1977).
- [6] National Veld and Forest Fire Act (Act No 101 of 1998).
- [7] SANS 10400: The Application of the National Building Regulations.
- [8] Fire Risk Management Standard 32-124

### **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. PROJECT DELIVERABLES**

Maintenance and servicing contract is required to keep all the firefighting equipment at Eskom Matimba Power Station Generation division, Lephalale, at an acceptable standard and condition as required by Occupational Health and Safety act 85 of 1993, National Building Regulation no.103 of 1977 and Fire Brigade Services Act 99 of 1987. It is also required to supply fire and emergency equipment on as and when required bases. The contract duration will be for a period of five (5) years.

#### **5. PROJECT SCOPE DESCRIPTION (PROGRESSIVELY ELABORATED)**

##### **5.1 Service Provider/Partner**

- The service provider/partner shall ensure that this scope of work is executed accordingly.
- The service provider/partner must ensure that a SANS 1475 registered fire technicians are always available to perform their duties as and when required.
- The service provider/partner shall have his/her own transportation to conduct their duties (vehicles used should be road worthy and compliant with Eskom safety standards).

##### **5.2 Process for Monitoring**

- The service provider will do inspections on firefighting equipment as in accordance to section 3; and submit an inspection report to the contract's manager.
- The contract's manager will conduct a monthly assessment to monitor work progress.

#### **6. Document Content**

Scope of work for the maintenance of firefighting equipment

The scope comprises the following but is not limited to:

- a) Maintenance of hydraulic equipment
- b) Maintenance of PPV fans
- c) Maintenance of fire department generators
- d) Servicing fire extinguishers
- e) Periodically repair and replace fire extinguishers
- f) Servicing of SCBA sets
- g) Periodically repair and replace SCBA sets
- h) Servicing fire hose reels
- i) Periodically repair and replace fire hose reels
- j) Service and repair foam and fire extinguishers trolleys including tyres
- k) Monthly inspection of sprinklers fire system

#### **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.

- l) Servicing of skid units
- m) Monthly inspections of all fire valves
- n) Monthly inspection on Pyroshield Extinguishing system at simulator building and Refill.
- o) Fire walls three monthly inspections / Repairs

## **6.1 Inspections**

Inspections to be carried out on a monthly basis and the following are to be checked:

- Seals are to be checked whether they are still intact.
- Gauges to be checked that pressures are still within range.
- Check that expiry dates are not exceeded.
- Daily inspection of emergency vehicles to check equipment and vehicles conditions.

## **6.2 Services**

When service date is reached, the following is to be done on fire equipment.

### **a) Fire Extinguishers**

- i. Extinguisher is to be removed from its position and replaced with spare one
- ii. Extinguisher to be opened and major service each time
- iii. Extinguisher is to be inspected for any defects, such as rust, cracks etc.
- iv. Extinguisher hoses that have deteriorated from exposure to the elements are to be replaced
- v. Extinguisher gauges are to be checked and calibrated
- vi. Extinguishers that got faded or slightly rusted areas must be refurbished
- vii. Extinguishers to be pressure tested
- viii. Extinguishers to be supplied with pressure test certificates
- ix. Inspection sticker to be placed showing when next service is due
- x. Fire extinguisher brackets to carry fire extinguishers are in place

### **b) Fire Hose Reels**

- i. Hose reels to be serviced in accordance to SANS 1475 Standards
- ii. Monthly inspection to be carried out
- iii. Hose to be checked periodically for deterioration
- iv. Nozzles to be checked if still in place
- v. Leaking seals to be replaced when leaking

### **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.

- vi. Inspect isolation valve's functionality and if defective replace
- vii. Hose reels to be inspected together with extinguishers
- viii. Inspection sticker to be placed showing when next service is due

**c) Hydrants**

- i. Hose connection seals to checked if in place
- ii. Hydrant to be checked for leaks
- iii. Hydrant to be flushed
- iv. Ensure that the fire hydrants outlets lugs are still in good condition
- v. Ensure that the fire bank has a symbolic sings for hydrants
- vi. Ensure that the fire hydrant throat plug is in place
- vii. Inspection sticker to be placed showing when next service date

**d) Servicing and maintenance of fire equipment**

- i. All the hand tools of the fire engine: adjustable fire nozzles, chainsaw; grinder cutter
- ii. Servicing of hydraulic pump; spreader; sheers; ram bars; cribbing and step chocks
- iii. PPV fan
- iv. Servicing of all SCBA equipment back packs; cylinders; face piece; regulators
- v. Servicing of SCBA mobile recharging unit
- vi. Servicing of grass beaters and repair

**6.3 Frequency**

<b>DESCRIPTION</b>	<b>FREQUENCY</b>
Periodic inspection of all firefighting equipment as prescribed by the performance management schedules, as well as proper documentation of inspection findings.	monthly
<b>Service and maintain 1,5 -9kg DCP extinguisher</b>	1 yearly
<b>Service and maintain 2 – 6,9kg co<sub>2</sub> extinguishers</b>	1 yearly
<b>Pressure test 50kg DCP extinguishers</b>	When required
<b>Pressure test 1,5 – 9kg DCP extinguishers</b>	when required
<b>Pressure test 2 – 9kg co<sub>2</sub> extinguishers</b>	when required
<b>Recharge 1,5 – 9kg DCP extinguishers</b>	when required
<b>Recharge 2 – 9kg co<sub>2</sub> extinguishers</b>	when required

**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.

<b>Reconditioning of all DCP extinguishers 1,5 – 9kg</b>	when required
<b>Reconditioning of all co<sub>2</sub> extinguishers 2 – 6,8kg</b>	when required
<b>Testing and reconditioning of all inline inductors</b>	6 monthly
<b>Test and service of fire hose reels</b>	1 yearly
<b>Pressure test of delivery hoses 38 mm to 65mm</b>	1 yearly
<b>Pressure and vacuum test of suction hoses 75mm to 100mm</b>	1 yearly
<b>Pressure test 300 bar SCBA cylinders</b>	when required
<b>Refill 300 bar SCBA cylinders</b>	when required
<b>De-rusting/chemical treatment of SCBA cylinders</b>	when required
<b>Test and service of hydrants</b>	1 yearly
<b>Service of portable pump</b>	1 yearly
<b>Service of hydraulic rescue set</b>	1 yearly
<b>Inspection and service of Vetter bags</b>	1 yearly
<b>Vacuum pressure and delivery test of vehicle pump</b>	1 yearly
<b>SERVICE OF SMALL GEAR;</b> - carborundum cutter - portable generator - PPV fan - chain saw	1 yearly
<b>SCBA compressor service</b>	1 yearly
<b>ladder test</b>	1 yearly
<b>on board truck fire pump</b>	1 yearly
<b>service skid units</b>	6 monthly
<b>service skid units trailers</b>	6 monthly
<b>fire hose reels boxes/sock</b>	when required
<b>DCP FIRE EXTINGUISHERS SPARES</b>	
A. valve assembly complete	as & when required
B. pressure gauge	as & when required
C. syphon tube	as & when required
D. discharge hose	as & when required
E. valve seat	as & when required
F. seal ring	as & when required
G. instruction label	as & when required

**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.

H. monthly inspection sticker	as & when required
I. replacement of scrapped 9kg extinguisher	as & when required
J. replacement of scrapped 4.5kg extinguisher	as & when required
K. 40% powder	As & when required
<b>CO<sub>2</sub> FIRE EXTINGUISHERS SPARES</b>	
A. valve assembly complete	as & when required
B. safety disc	as & when required
C. syphon tube	as & when required
D. discharge horn	as & when required
E. discharge hose	as & when required
F. instruction label	as & when required
G. monthly inspection label	as & when required
H. replacement of scrapped 5kg extinguisher	as & when required
I. CO <sub>2</sub> gas	As when required
J. replacement of scrapped 2kg extinguisher	as & when required
<b>FIRE HOSE REELS SPARES</b>	
A. stop valve	as & when required
B. 30m PVC hose & 60m PVC hose for plant	as & when required
C. gland packing	as & when required
D. nozzle	as & when required
E. clamps	as & when required
F. instruction label	as & when required
G. monthly inspection sticker	as & when required
H. replacement reel	as & when required
<b>FIRE HOSES SPARES</b>	
A. male coupling	as & when required
B. female coupling	as & when required
C. binding	as & when required
D. seal	as & when required
E. replacement lug	as & when required
F. replacement hose 45 mm	as & when required
G. replacement hose 65mm	as & when required
H. replacement hose 38mm	as & when required

**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.



I. replacement hose 100mm	as & when required
J. suction hoses spares	as & when required
K. seal	as & when required
L. coupling	as & when required
M. binding	as & when required
N. replacement hoses	as & when required
<b>SCBA CYLINDERS SPARES</b>	
A. valve assembly complete	as & when required
B. seals	as & when required
C. replacement of scrapped SCBA cylinder	as & when required
<b>INLINE INDUCTORS SPARES</b>	
A. siphon tube	as & when required
B. induction valve assembly	as & when required
C. male coupling	as & when required
D. female coupling	as & when required
E. separate lug for instantaneous coupling	as & when required
F. seal for 65mm instantaneous coupling	as & when required
G. seal for induction valve assembly	as & when required
H. replacement of irreparable inductor 225	as & when required
I. replacement of irreparable inductor 450	as & when required
<b>HYDRAULIC RESCUE EQUIPMENT SET SPARES</b>	
A. spreader tips	as & when required
B. spreader arms	as & when required
C. cutter blades	as & when required
D. hydraulic oil	as & when required
E. carburettor kit	as & when required
F. pull start mechanism	as & when required
G. internal piston	as & when required
H. oil seal	as & when required
I. quick release coupling	as & when required
J. high pressure pipe	as & when required
K. spark plug	as & when required
<b>PORTABLE PUMP SPARES</b>	

**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.

A. gland packing	as & when required
B. gauges	as & when required
C. primer oil	as & when required
D. primer	as & when required
E. primer bely	as & when required
F. spark plug	as & when required
G. discharge valve	as & when required
<b>AIRBAGS SPARES</b>	
A. o rings	as & when required
B. airbag replacement 16 ton	as & when required
C. airbag replacement 32 ton	as & when required
D. airbag replacement 64 ton	as & when required
E. gauges	as & when required
F. high pressure air pipe with quick release coupling	as & when required
G. screw in connection to connect to SCBA cylinder	as & when required
<b>FIRE CABINETS</b>	
A. equipment boxes	as & when required
B. extinguisher cabinets steel and plastic	as & when required
C. ground monitors	as & when required
D. akrons	as & when required
E. dividers	as & when required
F. rescue equipment	as & when required

## **7. CONTRACT SCOPE EXCLUSIONS**

- Anything that is not part of scope work

## **8. CONTRACT ACCEPTANCE CRITERIA**

- Must be a registered provider
- Must be SANS & SAQCC accredited
- Must have own workshop to carry out the work which is SANS approved
- They must have own transport & accommodation ,

### **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.

**9. CONTRACT ASSUMPTIONS**

- Contractor not being registered for carrying out the work.

**10. CONTRACT CONSTRAINTS**

- Loss of SANS or SAQCC accreditation

**11. PROJECT REFERENCES**

Description	Location
None	

**12. PROJECT ADDITIONAL INFORMATION**

None

**13. DOCUMENT ACKNOWLEDGEMENT**

By signing this document, the people listed record their agreement on the contents of this document.

**Client Representative:**

: **Name** : Lazarus Moabi  
: **Signature** : .....  
: **Date** : .....

**Stakeholder 1:**

: **Name** : Simon Mavhungu  
: **Signature** : .....  
: **Date** : .....

**Stakeholder 2:**

: **Name** : Macdonald Mahlaule  
: **Signature** : .....  
: **Date** : .....

**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.