	<b>Tutuka Power Station Works Instruction</b>	<b>Environment File 3</b>
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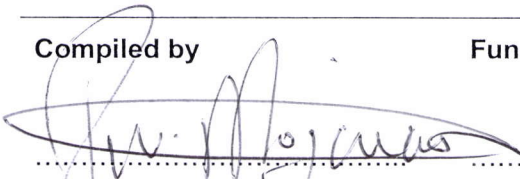
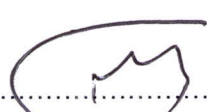

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DISCLOSURE**

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## 1. INTRODUCTION

Insulating oil, as well as other related hydrocarbon and synthetic compounds pose a serious pollution problem once released into the environment. One litre of oil has the potential to contaminate in excess of a million litres of water and can also cause harm to both human life and flora and fauna.

## 2. SUPPORTING CLAUSES

### 2.1 SCOPE

This instruction is applicable to Tutuka Power Station area, coal stockyard and ashing facility.

#### 2.1.1 Purpose

To describe the actions to be taken in event of oil spill i.e. the containment of the spillages and clean-up operations. The procedure also addresses the reporting of the spillages and investigations and closure of findings from the investigations, this includes the rehabilitation of the contaminated areas.

#### 2.1.2 Applicability

This document shall apply to Tutuka Power Station's oil spill clean-up and rehabilitation process.

### 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] ISO 9001 Quality Management Systems.
- [2] Environmental Liaison Committee (ELC) Performance Indicator Reporting.
- [3] 32-95 Eskom Incident Management Procedure
- [4] 14RISK IM PC-019 Tutuka Incident Management, Corrective and Preventative Action Procedure

#### 2.2.2 Informative

- [1] N/A

### 2.3 DEFINITIONS

#### 2.3.1 Classification

- a. **Controlled disclosure:** controlled disclosure to external parties (either enforced by law, or discretionary).
- b. **Spill:** oil present out of its "normal" container.
- c. **Containment:** prevention of spreading of the oil spill.
- d. **Weep:** where no free running oil is visible, but the area is damp with oil. It will be an area where dust is accumulating but no effective loss of oil is evident.

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- e. **Drip:** where continuous dripping is taking place and can result in pooling of the oil.
- f. **Leak:** described as continuous dripping that will result in pooling of oil and will need corrective action.
- g. Responsible Person: the person appointed by the relative line

## 2.4 ABBREVIATIONS

N/A

## 2.5 ROLES AND RESPONSIBILITIES

### 2.5.1 Shut-down plant, if necessary

- a. Operating, Chemical Services and any other department to contact the Environmental Management Department during normal operating hours to report oil spillages and to report to the Fire Station after hours in a case the spillage poses a fire risk
- b. Operating fire team to contain oil spillage until the relevant department has been called out and report to site.
- c. Oil clean-up to be done as per this procedure for minor spills
- d. In case of major spillages, a contractor should be called out to contain and clean the spillage to mitigate the risk of environmental pollution
- e. Shift Manager on Shift shall raise a SAP QIM on the system within 24 hours.
- f. The Environmental Department shall load the spillage on SAP EHS and follow up on the progress of the investigation. Once the investigation is completed, Environmental Department to load the investigation report on SAP EHS and close the incident.
- g. Environmental Department to ensure that when the spillage in on naked soil, the area is rehabilitated

## 2.6 PROCESS FOR MONITORING

Environmental Department to conduct frequent plant walks in order to look for spillages and also complete the Environmental monthly PM and submit to the planning department and also load defects captured on the PM.

## 2.7 RELATED/SUPPORTING DOCUMENTS

N/A

## 3. OIL SPILL CLEAN-UP AND REHABILITATION INSTRUCTION

### 3.1 REQUIREMENTS

An oil spill may be defined as being any amount of oil no longer present in its normal container or equipment and in terms of the Water Act 36 of 1998, which states "that hydrocarbons should not touch the ground or water and if they do, shall be removed immediately".

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### 3.1.1 Assessment of the Spillage

Assessment of the oil spill will need considerable judgement to perform and evaluate the cause, extent and ultimate corrective action, by utilising the table given in Annexure A.

### 3.1.2 Securing Of the Oil Spill Site

Where necessary secure the site and contain the spill to avoid further pollution, determine the spill boundaries, prevent unauthorised access to the spill site and where required, notify all parties involved. The securing may include barricades, ropes, plastic taping or covers, or any other appropriate measures in order to prevent access or spread of the contaminations.

### 3.1.3 Containing the Spillage

The need for immediate corrective action to limit the spillage cannot be over-emphasised to minimise the environmental damage and reduce remedial costs. The containment of a spillage will involve an action that will either prevent or stop a spill from spreading. The containment of oil spilled can be performed by means of one or more of the following

- Soil barriers
- Sand bags
- Bund walls
- Absorbent materials e.g. Drizit etc.

*NB: No ash is to be used to contain or clean any oil spillage on site.*

### 3.1.4 Removal of oil

All oil that can be removed must be removed into suitable containers such as drums or tankers for proper disposal at Tutuka's Hazardous waste site (H: H SITE). The correct procedure for the removal and storage of hazardous waste must be followed. 14SAPR 0H4/010

### 3.1.5 Final Clean-up

After removal of excess oil, saw dust, suitable absorbents or solvents etc may be utilized to complete the clean-up of the spill. This may also include the removal of contaminated soil and vegetation (rehabilitation). All the absorbing material needs to be bagged and disposed of at the hazardous waste site.

### 3.1.6 Spill Kit

To allow for a rapid response and clean-up to an oil spill, it is mandatory that a basic oil spill clean-up kit be available at all times during major activities on site, e.g. during Outages or weekend shutdowns.

Adequate and relevant training must be given to all staff working with oil at Tutuka Power Station and all employees who work with machinery that can spill oil.

## 3.2 REPORTING OF OIL SPILLS

It is of utmost importance that all oil spills be reported and assessed using the standard forms as given in Annexure A. This form need to be filled in by the responsible person, appointed by the relative line manager, who will take responsibility for remedial action following a spill. All oil spills must be registered on TomCat to ensure proper investigation depending on the volumes of the spills. If an oil spill leads to

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the contravention of an environmental act, Eskom procedure (Environmental Liaison Committee (ELC) Performance Indicator Reporting Procedure. (32-249) must be followed.

**Table 1: N/A**

**Figure 1: N/A**

#### 4. AUTHORIZATION

This document has been seen and accepted by:

Name	Designation
Prince Nkanyane	Operating Support Manager
Patrick Nkosi	Operating Manager
Ilse Coop	Environmental Manager

#### 5. REVISIONS

Date	Rev.	Compiler	Remarks
November 2016	4	L. Mogwase	The following parts of the procedure were reviewed: Introduction, purpose, roles and responsibilities, monitoring and authorization.
May 2013	3	L. Mogwase.	Document was due for revision. New unique identifier allocated for this procedure (14RISK ENV-0557). The old unique identifier was 15ENPR ENV-001.

#### 6. DEVELOPMENT TEAM

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

- S. Sibiya.
- L. Mogwase

#### 7. ACKNOWLEDGEMENTS

N/A

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**APPENDIX A: ASSESSMENT TABLE**

Using your judgment and facts available, allocate relevant points (1, 3 or 5) to each of the following and add together. The accumulative score will dictate the appropriate corrective action.

CONDITION	1	3	5
Source of spill	Weep	Drip/Leak	Incident: ≥ 100 L spilled
Age of spill	Historic	Happened recently – spill still moist	Happened with last 24 hours
Threat to any water body	No threat	Threat with rain	Access to waterway
Containment	Leak is minor – can be controlled, contained and plugged with oil spill kit	Leak is moderate – cannot be successfully managed with spill kit	Leak is serious, containment is impossible
Life threatening Conditions	Not at all	Moderate (Environmental or health risk only)	Serious (Explosion, fire, health and major environmental)
Weather conditions	Good weather and will prolong till spill is cleared	Moderate, but may change suddenly to weather conditions which will hamper containment	Raining
Properties affected	None	On-site (Only Eskom's property is affected)	Off-site (Eskom's neighbouring properties and public roads)
Public relations threat	Small	Medium	Large
Soil types	Clay or compacted ground	Loose or loam soil	Sandy soil and Gravel
Traffic implications	Not on any road	Public road	Road closed
TOTAL SCORE	SUB TOTAL	SUB TOTAL	SUB TOTAL

Minor Spill ≤ 12 points	Moderate Spill 13 – 24 points	Major Spill ≥ 25 points
Clean-up must be performed and a report issued to the relevant Environment Specialist	Contain and call in the assistance of the Environmental Specialist	Contain, call on contracted emergency response team and call Environmental Specialists
SIGNATURE _____ NAME _____ DATE _____ SITE _____		

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