

ISUNDU 765/400 KV SUBSTATION AND TURN-IN TRANSMISSION LINES

EMERGENCY PREPAREDNESS

1. EMERGENCY MANAGEMENT

All emergency incidents should be investigated in terms of Eskom's EPC 32-95: Safety, Health & Environmental Incident Management Procedure, in addition to any Environmental Liaison Committee (ELC) requirement. This procedure describes the high-level intention for the effective incident management of work-related incidents as well as environmental damage. The aim of this procedure is to ensure and facilitate the effective and efficient management of incidents from the moment that one occurs, until it can be audited that corrective and preventive measures were developed and taken. This procedure is supported by annexes which set out the detailed rules, requirements and action steps as well as useful examples and templates. These two have to be read and applied together to ensure that the aim of this procedure and its supporting annexes is met.

An **Emergency Incident** can be defined as an unexpected sudden occurrence, including a major emission, fire or explosion leading to serious danger to the public or potentially serious pollution of or detriment to the environment, whether immediate or delayed. It is also an accident involving the spilling of a harmful substance that finds or may find its way into a water resource.

An **Environmental Incident** can be defined as pollution, erosion, cutting of protected and/or indigenous trees, hazardous substance spillages, wildlife interactions, public complaints and loss of biodiversity caused by Eskom Distribution's activities, as well as non-compliance to legislation such as Environmental Authorisations, Record of Decisions, permits and licences.

2. INCIDENT MANAGEMENT – AIMS AND OBJECTIVES

The aims and objectives of incident management are as follows:

- Reduce risk and prevent any recurrence of incidents.
- Ensure incidents are managed effectively.
- Ensure incidents are classified and recorded accurately.
- Ensure prompt and appropriate investigation.
- Promote the proactive use and value of near-miss occurrence reporting.
- Improve the quality of safety and the work environment by learning from incidents, including near miss occurrences.
- Share incident information with all site personnel and other subcontractors.
- Report to relevant authorities as appropriate.
- Promote the analysis of trends and review practices accordingly.

3. INCIDENT REPORTING

After becoming aware of an incident, the following should be done as per Eskom's ELC procedure:

- All incidents must be reported via flash report within 24 hours or end of shift, regardless of the severity of the incident. Once an employee identifies that an incident has occurred, he/she must immediately notify his/her supervisor of such an incident, regardless of its severity, so that an appropriate and timely response can be made, an initial evaluation conducted, and an incident classification made.
- The responsible supervisor shall then send a flash report to the ECO and Project Coordinator within 24 hours of the incident. Thereafter, it will be determined by the ECO if reporting to the authorities is required.
- Immediate clean-up action is required.
- Eskom then has 14 days to formally investigate the incident internally before sending a report to the applicable authorities.

4. HAZARDOUS WASTE - INCIDENT REPORTING

If a leakage or spillage of hazardous substances occurs as a result of Eskom's activities or other users, the local emergency services will be immediately notified of the incident. The location, nature of the load and the status of the site of the accident itself (i.e. whether further leakage is still taking place, whether the vehicle or the load is on fire, etc.) must be provided.

Written records of the corrective and remedial measures decided upon, and the progress achieved therewith over time, must be kept. Such progress reporting will be important for monitoring and auditing purposes. The written reports may be used for training purposes in an effort to prevent similar future occurrences.

5. EMERGENCY PREPAREDNESS

Eskom's environmental emergency procedures ensure that there will be an appropriate response to unexpected or accidental actions or incidents that will cause environmental impacts, throughout the life cycle of the project. Such incidents may include, inter alia:

- Accidental discharges to water and land.
- Accidental exposure of employees to hazardous substances.
- Accidental veld fires.
- Accidental spillage of hazardous substances.
- Specific environmental and ecosystem effects from accidental releases or incidents.

6. THE EMERGENCY PREPAREDNESS PLAN

- Construction employees shall be adequately trained in terms of incidents and emergency situations.
- An emergency preparedness plan will include details of the organisation (manpower) and responsibilities, accountability and liability of personnel.
- The emergency preparedness plan shall include a list of key personnel.
- Details of emergency services (e.g. the fire department, spill clean-up services, etc.) shall be listed.
- Internal and external communication plans, including prescribed reporting procedures shall be listed.

- ❑ Actions to be taken in the event of different types of emergencies shall be included.
- ❑ Training plans, testing exercises, and schedules for effectiveness shall be included.
- ❑ Eskom will comply with the emergency preparedness, and incident and accident-reporting requirements, as required by the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), the National Environmental Management Act, 1998 (Act No 107 of 1998), the National Water Act, 1008 (Act No 36 of 1998) and the National Veld and Forest Fire Act, 1998 (Act No 101 of 1998) as amended, and/or any other relevant legislation.
- ❑ Hazardous material:
 - Information on hazardous materials, including the potential impact associated with each, and measure to be taken in the event of accidental release shall be listed.

7. SPILLAGES

- ❑ Streams, wetlands, dams and underground water will be protected from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, wash water, organic materials and bituminous products.
- ❑ In the event of a spillage during the construction phase, the responsibility for spill treatment will be with Eskom and Eskom will be liable to arrange for competent assistance to clear the affected area.
- ❑ Eskom will compile and maintain environmental emergency procedure, to ensure that there will be an appropriate rapid response to unexpected or accidental environmental related incidents throughout the life cycle of the project.
- ❑ Incidents must be reported in line with Operation Unit (OU) Oil Spill Management Instruction and the Eskom's Incident Management Procedure. The incident must be reported within 24 hours via a flash report.
- ❑ The Environmental Control Officer (ECO) will assess the situation and act as required in all cases; the immediate response will be to contain the spill. The exact treatment of soil/water pollution will be determined by the ECO.
- ❑ Should water downstream of the spill be polluted, and fauna and flora show signs of deterioration or death, specialist hydrological or ecological advice must be sought for appropriate treatment and remedial procedures to be followed. The costs of containment and rehabilitation will be for Eskom's account, including the costs of specialist input.
- ❑ Hazardous substance spillages can be defined as any hazardous liquids or substances spilt that have the potential to pollute aquatic or terrestrial ecosystems or present a health hazard to other living organisms.
 - The Eskom construction team shall have an oil spill kit on site and where working with hazardous substances, also drip trays on trucks.
 - Vegetated areas cleared of hazardous waste will be re-vegetated.

During an emergency situation, the following will apply:

- ❑ No person shall be allowed to approach a spill, fire, etc. unless he/she is equipped with the personal protective clothing and equipment.
- ❑ The risk involved shall be assessed, before anyone approaches the scene of the incident, with the emergency response plan as per Oil Spill Management Instruction and Environmental Emergency Preparedness Procedure.
- ❑ Any known or discovered spillage of toxic substances into a stream or river should be followed by immediate monitoring of the receiving streams and rivers.

8. FIRES

- The adjacent landowners will be informed and/or involved in case of any fire that poses a threat to landowners.
- It must be ensured that the basic fire fighting equipment is readily available onsite at all times.
- Welding gas cutting or cutting of metal will only be allowed inside the working/demarcated areas and with appropriate fire fighting equipment at hand.

9. MONITORING

Monitoring will be undertaken as and when required. Any incidents that might have a detrimental impact on the environment will be investigated and environmental monitoring will be conducted. Complaints received will be checked through verifiable monitoring.

10. INSPECTIONS

On-going visual inspections will be conducted by the ECO. The ECO will spend time on site on the lookout for any unsafe acts and activities that transgress the requirements as specified in the EMPr to define what action shall be taken to rectify the problem and prevent its reoccurrence.

6. WRITTEN INSTRUCTIONS

Written reporting will be given following an audit. The written instructions will indicate the source or sources of the problems identified on site and propose solutions to those problems. The implementation to solutions will be assessed in a follow-up audit and further written instructions issued if required. Maximum allowable response time is 4 working days unless specified otherwise by the ECO.

7. LIAISON

Eskom will comply with the requirements for public consultation as required by the National Environmental Management Act, 1009 (Act No 107 of 1998). Throughout the project, ongoing liaison will be maintained with authorities and communities when needed to ensure that the following is done:

- Timeous advanced warning of any project activities that may have some impact on the surrounding communities i.e. blasting.
- Ongoing feedback on the environmental performance of the project.
- A complaints' register needs to be opened and maintained by the ECO. The register will contain the contact details of the person who made complaints and information regarding the complaint itself, including the date of submission.

8. CHECKING AND CORRECTIVE ACTION

Non-compliance with the specifications of the EMPr will constitute a breach of contract for which Eskom must be immediately notified accordingly. Eskom will be deemed not to have complied with the EMPr if:

- There is evidence of contravention of the EMPr specifications within the boundaries of the construction site, site extensions and access roads.
- There is contravention of the EMPr specifications which relate to activities outside the boundaries of the construction sites.
- Environmental damage ensues due to negligence.
- Construction activities take place outside the defined boundaries of the site.
- Eskom fails to comply with corrective or other instruction.

Non-compliance will be dealt with in terms of the contract documentations signed by the various parties.