

DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME

This Draft Environmental Management Programme (EMPr) sets out mitigation/management measures for the potential impacts identified for the proposed relocation of a section of the 275 kV power line at the Sishen Iron Ore Mine (Sishen Mine). Due to the nature of the project, impacts of negative-low to negative-high significance are anticipated to occur during the construction phase with limited impacts of moderate significances during the operational phase. On receipt of the environmental authorisation, the EMPr will be amended to include additional conditions as set out by the National Department of Environmental Affairs (DEA). The EMPr will then become a legally binding document to the applicant, all its contractors and their employees.

The tables below outline the proposed action plans and mitigation measures to reduce the potential negative impacts associated with the proposed construction activities.

1. Planning and Design

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
Limit the impacts on sensitive areas.	The positions of the mast poles should be determined in such a way as to avoid being placed within 32 metres from the edge of any pans along the power line route.	Eskom	Prior to construction

2. Construction

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
2.1. APPOINTMENTS AND DUTIES			

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
Define organisational and administrative arrangements for EMP implementation.	Eskom to appoint a Site Manager (SM) to oversee all aspects of the construction activities and implementation of the EMPr.	Eskom	Prior to construction
Adequate management and mitigation of environmental impacts.	Eskom to appoint a capable and suitably qualified Environmental Control Officer (ECO) to monitor compliance with the EMPr. The competent authority must be notified of the details and contact numbers of the appointee in writing for record and communication purposes.	Eskom	Prior to construction
	Eskom Safety Health Environment and Quality (SHEQ) department representative to undertake monthly checks of construction activities and propose / request mitigation / management measures if and when required.	Eskom	Monthly
	Appointed contractors to nominate a capable and suitably qualified staff member as Environmental Representative (EREP) to supervise implementation of the EMPr as it applies to the nature of the contract with Eskom.	SM	Prior to construction
	The applicable conditions of this EMPr must form part of all contractors' and sub-contractors' conditions of contract. A performance based requirement with regards to environmental impact management must be included in all contracts.	Eskom	Prior to construction
	Procedures for the regular inspection and maintenance of the site must be in place to ensure that environmental degradation is prevented and possible impacts arising from the operation are mitigated.	Eskom, Contractor/ EREP & ECO	Ongoing
	A copy of the EMPr (this document) must always be available on site for	Eskom, Contractor/	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	inspection by authorised officers.	EREP & ECO	
2.2. PUBLIC AND LABOUR RELATIONS			
Maintain transparent communication with project affected community.	Include the construction of the power line as an item on the agenda of the Sishen Mine environmental monitoring committee meetings.	ECO	Ongoing, quarterly
Keeping project affected community up to date with developments at Sishen Mine and surrounding area.	Have a complaints register available at the site for any person to record complaints regarding the operations.	SM	Ongoing
Maintain community based "license to operate".	ECO to investigate complaints and provide feedback to the complainant within 72 hours of being reported.	ECO	Ongoing
	Any complaints regarding the development must be brought to the attention of the DEA. The complaints register must be kept up to date for inspection by the DEA.	ECO	Ongoing, quarterly
2.3. TRAINING, AWARENESS AND COMPETENCE			
Ensure adequate knowledge and understanding of EMPr stipulations, policies and procedures.	All construction workers, suppliers and service providers entering the construction site to attend and undergo environmental awareness induction training sessions covering key environmental issues pertaining to the construction site and surroundings with regard to protection of the natural environment, the conditions of the environmental authorisation, the requirements of the EMPr and the rights of landowners on whose properties construction activities take place.	Contractor/ EREP & ECO	Upon appointment and before entering the construction site
Understanding the interface between the work environment and environmental protection.			
2.4. SOIL			
Optimise availability and viability of soil as growth medium to enable sustainable vegetation cover after rehabilitation.	All available topsoil will be stripped from areas compacted and disturbed along the servitude.	Contractor/ EREP	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
Maximise topsoil availability for rehabilitation at the completion of construction activities.	Topsoil will be stockpiled for later use during rehabilitation.	Contractor/ EREP	Ongoing
	Soil erosion will be monitored over the entire servitude.	Contractor/ EREP	Ongoing
2.5. SPILL PREVENTION, RESPONSE AND CLEAN-UP			
Define and implement control measures for hazardous spill prevention, and ensure adequate response and clean-up measures are put in place.	Soil polluted by a spill of chemicals, oil or diesel shall be handled as hazardous waste if remediation in situ has not been authorised by the ECO.	Contractor & ECO	Ongoing
	All vehicles shall be serviced regularly according to a pre-planned maintenance programme in order to minimise oil drips and spillages. Vehicles with oil drips are not allowed on site.	Contractor & ECO	Ongoing
	All petroleum products to be stored in lined and bunded areas.	Contractor & ECO	Ongoing
	Dispensing of petroleum products to take place over a drip tray or within a lined and bunded area.	Contractor & ECO	Ongoing
	Use drip trays under machinery, vehicles and equipment with minor fuel or hydraulic fluid leaks.	Contractor & ECO	Ongoing
	Repairs and maintenance to machinery, vehicles and equipment to be undertaken in workshop. Any on-site emergency repairs to be undertaken over impervious surfaces.	Contractor & ECO	As required
2.6. NOISE			
Develop and implement appropriate noise control measures according to risk profile of construction site and proximity of residences.	Noise levels and other disturbances in close proximity to residences or built-up areas to be limited to daylight hours.	Contractor/ EREP & ECO	Ongoing
	The contractor shall ensure that his workers do not create unnecessary noise such as hooting or shouting.	Contractor & ECO	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	Complaints regarding noise to be registered in the complaints register and to be investigated and managed in accordance with the incident reporting procedure.	EREP & ECO	As Required
	Noise levels and other disturbances in close proximity to residences or built-up areas to be limited to daylight hours.	Contractor & ECO	Ongoing
2.7. DUST			
Develop and implement appropriate dust control measures according to the risk profile of the project.	Unsealed access roads and road verges of sealed roads should be watered by means of water carts.	Eskom & ECO	Ongoing
	Unsealed laydown and vehicle parking areas should be watered as required by means of water carts.	Eskom & ECO	Ongoing
	Speed limits on unsealed roads will be limited to a maximum speed consistent with the minimisation of dust generation. Nominal speed limit of 40 km/h applies unless otherwise marked.	Eskom & ECO	Ongoing
	All dust control equipment, such as water carts and sprays, shall be operated and maintained to prevent or minimise fugitive dust emissions.	Eskom & ECO	Weekly
	Complaints regarding dust to be registered in the complaints register and to be investigated and managed in accordance with the incident reporting procedure.	EREP & ECO	As Required
2.8. BIODIVERSITY			

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
<p>Prevent the alteration of natural ecological systems and processes.</p> <p>Minimise impacts on protected tree species, drainage channels, the Gamagara River, pans, rocky outcrops and other areas identified as sensitive.</p>	<p>Disturbance of natural vegetation beyond the footprint of the servitude is not permitted. The footprint of disturbance must be kept to the minimum required for the activity and reasonable vehicular and equipment movement.</p>	<p>Contractor/ EREP & ECO</p>	<p>Ongoing</p>
	<p>Trapping, catching and hunting of all animals are prohibited.</p>	<p>Contractor/ EREP & ECO</p>	<p>Ongoing</p>
	<p>Collection of any plant material from natural veld areas is prohibited.</p>	<p>Contractor/ EREP & ECO</p>	<p>Ongoing</p>
	<p>Damage to and removal of protected species of vegetation is prohibited unless permits for removal from the Department of Agriculture, Fisheries and Forestry (DAFF) and the Department of Environment and Nature Conservation (DENC) are in place (licenses and permits are required where protected tree and plant species cannot be avoided and have to be removed, respectively).</p>	<p>Contractor/ EREP & ECO</p>	<p>Prior to site clearance and removal of protected tree and plant species</p>
	<p>Remove any alien or invasive plants that have established within the power line servitude.</p>	<p>Contractor/ EREP & ECO</p>	<p>Ongoing</p>
	<p>All sections of the line passing over or adjacent to pans and dams or river and streams should be marked on the earth wires with a suitable marking device.</p>	<p>Contractor/ EREP & ECO</p>	<p>During construction</p>
<p>2.9. PUBLIC SAFETY AND SECURITY</p>			
<p>Implementation of adequate access control in order to prevent harm and the illegal dumping of any material.</p>	<p>The access gate to the construction site will be controlled and only authorised vehicles and persons will be allowed access.</p>	<p>Contractor/ EREP</p>	<p>Ongoing</p>

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	Contract a security company to patrol the construction site for the duration of construction period.	Contractor/ EREP	Ongoing
	The construction site will be fenced to prevent unauthorised people and animals accessing the area.	Contractor/ EREP	Ongoing
	Fences and gates will be maintained and all damage to fences and gates shall be properly fixed and repaired as soon as required and to the satisfaction of the landowners.	Contractor/ EREP	Ongoing
2.10. MACHINERY, EQUIPMENT, VEHICLE MOVEMENT AND ROADS			
Minimise construction-related disturbances and public safety risks during the use of machinery, equipment and vehicles.	Maintain machinery, vehicles and equipment in good condition to prevent unnecessary noise output, emissions, and risks of hydrocarbon spills (fuels and lubricants).	Contractor/ EREP	Ongoing
	Minimise movement of traffic along public roads as far as reasonably possible.	Contractor/ EREP	Ongoing
	Road sections affected by the construction operations to be maintained in an acceptable condition.	Contractor/ EREP	Ongoing
	No new roads and tracks will be created, unless approved by the ECO.	Contractor/ EREP & ECO	Ongoing
	All vehicles to adhere to prescribed / agreed speed limits as indicated on road signage and/or specific instructions or procedures issued by the SM or ECO to prevent accidents and road damage.	Contractor/ EREP & ECO	Ongoing
	Upon completion of construction activities, all access roads used during the construction process must be rehabilitated to their original condition.	Contractor/ EREP & ECO	At the end of the construction process

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
2.11. HERITAGE RESOURCES			
Avoid disturbance or loss of important heritage sites and artefacts.	An archaeologist should immediately be notified should any historical, archaeological, cultural or heritage artefacts be unveiled.	Contractor/ EREP	As required
2.12. INCIDENT REPORTING AND MANAGEMENT			
Adequately assess root cause of incidents in order to develop and implement appropriate corrective actions and prevent incidents from recurring.	An incident reporting procedure to be put in place and kept up to date.	Eskom, SM, Contractor/ EREP, ECO & EA	At start of construction, ongoing thereafter
	Record all environmental incidents in a register, and ensure investigation, follow-up and close out of all incidents.	Contractor/ EREP & ECO	As required
	After incident implement appropriate corrective actions, including measures to prevent recurring incidents.	Contractor/ EREP & ECO	As required
2.13. WASTE MANAGEMENT			
Adhere to waste management principles of avoidance, minimisation, reuse, recycling, treatment and correct disposal methods. Define and implement control measures to prevent inappropriate storage, treatment and construction of waste.	Provide separate receptacles for the collection and storage of general and hazardous waste generated at the site.	Contractor/ EREP	As required.
	All general and hazardous waste generated at the site are to be disposed at an appropriately registered waste construction facility.	Contractor/ EREP & ECO	Ongoing
	Littering is prohibited. Conduct regular inspections for and collection of litter.	Contractor/ EREP & ECO	Ongoing
	Burning of waste is prohibited.	Contractor/ EREP & ECO	Ongoing
	Recycling of waste is currently encouraged in all the consumer sections of the mine, which includes removal of useful materials before dumping them	Eskom	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	in the salvage yard.		
2.14. ABLUTION FACILITIES AND SEWERAGE TREATMENT			
Define and implement control measures to ensure adequate treatment and construction of sewage waste.	Provide chemical toilets for personnel at the construction site.	Contractor/ EREP & ECO	Ongoing
	Construction of chemical toilet waste to be in accordance with the waste management procedure to be issued by the ECO.	Contractor/ EREP & ECO	Ongoing
2.15. FIRES			
Preserve grazing land and natural habitats. Protect private property.	Open fires for heating and cooking purposes will not to be allowed on site or near areas where there is a risk of starting a veld fire.	Contractor/ EREP & ECO	Ongoing
	A trained fire response team will be in place to control fires as and when required.	ECO	Ongoing
2.16. COMPLIANCE MONITORING			
Provide information and ensure early detection of the impact of the construction activities upon the receiving environment. Recognise environmental changes in order to enable analysis of their cause. Maintain accurate records and transparent communication with regulatory bodies. Keeping regulatory bodies up to date with the development.	Records relating to the compliance/non-compliance within the conditions of the EMPr must be kept in good order.	Contractor/ EREP & ECO	Ongoing
	Officials employed by the DEA shall be given access to the property for the purpose of assessing and/or monitoring compliance with the conditions contained in the EMPr.	Contractor/ EREP & ECO	Ongoing
	Eskom will appoint a capable and suitably qualified and independent external Environmental Auditor (EA) to conduct audits to monitor compliance with the EMPr. The EA must be to the satisfaction of DEA.	Eskom	Prior to construction, on a quarterly basis

3. Operation

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
Prevent the alteration or damage of natural ecological systems and processes.	All sections of the power lines passing over or adjacent to pans and dams or crossing over rivers or wetlands should be marked on the earth wires with a suitable marking device in order to protect birds against collisions.	Eskom	During construction, ongoing thereafter

4. Demolition & Closure

This section pertains to the demolition of the existing power line. Once the new section of the power line has been constructed and it is operational the existing line will be decommissioned and demolished in order to make way for the western expansion of Sishen Mine. The demolition of the existing line might not be undertaken by the same project team. Conditions applicable to the construction phase might therefore be duplicated in this section.

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
4.1. APPOINTMENTS AND DUTIES			
Define organisational and administrative arrangements for EMP implementation.	Eskom to appoint a SM to oversee all aspects of the demolition activities and implementation of the EMPr.	Eskom	Prior to demolition
Adequate management and mitigation of environmental impacts.	Eskom to appoint a capable and suitably qualified ECO to monitor compliance with the EMPr. The competent authority must be notified of the details and contact numbers of the appointee in writing for record and	Eskom	Prior to demolition

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	communication purposes.		
	Eskom SHEQ department representative to undertake monthly checks of demolition activities and propose / request mitigation / management measures if and when required.	Eskom	Monthly
	Appointed contractors to nominate a capable and suitably qualified staff member as EREP to supervise implementation of the EMPr as it applies to the nature of the contract with Eskom.	SM	Prior to demolition
	The applicable conditions of this EMPr must form part of all contractors' and sub-contractors' conditions of contract. A performance based requirement with regards to environmental impact management must be included in all contracts.	Eskom	Prior to demolition
	Procedures for the regular inspection and maintenance of the site must be in place to ensure that environmental degradation is prevented and possible impacts arising from the demolition are mitigated.	Eskom, Contractor/ EREP & ECO	Ongoing
	A copy of the EMPr (this document) must always be available on site for inspection by authorised officers.	Eskom, Contractor/ EREP & ECO	Ongoing
4.2. PUBLIC AND LABOUR RELATIONS			
Maintain transparent communication with project affected community.	Include the demolition of the power line as an item on the agenda of the Sishen Mine environmental monitoring committee meetings.	ECO	Ongoing, quarterly
Keeping project affected community up to date with developments at Sishen Mine and surrounding area.	Have a complaints register available at the site for any person to record complaints regarding the operations.	SM	Ongoing
Maintain community based "license to operate".	ECO to investigate complaints and provide feedback to the complainant	ECO	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	within 72 hours of being reported.		
	Any complaints regarding the demolition process must be brought to the attention of the DEA. The complaints register must be kept up to date for inspection by the DEA.	ECO	Ongoing, quarterly
4.3. TRAINING, AWARENESS AND COMPETENCE			
Ensure adequate knowledge and understanding of EMPr stipulations, policies and procedures. Understanding the interface between the work environment and environmental protection.	All workers, suppliers and service providers entering the demolition site to attend and undergo environmental awareness induction training sessions covering key environmental issues pertaining to the construction site and surroundings with regard to protection of the natural environment, the conditions of the environmental authorisation, the requirements of the EMPr and the rights of landowners on whose properties demolition activities take place.	Contractor/ EREP & ECO	Upon appointment and before entering the demolition site
4.4. SOIL			
Optimise availability and viability of soil as growth medium to enable sustainable vegetation cover after rehabilitation.	All available topsoil will be stripped from areas compacted and disturbed along the servitude.	Contractor/ EREP	Ongoing
Maximise topsoil availability for rehabilitation at the completion of construction activities.	Topsoil will be stockpiled for later use during rehabilitation.	Contractor/ EREP	Ongoing
	Soil erosion will be monitored over the entire servitude.	Contractor/ EREP	Ongoing
4.5. SPILL PREVENTION, RESPONSE AND CLEAN-UP			
Define and implement control measures for hazardous spill prevention, and ensure adequate response and clean-up measures are put in place.	Soil polluted by a spill of chemicals, oil or diesel shall be handled as hazardous waste if remediation in situ has not been authorised by the ECO.	Contractor & ECO	Ongoing
	Construction vehicles shall be serviced regularly according to a pre-	Contractor & ECO	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	planned maintenance programme in order to minimise oil drips and spillages. Vehicles with oil drips are not allowed on site.		
	All petroleum products to be stored in lined and bunded areas.	Contractor & ECO	Ongoing
	Dispensing of petroleum products to take place over a drip tray or within a lined and bunded area.	Contractor & ECO	Ongoing
	Use drip trays under machinery, vehicles and equipment with minor fuel or hydraulic fluid leaks.	Contractor & ECO	Ongoing
	Repairs and maintenance to machinery, vehicles and equipment to be undertaken in workshop. Any on-site emergency repairs to be undertaken over impervious surfaces.	Contractor & ECO	As required
4.7. NOISE			
Develop and implement appropriate noise control measures according to risk profile of construction site and proximity of residences.	Noise levels and other disturbances in close proximity to residences or built-up areas to be limited to daylight hours.	Contractor/ EREP & ECO	Ongoing
	The contractor shall ensure that his workers do not create unnecessary noise such as hooting or shouting.	Contractor & ECO	Ongoing
	Complaints regarding noise to be registered in the complaints register and to be investigated and managed in accordance with the incident reporting procedure.	EREP & ECO	As Required
	Noise levels and other disturbances in close proximity to residences or built-up areas to be limited to daylight hours.	Contractor & ECO	Ongoing
4.8. DUST			
Develop and implement appropriate dust control measures	Unsealed access roads and road verges of sealed roads should be	Eskom & ECO	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
according to the risk profile of the project.	watered by means of water carts.		
	Unsealed laydown and vehicle parking areas should be watered as required by means of water carts.	Eskom & ECO	Ongoing
	Speed limits on unsealed roads will be limited to a maximum speed consistent with the minimisation of dust generation. Nominal speed limit of 40 km/h applies unless otherwise marked.	Eskom & ECO	Ongoing
	All dust control equipment, such as water carts and sprays, shall be operated and maintained to prevent or minimise fugitive dust emissions.	Eskom & ECO	Weekly
	Complaints regarding dust to be registered in the complaints register and to be investigated and managed in accordance with the incident reporting procedure.	EREP & ECO	As Required
4.9. BIODIVERSITY			
Prevent the alteration of natural ecological systems and processes. Minimise impacts on protected tree species, drainage channels, the Gamagara River, pans, rocky outcrops and other areas identified as sensitive.	Disturbance of natural vegetation beyond the footprint of the servitude is not permitted. The footprint of disturbance must be kept to the minimum required for the activity and reasonable vehicular and equipment movement.	Contractor/ EREP & ECO	Ongoing
	Trapping, catching and hunting of all animals are prohibited.	Contractor/ EREP & ECO	Ongoing
	Collection of any plant material from natural veld areas is prohibited.	Contractor/ EREP & ECO	Ongoing
	Damage to and removal of protected species of vegetation is prohibited unless permits for removal from the DAFF and the DENC are in place	Contractor/ EREP & ECO	Prior to removal of protected tree and

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	(licenses and permits are required where protected tree and plant species cannot be avoided and have to be removed, respectively).		plant species
	Remove any alien or invasive plants that have established within the power line servitude.	Contractor/ EREP & ECO	Ongoing
4.10. PUBLIC SAFETY AND SECURITY			
Implementation of adequate access control in order to prevent harm and the illegal dumping of any material.	The access gate to the demolition site will be controlled and only authorised vehicles and persons will be allowed access.	Contractor/ EREP	Ongoing
	Contract a security company to patrol the site for the duration of the demolition process.	Contractor/ EREP	Ongoing
	The demolition site will be fenced to prevent unauthorised people and animals accessing the area.	Contractor/ EREP	Ongoing
	Fences and gates will be maintained and all damage to fences and gates shall be properly fixed and repaired as soon as required and to the satisfaction of the landowners.	Contractor/ EREP	Ongoing
4.11. MACHINERY, EQUIPMENT, VEHICLE MOVEMENT AND ROADS			
Minimise construction-related disturbances and public safety risks during the use of machinery, equipment and vehicles.	Maintain machinery, vehicles and equipment in good condition to prevent unnecessary noise output, emissions, and risks of hydrocarbon spills (fuels and lubricants).	Contractor/ EREP	Ongoing
	Minimise movement of traffic along public roads as far as reasonably possible.	Contractor/ EREP	Ongoing
	Road sections affected by the construction operations to be maintained in an acceptable condition.	Contractor/ EREP	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	No new roads and tracks will be created, unless approved by the ECO.	Contractor/ EREP & ECO	Ongoing
	All vehicles to adhere to prescribed / agreed speed limits as indicated on road signage and/or specific instructions or procedures issued by the SM or ECO to prevent accidents and road damage.	Contractor/ EREP & ECO	Ongoing
	Upon completion of demolition activities, all access roads used during the construction process must be rehabilitated to their original condition.	Contractor/ EREP & ECO	At the end of the demolition process
4.12. HERITAGE RESOURCES			
Avoid disturbance or loss of important heritage sites and artefacts.	An archaeologist should immediately be notified should any historical, archaeological, cultural or heritage artefacts be unveiled.	Contractor/ EREP	As required
4.13. INCIDENT REPORTING AND MANAGEMENT			
Adequately assess root cause of incidents in order to develop and implement appropriate corrective actions and prevent incidents from recurring.	An incident reporting procedure to be put in place and kept up to date.	Eskom, SM, Contractor/ EREP, ECO & EA	At start of demolition, ongoing thereafter
	Record all environmental incidents in a register, and ensure investigation, follow-up and close out of all incidents.	Contractor/ EREP & ECO	As required
	After incident implement appropriate corrective actions, including measures to prevent recurring incidents.	Contractor/ EREP & ECO	As required
4.14. WASTE MANAGEMENT			
Adhere to waste management principles of avoidance, minimisation, reuse, recycling, treatment and correct disposal methods.	Provide separate receptacles for the collection and storage of general and hazardous waste generated at the site.	Contractor/ EREP	As required.
	All general and hazardous waste generated at the site are to be disposed	Contractor/ EREP	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
Define and implement control measures to prevent inappropriate storage, treatment and construction of waste.	at an appropriately registered waste construction facility.	& ECO	
	Littering is prohibited. Conduct regular inspections for and collection of litter.	Contractor/ EREP & ECO	Ongoing
	Burning of waste is prohibited.	Contractor/ EREP & ECO	Ongoing
	Recycling of waste is currently encouraged in all the consumer sections of the mine, which includes removal of useful materials before dumping them in the salvage yard.	Eskom	Ongoing
4.15. ABLUTION FACILITIES AND SEWERAGE TREATMENT			
Define and implement control measures to ensure adequate treatment and construction of sewage waste.	Provide chemical toilets for personnel at the construction site.	Contractor/ EREP & ECO	Ongoing
	Construction of chemical toilet waste to be in accordance with the waste management procedure to be issued by the ECO.	Contractor/ EREP & ECO	Ongoing
4.16. FIRES			
Preserve grazing land and natural habitats. Protect private property.	Open fires for heating and cooking purposes will not to be allowed on site or near areas where there is a risk of starting a veld fire.	Contractor/ EREP & ECO	Ongoing
	A trained fire response team will be in place to control fires as and when required.	ECO	Ongoing
4.17. COMPLIANCE MONITORING			
Provide information and ensure early detection of the impact of the construction activities upon the receiving environment.	Records relating to the compliance/non-compliance within the conditions of the EMP-01 must be kept in good order.	Contractor/ EREP & ECO	Ongoing
	Officials employed by the DEA shall be given access to the property for	Contractor/ EREP	Ongoing

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
Recognise environmental changes in order to enable analysis of their cause.	the purpose of assessing and/or monitoring compliance with the conditions contained in the EMPr.	& ECO	
Maintain accurate records and transparent communication with regulatory bodies. Keeping regulatory bodies up to date with the development.	Eskom will appoint a capable and suitably qualified and independent external EA to conduct audits to monitor compliance with the EMPr. The EA must be to the satisfaction of DEA.	Eskom	Prior to demolition, on a quarterly basis

5. Rehabilitation

OBJECTIVES	MANAGEMENT ACTION	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
Minimise residual impacts and ensure physical, ecological and chemical stability of site.	Soils that have become compacted through the demolition activities must be loosened to an appropriate depth to allow seed germination.	Contractor/ EREP	At end of demolition.
Ensure human safety.	All surface infrastructure that is not required by the land owner must be removed and all introduced materials must be removed and disposed.	Contractor	At the end of the demolition process
	Vegetation growth should be monitored to assess if successful establishment has taken place. Should vegetation not establish additional seeding needs to be considered. This should take place in consultation with the ECO.	ECO & EA	For 1 year after the end of the demolition process
	Alien and invasive plants need to be monitored and any plants establishing on the disturbed areas removed.	ECO & EA	For 1 year after the end of the demolition process