



**TRANSMISSION
ENVIRONMENTAL MANAGEMENT PLAN - PROJECTS / SERVICE PROVIDERS**

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Legal Requirements: <http://intranet.eskom.co.za/EskomBusinesses/OtherSites/Pages/Le.aspx>

This EMP should be used to assist Project Managers/Contractors/ Vendors in compiling their project specific EMP
 *The contents of this EMP is not limited and the responsibility remains with the relevant supplier/ contractor to ensure all project specific activities and legislation has been identified and managed
 The purpose of this EMP is to provide a guideline to manage project activities that are not subjected to the EIA process i.t.o. National Environmental Management Act, 1998 (Act No. 107 OF 1998) Environmental Impact Assessment Regulations (2014)

Site / Line: EVEREST - MAKALU 275kV Twr 237 (Collapsed tower project) - PERMANENT SOLUTION

Project Code:

Project Manager:

Project Manager Email:

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Date Compiled: 11/08/2021

Project / Contract Number:

Scope of work: Permanent restoration of tower. Earthing repairs. Replacement of damaged / collapsed tower structure. Foundations. Cabling and stringing. Rehabilitation.

Background and Purpose of Project: Permanent restoration of tower. Earthing repairs. Replacement of damaged / collapsed tower structure. Foundations. Cabling and stringing. Rehabilitation.

Note: Appointed contractor to submit method statements based on the site SPECIFIC EMP (project aspects and impacts).

NO.	ACTIVITY	ASPECT	IMPACT	SIGNIFICANCE	OBJECTIVE	TARGET	MEANS	LEGAL OBLIGATION AND OTHER REQUIREMENTS	DUE DATE	RESPONSIBLE PERSON	DATE COMPLETED	ACTION EFFECTIVENESS		
												Fully effective	Partially effective	Ineffective
1	PROCUREMENT	Evaluation and adjudication of tender submissions	Failure to include environmental requirements during tender process could result into environmental degradation	Medium	Ensure Eskom SHEQ requirements are specified / included during tender process	With the submission of each tender	Ensure Environmental requirements are taken into account during tender process	32-726 - SHE Requirements for the Eskom Commercial Process	Tender submission	Buyer				
		Placement of order/contract with suppliers	Specifying environmental criteria for supplies & advice on the use of products or services to minimise the environmental impacts.	Medium	Ensure Environmental requirements are taken into account when placing an order	Placement of order	Specifying environmental criteria for suppliers/service providers	32-726 - SHE Requirements for the Eskom Commercial Process	Tender stage	Buyer				
		Assessing contractors	Failure to make contractors aware of the impact of their deviations from set procedures could lead to negative environmental impacts	Medium	Ensure that contractors are aware of the impact of their deviations from / non-compliance to set procedures.	Prior commencement of activities	SHEQ File evaluation and approval for tender requirements	32-726 - SHE Requirements for the Eskom Commercial Process	Prior commencement of activities	Transmission Environmental Management / Project Manager				
2	PROJECT MANAGEMENT	The management of the project according to EMP and relevant environmental legal requirements	Failure to ensure compliance with the EMP and relevant compliance obligations requirements may lead to legal contraventions, customer complaints, claims against the business and damage to the environment and private / state properties.	HIGH	To ensure that the project is effectively managed according to all compliance obligation requirements.	0 Legal Contraventions / 0 Safety Incidents	Through discussing all environmental non-compliances and requirements under an agenda items at the project inaugural meeting and progress meetings, allocating responsible persons and action dates for mitigations.	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
		Assesment & Planning	Failure to conduct line risk assessments and proper planning during the execution of the project activities may lead to environmental and safety incidents and damage to private / state property that may result in disputes with landowners.	HIGH	To ensure that risk assessments and proper planning are conducted to minimise or avoid environmental aspects that might lead to negative environmental impacts	0 Legal Contraventions / 0 Safety Incidents	1. Environmental requirements can be discussed daily during the toolbox talks. 2. Environmental Risks assessments of the area can be done together with safety observations / assessments. 3. Emergency contact numbers must be available on site. 4. Land owners must be notified of dates contractors will be working in the servitude, crossing private properties. 5. Contractors working for Eskom must have identity cards, clearly marked clothing and vehicles. 6. Contractors working on Transmission sites must have SAPS security clearance to enter substations / sites	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
		Environmental Training & Awareness of contractors.	Lacking environmental awareness / knowledge of Eskom Transmission and other relevant compliance obligations requirements may lead to legal contravention, damage to the environment and private property that may result into disputes and claims with landowners.	HIGH	To ensure contractors are aware of environmental requirements i.t.o. the EMP and other compliance obligations requirements	0 Legal Contraventions / 0 Safety Incidents	1. SHE & Security Induction Training must be provided to all contractors before any project activity may start. 2. Attendance Registers of SHE Induction must be kept by the project manager / BU SHE Depts and copies included in the contractor's SHE file 3. Environmental Requirements can be highlighted daily during the toolbox talks to refresh workers minds on what is required. 4. Relevant training requirements must be identified up front before tender award and will be checked during tender approval and SHE file evaluations and approvals.	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
		During / Final Construction Audits	Failure to conduct audits during the course of the project can result in non compliances that are overlooked and failure to mitigate and prevent environmental incidents that have occurred.	HIGH	To ensure that non compliances or NCRs are picked up during construction activities and rectified / mitigated a.s.a.p. after it occurred. To conduct a final construction audit to ensure that the project is completed without any non compliances and NCRs open.	0 Legal Contraventions / 0 Safety Incidents	1. During construction audits must be conducted on a weekly basis by conducting site visits to where activities of the project are taking place. 2. A Final construction audit and before project handover must be conducted on project completion. Objective evidence of close out of previous NCRs if any. 3. During / Final constructions audits can also be conducted by the relevant Environmental professional at any given time. 4. NCRs will be raised for non-conformances and	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project On project completion Duration of project Duration of project	Project Site Supervisor / SHE Rep Project Site Supervisor / SHE Rep BU Environmental Professional Project Manager / BU Environmental Professional.				

3	VEGETATION MANAGEMENT & BUSHCLEARING	The cutting / removing of protected plant / tree species (Cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree or any forest product derived from a protected tree)	Resulting into a legal contravention. Financial and legal prosecution implication from the authorities and or private property owners.	HIGH	To ensure that no protected tree /species are cut , disturbed, destroyed or damaged / transported without a permit.	0 Legal Contraventions	Any Eskom staff / contractors must undergo SHE & Security Induction prior to the start of any project. Relevant Eskom staff / contractors must have done tree identification training prior to them starting with any vegetation mg/ bushclearing program. Permits must be obtained from the Dept. of Agriculture & Forestry before any protected tree is cut. Tx Landowner Approval Certificate / Consent form must be completed prior to the start of the project and landowners must sign off on status of property after completion of any bush clearing activities.	National Environmental Management Act, Act 107 of 1998 Section 28 Duty of care and remediation of environmental damage. -National Environmental Management: Biodiversity Act 10 of 2004 - Threatened or Protected Species Regulations, 2007 - Apply for permits for restricted activities involving specimens of listed threatened or protected species in accordance with these Regulations. - National Forests Act, 1998 - Notice of the List of Protected Tree Species Under the National Forests Act, 1998 (Act no. 84 of 1998), 2014, Section 15(1) no person may cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree or any forest product derived from a protected tree, except under a licence or exemption granted by the Minister to an applicant and subject to such period and conditions as may be stipulated.	Before project start On contract award / before project start Before project start Before entering servitude / private property	Project Manager / Contractor / Site supervisor Contractor BU Env Department Contractor / Site Supervisor			
	VEGETATION MANAGEMENT & BUSHCLEARING	Proliferation of Alien Invasive species	It is legally non-compliant to allow alien species to proliferate. Sites should be monitored continuously to control spread of alien species.	HIGH	To ensure that Alien Invasive species are removed according to legal and other requirements (compliance obligation).	0 Legal Contraventions	1. To ensure alien invasive species are included in scope of work during bush clearing programmes 2. To ensure contractors / staff are trained on tree identification 3. Method statement on removal and disposal of alien invasive species in SHE files 4. Quality checks on scope of work completed	National Environmental Management Act, Act 107 of 1998 Section 28 Duty of care and remediation of environmental damage. - Environment Conservation Act 73 of 1989 s31a - Conservation Of Agricultural Resources Act, 43 of 1983 , 5. Prohibition of the spreading of weeds - Conservation Of Agricultural Resources Act, 43 of 1983 - Regulations (GNR 1048)- Part II: Weeds And Invasive Plants - National Environmental Management: Biodiversity Act, 10 of 2004, 65. Restricted activities involving alien species, 66,67,68 - National Environmental Management: Biodiversity Act 10 of 2004 - Alien and Invasive Species Regulations, 2014, Part 2-6 - National Environmental Management: Biodiversity Act 10 Of 2004: Alien And Invasive Species Lists, 2016 -	Before project start On contract award Before project start Duration of project	Project Manager / Contractor Contractor BU Env Dept BU Lines & Servitude Supervisor			
	VEGETATION MANAGEMENT & BUSHCLEARING	Herbicide Application	Incorrect application of herbicide can lead to environmental degradation. Leaching of herbicide can affect groundwater and neighbouring farms. Financial and legal prosecution may also arise out of such a contravention.	HIGH	Ensure herbicides are applied in accordance with legal requirements	0 Legal Contraventions	1. Only contractors in possession of a PCO licence and accredited can apply herbicide within the terms and conditions of the contract and legal requirements. 2. Contractor PCO Licence holders must be on site during herbicide application 3. Herbicide application must be done as soon as vegetation has been removed to avoid regrowth 4. A Herbicide Application register must be kept on site and copies must be submitted to the BU Lines & Servitude supervisor. 5. All contractor staff applying herbicide must have proof of herbicide application training	Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 36 of 1947 , Se 3. Registration of fertilizers, farm feeds, agricultural remedies, stock remedies, sterilizing plants and pest control operators - Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 36 of 1947 - GN R98 - Pest Control Operator Regulations , 12. Responsibilities of pest control operators, 14. Offences and penalties and 13. Records to be kept - National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage. duty of care on every person to prevent and - Sec 30. Control of emergency incidents - National Water Act, 36 of 1998, Se 19. Prevention and remedying effects of pollution and - Sec 20. Control of emergency incidents - Occupational Health and Safety Act, 85 of 1993 - GN R1031 - General Safety Regulations, 1986 , Sec 4. Use and storage of flammable liquids - National Environmental Management: Waste Act, 59 of 2008, Sec 20.	By contract award / project start Duration of project Duration of project	Project Manager / Contractor Contractor Contractor / Lines and servitude supervisor			
	VEGETATION MANAGEMENT & BUSHCLEARING	Bush clearing in sensitive / protected areas such as: National parks Privately owned game reserves / farms Rivers / riverbanks 500m from Wetlands / water bodies Proclaimed protected areas Graves sites	If bush clearing is done indiscriminately there is the possibility of affecting protective / sensitive ecosystems systems negatively and enhance erosion in the servitude.	HIGH	To ensure that good vegetation management practices according to legal and other requirements	0 Legal Contraventions	1. Working according to established bushclearing program for bushclearing in servitudes 2. Tx Landowner Approval certificate / consent form must be completed and signed off by contractor / site supervisor / landowner before and on completion of project 3. Identify and obtain all relevant permits required i.t.o. legislation prior to the start of any project activity. 4. To include sensitive / protected areas in scope of work for relevant bush clearing programmes	Environment Conservation Act 73 of 1989 s31a - National Environmental Management Protected Areas Act 57 Of 2003, Sec 9. Kinds of protected areas, 17. Purpose of protected areas, Part 1 - Special nature reserves, Part 3 - Nature reserves, Chapter 4 - Management Of Protected Areas and chapter 6- Acquisition of right in or to land - National Environmental Management: Protected Areas Act, 57 Of 2003 - Regulations For The Proper Administration Of Special Nature Reserves, National Parks And World Heritage Sites , Part 3- Access to special nature reserves, national parks and world heritage sites and Part 5 - Activities that may be carried out in terms of section 50 - National Water Act, 36 of 1998, Se 19. Prevention and remedying effects of pollution and - Sec 20. Control of emergency incidents -National Heritage Resources Act, 25 of 1999, S	Duration of project Before entering servitude / private property Beofre leaving servitude / private property after work completion Before project starts / kick-off On task order award for project activity to start	Project Manager / Contractor Contractor / Site Supervisor BU Env Dept BU Lines & Servitude supervisor			
4	ACCESS	Use of access roads	The incorrect use of access roads in areas, which are prone to erosion, especially during wet conditions can lead to serious erosion. This can eventually make the entire area inaccessible and can affect the landowner's farm's carrying capacity. Damage to access roads and property can lead to claims and legal disputes and rehabilitation cost incurred.	Medium	To use access roads which belongs to land owners on private property responsibly according to legal and other requirements, EMP, method statements	0 Legal Contraventions	1. To capture the condition of any access road prior to the start of the project for record purposes. 2. All defects / damages occurring during the project should be reported, rectified immediately on occurrence . 3. The onus is on the contractor to be responsible for any rehabilitation on site's should it damage / pollution incidents resulted from this project. 4. Landowner's consent must be obtained prior to the start of the project and landowners must sign off on status of property after completion of any project activities.	Eskom Access to to Farms Standard (32-1173) -Conservation of Agricultural Resources Act, 43 of 1983	Before project starts Duration of project Duration of project Beofre entering servitude / private property	Project Manager / Contractor Contractor Contractor Contractor / Site Supervisor			
	ACCESS	Access of Eskom staff and or Contractors to sites along the servitude.	Employees entering the servitude on private property must understand specific requirements . People / Contractors from outside the network can have a negative impact on environment and pose security risks to landowners as well as affecting relationships negatively. This may lead to deputes and claims against Eskom.	HIGH	To ensure that external people / contractors working on behalf of Eskom Tx do not contravene any legal or other requirement / bridge any agreement.	0 Legal Contraventions	1. All Eskom staff and contractors must be in possession of a form of identification indicating who they are, employer and project and have marked clothing and vehicles. 2. All landowners who's property will be accessed during the duration of the project must be contacted prior to accessing the servitude / line crossing private / state property. 3. All contractors staff must have SA Police clearance submitted with their copies of identification during SHE evaluations and approvals	Fencing Act , 31 of 1963, Sec 22 leaving gates open - Eskom Access to to Farms Standard (32-1173)	Duration of project Duration of project Before project start	Project Manager / Contractor			

	ACCESS	Bad Access	River crossings, servitude access route in poor condition, access gates removed / locked, etc.	MEDIUM	To ensure that areas where accessibility are difficult / poor condition are identified and managed	0 Legal Contraventions / claims from landowners	1. To identified such areas in advance to access required and plan project activities accordingly. 2. To report such occurrences so it can be rectified and managed. 3. Not to damaged fences, gates or cut locks without consent / prior agreement of landowner / project manager. 4. To conduct risk assessment of poor access roads to avoid vehicle accidents and safety incidents.	Eskom Access to to Farms Standard (32-1173) -Conservation of Agricultural Resources Act, 43 of 1983	Duration of project	Project Manager / Contractor				
5	SOCIAL INTERACTION	Unlawful occupation of land.	Unlawful occupation of land may lead to pollution of the environment, damage / theft of tower members as well as damage to private property.	HIGH	Illegal occupants to be handled in accordance with legal requirements	0 Public complaints arising from illegal land occupation	No Eskom Employee / contractor may make use of private property for camping during the duration of any project without written consent from / formal agreement with the property owner / Eskom Management.	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
	SOCIAL INTERACTION	Public / Landowner Complaints	Inappropriate activities, activities in non-compliance to the EMP, legal and other requirements may lead to customer complaints.	HIGH	To ensure that public complaints are address and successfully resolved.	Resolution / Management of public and landowner complaints	1. All public complaints must be kept in a register with proof of resolution on the site SHE file. 2. All public complaints must be reported to the relevant BU Env Dept. under which the project is executed. 3. BUs to record and monitor public / landowner complaint until resolved 4. Public complaints must be closed ut on project completion / handover to the BU	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project Duration of project Duration of project Project completion	Project Manager / Contractor Contractor BU Env Dept Project Manager / Contractor				
	SOCIAL INTERACTION	Servitudes through cropfields	Cropfields might cause restriction of access to towers. Damage to cropfields can lead to claims against Eskom.	HIGH	Ensure that these areas of crop fields are identified so alternative routes can be used or access negotiated with landowner.	0 Legal Contraventions / law suits / claims	1. By conducting risk assessments prior to the start of projects i.t.o. access. 2. To obtain written consent from property owner, stipulating any specific requirements from the property owner. 3. Avoid interaction with land owners activities. 4. No fires to be made anywhere.	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage. duty of care on every person to prevent L64	Duration of project	Project Manager / Contractor				
	SOCIAL INTERACTION	Social-Civil liability due to inappropriate activities while working in servitudes / private property and or activities arising from substations	Employees entering a private property can have an impact if they leave gates open and animals are lost, damage cultivated areas and incorrect use of access to roads. Various public complaints may arise from this project activities and if not resolved may lead to social, civil and financial liabilities for Eskom. Substation activities may lead to pollution incidents that may result into social, civil and financial liabilities for Eskom	HIGH	To ensure that public complaints are successfully resolved	0 Legal Contraventions / law suits / claims	1. To attend to customer complaints and have minutes of meetings / any other documentation kept for record purposes. 2. Keep a public complaint register in the Environmental & Safety File on site. 3. To refer complaints involving legal action taken against Eskom to the Eskom Legal and Claims Department for resolution	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor Contractor Project Manager / BU Env Dept				
6	WILDLIFE INTERACTION	Bird Nests	The removal of bird nest from towers without a without authorisation will lead to a legal contravention. Injuring and killing of red data / protected bird species.	HIGH	To remove bird nests posing a risk to the tower i.t.o. quality of supply etc. according to legal and other requirements.	0 Legal Contraventions / 0 public complaints	1. Identify affected towers where nest removal are required and report for mitigation. 2. All Bird nests requires a permit for removal from the Provincial DEA / relevant national parks authority. Obtain relevant bird nest removal permit 3. Any nest including Red Data / Protected bird nests identified should NOT be removed until the chicks have fledged and left the nest (only in an emergency situation). 4. The BU Env dept will contact or coordinate site assessment	Provincial Nature Conservation Ordinances - National Environmental Management: Biodiversity Act, 10 of 2004 Publication of Lists of Critically Endangered, Endangered, Vulnerable and Protected Species (GN 389 - Publication of Lists of Species that are Threatened or Protected, Activities that are Prohibited and Exemption from Restriction) - National Environmental Management: Biodiversity Act 10 of 2004 - Threatened or Protected Species Regulations, 2007	Before / Duration of project Before project start Duration of project Duration of project	Project Manager / Contractor BU Env Dept Contractor Project Manager / Contractor				
	WILDLIFE INTERACTION	Bird / wildlife / animal electrocutions and collisions with powerline infrastructure.	Bird / Wildlife fatalities can be due to electrocutions and collisions plant infrastructure. This may cause failure of equipment and interruption of supply. Killing of protected & endangered species.	HIGH	To ensure bird electrocution / collisions are reported.	0 Legal Contraventions / 0 plant failures or interruption of supply	BU Env dept to report wildlife incidents to EWT	Provincial Nature Conservation Ordinances - National Environmental Management: Biodiversity Act, 10 of 2004 Publication of Lists of Critically Endangered, Endangered, Vulnerable and Protected Species (GN 389 - Publication of Lists of Species that are Threatened or Protected, Activities that are Prohibited and Exemption from Restriction) - National Environmental Management: Biodiversity Act 10 of 2004 - Threatened or Protected Species Regulations, 2007	Duration of project	Project Manager / Contractor				
	WILDLIFE INTERACTION	Poaching of game / wild / domestic animals.	The poaching of game / wild / domestic animals on private property is illegal.	HIGH	To ensure NO poaching of game / wild / domestic animals occurs on private property.	0 Legal Contraventions / 0 law suits / claims	1. To communicate EMP and legal requirements to all contractors working on project during SHE & Security Induction 2. To include EMP and legal requirements in daily toolbox talks / risk assessments 3. To ensure SA police clearance for all contractor employess is done and submitted with ID documents during SHE file assessment and approval	National Environmental Management Protected Areas Act 57 Of 2003, Sec 9. Kinds of protected areas. 17. Purpose of protected areas, Part 1 - Special nature reserves, Part 3 - Nature reserves, Chapter 4 - Management Of Protected Areas and chapter 6- Acquisition of right in or to land - National Environmental Management: Protected Areas Act, 57 Of 2003 - Regulations For The Proper Administration Of Special Nature Reserves, National Parks And World Heritage Sites , Part 3- Access to special nature reserves, national parks and world heritage sites and Part 5 - Activities that may be carried out in terms of section 50 - National Environmental Management: Biodiversity Act, 10 of 2004 Publication of Lists of Critically Endangered, Endangered, Vulnerable and Protected Species (GN 389 - Publication of Lists of Species that are Threatened or Protected, Activities that are Prohibited and Exemption from Restriction) - National Environmental Management: Biodiversity Act 10 of 2004 - Threatened or Protected Species Regulations, 2007	Before project start Duration of project Beofre project start	Project Manager / Contractor				

	WILDLIFE INTERACTION	Interaction between people and animals.	The injuring or killing of animals accidentally with vehicles can lead to claims against Eskom. Interaction with dangerous animals can lead to employee fatalities / injuries	MEDIUM	To ensure that vehicles are driven responsibly with caution and legal / safe speeds. That all wildlife incidents are reported for investigation and mitigation.	0 Legal contraventions / claims / safety incidents	1. To conduct detailed risk assessments of areas where work needs to be done 2. To identify servitudes with game camps keeping dangerous animals eg lion, buffalo, etc before entering property / servitude 3. To establish landowner requirements upfront on entering areas where dangerous animals are kept 4. To keep and maintain an Environmental Incident register on site which includes Wildlife incidents. 5. To report such incident at to the Project Manager immediately after occurrence.	- National Environmental Management Protected Areas Act 57 Of 2003, Sec 9. Kinds of protected areas, 17. Purpose of protected areas, Part 1 - Special nature reserves, Part 3 - Nature reserves, Chapter 4 - Management Of Protected Areas and chapter 6- Acquisition of right in or to land - National Environmental Management: Protected Areas Act, 57 Of 2003 - Regulations For The Proper Administration Of Special Nature Reserves, National Parks And World Heritage Sites ; Part 3- Access to special nature reserves, national parks and world heritage sites and Part 5 - Activities that may be carried out in terms of section 50 - National Environmental Management: Biodiversity Act, 10 of 2004 Publication of Lists of Critically Endangered, Endangered, Vulnerable and Protected Species (GN 389 - Publication of Lists of Species that are Threatened or Protected, Activities that are Prohibited and Exemption from Restriction) - National Environmental Management: Biodiversity Act 10 of 2004 - Threatened or Protected Species Regulations, 2007	Before / Duration of project Before project start Before / Duration of project Duration of project Duration of project	Project Manager / Contractor Project Manager / Site supervisor Project Manager / Contractor Contractor Contractor					
7	DRIVING OF VEHICLES	The incorrect use of access roads, speeding or driving irresponsibly, maintenance of vehicles, causing damage to property or injuring of animals / people.	This can eventually make the entire area inaccessible and can affect the landowner's relations negatively resulting in claims and or civil / criminal liability.	HIGH	To ensure no environmental damage is caused by vehicles during this project.	0 Claims / Safety incidents	1. Use existing roads 2. No vehicle maintenance on site or in the servitude or on private property. 3. Be aware of environmental sensitive areas / soil(sand) and steep area 4. Leave gates in the position it was found/ or as agreed by land owner. 5. Damaged locks to be replaced. 6. Record all damage to infrastructure/ towers /antitclimbing devices 7. Vehicles which are not road worthy (i.e. leaking oil) shall not be used or allowed on site.	National Road Traffic Act, 93 of 1996 - 42. Certification of roadworthiness required in respect of motor vehicle - National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage	Duration of project	Project Manager / Contractor					
8	WASTE MANAGEMENT	Domestic / General Waste and litter generated during this project in the servitude. This include uncontaminated building rubble	These types of activities cause pollution and degradation to the environment. Leaving waste under the line and on private property can lead to landowner complaints and claims against Eskom	HIGH	Waste is handled and disposed of as required by legislation and best practices.	0 Legal contraventions / landowner complaints	No waste to be left on site/ servitude after shift ends.	Eskom Waste Standard (32-245) - National Environmental Management Act, 107 of 1998 (NEMA), Sec 30. Control of emergency incidents - National Environmental Management: Waste Act, 59 of 2008, Sec 17. Reduction, re-use, recycling and recovery of waste, Sec 21. General requirements for storage of waste, Sec 22. Storage of general waste, Sec 24. Collection of waste, Sec 25. Duties of persons transporting waste, Sec 26. Prohibition of unauthorised disposal and Sec27. Littering - National Environmental Management: Waste Act, 59 of 2008 - Waste Classification and Management Regulations, 2013 (GN R634) , Sec 4. Waste Classification and Sec 6. General - National Environmental Management: Waste Act, 59 of 2008 - National Waste Information Regulations, 2012 - Annexure 3 - General Waste Types For Reporting To The Saws	Duration of project Duration of project Duration of project / project completion	Project Manager / Contractor Project Manager / Contractor Contractor					
							Domestic / general waste to be disposed of at the closest registered / licensed municipal waste site.		Duration of project	Project Manager / Contractor					
							1. Waste disposal register to be completed for waste disposal and kept on site in environmental and safety file. 2. Retain all waste disposal documentation / records 3. Report waste disposal figures to BU Env Dept.		Duration of project	Project Manager / Contractor					
	WASTE MANAGEMENT	Hazardous waste including but not limited to asbestos containing material, silica gel, PCBs, oil and oil contaminated soils and materials, chemicals, old herbicides and herbicide containers, pesticides, building rubble contaminated with hazardous waste types, etc.	Hazardous waste are dangerous to humans and animals, causing land, water and ground water pollution. Incorrect handling and disposal may lead to claims against the business and legal contraventions.	HIGH	Hazardous waste is identified and stored, transported and disposed according to legal and other requirements.	0 Legal contraventions	1. Hazardous waste must be identified and disposed off at a registered hazardous waste site by an hazardous waste contractor. 2. Disposal certificates, waste manifest and weigh bridge receipts must be obtained and available. 3. Copies of any disposal certificate must be submitted to BU Environmental Dept. and records kept in Environmental and safety file. 4. All waste disposal figures must be report to the BU Env Dept 5. A waste disposal control register must be kept on site at all times with disposal figures recorded	National Environmental Management Act 107 of 1998, Duty of Care - National Environmental Management: Waste Act, 59 of 2008, Sec 17. Reduction, re-use, recycling and recovery of waste, Sec 21. General requirements for storage of waste, Sec 22. Storage of general waste, Sec24. Collection of waste, Sec 25. Duties of persons transporting waste, Sec 26. Prohibition of unauthorised disposal and Sec27. Littering - National Environmental Management: Waste Act, 59 of 2008 - Waste Classification and Management Regulations, 2013 (GN R634) , Sec 4. Waste Classification and Sec 6. General - National Environmental Management: Waste Act, 59 of 2008 - National Waste Information Regulations, 2012 - Annexure 4 - Hazardous Waste Types For Reporting To The Saws - National Environmental Management: Waste Act, 59 of 2008 - Waste Classification and Management Regulations, 2013 (GN R634) , Sec 5. Safety Data Sheets - National Environmental Management: Waste Act 59 of 2008 - National Norms and Standards for the Storage of Waste (GN 926) , Sec 10. General Requirements of Waste Storage Containers - National Environmental Management : Waste Act 59 of 2008 - National Norms and Standards for Disposal of Waste to Landfill (GN R636) , Sec 5. Waste Disposal Restrictions	Duration of project	Project Manager / Contractor					
9	Oil Management	The maintenance, leaks or explosion of Power transformers: CVTs, CTs ,VTs and breakers,CVTs, CTs ,VTs and breakers. Oil leaks from transportation vehicles, vehicles with hydraulic cranes, etc.	Incorrect / poor oil management practices can lead to serious ground, ground water / surface water pollution. Oil spill causes serious environmental damage and can lead to health and safety risks for humans and animals. Oil spill that caused damage to the environment and or private property can lead to legal contravention, claims and rehabilitation costs for the business.	HIGH	To ensure that all oil spills are reported and that reasonable measure are in place from the incident continuing, recurring. To ensure that the contaminated site is rehabilitated and cleaned up according to all legal requirements, policies and procedures.	0 Legal Contraventions	1. All oil spills must be reported within 24 hours of occurrence to the project manager and relevant BU Environmental Department. 2. Small oil spills must effectively be cleaned up by using an oil spill clean-up kit on site. 3. For large oil spill and registered oil spill clean-up consultant must be appointed. 4. The site must be cleaned and rehabilitated where necessary. 5. An incident register must be kept on site where all environmental incidents must be captured (including oil spills).	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage - National Environmental Management Act, 107 of 1998 (NEMA), Sec 30. Control of emergency incidents - National Water Act, 36 of 1998, Se 19. Prevention and remedying effects of pollution and Sec 20. Control of emergency incidents - Occupational Health and Safety Act, 85 of 1993 - GN R1031 - General Safety Regulations, 1996 , Sec 4. Use and storage of flammable liquids - Occupational Health and Safety Act, 85 of 1993 - Regulations for Hazardous Chemical Substances, 1995 Sec 3, 9-15 - Occupational Health and Safety Act, 85 of 1993 - GN R84 - Construction Regulations, 2014 , Sec 25. Use and temporary storage of flammable liquids on construction sites and Sec29. Fire precautions on construction sites - Occupational Health and Safety Act, 85 of 1993 - GN R1031 - General Safety Regulations, 1996 , Sec 3. First aid, emergency equipment and procedures and Sec 2. Personal safety equipment and facilities	Duration of project	Project Manager / Contractor					

10	CHEMICAL SUBSTANCE MANAGEMENT	Incorrect storage of Solvents, chemical substances & Paints	Health hazard to humans and environmental pollution		MEDIUM	To ensure that solvent and paints are stored in accordance with legal and other requirements.	0 Legal Contraventions	<ol style="list-style-type: none"> To store all solvents, chemical substances and paints in appropriate storage areas / facilities where chemical / solvent registers are available and updated. The temporary storage of nitrogen gas cylinders in workshop must be chained to wall (empty / full one). To ensure conformance with Environmental EPP Procedure to address spillages. To ensure MSDS are available at areas where such products are stored and meets the 16 point requirements as set by the OSH Act (1993). To store hazardous chemicals substances which may cause a spillage in banded areas. To label demarcated hazardous chemical store. 	<ul style="list-style-type: none"> - Basil Convention , Annexure 2.3 and article 4 and 12 . Rotterdam Convention Article 1,2 and 9 - National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage. duty of care on every person to prevent significant pollution or degradation of the environment or where it cannot reasonably be avoided, stopped or is authorised by law, to minimise and rectify such pollution or degradation. - National Environmental Management Act, 107 of 1998 (NEMA), Sec 30. Control of emergency incidents - National Environmental Management: Waste Act, 59 of 2008, Sec 16. General duty in respect of waste management - National Environmental Management: Waste Act, 59 of 2008, Sec 21. General requirements for storage of waste- National Environmental Management: Waste Act, 59 of 2008, Sec 25. Duties of persons transporting waste - National Water Act, 36 of 1998, Sec 19. Prevention and remedying effects of pollution - National Water Act, 36 of 1998, Sec 20. Control of emergency incidents - Occupational Health and Safety Act, 85 of 1993 - GN R1031 - General Safety Regulations, 1986 , Sec 4. Use and storage of flammable liquids 	Duration of project	Project Manager / Contractor				
11	ARCHEOLOGICAL SITES	Disturbance and damage to archeological sites when doing line inspection/maintenance / project activities .	Could lead to social impact on communities involved and litigation.		HIGH	Ensure archeological site are not disturbed or damaged.	0 Legal Contraventions	<ol style="list-style-type: none"> Identify and communicate areas where archeological sites are present on the servitude / site. Take necessary measures to avoid such sites. Ensure records area kept on location of sites. 	National Heritage Resources Act, 25 of 1999, Sec 35. Archaeology, palaeontology and meteorites	Duration of project	Project Manager / Contractor				
12	MOVEMENT IN SENSITIVE AREAS	Incorrect movement of vehicles / unlawful trespassing during this project in sensitive areas could lead to social issues with land owners and damage and or pollution to the natural environment. Protected areas / sensitive ecosystems: National parks Privately owned game reserves / farms Rivers / riverbanks 500m from Wetlands / water bodies Proclaimed protected areas Graves sites	Land owners could refuse/restrict access to their properties. Pollution, erosion, damage to the environment.		HIGH	Ensure that no damage in sensitive area to the natural environment takes place. Legal requirements are adhered to	0 Legal Contraventions	<ol style="list-style-type: none"> Tx Landowner Approval certificate / consent form must be completed and signed off by contractor / site supervisor / landowner before and on completion of project Identify and obtain all relevant permits required I.T.O. legislation prior to the start of any project activity. To include sensitive / protected areas in scope of work for relevant bush clearing programmes 	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	<ol style="list-style-type: none"> Before entering servitude / private property Beofre leaving servitude / private property after work completion Before project starts / kick-off On task order award for project activity to start 	Project Manager / Contractor BU Env Dept Project Manager				
13	EQUIPMENT MANAGEMENT	Cleaning of Machinery	Chemical pollution is caused by vehicle oils, grease or solvents. Chemical pollution to the environment can lead to a legal contravention and		MEDIUM	To ensure that no machinery is maintained / Cleaned in the servitude / on substitution that can result to pollution	0 Legal contraventions and landowner complaints	<ol style="list-style-type: none"> By inspecting machinery prior to maintenance / project activity starting. Not to make use of the incorrect tools for the job and not to make use of malfunctioning machinery. To ensure all staff and contractors are sufficiently trained in using the machinery correctly. Have records where relevant available in SHE file 	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
14	Civil Works: Establishment of Construction Camps and Store. Off - Loading Construction Material and Equipment	Site Establishment	Potential negative on the indigenous vegetation when clearing the land for site establishment. Possible damage to construction equipment that might cause contamination of the natural environment, air t, ground and surface water		HIGH	To minimise water wastage and pollution of land and water	0 Legal contraventions and landowner complaints	<ol style="list-style-type: none"> No camp sites on servitudes / private property or Eskom sites without written consent from landowners / Eskom Management. Camp sites must not be located next 100 year flood line of the stream or the river. And 300 meters of the geo-hydrological gradient of the surface water. Ensure proper effluent / sewerage management and implemented. Ensure that all equipments are inspected for possible leaks. Ensure sites have good housekeeping and kept clean 	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage. duty of care on every person to prevent	Duration of project	Project Manager / Contractor				
15	DELIVERY MATERIALS	Heavy vehicles	Oil contamination to natural environment. Potential of hydrocarbon contamination of ground due to spillage or leaks		HIGH	To prevent or minimise pollution incidents resulting from delivery of materials from heavy vehicles	0 Legal Contraventions	No oil leaks, oil leaks to be cleaned with spillage kit. All oil contaminated supsors to be disposed as hazardous waste.	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
16	Protection, Delivery of ERTU Cabling and Panels	Heavy vehicles: Oil and lubricants, Exhaust fumes Packaging materials	Oil contamination natural environment and illegal disposal of the packaging material on the natural environment		HIGH	Minimize contamination to the environment, minimize air pollution	0 Legal Contraventions	Ensure only licenced drivers are driving delivery vehicles, all waste to be stored on the proper waste facilities.	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
17	Off-Loading of ERTU Equipment	Oil and lubricants. Exhaust fumes Packaging materials damage to equipment or infrastructure. Incorrect storage of equipment	Oil contamination natural environment and illegal disposal of the packaging material on the natural environment		HIGH	Minimize contamination to the environment, minimize air pollution	0 Legal Contraventions	<ol style="list-style-type: none"> Ensure that the site has spillage kit and the personnel are trained how to deal with small to medium spillages. Only licenced drivers must operate construction vehicles. 	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
18	Excavate new foundations	Heavy vehicles	Oil contamination natural environment		HIGH	Minimize contamination to the environment, minimize air pollution	0 Legal Contraventions	<ol style="list-style-type: none"> Top soil excavated may not be removed from site/s without a permit. No archeological found must be destroyed during the excavation process Top soil from excavations must be stored on site and used for backfilling where required Care should be taken to store topsoil and ensure it does not become contaminated with hazardous material eg) oils 	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				

19	Backfilling of foundation and trenches and storm water drainage	Compacting machinery workers with hand tools	Possible hydrocarbon contamination with from heavy machinery into the natural environment	HIGH	minimize hydrocarbon contamination to the natural environment, minimize air pollution	0 Legal Contraventions	1. Backfilling must be done according to method statements 2. Backfilling and soil compacting must be done to prevent erosion from occurring after excavations 3. Only use uncontaminated backfilling material 4. Backfilling material brought into site/s must meet legal and other requirements	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
20	Place steel work into the foundation	Steel off-cuts and steel cutting and gridding	Illegal dumping of steel off-cut waste on the natural environment	HIGH	Ensure that steel off-cuts are stored and disposed in an environmentally friendly manner	No steel off-cuts are disposed on the natural environment	1. Ensure that the site has adequate waste receptors to store waste prior transportation. 2. All recyclable waste to be recycled with licensed recyclers.	Eskom Waste Standard (32-245) - National Environmental Management Act, 107 of 1998 (NEMA), Sec 30. Control of emergency incidents - National Environmental Management: Waste Act, 59 of 2008, Sec 17. Reduction, re-use, recycling and recovery of waste - National Environmental Management: Waste Act, 59 of 2008, Sec 21. General requirements for storage of waste, Sec 22. Storage of general waste, Sec 24. Collection of waste, Sec 25. Duties of persons transporting waste, Sec 26. Prohibition of unauthorised disposal and Sec 27. Littering	Duration of project	Project Manager / Contractor				
21	Connect earthing to steel work	Welding and brazing	Possible fire veld due to uncontrolled sparks	HIGH	Ensure that welding is controlled	No veld fires are started due to welding activity / 0 Legal contraventions	All welding areas to have serviced fire extinguishers and all workers to be trained, to use fire extinguisher in the event of fire.	National Veld And Forest Fire Act, 101 of 1998, Sec 17. Readiness for fire fighting and Sec 18. Actions to fight fires	Duration of project	Project Manager / Contractor				
22	Stringing & Cabling, Measure & Cut to size to fit clamps	Hand tools and cable off -cuts	Proper disposal & storage of cable off-cuts	HIGH	All waste to be managed in an environmentally sound manner	0 Legal Contraventions	Adequate waste facilities to be available on site to store waste material.	Eskom Waste Standard (32-245) - National Environmental Management Act, 107 of 1998 (NEMA), Sec 30. Control of emergency incidents - National Environmental Management: Waste Act, 59 of 2008, Sec 17. Reduction, re-use, recycling and recovery of waste - National Environmental Management: Waste Act, 59 of 2008, Sec 21. General requirements for storage of waste, Sec 22. Storage of general waste, Sec 24. Collection of waste, Sec 25. Duties of persons transporting waste, Sec 26. Prohibition of unauthorised disposal and Sec 27. Littering	Duration of project	Project Manager / Contractor				
23	Cast blinding layer	Use of concrete	Possible concrete spillage during construction.	HIGH	All concrete spills to managed	0 Legal Contraventions	All concrete spills to cleaned before completion of shift	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
24	REHABILITATION	Land rehabilitation	Failure to rehabilitate the area may result negatively on the environment e.g soil erosion	HIGH	Rehabilitate disturbed areas at the completion of the contract	All disturbed areas successfully rehabilitated after completion of contract	Identify indigenous plant for replanting and avoid invader plants 2. All required disturbs, damaged, degraded or polluted areas must be rehabilitated on project completion 3. Rehabilitation method statements can be obtained from BU Env Department for rehabilitation specifications required. 4. Only indigenous vegetation to be used for rehabilitation of required areas and responsible persons to be changed accordingly	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Contractor				
25	FIRE MANAGEMENT	Starting of fires due to negligence	Damage to property, fatalities of people and animals / livestock, legal contraventions, claims	HIGH	To avoid fires from Eskom activities / negligence	0 Legal contraventions / claims / safety incidents	1. No fires allowed to be made on any Eskom site / private property in servitudes 2. Risk assessments to be done for all project activities and precautions / preventative measures to be taken for activities which may pose a fire risk 3. Ensure EPP address fire risks 4. Have emergency contact details in place.	National Veld And Forest Fire Act, 101 of 1998, Sec 17. Readiness for fire fighting and Sec 18. Actions to fight fires	Duration of project	Contractor				
26	ADMINISTRATION	Environmental & Safety File	Non compliance to legal requirements and non conformance to other requirements and conditions set out in the EMP can lead to severe impacts resulting from the list of aspects identified. Failure to keep relevant and required documents for record purposes can lead to legal contraventions, civil and financial liability Failure to comply with the EMP and other Eskom requirements will result in the issuing of an NCR against the contractor.	HIGH	Ensure documentation system is maintained	0 Legal contraventions / claims / safety incidents	1. Update documents as activities takes place. 2. Keep all records and documentation with regards to project. 3. Submit reports as required after inspection/investigations and completion of work. 4. All Environmental incidents to be reported.	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor				
27	REPORTING	Recording and reporting of Environmental related incidents	Failure to report could have a major impact on the environment, human health and well being and could lead to mitigation measures not taken	HIGH	Ensure all incidents are recorded and reported	0 Legal contraventions / claims / safety incidents	1. To keep and SHE incident register on site 2. To record and report all SHE incidents within 24 hours to Project Manager / BU Env Dept	240-133087117 - Eskom Environmental Incident Management Procedure - Environmental Inspections Report for Substation (TRM-FM-0071) - National Environmental Management Act 107 of 1998 section 28 Duty of Care and section 30 (Control of emergency incidents) - National Water Act, 36 of 1998, Se 19. Prevention and remedying effects of pollution and Sec 20. Control of emergency incidents - 240-80662342 : Environmental Monitoring and Measurement work instruction	Duration of project	Project Manager / Contractor				
28	HANDLING OF CONSTRUCTION RUBBLE/WASTE	Incorrect storage and disposal of waste	Oil contamination to natural environment.	HIGH	To prevent or minimise pollution incidents resulting from the storage and disposal of construction rubble/waste	During construction	1. Rubble to be stored in demarcated area. 2. Ensure no water resources are contaminated ensure no land degradation due to incorrect storage Disposal to take place at legal site	National Environmental Management Act 107 of 1998, Duty of Care Section 28 and Sec 30. Control of emergency incidents - Eskom Waste Standard (32-245) - National Environmental Management: Waste Act, 59 of 2008, Sec 17. Reduction, re-use, recycling and recovery of waste. Sec 21. General requirements for storage of waste, Sec 22. Storage of general waste, Sec 24. Collection of waste, Sec 25. Duties of persons transporting waste, Sec 26. Prohibition of unauthorised disposal and Sec 27. Littering	During and after construction	Project manager/Contractor				

29	SANITATION	Regular monitoring of sanitation (portable toilets) to prevent pollution to soil and ground water resources	Hazardous waste are dangerous to humans and animals, causing land, water and ground water pollution. Incorrect handling and disposal may lead to customer complains and claims against the business and legal contraventions.	To ensure that non compliances or NCRs are picked up during construction activities and rectified / mitigated a.s.a.p. after it occurred. Chemical waste is transported and dispose according to legal and other requirements.	0 Legal Contraventions	1. Portable toilets should be made available for use on site if required, to accommodate the number of employees working on site. Permission to be obtained from Eskom to make use of facilities on site. 2. The removal or sewerage from chemical toilet shall be done by licenced service providers. 3. Service providers shall only make use of licenced waste water treatment facilities 4. The contractor shall submit sewerage waste disposal figures and safe disposal certificates to the relevant BU Environmental Dept	Eskom Waste Standard (32-245) - Occupational Health and Safety Act, 85 of 1993 - Facilities Regulations, 2004- Sec 2 sanitation - Occupational Health and Safety Act, 85 of 1993 - GN R84 - Construction Regulations, 2014 - Sec 30. Construction employees' facilities - National Building Regulations and Building Standards Act, 103 of 1977 - Regulations Under Section 17 (1), Part 3 - Control of objectionable discharge and P4 industrial effluent - National Environmental Management - Integrated Coastal Management Act, 24 of 2008 - Chapter 8 - Marine And Coastal Pollution Control - National Environmental Management, Waste Act 59 of 2008 - List of Waste Management Activities That Have, or are Likely to Have, a Detrimental Effect on the Environment (GN 921 of 2013) -National Health Act, 61 of 2003 - National Environmental Health Norms and Standards For Premises and Acceptable Monitoring Standards For Environmental Health Practitioners - Sec 1, Norms and standards applicable to premises, Sec 26 Environmental pollution control measures applicable to premises and Sec 22. Permissible water use -Occupational Health and Safety Act, 85 of 1993 - Facilities Regulations, 2004 - Sec 2 Sanitation -Water Services Act, 108 of 1997 - Sec 3. Right of access to basic water supply and basic sanitation. - 240-133087117 - Eskom Environmental Incident Management Procedure - Environmental Inspections Report for Substation (TRM-FM-0071) - National Environmental Management Act 107 of 1998 section 28 Duty of Care and section 30 (Control of emergency incidents) - National Water Act, 36 of 1998, Se 19. Prevention and remedying effects of pollution and Sec 20. Control of emergency incidents	Duration of project	Project Site Supervisor / BU Environmental Professional.			
30	ACTIVITIES WITHIN 500M RADIUS OF A WATERCOURSE	Licences, General Authorization issued by Dept of Water Affairs and Sanitation to be in place before work starts	Activities within 500 meters of any watercourse (river, spring, natural channel, wetland, lake or a dam) may lead to legal contraventions and claims against the business.	Compliance with legal requirements	0 Legal Contraventions	Comply to directive issued by Water Affairs.	National Water Act, 36 of 1998 - Regulations Requiring That A Water Use Be Registered - Sec 21 - National Water Act, 36 of 1998 - General Authorisation in terms of section 39 of the NWA for water uses as defined in section 21(c) or section 21(i) - National Environmental Management Act 107 of 1998 section 28 Duty of Care and section 30 (Control of emergency incidents) - National Water Act, 36 of 1998, Se 19. Prevention and remedying effects of pollution and Sec 20. Control of emergency incidents	Duration of project	L&S Technical Adviser / BU Environmental Professional.			
31	TRAINING	Environmental Training & Awareness of contractors.	Lacking environmental awareness / knowledge of Eskom Transmission and other relevant environmental legal requirements may lead to legal contravention, damage to the environment and private property that may result into disputes and claims with landowners.	To ensure contracts are aware of environmental requirement I.L.o. the EMP and environmental legal and other requirements	Daily	1. Environmental Induction Training must be provided to all contractors who will be conducting work for this project. 2. Attendance Registers of this induction training must be kept by the project manager and copies included in the contractor's Environmental & Safety file 3. Environmental Requirements can be highlighted daily during the toolbox talks to refresh workers minds on what is required. 4. Relevant training requirements must be identified and be applicable to the scope of work of each project prior to the start of the project.	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor			
32	SOIL EROSION	The incorrect activities in areas, which are prone to erosion, can lead to serious erosion. This can eventually make the entire area inaccessible.	Erosion on communal properties can affect the landowner's carrying capacity, and affect Eskom infrastructure that could lead to Quality of supply been affected to customers as well as replacement and rehabilitation cost.	To ensure that activities which may lead to erosion are identified and managed to avoid or minimise further erosion from resulting and adhere to relevant legal requirements.	On Occurance	1. By identifying activities that may cause erosion. 2. By assessing site/s for existing erosion and to avoid these areas if and where possible. 3. By removing vegetation selectively and compacting soil after excavation activities. 4. To rehabilitate areas of erosion caused by project activities.	Conservation of Agricultural Resources Act, 43 of 1983 - National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.	Duration of project	Project Manager / Contractor and ECO			
33	Water Management	Water supply	Being uninformed of where the substation water supply come from may pose a risk to health, safety and ensuring legal and other requirements are met during water pipes leaking and water contamination	To know source of water supply.	0 Legal contraventions, Water quality suitable for human consumption	1. Test water quality for human consumption 2. Take action by replacing water tank filters / buying water if water quality is not fit for human consumption		Duration of project	Contractor			
	Water Management	Leaking pipes / Water Wastage	Waste of water	To ensure that no water is wasted on site.	To comply with legal and other requirements and ensure sustainable use of natural resources.	1. To ensure that leaking pipes are monitored monthly through substation inspections Environmental Inspection Report for Substations (240-108348810) 2. Repair leaking water pipes on occurrence		Duration of project	Contractor			
34	Eskom Site Security Management	Contractor Access control and compliance check	Land and water pollution	To ensure that all contractor vehicles comply with law, e.g. roadworthiness, oil leaks, etc.)	0 Legal contraventions, contractor compliance	1. The Eskom security guard / officer at any site has the right to refuse entry of contractor vehicles that is not roadworthy e.g. leaking oil, etc. to any site. 2. Contractors must provide proof of grid Environmental Authorisation for any waste material in their possession and leaving site. 3. No form of any waste (general/ hazardous) may leave any grid site without relevant approvals/ authorisation given by the Grid Environmental Manager in writing.	National Environmental Management Act 107 of 1998 section 28, 33, 34, S29, S30, S31, S35.	Duration of project	Contractor			

NOTES

Compliance obligations: All relevant compliance obligations is important. The Aspect significance in terms of the project is indicated with (High), Existing site conditions:

Medium, Low) depending on the relevance to the project scope of work. Applicable compliance obligations are highlighted in the corresponding column. The contractor to monitor EMP implementation in the last four columns.
 The Grid will also highlight which legislation and other requirements are critical to the project scope of work in the form of additional supporting method statements.

Contract employees to take care on driving on access road to substation / lines that can be muddy after rains.
 Contract employees to include snakes and bees awareness for project duration in risk assessments.
 Water at substation / sites not suitable for drinking purposes, contractors to bring own water for drinking.
 Borehole on site not to be used for industrial purposes. n/a
 Asbestos containing material on site. n/a
 use site toilet facilities / provide their own chemical toilets on site.
 clean-up kit and general and hazardous waste bins provided for waste storage. Contractors to supply oil spill kit on site.
 Care is to be taken while travelling to sites on the dirt roads. Beware snakes, scorpions, spiders, bees, wasps and ticks.
 Make sure to have all COVID-19 PPE, requirements in place and follow all protocols before going onto site.

Contractors to
 Substation has an oil spill

Transmission Project Manager		Grid Senior Environmental Advisor	ENVIRONMENTAL OFFICER
Name & Surname		Name & Surname	ASHLEIGH DU PREEZ
Signature		Signature	
Date		Date	11/08/2021

CONTRACTORS DETAILS

I,.....(Name of Contractor), accept the above Environmental Management Plan and acknowledge having read and understood my responsibilities.

SIGNATURE		DATE	
CONTACT DETAILS			
ESKOM PROJECT MANAGER/ SITE REPRESENTATIVE (NAME)			
SIGNATURE		DATE	

Effectiveness Criteria

* **Fully effective** : Nothing more to be done except review and monitor the existing controls. Controls are well designed for the risk, are largely preventive and address the root causes and management believes that they are effective and reliable at all times. Reactive controls only support preventive controls

* **Partially effective**: Most controls are designed correctly and are in place and effective. Some more work to be done to improve operating effectiveness or management has doubts about operational effectiveness and reliability

* **Ineffective**: While the design of controls may be largely correct in that they treat most of the root causes of the risk, they are not currently very effective. There may be an over-reliance on reactive controls
 or
 Some of the controls do not seem correctly designed in that they do not treat root causes, those that are correctly designed are operating effectively