

TRANSMISSION ENVIRONMENTAL MANAGEMENT PLAN - PROJECTS / SERVICE PROVIDERS												Template Identifier	240-43921898	Rev	7
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Legal Requirements: <a href="http://intranet.eskom.co.za/EskomBusinesses/OtherSites/Pages/Le.aspx">http://intranet.eskom.co.za/EskomBusinesses/OtherSites/Pages/Le.aspx</a>												Review Date	December 2023		
*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 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: TRANSMISSION SITES - SOUTH GRID / EAST GRID / NORTH EAST GRID / WEST GRID / NORTH GRID / CENTRAL GRID.															
Project Code:															
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Date Compiled: 19/01/2022															
Project / Contract Number:															
Scope of work: Repair/Calibration of Condition Monitoring Equipment															
Background and Purpose of Project: Repair/Calibration of Condition Monitoring Equipment															
Note: Appointed contractor to submit method statements based on the site SPECIFIC EMP (project aspects and impacts).															
NR	ACTIVITY	ASPECT	IMPACT	SIGNIFICANCE	OBJECTIVE	TARGET	MEANS	DUE DATE	RESPONSIBLE PERSON	COMPLETION DATE	LEGAL OBLIGATION AND OTHER REQUIREMENTS	ACTION EFFECTIVENESS			
												Fully effective	Partially effective	Ineffective	
1	PROCUREMENT	Evaluation and adjudication of tender submissions	Failure to include environmental requirements during tender processes could result into environmental degradation	Medium	Ensure Eskom SHEQ requirements are specified / included during tender	With the submission of each tender	Ensure Environmental requirements are taken into account during tender process .	Tender submission	Buyer		32-726 - SHE Requirements for the Eskom Commercial Process				
2		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 .	Tender stage	Buyer		32-726 - SHE Requirements for the Eskom Commercial Process				
3		Assessing contractors	Failure to make contractors aware of the impact of their deviations from set procedures could lead to negative.	Medium	Ensure that contractors are aware of the impact of their deviations from set procedures.	Prior commencement of activities	SHEQ File evaluation and approval for tender requirements	Prior commencements of activities	Transmission Environmental Management Project Manager / Contractor		32-726 - SHE Requirements for the Eskom Commercial Process				
4	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 property.	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.	Duration of project			National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.				
5	PROJECT MANAGEMENT	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 onTransmission sites must have SAPS security clearance to enter substations / sites	Duration of project	Project Manager / Contractor		National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.				
6	PROJECT MANAGEMENT	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 submissions and compliance.	Duration of project	Project Manager / Contractor		National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.				
7	PROJECT MANAGEMENT	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	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.		National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.				
8	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.	Before project starts  Duration of project  Duration of project  Before entering servitude / private property	Project Manager / Contractor  Contractor  Contractor  Contractor / Site Supervisor		Eskom Access to to Farms Standard (32-1173) -Conservation of Agricultural Resources Act, 43 of 1983				

9	ACCESS	Bad Access	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.	Duration of project	Project Manager / Contractor	Eskom Access to to Farms Standard (32-1173) -Conservation of Agricultural Resources Act, 43 of 1983			
10	SOCIAL INTERACTION	Public / Landowner Complaints	Inappropriate activities, activities in non-compliance to the EMP, legal and other requirements may lead to customer complaints.	Medium	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 out on project completion / handover to the BU	Duration of project Duration of project Duration of project Project completion	Project Manager / Contractor Contractor BU Env Dept Project Manager / Contractor	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.			
11	SOCIAL INTERACTION	Social-Civil liability due to inappropriate activities while working or activities arising from substations	Various public complaints may arise from this project activities and if not resolved my lead to social, civil and financial liabilities for Eskom.  Substation activities may lead to pollution incidents that may result intosocial, 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	Duration of project	Project Manager / Contractor  Contractor Project Manager / BU Env Dept	National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.			
12	WILDLIFE INTERACTION	Bird Nests	The removal of bird nest from equipment 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 equipment i.t.o. quality of supply etc. according to legal and other requirements.	0 Legal Contraventions / 0 public complaints	1. Identify affected equipment 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	Before / Duration of project Before project start Duration of project Duration of project	Project Manager / Contractor BU Env Dept Contractor Project Manager / Contractor	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			
13	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 equipent 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	Duration of project	Project Manager / Contractor	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			
14	WILDLIFE INTERACTION	Poaching of game / wild / domestic animals	The poaching of game / wild / domestic animals on private property is illegal.	Medium	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 employees is done and submitted with ID documents during SHE file assessment and approval	Before project start Duration of project Bedfine project start	Project Manager / Contractor	- 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			
15	WILDLIFE INTERACTION	Interaction between people and animals.	The injuring or killing of animals accidently 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 a Environmental Incident register on site which includes Wildlife Incidents. 5. To report such incident at to the Project Manager immediately after occurrence.	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	- 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			
16	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 cause 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 /anticlimbing devices 7. Vehicles which are not road worthy (i.e. leaking oil) shall not be used or allowed on site.	Duration of project	Project Manager / Contractor	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.			
17	WASTE MANAGEMENT	Domestic / General Waste and litter generated during this project in the servitude.	These types of activities cause pollution and degradation to the environment.  Leaving waste under the line and on private	HIGH	Waste is handled and dispose of as required by legislation and best practices.	0 Legal contraventions / landowner complaints	No waste to be left on site/ servitude after shift ends.	Duration of project	Project Manager / Contractor	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,			

		This include uncontaminated building rubble	property can lead to landowner complaints and claims against Eskom				Domestic / general waste to be disposed of at the closest registered / licensed municipal waste site.	Duration of project	Project Manager / Contractor		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			
							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  Duration of project / project completion	Project Manager / Contractor					
18	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 dispose 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	Duration of project	Project Manager / Contractor		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, 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 628) , 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			
19	OIL MANAGEMENT	Planning for oil management activities on site.	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 correct planning of oil management activities forms part of the scope of work of any project to minimise and avoid pollution incidents.  To ensure all legal requirements are identified well in advance to ensure authorisation, permits are obtained prior to the start of such a project where required.  To avoid costly delays in projects while waiting to obtain permits and authorisations.	0 Legal Contraventions	1. Identify activities involved in oil management in scope of work before project commence. 2. Complete a risk assessment prior to the start of project on the management of all oil spillages, storage, disposal activities. The risk assessment must be verified and signed off by the BU Environmental professional. 3. Establish quantities of oil to be used, stored on or disposed from site. 4. Ensure that an EPP for oil management on site is in place. 5. Ensure that all oil management plans is in place and forms part of the project EMP.	Before project starts  Duration of project  Before project starts Before project starts	Project Manager / Contractor		National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage and Sec 30. Control of emergency incidents - National Environmental Management: Waste Act, 59 of 2008, Sec 16. General duty in respect of waste management, Sec 21. General requirements for storage of waste and Sec 25. Duties of persons transporting waste - National Water Act, 36 of 1998, Sec 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 - Hazardous Substances Act, 15 of 1973 - Declaration of Group I Hazardous Substances (GNR 452) - Occupational Health and Safety Act, 85 of 1993 - Regulations for Hazardous Chemical Substances, 1986 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 - National Road Traffic Act, 93 of 1996 - National Road Traffic Regulations, 2000 - Chapter 8 - Transportation of Dangerous Goods and Substances by Road, Sect 277. Duties of Operator, Driver, Consignor and Consignee, Sec 278. Dangerous Goods to be Compatible, Sec 280. Driver to Undergo Training and Sec 281. Documents to be Held by Driver - Occupational Health and Safety Act, 85 of 1993 - GN R1031 - General Safety Regulations, 1986 , Sec 3. First aid, emergency equipment and procedures and Sec 2. Personal safety equipment and facilities - Hazardous Substances Act (15/73) Section 1 and 2 - classifies hazardous substances into Group I, Group II, Group III and Group IV hazardous substances. - Hazardous Substances Act (15/73) Regulation 453 – Disposal of hazardous chemical substance containers SANS Code of Practice 10228 - National Roads Act (54/71) Section 16 – Dumping of material on or near a national road			
20	Oil Management	The maintenance, leaks or explosion of Power transformers: CVTs, CTs, VTs and breakers.  Oil leaks from transportation 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).	Duration of project	Project Manager / Contractor		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, Sec 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 - Occupational Health and Safety Act, 85 of 1993 - Regulations for Hazardous Chemical Substances, 1986 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, 1986 , Sec 3. First aid, emergency equipment and procedures and Sec 2. Personal safety equipment and facilities			
21	SF6 MANAGEMENT	Sulphur Hexa Fluoride (SF6) Gas Insulated Breakers	SF6 gas is a greenhouse gas contributing negatively to climate changes and in large volumes may have health and safety risks when inhaled	HIGH	To ensure compliance to legal and other requirements and prevent environmental, health and safety impacts.	0 Legal Contraventions / 0 Safety incidents	1. Equipment must be checked for SF6 gas leaks and it must be reported on an Environmental Incident Notification form. 2. SF6 gas cylinders should be weighed before and after FS6 gas usage and differences recorded. 3. SF6 purchases and disposal should also be recorded. 4. Disposal of SF6 gas cylinders must be done by a Hazardous waste consultant and the disposal certificate obtained and submitted	Duration of project	Project Manager / Contractor		Occupational Health & Safety Act 85 of 1993 Sec 8 duties of employer - National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage - NEM: Air Quality Management Act (39 of 2004, Notice 172 (Gazette 37421) Kyoto Protocol to the United Nations Framework convention on climate change, Article 2 and Annexure A			
22	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	1. To store all solvents, chemical substances and paints in appropriate storage areas / facilities where chemical / solvent registers are available and updated. 2. The temporary storage of Nitrogen gas cylinders in workshop must be chained to wall (empty / full one). 3. To ensure conformance with Environmental EPP Procedure to address spillages. 4. 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). 5. To store hazardous chemicals substances which may cause a spillage in banded areas. 6. To label demarcated hazardous chemical store.	Duration of project	Project Manager / Contractor		- 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			

23	EQUIPMENT MANAGEMENT	Cleaning of Machinery	Chemical pollution is caused by vehicle oils, greases 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 substation that can result to pollution	0 Legal contraventions and landowner complaints	1. By inspecting machinery prior to maintenance / project activity starting. 2. Not to make use of the incorrect tools for the job and not to make use of malfunctioning machinery. 3. To ensure all staff and contractors are sufficiently trained in using the machinery correctly. 4. Have records where relevant available in SHE file	Duration of project	Project Manager / Contractor		National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.			
24	Civil Works: Establishment of Construction Camps and Stone, 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	1. No camp sites on servitudes / private property or Eskom sites without written consent from landowners / Eskom Management. 2. 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. 3. Ensure proper effluent / sewerage management and implemented. 4. Ensure that all equipments are inspected for possible leaks. 5. Ensure sites have good housekeeping and kept clean	Duration of project	Project Manager / Contractor		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			
25	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 supersorb to be disposed as hazardous waste.	Duration of project	Project Manager / Contractor		National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.			
26	Connect earthing to steel work	Weldind 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.	Duration of project	Project Manager / Contractor		National Veld And Forest Fire Act, 101 of 1998 , Sec 17. Readiness for fire fighting and Sec 18. Actions to fight fires			
27	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.	Duration of project	Project Manager / Contractor		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 Sec27. Littering			
28	Dismantling of existing transformer	Crane trucks & Engine & Hydraulic oil	Possible hydrocarbon contamination with from heavy machinery into the natural environment	HIGH	Minimize hydrocarbon contamination to the natural environment, minize air pollution	0 Legal Contraventions	1. Ensure that the site has spillage kit and the personnel are trained how to deal with small to medium spillages. 2. Only licensed drivers must operate construction vehicles.	Duration of project	Project Manager / Contractor		National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.			
29	Remove fittings and fixtures from the transformer	Electrical cables	Improper disposal of old electrical cables	HIGH	All old electrical cables to be disposed in an environmentally sound manner	0 Legal Contraventions	1. Ensure that Eskom Scrapping procedure to be followed and all personnel working on the transformer to be suitably qualified. 2. All waste to be disposed on the registered landfill sites.	Duration of project	Project Manager / Contractor		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 Sec27. Littering			
30	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.	Duration of project	Contractor		National Veld And Forest Fire Act, 101 of 1998 , Sec 17. Readiness for fire fighting and Sec 18. Actions to fight fires			
31	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 form 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 inspections/investigations/and completion of work. 4. All Environmental incidents to be reported.	Duration of project	Project Manager / Contractor		National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.			
32	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	Duration of project	Project Manager / Contractor		240-133087117 - Eskom Environmental Incident Management Procedure - Environmentalinspections 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			
33	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.	HIGH	To ensure contracts are aware of environmental requirement I.i.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.	Duration of project	Project Manager / Contractor		National Environmental Management Act, 107 of 1998 (NEMA), Sec 28. Duty of care and remediation of environmental damage.			

[illegible]

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

Make sure to have

**Environmental Officer**

Name &amp; Surname

Name &amp; Surname

**Signature**

**Signature**

Date \_\_\_\_\_

Date \_\_\_\_\_

ASHLEIGH DU PREEZ

19/01/2022

**19/01/2022**

## 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