

Office s/Adm in	activities	4	Excessive Water usage	i	Indirect depletion of natural resources (Water)	Environmental authorisation contravention (exceeding allocated amount of water as per WUL) which may lead to fines, project delays etc. (Legal contravention)	4(j)	x					3	A	III	Implementation of Integrated Water and Waste Management Plan 241 - 202217 Water saving awareness Water use monitoring by Gx	I	A	IV	Section 2.2, 3.3.2, 4.15 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System	Water usage is monitored by Gx
	Cleaning of Offices	5	Use of cleaning consumables	i	Potential water, land and air pollution	Reputational damage Legal contravention that may lead to fines and clean-up cost	5(j)	x					2	B	IV	Waste Management Work Instruction 348-22367 Implementation of Integrated Water and Waste Management Plan 241 - 202217 Cleaning consumables stored in a designated area Waste water from cleaning discharged into water drains Use environmentally friendly cleaning detergents	I	A	IV	Section 4.18 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Audits Inspections Meetings
	Office Waste Management			i	Potential water and land pollution due to storage of waste outside designated area	Potential Legal contravention	6(j)	x					1	D	III	Waste Management Work Instruction 348-22367 Waste management awareness	I	A	IV	Section 4.17 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspections Audits Meetings

6	Generation, handling and disposal of general office waste	ii	Potential water and land pollution due to overflowing waste bins	Potential Legal contravention	6(ii)	x			I	D	III	Waste Management Work Instruction 348-22367 Waste management awareness	I	A	IV	Section 4.17 Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspections Audits Meetings
		iii	Potential water and land pollution due to scattering of from waste bins by baboons & monkeys searching for food	Potential Legal contravention	6(iii)	x			I	D	III	Waste Management Work Instruction 348-22367 Service waste bins regularly Provide cages in central waste stations to prevent baboons & monkeys from accessing waste	I	A	IV	Section 4.17 Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspections Audits Meetings
7	Recycling of office waste (e.g. paper, bottles, bottle caps)	i	Reduction of amount of waste for landfilling	Recognition by stakeholders (e.g. Funders, government, public) (+)	8(i)	x										Section 4.17 Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspections Audits Meetings
8	Selection of supplier/contractor with little or no knowledge of site environmental requirements	i	Air, water and land pollution due to non compliance to site environmental requirements	Legal contravention Compliance from neighbouring farmers and public	8(i)	x		4		C	II	Scope specific SHE specification to be issued during procurement stage Clarification meetings with potential suppliers Review and approve SHE files before contractor starts work	I	A	IV	Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System	Meetings

Procurement	Procurement of services	9	Failure to involve environmental team & environmental requirement during procurement stage	i	Air, water and land pollution due to non compliance to site environmental requirements	Legal contravention Non compliance to site environmental requirements	9(i)	x		4	C	II	Scope specific SHE specification to be issued during procurement stage Clarification meetings with potential suppliers Review and approve SHE files before contractor starts work	I	A	IV	Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Meetings
		10	Ensure service provider meets required environmental licence requirements before contract is finalised	i	Ensure competent service provider to reduce/prevent potential environmental and business/production negative impacts (+)	Recognition by stakeholders (e.g. Funders, government, public) (+)	10(i)	x												
Engineering	Engineering Designs	11	Inadequate designs/ Not considering environmental requirements during design phase	i	Potential Air, water and land pollution	Legal contravention Compliance from neighbouring farmers and public Increase project cost Project delays	11(i)	x		6	B	II	Involvement of environmental team during engineering design phase Submission of engineering designs to authorities for approval Interface meetings where engineering & environmental matters are discussed	I	B	IV	Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Meetings Inspections
Human Resources	Recruitment	12	delay to fill environmental management vacancies	i	Air, water and land pollution due to inadequate staff complement	Legal contravention	12(i)	x		1	C	III	Adhere to Eskom recruitment policy	I	A	IV	Section 2.1 Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Meetings

Emergency Management Services	Emergency Preparedness and Response	13	Use of fire-fighting chemicals	i	Water, land and air pollution from fire fighting chemicals	Legal contravention	13(i)			x	I	B	IV	Emergency Preparedness and Response 240-91688868 Integrated Water and Waste Management Plan 241-202217	I	A	IV	Section 4.6 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Meetings
		14	Use of PPE e.g. disposable gloves, hard hats, overalls	i	Potential land & water pollution due to improper disposal of disposable gloves, hardhats and overalls	Legal contravention	14(i)			x	I	B	IV	Emergency Preparedness and Response 240-91688868 Integrated Water and Waste Management Plan 241-202218	I	A	IV	Section 4.17 and Section 4.6 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspections Meetings
	Fumigation	15	Pesticides /Fumigation application	i	Potential air, water and land pollution	Legal contravention	15(i)			x	I	B	IV	Competent person to apply pesticides (Pest Control Operator) Safety Data Sheet available at point of use. Ensure correct storage and disposal of pesticides chemicals.	I	A	IV	Section 4.11.5 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspections Meetings
	General maintenance	16	Removal, replacement and storage of R22 aircon (Ozone depleting substances)	i	Potential air, water and land pollution due to improper storage or prolonged storage of R22 aircons (Over 18 months)	Legal contravention	16(i)			x	3	C	II	Waste Management Work Instruction 348-22367	I	C	III	Section 4.17 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspections Audits Meetings

Contract Management	Project Management	21	Assessing and monitoring of contractors.	i	Failure to make contractors aware of the impact of their deviation from set procedures could lead to a negative environmental impact such as Air, Water and land pollution	Legal Contravention Fines from authorities	21(i)	x	4	C	II	Contrator SHE file evaluated before commencement of work Regular monitoring of contractor through visual inspections Establish proper legal NEC contract. Provide contractor with SHE specification requirements.	I	B	IV	Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings
	Implementation of ISO14001:2015	22	Maintenance of ISO 14001:2015	i	Failure to comply with the requirements of the EMS standard could result in the BU not achieving the intended outcomes	Loss of ISO certificate Reputational Damage Loss of trust by funders, public & other BU	22(i)	x	3	B	III	Provide EMS awareness to all employees Conduct Internal and external audit on SO 14001:2015 Standard	I	A	IV	None	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Audits Self assessments
	Planning, leadership & commitment	23	Provision of resources	i	failure to provide resources required for environmental management can lead to air, water and soil pollution	Legal contravention	23(i)	x	3	B	III	Continuous management engagement regarding required environmental resources	I	A	IV	None	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Meetings Audits

Finance Department	Budgeting	24	Budgeting	i	Potential soil, water and air pollution due to insufficient environmental budget	Legal contravention due to insufficient environmental budget Failure to implement environmental projects	24(i)	x		4	B	III	HSE Manager have an input in environmental budget considering all environmental projects planned for the financial year	I	A	iv	None	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Meetings
HSE	Performance Reporting - (including Incident investigation and Audit results)	25	Recording and reporting of Environmental performance	i	Failure to integrate environmental report accurately could lead to areas of improvement's not being identified Failure to liaise timeously with Environmental Management Department could	Legal contravention Reputational Damage Loss of trust by funders, public & other BU	25(i)	x		3	B	III	Environmental Performance Monitoring and Measurement Procedure 348-862555	3	A	IV	Section 2.5. Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Audits Self assessments
IT	Disposal of redundant computer hardware cables	26	Incorrect disposal of redundant computer hardware, and cables	i	Incorrect disposal of redundant computer hardware (Laptop chargers / , cables, printers) could lead to land and water pollution.	Legal contravention	26(i)	x		1	B	IV	Implementation of Waste Management Work Instruction 348-22367	I	A	IV	Section 4.17. Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspections

Project Execution (BOP; Units)	Waste Management (generation, storage, handling, transportation and disposal of waste at and from contractor's site during planned unit shut down and forced contractor's)	27	Temporary storage of waste (scrap, e-waste, & etc.)	i	Aesthetic (visual) impact - if waste not stored correctly at contractor's area	Potential Legal contravention	27(i)	x	2	C	III	Waste Management Work Instruction 348-22367 Integrated Water and Waste Management Plan 241 - 202217,	2	B	IV	Section 4.17 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspection Audits Meetings
				ii	Prolonged temporary storage of waste can lead to legal contravention -general waste-30days as per Medupi PS CEMP rev 2 SP5 concrete & rubble-180days-Norms & Standards	Potential Legal contravention	27(ii)	x	6	E	I	Implementation of Waste Management Work Instruction 348-22367 & Integrated Water and Waste Management Plan 241 - 202217 Waste management awareness Allocation of central waste area-Take waste to central waste area within 30 days Implement waste classification	3	C	II	Section 4.17 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspection Audits Meetings
		28	Waste classification	i	Failure to conduct waste classification can lead to disposal of waste in wrong areas. This has potential to cause water, air and land pollution	Potential Legal contravention	28(i)	x	4	D	I	Implementation of Waste Management Work Instruction 348-22367 & Integrated Water and Waste Management Plan 241 - 202217 Waste management awareness Allocation of central waste area-Take waste to central waste area within 30 days Implement waste classification	1	C	III	Section 4.17 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspection Audits Meetings

Com mission	Plant Management	29	Management of plant	i	Water and land pollution due to hydrocarbon spillages	Potential Legal contravention	29(i)				x	5	D	I	Implementaton of Waste Management Work Instruction 348-22367 & Integrated Water and Waste Management Plan 241 - 202217 Implementaton of SPCC 348-880696 HCS management awareness	4	C	I	Section 4.18 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System; Waste Management Procedure 32-245.	Inspection Audits Meetings
	Use of sand, concrete, beddings on site	30	Sourcing of river sand, concrete, beddings by contractors from unlicensed suppliers	i	Failure in ensuring that contractors sources sand from licensed and reputable service providers can lead to potential water, air, land pollution	Legal contravention, reputational damage, fines, project delay, public complaints due to sourcing of river sand from unlicensed service provider	30(i)	x				5	B	II	Establish a list of licensed local river sand suppliers Request proof of licenses from local river sand suppliers to ensure compliance communicate with contractors regarding licensed river sand suppliers	3	B	III	None	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings
	Flammable/HCS Management	31	Licensing of flammable /HCS storage areas	i	Failure to license flammable /hcs stores can lead to non compliance to local bylaws	Legal contravention	31(i)	x				3	E	I	Implementaton of Waste Management Work Instruction 348-22367 & Integrated Water and Waste Management Plan 241 - 202217 Implementaton of SPCC 348-880696 HCS management awareness	1	D	III	Section 4.18 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings
	Commissioning of infrastructure	32	Discharge of large amount of water mixed with chemicals during commissioning process	i	Land and water pollution	Legal contravention	32(i)	x				4	C	II	Integrated Water and Waste Management Plan 241 - 202217 Adhere to commissioning procedures	1	B	IV	Medupi Power Station EMP, Revision 2.	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings

Commissioning		33	Possible explosion s due to faulty electrical connections/infrastructure	i	Potential air pollution due to fires	Legal contravention Project delays	33(i)	x		4	C	II	Integrated Water and Waste Management Plan 241 - 2022/17 Adhere to commissioning procedures	I	B	IV	Section 4.14 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings
		34	Demobilisation of environmental management personnel before completion of disestablishment activity	i	Land, water pollution due to lack of competent environmental resources onsite	Legal contravention	34(i)	x		I	C	III	Medupi PS Construction Environmental Management Plan 348-681011 Rehabilitation Strategy & Implementation Plan 348-77837 Demobilisation & Rehabilitation Method Statements	I	B	IV	Section 4.20 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings
		35	Demolition of fuel/hydrocarbon storage area	i	Land and water pollution due to demolition of contaminated cantaminated slabs	Legal contravention	35(i)	x		I	C	III	Medupi PS Construction Environmental Management Plan 348-681011 Rehabilitation Strategy & Implementation Plan 348-77837 Demobilisation & Rehabilitation Method Statements	I	B	IV	Section 4.20 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings
		36	Demolition of hazardous waste storage area	i	Land and water pollution due to demolition of contaminated cantaminated slabs	Legal contravention	36(i)	x		I	C	III	Medupi PS Construction Environmental Management Plan 348-681011 Rehabilitation Strategy & Implementation Plan 348-77837 Demobilisation & Rehabilitation Method Statements	I	B	IV	Section 4.20 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings
		37	Handling ,storage and disposal of hazardous material (waste & Chemicals)during site disestablishment	i	Land, water and pollution due to disposing of contaminated material outside designate d areas	Legal Contravention Fines from authorities Increased project cost	37(i)	x		I	C	III	Medupi PS Construction Environmental Management Plan 348-681011 Rehabilitation Strategy & Implementation Plan 348-77837 Demobilisation & Rehabilitation Method Statements	I	B	IV	Section 4.20 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings

Disestabilishment	38	Removal of Alien and Invasive plant species	i	Spread of alien and invasive species due to improper removal, storage and disposal of removed species	Spread of alien and invasive species Increased cost of managing alien and invasive species Legal contravention	38(i)	x			I	C	iii	Medupi PS Construction Environmental Management Plan 348-681011 Rehabilitation Strategy & Implementation Plan 348-77837 Implementation of Monitoring control & Eradication of Alien & Invasive Species 240-139218662 Demobilisation & Rehabilitation Method Statements	I	B	IV	Section 4.11 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings	
			ii	Spread of alien and invasive species due to failure to remove these species	Spread of alien and invasive species Increased cost of managing alien and invasive species Legal contravention	38(ii)	x			I	C	iii	Medupi PS Construction Environmental Management Plan 348-681011 Rehabilitation Strategy & Implementation Plan 348-77837 Implementation of Monitoring control & Eradication of Alien & Invasive Species 240-139218662 Demobilisation & Rehabilitation Method Statements	I	B	IV	Section 4.11 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings	
		39	Removal of infrastructure	i	Destruction of bird nests	Legal contravention	39(i)	x			I	C	iii	Medupi PS Construction Environmental Management Plan 348-681011 Rehabilitation Strategy & Implementation Plan 348-77837 Implementation of Monitoring control & Eradication of Alien & Invasive Species 240-139218662 Demobilisation & Rehabilitation Method Statements	I	B	IV	Section 4.12 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings
				ii	Destruction of animals habitat	Legal contravention	39(ii)	x			I	C	iii	Medupi PS Construction Environmental Management Plan 348-681011 Rehabilitation Strategy & Implementation Plan 348-77837 Implementation of Monitoring control & Eradication of Alien & Invasive Species 240-139218662 Demobilisation & Rehabilitation Method Statements	I	B	IV	Section 4.12 Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	Medupi Power Station Project Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Inspection Audits Meetings

Heritage Management	Heritage management	49	Heritage Management	i	Potential destruction of unidentified graves	Legal contravention Complaints by community Project delays	49(i)	x		6	A	III	Environmental Incident Management Procedure Rev 8, Handling of Environmental Non-conformities and Corrective and Preventive Action 348-717685 Medupi Environmental Aspects and Impacts 348-860847, Implementatn of Heritage Management Plan	4	C	IV	Section 4.13 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Monitored through site inspection, audits and meetings
				ii	Potential deface, paint, mark or damage to archeological features or site	Legal contravention Complaints by community Project delays	49(ii)	x		I	A	IV	Environmental Incident Management Procedure Rev 8, Handling of Environmental Non-conformities and Corrective and Preventive Action 348-717685 Medupi Environmental Aspects and Impacts 348-860847, Implementatn of Heritage Management Plan	I	A	IV	Section 4.13 Medupi Power Station EMP, Revision 2.	Medupi Power Station Legal Register (https://registers.ecoimpact.co.za/UserDashboard)	SANS/ISO 14001:2015 Environmental Management System;	Monitored through site inspection, audits and meetings

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Revisions

Date	Rev	Compiler	Remarks
27-05-2025	13	Ndivhuho	Annual review
10-11-2024	12	Ndivhuho	Addressing the following ISO14001:2015 audit finding:Some of the impacts not
20-09-2024	11	Sakutanya	Moving aspects and impacts to new template