

Legal and Administrative Requirements

National Environmental Management Act, 107 of 1998

The NEMA provides a framework for cooperative environmental governance between the various spheres of government by establishing principles for decision-making on matters relating to the environment. The NEMA also promotes integrated environmental management to ensure sustainable resource utilisation and development. It further requires that the DFFE be the lead agent in ensuring effective custodianship of the environment. It acknowledges that sensitive, vulnerable, highly dynamic, or stressed ecosystems, such as wetlands and similar systems, require specific attention in management and planning procedures, especially where subjected to significant human resource usage and development pressure. The DFFE is the approving/competent authority in this Project.

The NEMA principles (contained in Section 2) guide the interpretation, administration and implementation of the Act and any other law concerned with the protection of the environment. Its overarching emphasis is that development must be environmentally, socially and economically sustainable. The Act also states that sustainable development requires the consideration of, inter alia, the following:

- That pollution and degradation of the environment are avoided, or where it cannot be altogether avoided, minimised and remedied;
- That waste is avoided, or where it cannot be altogether avoided, is minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner;
- That the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;
- That the development, use and exploitation of renewable resources and the eco-systems of which they are part do not exceed the level beyond which their integrity is jeopardised; and
- That negative impacts on the environment and on peoples' environmental rights be anticipated and prevented, and where it cannot be altogether prevented are minimised and remedied.

The NEMA principles apply to all activities that may significantly affect the environment and serve as guidelines by reference to which organs of state will exercise their functions when taking a decision in terms of the NEMA.

Sections 24 and 44 of the NEMA make provision for the promulgation of Regulations that identify activities which may not commence without EA. The result being that the NEMA began governing the EIA process with the promulgation of the EIA Regulations in April 2006 (Government Gazette No. 28753 of 21 April 2006). These Regulations was then replaced by the EIA Regulations of 2010 and then subsequently replaced by the EIA Regulations of 2014 (amended in 2017) listed in Government Gazette No. 38282 of 04 December 2014 (GNR No. 982, 983, 984 and 985) (as amended).

On submission of an application, the competent authority (CA) must consider all the relevant information contained in the Basic Assessment Report (BAR) (including any pollution, environmental impacts or environmental degradation likely to be caused if the application is approved or refused) and thereafter make a decision of whether or not to grant an EA to the Project.

Certain minimum conditions are attached to the EA, as required by Section 24E of the NEMA. However, it is at the CA's discretion to include additional project specific conditions. In terms of Section 24F of the NEMA, it is an offence not to comply with any condition applicable to an EA issued for a listed activity.

Typical conditions that may be applied by the CA include:

- Measures to prevent, manage and mitigate environmental impacts to acceptable levels;
- Prevention of pollution of water bodies and groundwater;
- Rehabilitation programme for disturbed natural and/or heritage areas;
- Appointment of an independent Environmental Control Officer (ECO) to oversee the construction phase and to ensure that the development phase is conducted in an environmentally responsible manner;
- Conservation and visitor management plans; and

- Requirements of other authorities, such as the Department of Water and Sanitation (DWS), the Department of Energy (DoE), the Department of Mineral Resources (DMR), South African Heritage Resources Agency (SAHRA) and/or relevant provincial authorities.

Activities Applicable to the NEMA

The development activities associated with the project trigger listed activities in terms of Listing Notice 1 of the EIA Regulations of 2014 (as amended), governed in line with Section 24(2) and (d) of the NEMA. Refer to Table 0-1 below for the listed activities triggered by the project.

Table 0-1: Listed Activities in Terms of the NEMA

Activity	Description	Description of Activities Applicable
GNR 983, 04 December 2014 (as amended) Listing Notice 1		
11	<p>The development of facilities or infrastructure for the transmission and distribution of electricity—</p> <ol style="list-style-type: none"> 1. outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or 2. inside urban areas or industrial complexes with a capacity of 275 kilovolts or more; <p>excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is</p> <ol style="list-style-type: none"> a. temporarily required to allow for maintenance of existing infrastructure; b. 2 kilometres or shorter in length; c. within an existing transmission line servitude; and d. will be removed within 18 months of the commencement of development. 	<p>The development will include realignment of the existing Cuprum/Karoo 66kV and Cuprum/Kronos 11kV overhead lines to make provision for the BESS and substation expansion.</p>
14	<p>The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.</p>	<p>The establishment of the 70MW/ 240MWh BESS may result in the storage of dangerous goods. At this stage, it is uncertain whether the batteries will be fully assembled and/or whether the electrolyte will be stored in a container.</p> <p>As such, a worst-case scenario is assumed where the battery assembly will only take place on site, with the electrolyte to be stored in a container on site until such time. This listed activity will, therefore, be triggered.</p>
27	<p>The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—</p> <ol style="list-style-type: none"> (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan. <p>Where, "indigenous vegetation" refers to vegetation consisting of indigenous plant species occurring naturally in an area, regardless of the level of alien infestation and where the topsoil has not been lawfully disturbed during the preceding ten years;</p>	<p>The development of the BESS and associated infrastructure will result in the clearance of approximately 35 650 m² (3.565 hectares) of indigenous vegetation. This will exceed the threshold of 1 hectare to be cleared, therefore the listed activity will be triggered.</p>

GNR 984, 04 December 2014 (as amended) Listing Notice 2

Not applicable

GNR 985, 04 December 2014 (as amended) Listing Notice 3

Not applicable

The listed activities triggered for the project, forms part of Listing Notice 1 and therefore requires a BA process to be undertaken in applying for the EA.

National Heritage Resource Act, 25 of 1999

The NHRA (No. 25 of 1999) is the primary statute regulating the protection and management of South Africa's heritage resources. The NHRA aims to promote good management of the national estate, and ensures community participation in the protection of national heritage resources and involves all three levels of government (national, provincial and local) in the management of the country's national heritage. SAHRA is the enforcing authority for the NHRA. The national estate includes, but is not limited to places, buildings, structures and equipment of cultural significance, places to which oral traditions are attached or which are associated with living heritage; historical settlements and townscapes, landscapes and natural features of cultural significance, geological sites of scientific or cultural importance, archaeological and paleontological sites, graves and burial grounds, and sites of significance relating to South African history and movable objects.

A variety of formal protection measures are provided for in the NHRA, ranging from national and provincial heritage sites, protected areas, provisional protection, inclusion on the heritage register of a province, heritage areas and heritage objects legal protection of paleontological and archaeological sites (including rock art) and meteorites, burial grounds and graves, and the protection of structures older than 60 years and public monuments and memorials.

Applicants must contact the SAHRA or the relevant authorised provincial agency to ascertain which properties and objects are formally protected by the Act and how any future development would impact on these heritage resources. Formal permit applications or authorisations would be required from the relevant heritage resource management authority to make changes to heritage resources. In the case of any built environment features, the approving authority is the Northern Cape Heritage Authority (previously called Ngwao Boswa jwa Kapa Bokone).

In terms of Section 34(1) of the NHRA, 1999, no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

The provisions of Section 38 of the NHRA provide that the applicant is responsible for contacting SAHRA at the earliest stages of initiating a development and for furnishing the SAHRA with details relating to the Project. The information is provided for the reason that SAHRA can determine if a Heritage Impact Assessment (HIA) is required. The following activities listed the NHRA apply to the proposed site project:

- National heritage sites, areas and objects;
- Provincial heritage sites, areas and objects;
- Protected areas;
- Structures;
- Archaeology, palaeontology, meteorites;
- Burial grounds and graves; and
- Public monuments and memorials.

The various categories of heritage resources recognised as part of the National Estate in Section 3 of the NHRA include, among others:

- Geological sites of scientific or cultural importance;
- Palaeontological sites; and
- Palaeontological objects and material, meteorites and rare geological specimens.

According to Section 35 of the NHRA, dealing with archaeology, palaeontology and meteorites:

- The protection of archaeological and palaeontological sites and material and meteorites is the responsibility of a provincial heritage resources authority;
- All archaeological objects, palaeontological material and meteorites are the property of the State; and
- Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

No person may, without a permit issued by the responsible heritage resources authority—

- Destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
 - Destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
 - Trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
 - Bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may—
- Serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;
 - Carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
 - If mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph (a) to apply for a permit as required in subsection (4); and
 - Recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.
- Minimum standards for the palaeontological impact assessment have been published by SAHRA (2013). These standards have been incorporated, along with the requirements of the heritage impact assessment, into the specialist studies undertaken for the project.

National Water Act, 36 of 1998

The NWA provides a framework to protect, develop, conserve and manage the nation's water resources. Water use is defined broadly in terms of the NWA, and includes taking and storing water, activities which reduce stream flow, waste discharges and disposals, controlled activities (activities which impact detrimentally on a water resource), altering a watercourse, removing water found underground for certain purposes, and recreation. In general, a water use must be licensed (in terms of Section 21) unless it is listed in Schedule 1 as an existing lawful water use; is permissible under a general authorisation; or if a responsible authority waives the need for a licence.

Water uses as identified in Section 21 of the NWA requiring a licence, include the following:

- Section 21 (a) - Taking of water from a water resource;
- Section 21 (b) - Storing of water;
- Section 21 (c) - Impeding or diverting the flow of water in a water course;
- Section 21 (d) - Engaging in a stream flow reduction activity contemplated in Section 36 of the Act
- Section 21 (e) - Engaging in a controlled activity: S37 (1) (a) irrigation off any land with waste, or water containing waste generated through any industrial activity or by a water work;

- Section 21 (f) - Discharging waste or water containing waste into a water resource;
- Section 21 (g) - Disposing of waste in a manner which may impact on a water resource;
- Section 21 (h) - Disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process;
- Section 21 (i) - Altering the bed, banks, course, or characteristics of a watercourse. This includes altering the course of a watercourse (previously referred to as a river diversion);
- Section 21 (j) - Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity, or for the safety of people; and
- Section 21 (k) - Using water for recreational purposes.

The NWA also provides for pollution prevention measures, with particular emphasis on water resource pollution. In accordance, the licensee shall ensure that activities impacting upon water resources and effluent releases are monitored for compliance with the applicable Regulations. Emergency incidents involving water resources are included in the Act, requiring the polluter to remediate and mitigate the impacts of such an emergency incident.

In terms of Section 19 of the NWA, “an owner of land, a person in control of land or a person who occupies or uses the land on which any activity or process is or was performed or undertaken; or any other situation exists, which causes, has caused or is likely to cause pollution of a water resource must take all reasonable measures to prevent any such pollution from occurring, continuing or recurring”. These measures may include, but are not limited to:

- Measures to cease, modify, or control any act or process causing the pollution.
- Compliance with any prescribed waste standard or management practice.
- Containment or prevention of the movement of pollutants.
- Remediation of the effects of the pollution.
- Remediation of the effects of any disturbance to the bed and banks of a watercourse.
- With specific reference to the project, it is important to note that no water use is triggered in line with Section 21 of the NWA. As such, no Water Use Licence is required.

National Planning and Policy Context on Energy

White Paper on The Energy Policy of South Africa, 1998

The white paper on South African energy policy governs the development of South Africa energy sector (DME, 1998). This document identifies key objectives for energy supply such as managing energy related environmental impacts, access to affordable energy services and securing energy supply through diversity.

Renewable Energy Policy in South Africa, 2003

The white paper on renewable energy supplements the energy policy and sets out government’s strategic goals, vision, policy principles and objectives implementing and promoting renewable energy in South Africa. South Africa has various sources of renewable resources such as solar and wind that are supported by this policy. From a fuel resource perspective, renewable energy applications are proven to be the least costly, especially from an environmental and social perspective. Meeting technical and economic as well other constraints is one of the major concerns of the governmental policy on renewable energy. South Africa has set a 10 year 10 000 GWH target for renewable energies by 2013 to be produced mainly from solar, wind and biomass as well small-scale hydro. This amounts to approximately 4% of the country’s estimated demands by 2013.

Integrated Resource Plan (IRP), 2019

The IRP is an electricity infrastructure development plan based on least-cost electricity supply and demand balance, taking into account security of supply and the environment (minimize negative emissions and water usage). At the time of promulgation, it was envisaged that the IRP would be a “living plan” to be revised regularly. The promulgated IRP 2010–2030 identified the preferred generation technology required to meet expected demand growth up to 2030. It incorporated government objectives such as affordable electricity, reduced greenhouse gas (GHG) emissions, reduced water consumption, diversified electricity generation sources, localisation and regional development.

Following the promulgation of the IRP 2010–2030, implementation followed in line with Ministerial Determinations issued under Section 34 of the Electricity Regulation (Act No.4) of 2006. The Ministerial Determinations give effect to planned infrastructure by facilitating the procurement of the required electricity capacity. Since the promulgated IRP 2010–2030, the following capacity developments have taken place:

- A total 6 422 MW under the Renewable Energy Independent Power Producers Programme (REIPPP) has been procured, with 3 876 MW operational and made available to the grid;
- In addition, IPPs have commissioned 1 005 MW from two Open Cycle Gas Turbine (OCGT) peaking plants;
- Under the Eskom build programme, the following capacity has been commissioned: 1 332 MW of Ingula pumped storage, 1 588 MW of Medupi, 800 MW of Kusile and 100 MW of Sere Wind Farm; and
- In total, 18 000MW of new generation capacity has been committed to.

Besides capacity additions, a number of assumptions have changed since the promulgation of IRP 2010–2030. Key assumptions that changed include the electricity demand projection, Eskom’s existing plant performance, as well as new technology costs.

These changes necessitated the review and update of the IRP which resulted in the IRP 2019.

Other Applicable Environmental Legislation

A screening of relevant legislation and municipal requirements was undertaken to identify the key legal issues related to the Project. Additional legislation to be considered during the implementation of the Project is summarised in Table 0-2 below:

Table 0-2: Summary of Other Applicable Legislation

Legislation	Sections	Applicability
The Constitution (No. 108 of 1996)	Chapter 2	Bill of Rights
	Section 24	Environmental rights
	Section 25	Rights in property
	Section 32	This section provides that every person has the constitutional right of access to information held by the state, including for example a state department such as the DEA, and any information held by another person in so far as that information is required for the exercise or protection of any of their rights, including their environmental right.
	Section 33	The Constitution entitles everyone to administrative action that is lawful, reasonable and procedurally fair and if one’s rights have been adversely affected by administrative action one has the right to be given written reasons for the decision.
Environment Conservation Act (No. 73 of 1989) (ECA) and Regulations	Although the Environment Conservation Act has been substantially repealed by the NEMA and the NEM:WA, certain Regulations promulgated under the Act remain in effect. Of importance are the National Noise Control Regulations.	
Northern Cape Nature Conservation Act, Act No. 9 of 2009	This Act provides for the sustainable utilisation of wild animals, aquatic biota and plants; provides for the implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora; provides for offences and penalties for contravention of the Act; provides for the appointment of nature conservators to implement the provisions of the Act; and provides for the issuing of permits and other authorisations. Amongst other regulations, the following may apply to the current project: <ul style="list-style-type: none"> • Boundary fences may not be altered in such a way as to prevent wild animals from freely moving onto or off of a property; • Aquatic habitats may not be destroyed or damaged; • The owner of land upon which an invasive species is found (plant or animal) must take the necessary steps to eradicate or destroy such species; and • Permits must be obtained for indigenous vegetation disturbed within 100m from a public road The Act provides lists of protected species for the Province.	
National Environmental Management: Protected Areas Act (No. 57 of 2003) (NEM:PAA)	The NEM:PAA was signed into law on 18 February 2004, and came into operation on 01 November 2004. The aim of the Act is to provide for the protection and conservation of ecologically viable areas representative of South Africa’s biological diversity, natural landscapes and seascapes. The Act operates in conjunction with the NEM:BA.	

Legislation	Sections	Applicability
National Environmental Management: Biodiversity Act (No. 10 of 2004) (NEM:BA)	Sections 65-69	These sections deal with restricted activities involving alien species; restricted activities involving certain alien species totally prohibited; and duty of care relating to alien species.
	Sections 71 and 73	These sections deal with restricted activities involving listed invasive species and duty of care relating to listed invasive species.
	Alien and Invasive Species Regulations in terms of section 97 (1).	
	Chapter 2	Categories of listed invasive species.
Northern Cape Critical Biodiversity Areas (2016)	The Northern Cape Critical Biodiversity Area identifies biodiversity priority areas, called Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs), which, together with protected areas, are important for the persistence of a viable representative sample of all ecosystem types and species as well as the long-term ecological functioning of the landscape as a whole.	
	<p>The Northern Cape Critical Biodiversity Area (CBA) Map updates, revises and replaces all older systematic biodiversity plans and associated products for the province. These include the:</p> <ul style="list-style-type: none"> Namakwa District Biodiversity Sector Plan Cape Fine-Scale Plan (only the extent of the areas in the Northern Cape i.e. Bokkeveld and Nieuwoudtville) Richtersveld Municipality Biodiversity Assessment 	
Conservation of Agricultural Resources Act (No. 43 of 1983) (CARA) and Regulations	Sections 2, 5, 6	Implementation of control measures for soil conservation works as well as alien and invasive plant species in and outside of urban areas.
National Environmental Management: Air Quality Act (No. 39 of 2004) (NEM:AQA)	The provisions of this Act would only be applicable during the construction phase of the project	
	Section 32	Measures for the control of dust
	Section 34	Measures for the control of noise
	Section 35	Measures for the control of offensive odours
	Chapter 5	Licensing of listed activities
	Schedule 2	Ambient air quality standards
NEM:WA	Section 16	General duty in terms of waste management
	Section 17	Reduction, re-use, recycling and recovery of waste
	Section 20	No person may commence, undertake or conduct a waste management activity, except in accordance with: <ul style="list-style-type: none"> 1. the requirements or standards prescribed by said Act and Regulations; and 2. a waste management licence issued in respect of that activity, if a licence is required.
	Section 26	Prohibition of unauthorised disposal of waste
	Section 27	Prohibition of littering
	Occupational Health and Safety Act (No. 85 of 1993) (OHSA) and Regulations	General Administration Regulations GN R929 of June 2003
Section 8		General duties of employers to their employees.
Section 9		General duties of employers and self-employed persons to persons other than their employees.
Fencing Act (No. 31 of 1963)	Section 17	Any person erecting a boundary fence may clean any bush along the line of the fence up to 1.5 metres on each side thereof and remove any tree standing in the immediate line of the fence. However, this provision must be read in conjunction with the environmental legal provisions relevant to the protection of flora.
Hazardous Substances Act (No. 15 of 1973)	Provides for the definition, classification, use, operation, modification, disposal or dumping of hazardous substances.	
National Road Traffic Act (No. 93 of 1996) and Regulations	Section 54	Transportation of dangerous goods.

Legislation	Sections	Applicability
Spatial Planning and Land Use Management Act (No. 16 of 2013) (SPLUMA)	<ul style="list-style-type: none"> • Framework act for all spatial planning and land use management legislation. • Provide for a uniform, effective and comprehensive system of spatial planning and land use management for the Republic. • Ensure that the system of spatial planning and land use management promotes social and economic inclusion. • Provide for development principles and norms and standards. • Provide for the sustainable and efficient use of land. • Provide for cooperative government and intergovernmental relations amongst the national, provincial and local spheres of government. • Redress the imbalances of the past and to ensure that there is equity in the application of spatial development planning and land use management systems. 	
Land Survey Act (No. 8 of 1997)	To regulate the survey of land in South Africa.	

Policies and Guidelines

The BA process must consider the planning policies that govern the study area to ensure that the scale, density and nature of activities/developments are harmonious and in keeping with the sense of place and character of the area. Furthermore, relevant guidelines as applicable to the management of the BA process and to this application have also been taken into account. The proposed environmental and infrastructure modifications must be viewed in the context of the following planning policies and guidelines:

Policies

- Siyathemba Local Municipality Integrated Development Plan 2017-2022;
- Siyathemba Local Municipality Spatial Planning and Land Use Management Act (16/2013) (By-law);
- Pixley Ka Seme District Municipality Integrated Development Plan 2017 – 2022;
- Pixley Ka Seme District Municipality Spatial Development and Land Development Plan 2013 – 2018 (By-law);
- Public Participation in the EIA process, NEMA EIA Regulations (2014) as amended, Chapter 6;
- NEMA Waste Act: Waste Classification and Management Regulations (GNR 634), 2013, DEA, Pretoria;
- NEMA Waste Act: National Norms and Standards for the Storage of Waste (GNR 926 of 29 November 2013, DEA, Pretoria);
- SANS 1929: Ambient air quality – limits for common pollutants; and
- SANS 10103: The measurement and rating of environmental noise with respect to land use, health, annoyance and to speech communication.

Guidelines

- Integrated Environmental Management (IEM) Guideline Series (Series 2): Scoping in the EIA process (2002);
- IEM Guideline Series (Series 3): Stakeholder engagement (2002);
- IEM Guideline Series (Series 4): Specialist studies (2002);
- IEM Guideline Series (Series 5): Impact Significance (2002);
- IEM Guideline Series (Guideline 5): Companion to the EIA Regulations 2010 (October 2012);
- IEM Guideline Series (Series 7): Cumulative Effects Assessment (2002);
- IEM Guideline Series (Guideline 7): Public Participation in the EIA process (October 2012);
- IEM Guideline Series (Series 7): Alternatives in the EIA process (2002);
- IEM Guideline Series (Guideline 9): Draft guideline on need and desirability in terms of the EIA Regulations 2010 (October 2012);
- DEA (2017) Guideline on Need and Desirability, Department of Environmental Affairs (DEA) Pretoria, South Africa (2017);
- IEM Guideline Series (Series 12): Environmental Management Plans (EMP) (2002);

- IEM Guideline Series (Series 15): Environmental impact reporting (2002);
- Government Notice (GN) 320 (2020): Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of Sections 24(5)(A) And (H) And 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation; and
- GN 1150 (2020): Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of Sections 24(5)(A) And (H) And 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation.