

5.1 INTRODUCTION

This section provides an overview of legislation, policies, guidelines and information documents that have informed the scope and content of this report and the approach to the EIA process.

5.2 ENVIRONMENTAL AUTHORISATION LEGISLATIVE PROCESS

The Environmental Authorisation process in South Africa is governed by the National Environmental Management Act (No. 107 of 1998) (NEMA), as amended, and the Environmental Impact Assessment (EIA) Regulations of 2014 promulgated under NEMA. The relevance of this legislation is summarised below.

5.2.1 NEMA Environmental Authorisation

Chapter 5 of NEMA, as amended, outlines the general objectives and implementation of Integrated Environmental Management. This provides a framework for the integration of environmental issues into the planning, design, decision-making and implementation of plans and development proposals that are likely to have a detrimental effect on the environment. Whilst Section 23 sets out the basic objectives and principles of the IEM procedure, Section 24 sets out how these objectives and principles are to be accomplished.

Regulations governing the environmental authorisation process have been promulgated in terms of NEMA and include the following:

- Environmental Impact Assessment Regulations (GNR R982/2014);
- Environmental Impact Assessment Regulations Listing Notice 1 (GNR 983/2014);
- Environmental Impact Assessment Regulations Listing Notice 2 (GNR 984/2014); and
- Environmental Impact Assessment Regulations Listing Notice 3 (GNR 985/2014).

Activities that trigger GNR 983 and GNR 985 require a Basic Assessment Report (BAR) process to be undertaken, whereas activities identified in terms of GNR 984 will require a full Scoping and Environmental Impact Report (S&EIR) process. GNR 982 sets out the general procedure to follow when conducting either a BAR or S&EIR process.

Numerous trigger activities have been identified for this Project in terms of all the listing notices (refer to *Table 5.1*). In such instances where all the listing

notices are triggered, GNR 984 requirements will take precedent and the Project will be subject to a full S&EIR process prior to commencement of any of the associated activities.

The Project location falls within the Western Cape Province and the competent authority would therefore generally be the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP), however, the National Department of Environmental Affairs (DEA) has been identified as the competent authority because this power generation project could be considered of national interest and it could also have implications for other provinces if power is evacuated in future. ArcelorMittal Saldanha Steel will be required to obtain environmental authorisation from the DEA prior to commencement of any of these proposed activities.

Table 5.1 lists the permitting requirements for the Environmental Impact Assessment Regulations Listing Notices 1, 2, and 3 of 2014 from NEMA.

Table 5.1 Environmental Permit Requirements from NEMA Listing Notices

Permit	Listed Activity	Project Trigger
Basic Assessment EIA Regulations Listing Notice 1 of 2014 (GNR R983 of 2014)	11) The development of facilities or infrastructure for the transmission and distribution of electricity- (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts. (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.	The upgrade of existing 132 kV transmission lines currently supplying ArcelorMittal Saldanha Steel with electricity from Blouwater substation. The 400 kV line required for Phase 2 of the Project, to connect the power plant to Eskom's Aurora substation, will be permitted separately, based on discussions with Eskom.
Basic Assessment EIA Regulations Listing Notice 1 of 2014 (GNR R983 of 2014)	14) The development 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.	The development/construction of steel fuel tanks for the storage of up to 50 m³ of diesel for use during construction and operation activities. A maximum of 30 m³ of LPG (Propane) will be stored on site to fuel three generators during the operational phase. Waste (change-out) lube oil and hydraulic oil will be held temporarily in steel holding tanks (5 m³ each). The waste oil will be transported by tanker and disposed of by a registered waste handling and disposal contractor.
Basic Assessment EIA Regulations Listing Notice 1 of 2014 (GNR R983 of 2014)	15) The development of structures in the coastal public property where the development footprint is bigger than 50 square metres, excluding (i) the development of structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (ii) the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (iii) the development of temporary structures within the beach zone where such structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared; or (iv) activities listed in activity 14 in Listing Notice 2 of 2014, in which case that activity applies.	The development of the terrestrial natural gas pipeline within the coastal public property.

Permit	Listed Activity	Project Trigger
Basic Assessment EIA Regulations Listing Notice 1 of 2014 (GNR R983 of 2014)	24) The development of- (ii) a road with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;	Construction of onsite roads and the access off from the OP7644. Access roads and the onsite roads will vary between 8m and 12m wide.
Basic Assessment EIA Regulations Listing Notice 1 of 2014 (GNR R983 of 2014)	28) Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	Development of the CCGT Power Plant will be considered an industrial development with a footprint of approximately 45 ha. The development will occur on land previously used for agriculture (grazing).
Basic Assessment EIA Regulations Listing Notice 1 of 2014 (GNR R983 of 2014)	56) The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre- (i) where the existing reserve is wider than 13,5 meters; or (ii) where no reserve exists, where the existing road is wider than 8 metres; excluding where widening or lengthening occur inside urban areas.	For road safety considerations and in light of the increased traffic (particularly during construction phase) the provincial road OP7644 leading past the two power plant entrances will be widened from 11 m to a 20 m wide over-taking 4- lane section.
Full Scoping and EIR EIA Regulations Listing Notice 2 of 2014 (GNR 984 of 2014)	2) The development and related operation of facilities or infrastructure for the generation of electricity from a non-renewable resource where the electricity output is 20 megawatts or more.	The proposed CCGT Power Plant will consist of the construction and operation of an approximately 1507 MW gas-fired power plant. The power plant will be fuelled by natural gas.
Full Scoping and EIR	6) The development of facilities and infrastructure for an process or activity which requires a permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent,	Development of a 1507 MW gas-fired power plant which will require and Atmospheric Emission Licence (AEL) for the release of atmospheric emissions related to the use of natural gas in the power generation process. An application for an AEL will be submitted in the future in order to receive a provisional AEL prior to the commencement of commissioning and operations.

Permit	Listed Activity	Project Trigger
Full Scoping and EIR EIA Regulations Listing Notice 2 of 2014 (GNR 984 of 2014)	7) The development and related operation of facilities or infrastructure for the bulk transportation of dangerous goods- (i) in gas form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 700 tons per day; (ii) in liquid form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 50 cubic metres per day; or (iii) in solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity of more than 50 tons day.	Development and operation of natural gas pipelines (approximately 4600 m in length) from the shore (or border of Transnet's land) to the power plant site.
Full Scoping and EIR EIA Regulations Listing Notice 2 of 2014 (GNR 984 of 2014)	15) The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for- (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	Clearance of 45 ha of disturbed indigenous vegetation for the construction of the power plant and associated infrastructure and laydown areas.
Full Scoping and EIR EIA Regulations Listing Notice 2 of 2014 (GNR 984 of 2014)	28) Commencing of an activity, which requires an atmospheric emission license in terms of section 21 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), excluding - (i) activities which are identified and included in Listing Notice 1 of 2014; (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or (iii) the development of facilities or infrastructure for the treatment of effluent, wastewater or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or less.	The development of the 1507 MW CCGT gas-fired power plant and potentially the storage of LPG will require an Air Emission Licence (AEL) in terms of the National Environmental Management: Air Quality Act. The likely listed activities in terms of NEM: AQA are Liquid Fuel Combustion Installations' (Subcategory 1.2), 'Gas Combustion Installations' (Subcategory 1.4), as well as the storage and handling of petroleum products (Subcategory 2.4).
Basic Assessment EIA Regulations Listing Notice 3 of 2014 (GNR 985 of 2014)	2) The development of reservoirs for bulk water supply with a capacity of more than 250 cubic metres. (f) In Western Cape: i. All areas outside urban areas; or ii. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose, within urban areas.	Development of modular bulk water storage reservoirs with a capacity of 25,000 cubic metres. Five modules are envisaged for collection of rain water. No water supply from the local municipality is envisaged. Groundwater from surrounding farms will be used, in addition to rain water harvesting.

Permit	Listed Activity	Project Trigger
Basic Assessment EIA Regulations Listing Notice 3 of 2014 (GNR 985 of 2014)	4) The development of a road wider than 4 metres with a reserve less than 13, 5 metres. (f) In Western Cape: i. Areas outside urban areas; (aa) Areas containing indigenous vegetation; (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or ii. In urban areas: (cc) Areas zoned for conservation use; or (dd) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.	Upgrading of access road OP7644 to the site. Construction of onsite roads and the access off from the OP7644. Access roads and the onsite roads will vary between 8m and 12m wide.

The following listed activities have been removed subsequent to the Scoping Report submission. A revised application will be submitted to the DEA.

EIA Regulations Listing Notice 2 of 2014 (GNR 984 of 2014)

9) The development of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex.

This has been removed as the 400 kV transmission line to Aurora will be permitted separately based on discussions with Eskom.

EIA Regulations Listing Notice 3 of 2014 (GNR 985 of 2014)

12) The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.

(a) In Western Cape:

- i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;*
- ii. Within critical biodiversity areas identified in bioregional plans;*
- iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; or*
- iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.*

As confirmed by the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) in their comments on the draft Scoping Report the proposed development is not mapped as having any critically endangered or endangered ecosystems listed in terms of Section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004): National List of Ecosystems that are threatened and in need of protection (Government Gazette No. 34809 of 9 December 2011). As such this listed activity has been removed.

5.2.2 Consolidated Permitting Requirements

Due to nature of the Project, a suite of environmental legislation other than that derived from NEMA is also applicable. In order to meet the various legislative requirements, ERM has run a single integrated EIA process, which has met the requirements in terms of the following laws:

- National Environmental Management: Waste Act (No. 59 of 2008) (NEMWA);

- National Environmental Management: Biodiversity Act (No. 10 of 2004) (NEMBA);
- National Environmental Management: Air Quality Act (No. 39 of 2004) (NEMAQA);
- National Environmental Management: Integrated Coastal Management Act (No. 24 of 2008) (NEMICMA);
- National Water Act (No. 36 of 1998); and
- National Heritage Resources Act (No. 25 of 1999).

Details of the permitting requirements from these laws are provided in *Table 5.2*.

Table 5.2 Consolidated Permitting Requirements

Law	Requirements	Project Relevance	Competent Authority
National Environmental Waste Act (No. 59 of 2008)	Section 19 of NEMWA provides for the listing of waste management activities that have, or are likely to have a detrimental effect on the environment. In accordance with this, GN 921 of 29 November 2013 lists waste management activities for which a waste management licence (WML) is required in terms of Section 20 of the Act. Furthermore, it classifies each of the waste management activities into different categories, with more onerous provisions assigned for activities that are regarded as being more detrimental to the environment. In this regard, 'Category A' activities require a NEMA BAR process to be conducted prior to commencement. 'Category B' activities require a full S&EIR process to be conducted, while 'Category C' activities are wholly exempt from the WML permitting process, as long as they show compliance with a set of prescribed standards.	A Waste Management Licence (WML) is not expected to be applicable for this Project given the small quantities of waste generated, the fact that only temporary storage of general waste and hazardous waste is expected and the fact that no general or hazardous waste is expected to be treated on site.	The Provincial MEC is the competent authority for all applications involving general waste, while the National DEA administers applications involving hazardous waste.
National Environmental Management Biodiversity Act (10 of 2004)	Part 1 of Chapter 4 of NEMBA discusses the protection of threatened or protected ecosystems. In this section, the Minister or the provincial environmental MEC may publish a national or provincial list of ecosystems that are threatened and in need of protection. Subsequently, the Minister can identify by notice in the Gazette, any process or activity in a listed ecosystem as a 'threatening process'. Once so identified, the threatening process is regarded as an activity requiring an EIA to be carried out in terms of section 24(2) (b) of NEMA. Only a draft national list of threatened ecosystems has been published as of yet. As such, these provisions are not yet in effect and will not apply.	The proposed development is not mapped as having any critically endangered or endangered ecosystems listed in terms of Section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004): National List of Ecosystems that are threatened and in need of protection (Government Gazette No. 34809 of 9 December 2011).	Not applicable.

Law	Requirements	Project Relevance	Competent Authority
National Environmental Management Air Quality Act (No. 39 of 2004)	Chapter 5 of NEMAQA deals with the control and management of emissions relates to the listing of activities that are sources of emissions and the issuing of emission licences in respect of these activities. These activities are listed in terms of GN 893 of 22 November 2013 and are broken up into 10 categories and associated sub-categories, including 'Liquid Fuel Combustion Installations' (Subcategory 1.2), 'Gas Combustion Installations' (Subcategory 1.4), ' <u>Reciprocating Engines</u> ' (Subcategory 1.5) as well as the storage and handling of petroleum products (Subcategory 2.4).	An Air Emissions Licence (AEL) is required for the generation of more than 50 MW of power. Application for an AEL can be made during the EIA process and will be granted within 60 days of Environmental Authorisation. Information gathered during the EIA phase will be used in this application process.	The issuing of emission licences for 'power sector' projects is the responsibility of the National DEA.
National Environmental Management Integrated Coastal Management Act (No. 24 of 2008)	Any discharge of land-based effluent to the coastal environment from an activity triggering any of the Listing Notices in the Environmental Authorisation Regulations under the NEMA, is subject to the applicable environmental authorisation issued under the NEMA EA Regulations (2014) administered by the DEA and / or a Coastal Waters Discharge Permit (CWDP) or a General Authorisation (GA) in terms of Section 69 of the ICMA, unless the activity conforms to a standard as prescribed in section 24 of the NEMA and in terms of the ICMA. In addition to this, both the general authorisation and coastal waters discharge permit for the discharge of effluent into estuarine waters require the Minister to consult with, and issue the authorisation or permit in concurrence with the Minister responsible for water affairs [s. 69(2)].	No effluent discharge into the marine environment is planned for this development.	Not applicable

Law	Requirements	Project Relevance	Competent Authority
National Water Act (No. 36 of 1998)	Section 21 of NWA sets out general principles for regulating water use. Water use is defined broadly, 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 (refer to 'WULA Listed Activities' in permitting plan). In general a water use must be licensed unless it is listed in schedule I, as an existing lawful use, is permissible under a general authorisation (as listed in GNR 399), or if a responsible authority waives the need for a licence (Section 22).	A Water Use Licence is not anticipated to be required as the proposed Project is not planning to abstract water and will not affect any watercourse, wetland, pan or drainage line.	The Regional Department of Water and Sanitation (DWS) will be the competent authority to engage with on this application.
National Heritage Resources Act (No. 25 of 1999)	Section 38 (1) of the NHRA requires any person who intends to undertake a development which exceeds 5000 m² in extent or 300 m in length to notify the responsible heritage resources authority, viz. the South African Heritage Resources Agency (SAHRA) or the relevant provincial heritage agency. The applicable authority will in turn indicate whether or not a full Heritage Impact Assessment (HIA) would need to be undertaken.	Before undertaking the development the South African Heritage Resources Agency (SAHRA)/Heritage Western Cape (HWC) has to be informed of the planned construction activities (via submission of a Notice of Intent to Develop (NID)), as the development exceeds standard SAHRA thresholds. A NID was submitted to HWC on 25 April 2016 and a response received on 6 May 2016 indicating that a Heritage Impact Assessment (including an assessment of both archaeological and paleontological resources) would be required for the Project. A Heritage Impact Assessment has been undertaken and is attached in <i>Annex D</i> of this report. This will be submitted to HWC with the Draft EIA Report.	Heritage Western Cape

5.3.1

National Legislation

National legislation relevant for the Project (in addition to those presented in preceding sections) is listed below.

- **Constitution of the Republic of South Africa (108 of 1996):** South African law, including environmental law, is underpinned by the Constitution (No. 108 of 1996) which promotes specific moral, social and political values. The Constitution is the highest law of the land, and all South African law has to follow in the spirit of the Constitution. The Constitution commits to the establishment of a society based on democratic values, social justice and fundamental human rights through improving the quality of life of all citizens and realising the potential of each person. Sections 7, 8 and 24 of the Bill of Rights give constitutional force to sustainable development and provide that all people in South Africa have the right to a clean and healthy environment. These sections oblige government to pass reasonable legislation to protect the environment, prevent pollution and ecological degradation, and secure sustainable development.
- **National Environmental Management: Protected Areas Act (57 of 2003):** There are no protected areas directly impacted by the proposed Project.
- **Occupational Health and Safety Act (73 of 1989):** In terms of the Major Hazard Installation (MHI) Regulations (GNR.692 of 30 July 2001), enacted under Section 43 of the Occupational Health and Safety Act (73 of 1989), the proposed pipelines are considered an MHI. In terms of these regulations, the Project will be required to notify the chief inspector, the provincial director and the relevant local government, in writing, prior to erecting, altering or modifying the proposed facility. Following this, a risk assessment will need to be undertaken by a certified entity in order to quantify the risks that the proposed MHI facility poses to employees and the general public. This process will be undertaken outside of the environmental assessment process.
- **Gas Act (48 of 2001):** The Gas Act seeks to promote the efficient, effective, sustainable and orderly development and operation of gas facilities in South Africa. Section 15 of the Act sets out activities that require licencing, issued by the Gas Regulator, prior to commencement. Specific activities that require licencing include the construction and operation of gas transmission, storage, and distribution facilities. The requirements of the Gas Act will be met outside of the environmental assessment process.
- **Noise Control Regulations under the Environmental Conservation Act (73 of 1989):** The control of noise in the Western Cape is legislated in the form of the Noise Control Regulations of the Environment Conservation

Act No. 73 of 1989 applicable to the Province of the Western Cape, Provincial Notice 627 of 20 November 1998.

- **Hazardous Substances Act (56 of 1973):** License required for the use, handling and storage of Group I, II and II Hazardous Substances. The requirements of the Gas Act will be met outside of the environmental assessment process.
- **Explosives Act (15 of 2003):** This would only be applicable to the proposed Project should blasting be required for construction activities. This is not currently anticipated.
- **Conservation of Agricultural Resources Act (43 of 1983):** The Conservation of Agricultural Resources Act, as amended defines different categories of alien plants and those listed under Category 1 are prohibited and must be controlled while those listed under Category 2 must be grown within a demarcated area under permit. This would have relevance if farming activities were to change dramatically due to the proposed Project or if alien species were used for re-vegetation of areas, neither of which is intended for this Project.
- **Electricity Regulation Act (4 of 2006):** The requirements of this Act will be met outside of the environmental assessment process.
- **Subdivision of Agricultural Land Act (70 of 1970):** This Act is applicable to the rezoning application for the land parcel identified for this proposed Project. The requirements of this Act will be met outside of the environmental assessment process.
- **Western Cape Nature and Environmental Conservation Ordinance 19 of 1974 as amended by the Western Cape Nature Conservation Laws Amendment.**
- **National Ports Act (12 of 2005):** This Act provides for the establishment of the National Ports Authority and the Ports Regulator. In terms of the Act, all ports fall under the jurisdiction of the National Ports Authority, which must own, manage, control and administer ports to ensure their efficient and economic functioning. Part of this control includes the exercise of licensing and controlling functions in respect of port services and port facilities. The proposed site is located within the Saldanha 'back of port' area and as such will need to adhere to the controlling Ports Authority and any orders or notices it may be issued in this respect. The specific Ports Authority requirements will be met outside of the environmental assessment process.

Applicable provisions from these laws and regulations will be and have been incorporated into the design and implementation of the Project.

Noise Guidelines

South African national standards (SANS) relevant to noise from mines, industry and roads are:

- SANS 10103:2008. 'The measurement and rating of environmental noise with respect to annoyance and to speech communication';
- SANS 10210:2004. 'Calculating and predicting road traffic noise';
- SANS 10328:2008. 'Methods for environmental noise impact assessments'.
- SANS 10357:2004. 'The calculation of sound propagation by the Concave method'.