

North Block Complex Glisa and Paardeplaats Sections

Draft Section 27 Motivation

Belfast, Mpumalanga Province




9 October 2019

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North Block Complex (Pty) Ltd

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QUALITY MANAGEMENT

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9 October 2019

Date

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1 BACKGROUND

Universal Coal Energy Holdings SA (UCEHSA), a subsidiary of Universal Coal PLC, purchased North Block Complex (Pty) Ltd (NBC) from Exxaro Coal Mpumalanga (Pty) Ltd in November 2018. NBC consists of three mining sections namely Eerstelingsfontein, Glisa and Paardeplaats. The current Integrated Water Use License (IWUL) for the Glisa section (IWUL No. 04/B11B/ABCGIJ/2508) will expire on 3 October 2020, whilst the Paardeplaats section approved IWUL (IWUL No. 06/B41A/CGIJ/8880) will expire on 21 February 2039. The water uses authorised at the Glisa section include Section 21(a), 21(b), 21(c), 21(f), 21(g), 21(i) and 21(j) water uses, whilst the water uses authorised at the Paardeplaats section include 21(c), 21(g), 21(i) and 21(j) water uses.

The Glisa and Paardeplaats sections adjoin each other. Mining at the Glisa section is approaching end of life in 2020, whilst mining at the Paardeplaats section will be initiated in 2020. NBC's intention is to make use of the existing coal Crushing, Screening and Washing Plant (CSWP) and associated infrastructure at the Glisa section for the life of operation of the Paardeplaats section. In so doing, NBC will minimise the need to construct much new infrastructure for the Paardeplaats section, thereby containing the disturbed areas of NBC in the current Glisa section and reducing the environmental footprint at Paardeplaats section.

NBC therefore wish to apply for an IWUL for the Glisa section in order to continue to utilise infrastructure at Glisa. Most of the current water uses at Glisa will be modified to accommodate Paardeplaats mining and require re-licensing, that is CSWP, Water Treatment Plant (WTP) and associated infrastructure. At the same time NBC wishes to include some new water uses in order to rectify historical water management issues at the Glisa section.

Mining at the Glisa section started in 1890 using underground mining methods. From 2006 onwards, opencast mining has been undertaken at the Glisa section in order to reclaim underground pillars. Processing of mined coal takes place at the Glisa section at a CSWP. All coal mined is supplied to the local market (Eskom). Mining at the Glisa section is approaching end of life in 2020.

The Paardeplaats section is a Greenfields project adjoining the Glisa section. It is anticipated that mining at the Paardeplaats section will commence in 2020 through the opencast mining method. NBCs intention is to make use of the existing coal CSWP and associated infrastructure at the Glisa section for the life of operation of the Paardeplaats

section. In so doing, NBC will minimise the need to construct much new infrastructure for the Paardeplaats section, thereby containing the disturbed areas of NBC in the current Glisa section.

The coal mining, processing and water treatment activities at the Glisa section trigger water uses in terms of the National Water Act, 1998 (Act No. 36 of 1998) (NWA), namely Section 21(a), 21(b), 21(c), 21(f), 21(g), 21(i) and 21(j) water uses. In order to continue with the operational activities that take place in the Glisa section in support of the Paardeplaats mining activities, these water uses need to be re-licensed.

2 MOTIVATION IN TERMS OF SECTION 27(1) OF THE NWA

2.1 Section 27(1)(A): Existing Lawful Water Uses

An Existing Lawful Water Use (ELWU) is a water use which has taken place at any time during a period of two years immediately before the date of commencement of the National Water Act, 1998 (Act No. 36 of 1998) (NWA) or which has been declared an existing lawful water use in terms of Section 33 of the NWA and which was authorised by or under any law which was in force immediately before the date of commencement of the NWA.

Table 2.1 presents the ELWUs which apply to the North Block Complex (Pty) Ltd Mine (NBC Mine).

Table 2.1: ELWUs for NBC Mine.

WATER USE	DESCRIPTION	FARM AND FARM PORTION
21(a)	Abstraction of groundwater via a borehole for drinking water	Paardeplaats 380 JT, Ptn 2
21(c)	Diversion of Rietvallei Spruit	Paardeplaats 380 JT, Ptn 5
21(d)	Eucalyptus Plantations	Paardeplaats 380 JT, Ptn 1, 2, 3, 5 & 24
21(i)	Diversion of Rietvallei Spruit	Paardeplaats 380 JT, Ptn 5

2.2 Section 27(1)(B): Need to Redress Past Racial and Gender Discrimination

The NBC Mine is in the Nkangala District Municipality (DM) and the Emakhazeni Local Municipality (LM), near to the town of Belfast (**Figure 2.1**). According to the Emakhazeni LM 2018/2019 Integrated Development Plan (IDP), the overall unemployment rate within the LM has decreased from 25.9% in 2011 to 22.8%. The IDP further notes that unemployment opportunities are unfavorable in the LM for females (29.2%) compared to males (19.9%). However, it is alarming that the youth unemployment rate stands at 34.2% with the females being the most affected (Emakhazeni Local Municipality, 2018). It is noted that the largest employing industries in the Emakhazeni LM are trade (including tourism), community/government services, and agriculture, whilst high labour intensity is further noted in the construction and mining sectors.

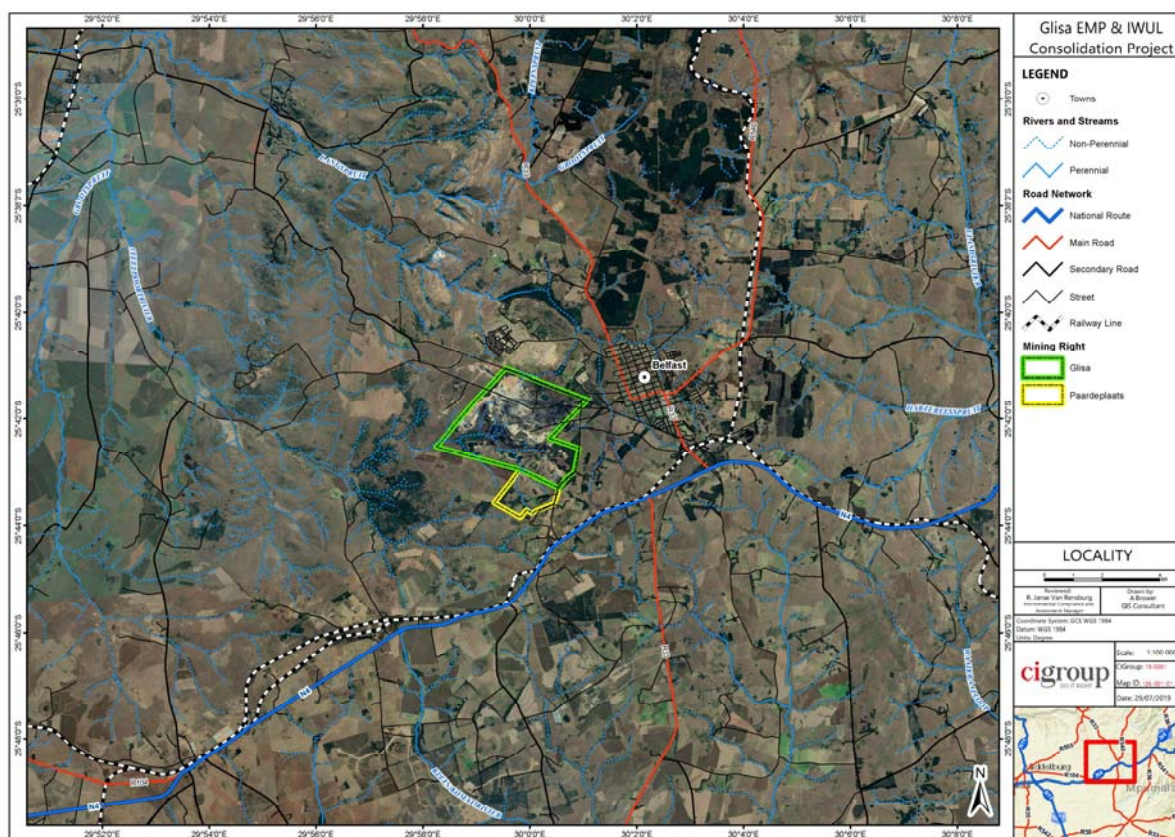


Figure 2.1: Location of the NBC Mine within the Nkangala DM and Emahazeni LM.

Based on the above statistics and the national and provincial directives on job creation, the Emakhazeni LM uses all capital projects, infrastructure projects, environmental and social projects for massive job creation within the LM. Alternative employment

opportunities are also welcomed in the LM, and mining could be considered such an opportunity.

NBC Mine is guided by their approved Social and Labour Plan (SLP) which has been compiled in terms of Regulation 46 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA).

2.2.1 Procurement Plan

NBC recognises the need to participate meaningfully in the broad-based socio-economic transformation of South Africa. Accordingly, the NBC Mine supports local and Black Economic Empowerment (BEE) companies and local suppliers will be used where possible to increase the spend in the local community of Belfast.

Approximately 20 local businesses provide services to NBC, totalling an approximate value of R 5.8 million. These local businesses include:

- Domestic and industrial cleaning services;
- Catering services;
- Road maintenance services (2 providers);
- Civil services (2 providers);
- Medical care;
- Transport – logistics;
- Transport – employees;
- Invader species management services;
- Water laboratory services;
- Coal sampling services;
- Sewer cleaning/maintenance services;
- Coal processing and screening; and
- Laundry services.

2.2.2 Employment Equity

NBCs aligns employment equity with the Employment Equity Act, 1998 (Act 55 of 1998, as amended). Employment equity is a vital tool for achieving the Mining Charter employment equity targets. Employment equity is designed with the following goals:

- No unfair discriminatory practices, implicit or explicit, will exist anywhere in the mine;

- Sexual and racial harassment will not be tolerated;
- No barriers are to exist in the workplace that unfairly restrict employment and promotion opportunities of any person;
- An enhanced representation of currently underrepresented categories of people, with the emphasis on persons from designated groups, at all levels in the Mine, focused on the long term objective of reflecting the demographics of the South African population; and
- Creation of an organisation culture in which diversity is encouraged and valued while focusing on shared values in order to develop team spirit, promote mutual understanding, optimise potential and achieve goals in serving the community.

2.2.3 Employee Profile

NBC have 98 permanent employees at NBC Mine as presented in **Table 2.2**. No new jobs will be created at NBC as the same personnel will be utilised for the new mining areas. NBC recruit staff from the local area, as well as support local Small, Medium and Micro Enterprises (SMMEs).

Table 2.2: Permanent Employees at NBC Mine.

EQUITY/STATUS		GENDER			
TOTAL NUMBER		TOTAL NUMBER		TOTAL NUMBER	
Black	80	Male	63	Female	17
Coloured	1	Male	1	Female	0
Indian	1	Male	1	Female	0
White	7	Male	3	Female	4
Youth/Learners	9	Male	4	Female	5

All mining activities at the NBC Paardeplaats section will be contracted out. It is envisaged that the workforce of the contractor will be made up of 239 workers of which 68 will come from eMakhazeni 129 from the rest of Nkangala and 42 from the rest of South Africa (EIMS, 2015). Mining activities will be contracted out with these jobs being created at the companies contracted to undertake the mining activities. Although mining activity will be contracted out NBC management will be responsible for support services and line management of the Paardeplaats operation.

2.2.4 Local Economic Development

Informed by both the BEE Code of Good Practice as well as Mining Charter, NBC has awarded the local Exempt Micro Enterprises (EMEs) and Qualifying Small Enterprise (QSE) business opportunities. Moreover, such businesses are emerging. All the businesses will run for a period of 3 years. XX presents the differentiations between the Enterprise and Supplier Development initiatives as follows:

- Laundry and Canteen: – both will fall under the category of Supplier Development; and
- Road Maintenance: falls under Enterprise Development

Table 2.3: Enterprise Supplier Development.

ENTERPRISE DEVELOPMENT	SUPPLIER DEVELOPMENT
NPAT: Target (NPAT 1%)	NPAT: Target (NPAT 2%)
Subminimum of Target: 5 Points	Subminimum of Target: 10 points
Support to a: QSE/EME	Support to a: QSE/EME
51% Black Owned	51% Black Owned
30% Black Women Owned	30% Black Women Owned
Not a supplier	Current supplier

2.2.5 Corporate Social Responsibility

In line with the Mining Charter, NBC has invested in the host community as follows:

- **Emakhazeni Saturday School Initiative:** Approximately R2.5 million which has seen Grade 12 results in the District improving exponentially. The foregoing has also boosted Skills Development for teachers who were also included in the training for new didactic methods. Children in the area have benefited from this initiative.
- **Coal Yard:** Approximately R1 million was invested in a coal yard to ensure that the local community had easy access to coal which was also sold to them at a price below the market price.
- **Provision of Grass Bales to the Community:** In order to compensate for potential grazing land loss as a result of mining activities, NBC provide grass bales to the community for cattle feeding.

2.2.6 Impact of the Operation on the Area

The expansion of the mining operation in Belfast will have both positive and negative impacts on the Emakhazeni LM area and on the Nkangala district in general. On the positive side several jobs will be created both directly and indirectly by the NBC Mine and

through procurement and its fiscal contributions, the NBC Mine will also contribute to the economy and social conditions of the area. On the more negative side the creation of job opportunities is often accompanied by social pathologies as job seekers flock to the area in search of work and various informal service providers follow in the hope of financial gain. These issues will be addressed through the implementation of the SLP for NBC.

2.3 Section 27(1)(C): Efficient and Beneficial use of Water in the Public Interest

Water uses authorised under the Water Act, 1956 (Act No. 54 of 1956) (WA) required merely that water be used beneficially. Water use was considered beneficial if the applicant was going to make a profit. In the NWA however, the concept of “public interest” is more clearly defined. The Act requires an Applicant to engage in a public participation process to provide accurate and comprehensive information about the proposed development, to gauge the public opinion and help ensure that requested water use is granted with the knowledge and general consent of interested and affected parties.

A comprehensive consultation was previously undertaken for both the Glisa and Paardeplaats sections to ensure that the proposed water uses are in the public interest. Additional consultation will be undertaken in support of this IWUL application and as part of an Environmental Authorisation (EA) process to be undertaken in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA).

South Africa is endowed with an estimated 30 billion ton of coal representing 3.5% of the world’s coal resources. The country produces 3.3% of the world’s annual coal production, and .83% of the coal produced in the country is mined in Mpumalanga Province with the residual produced in the Limpopo, KwaZulu-Natal, and Free State Provinces. Coal reserves in the Mpumalanga Province are dwindling and as a result coal mining is shifting to the Waterberg region of the Limpopo province.

South Africa is a net exporter of coal and exports amount to 6% of total global exports, ranking South Africa as the 6th largest coal-exporting nation in the world. In 2016, South Africa produced 253.1 million tons (Mt) of coal of which 181.4 Mt were sold internally with a value of R 61.5 billion, while 68.9 Mt, worth R 50.5 billion, were exported (Chamber of Mines, 2018). The Richards Bay Coal Terminal (RBCT) serves as the primary coal export port and has a dedicated coal railway.

Coal provides 82% of the power generated by the state-owned power utility Eskom, which currently operates 16 power stations and is in the process of building two more that will come on stream by 2021.

Sasol mines some 40 Mt of coal a year gasification and conversion into liquid fuels.

The reliance of South Africa on coal as a local source for energy provision and as a significant contributor to economic growth confirms its importance and triggers the on-going demand for coal. NBC Mine provide coal locally to Eskom which indirectly allows for the continued operation of various business associated with energy provision thereby contributing positively to the economy. Furthermore, the public benefits indirectly from coal through the provision and usage of fuel and electricity.

The goal of NBC is to minimise water consumption, impacts to the environment, running costs and to achieve environmental legal compliance whilst maintaining adequate water supply as not to compromise the mining operations and supply of coal to industry. The following objectives are therefore set for the NBC Mine:

- Water conservation by minimising water use. Water is reused wherever possible;
- Prevention of water pollution where possible;
- Minimise impacts on water resources and receiving water environment;
- Achieve and maintain legal compliance;
- Continuous mining operation to supply market need; and
- Production of quality coal for industry.

The use of water for mining and related activities will enable the NBC Mine to operate, resulting in socio-economic gains for the region. The granting of an IWUL will also allow for the input from the DHSWS with regards to the proposed water uses to take place at the mine and the regulation of the water uses through the review of the licence conditions regularly and the results of the monitoring programme.

The NBC Mine provides both local and national economic benefits as well as socio-economic benefits. The following benefits are anticipated during the life of mine:

- Direct economic benefits will be derived from wages, taxes and profits.
- Indirect economic benefits will be derived from the procurement of goods and services and the increased spending power of employees.
- Local and regional employment opportunities during the operational phase.
- Increased business opportunities for local entrepreneurs through the supply of goods and services to the NBC Mine.

- A positive macro-economic impact at a local, regional and provincial level due to operational expenditure, taxes and royalties.
- Economic and social benefits associated with Corporate Social Responsibility (CSR) and Local Economic Development (LED) initiatives by the NBC Mine.

As previously indicated, unemployment in the Emakhazeni LM is an ongoing problem. The IDP identifies targeting more labour-absorbing activities across the main economic sectors, including mining, as a job driver for the Emakhazeni LM. The Emakhazeni LM would like to achieve an additional 140 000 additional jobs in Mining by 2020 (Emakhazeni Local Municipality, 2018). The continuation of the NBC Mine will have a continued positive impact on the socio-economic conditions of the local job-sending communities.

2.4 Section 27(1)(D): Socio-Economic Impacts of the Proposed Operation

The proposed NBC Mine falls within the Steelpoort River sub-basin which, in turn, forms part of the Olifants River basin. The portion of the Mpumalanga Province in the Steelpoort basin has a significant economic base through the mining and agricultural sectors that stimulate the region's economy.

The NBC Mine has an existing agreement to supply Eskom with coal for their coal fired power stations. The mining of coal at the NBC Mine is required by NBC in order to meet its contractual obligations to Eskom, which are to provide steady and secure coal to its power stations.

The NBC Mine will provide the following opportunities:

- Long-term retention of NBC Mine staff;
- On-going economic input into the area;
- Maintenance of the regional socio-economic benefit; and
- Secure on-going local supply of coal to Eskom which will ensure supply of electricity to South Africa.

Should DWS decide not to grant the IWUL for the water uses proposed for the NBC Mine, mining would not be able to take place and none of the above-mentioned benefits will be realised.

2.5 Section 27(1)(E): Catchment Management Strategy

Catchment Management Agencies (CMAs) are recognised in the NWA as operational institutions to actively support the implementation of integrated catchment (watershed) management policies and strategies at a local level. The agencies are tasked with ensuring that the nation's water resources are protected, used, developed, conserved, managed and controlled in an equitable manner. The CMA is responsible inter alia for:

- a) Developing and implementing a catchment management strategy that reflects the needs and concerns of all role-players; and
- b) Co-ordinating the activities of water users and water.

The NBC Mine is in the Olifants River Catchment (Primary Catchment B). One quaternary catchment is affected, namely B41A which is drained by the Steelpoort River.

The Olifants River Basin is one of nine (9) catchment-based water management areas in the country to be managed by a CMA. The Olifants River Basin Catchment Management Agency (CMA) is in the process of being established. The CMA will be responsible for coordinating water-related activities in the basin and providing an effective mechanism for stakeholder participation in water management. Once established, it will take over direct water resource management responsibilities in the basin currently being performed by the Department of Human Settlements, Water and Sanitation (DHSWS).

The water requirements in the Olifants Water Management Area (WMA) has increased substantially over the last number of years due to increases in a range of activities including power generation, mining, the steel industry, urban development and agriculture (Beumer et al., 2011). Consequently, the Olifants River catchment is currently one of South Africa's most stressed catchments in terms of both water quantity and water quality. As such priority attention will continue to be needed to contain pollution from mines, also after the discontinuation of operations. In response to the concerning situation over the Olifants catchment, a draft Reconciliation Strategy for the Olifants River Water Supply System has been developed and is currently being finalised (Beumer et al., 2011). The Olifants WMA requires a reconciliation strategy aimed at alleviating the current water deficits and at ensuring a sustainable water supply for the foreseeable future.

2.6 Section 27(1)(F): Effects on Water Resources and Other Users

Water users in the vicinity of the NBC Mine are expected to be impacted on by the mining operations. Impacts on the surface water and groundwater resources is possible. The predominant land uses in the surrounding areas is mining and agricultural, with many of the nearby landowners utilising water for agricultural use.

Potential impacts on surface water and groundwater resources at the Glisa section may include the following:

- Decline in water quality;
- Loss of wetland habitat;
- Alteration of natural drainage patterns;
- Alteration of groundwater levels;
- Wetland dewatering;
- Decline in water quality: seepage;
- Decline in water quality: sedimentation and turbidity;
- Surface water contamination;
- Contamination of groundwater;
- Decline in water quality: AMD and decant;
- Water quality deterioration due to AMD;
- Increased surface runoff;
- Decanting of contaminated groundwater into surface water; and
- Long term quality of mine seepage.

2.7 Section 27(1)(G): Class and Resource Objectives

The water resource class and quality objectives are determined by the DHSWS and are set out in the Reserve. At present, no reserve determination has been completed for surface water in the catchment B41A. A reserve determination for the water uses being applied for in this IWUL is the responsibility of DHSWS.

The proposed classes and resource quality objectives for catchments of the Olifants River Catchment were issued on 22 April 2016 (GN 466), in terms Section 13(4) of the NWA. The Resource Quality Objectives (RQOs), as outlined in the gazette, were applicable from the date of approval by the Minister. As part of these classes, Integrated Units of Analysis (IUAs) were classified in terms of the following:

- Class I (Minimally used):

- Water resource is one which is minimally used, and the overall condition of that water resource is minimally altered from its pre-development condition.
- Class II (Moderately used):
 - Water resource is one which is moderately used, and the overall condition of that water resource is moderately altered from its pre-development condition.
- Class III (Heavily used):
 - Water resource is one which is heavily used, and the overall condition of that water resource is significantly altered from its pre-development condition.

The watercourses that are applicable to the NBC Mine form part of the Steelpoort River Catchment. The proposed classification of the Steelpoort River catchment is Class III, requiring sustainable minimal protection and indicating high utilisation.

A preliminary groundwater reserve determination (RD) was done in November 2007 within the B41A quaternary catchment (EIMS, 2015). According to the RD, 12.4% of the groundwater recharge of 50 million cubic meters per annum (m^3/a) is required to remain within B41A. This amount accounts for the Ecological Reserve (12%) and Basic Human Needs Reserve (BHN) (0.4%). The water quality component of the reserve is presented in **Table 2.4** and **Table 2.5**.

Table 2.4: B41A Groundwater Reserve Determination – Quantity Component

DESCRIPTION	
Area of catchment (km^2)	764
Recharge (Mm^3/a) [*]	50
Population	22 220
Groundwater component of baseflow (Mm^3/a)	10
Baseflow required by IFR ^{**}	6
BHN Reserve (Mm^3/a)	0.2
Reserve as a % of recharge	12.4

^{*}Recharge is calculated as 9.1% of MAP of 715mm

^{**}The volume of baseflow required by the instream flow requirements set for the surface water component of the reserve.

Table 2.5: B41A Groundwater Reserve Determination – Quality Component

	AMBIENT GROUNDWATER QUALITY	BHN	GROUNDWATER QUALITY RESERVE
Electrical Conductivity (mS/m)	32	150	35
Sodium (mg/l)	19	<200	21
Magnesium (mg/l)	10	<100	11
Calcium (mg/l)	28	<150	31
Chloride (mg/l)	25	<200	28
Sulphate (mg/l)	8	<400	9
Nitrate (mg/l)	6	>20	7
Fluoride (mg/l)	0.2	<1	0.2
pH	7.11	5.0 – 9.5	5.0 – 9.5

2.8 Section 27(1)(H): Investments by the Water User

The existing NBC Mine provides employment to 98 people (**Table 2.2**). As an existing mine, a large amount of capital expenditure has been required. NBC has invested in various specialist studies to determine the extent of the impact of the operation and receive recommendations with regards to management and mitigation of those impacts. NBC continues to spend money on the implementation of various management measures to control the environmental and socio-economic impact of the mine. From November 2018, when NBC was established, a total of approximately R1.7 million was spent on specialist assessments, ground and surface water monitoring and civil engineering designs for water management infrastructure.

2.9 Section 27(1)(I): Strategic Importance of Water Use

The strategic importance of the water uses relates to the strategic importance of coal in South Africa. An IWUL is required for the NBC Mine to operate legally and therefore the proposed water uses are of strategic importance if NBC are to meet Eskom's coal requirements.

Coal is one of the five minerals selected by the Department of Mineral Resources and Energy (DMRE) for local beneficiation as it is considered critical to the on-going development of South Africa (DMR, 2011). The driving force behind the emphasis of the importance of coal, coal mining and local beneficiation is primarily due to concerns voiced by Eskom over the future security of supply in both the medium and long term of the mineral to its coal fired electricity generating power stations.

Eskom's existing coal fired power stations are critical in terms of electricity production and in meeting the growing energy requirements of South Africa as a whole. Coal and coal supply are consequently seen as critical and its importance is detailed in the Eskom Transmission Ten Year Development Plan 2011-2020 (Eskom, 2011). Without steady, secure supply of the mineral, it is unlikely that Eskom will be able to meet the energy demands of the country.

Furthermore, Eskom's concern over coal supply to its power stations has been heightened due to competition from Indian buyers for the low-grade coal required by the Indian Sub-Continents electricity generating power stations. Until recently there has been no viable export market for such low gr Eskom Transmission Ten Year Development Plan 2011-2020 ade coal.

As a result, coal mining, beneficiation and supply is of paramount importance to Eskom for continued electricity generation in order to meet the rising energy demands of the country in the short, medium and long term.

The NBC Mine has an existing agreement to supply Eskom with coal for their coal fired power stations. The mining of coal at the NBC Mine is required by NBC in order to meet its contractual obligations to Eskom, which are to provide steady and secure coal to its power stations.

It is anticipated that the Paardeplaats Section will target a Run of Mine (RoM) production rate of between 4.2 – 4.4 million tons per annum (mtpa) and the available reserve is approximately 76.65 million ton, equating to to approximately 20 years' worth of coal production and 20 years' worth of secure supply to Eskom (EIMS, 2015).

The continuation of the Glisa section in support of the Paardeplaats section is therefore of critical importance to NBC as it will allow the applicant to continue producing a secure, steady supply of coal to Eskom in order to meet its contractual obligations in the medium to long term. The secure, steady supply of coal to Eskom also aligns directly with the goals of the energy producer.

2.10 Section 27(1)(J): Quality of Water Resource

2.10.1 Reserve – Local Requirements

The proposed water uses at Glisa Section will have an impact on surface water and groundwater in terms of quality. Thus, water quality in the water resources at the Glisa

section, which contribute to downstream water resources, should meet certain requirements. These requirements are set out in the reserve which must be undertaken by the DHSWS with respect to this application.

2.10.2 *International Obligations*

The Olifants WMA falls within the Limpopo River Basin, which is shared by South Africa, Botswana, Zimbabwe and Mozambique. The Olifants River flows directly from South Africa in Mozambique, where it joins the Limpopo River. Developments in South Africa can directly impact upon Mozambique. International cooperation with respect to the use and management of the watercourses in the Limpopo River Basin is overseen by the Limpopo Permanent Technical Committee with membership by South Africa, Botswana, Zimbabwe and Mozambique. In 2003, an agreement was reached between these countries on the establishment of the Limpopo Watercourse Commission (LIMCOM). The LIMCOM agreement was ratified in 2011. NBC take cognisance of the water quality objectives that may be set out for the catchment in the future and the adoption of a greater regional perspective in dealing with issues relating to water quality and quantity as a result of their operations.

2.11 Section 27(1) (K): The Probable Duration of any Undertaking for which Water Use is to be Authorised

It is estimated that the water uses at Glisa section will continue for the next fifteen (15) years, to align with the Paardeplaats sections mining schedule. It is recommended that these water uses are thus authorised for fifteen (15) years, with a five (5) year review period.

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