

Basic Environmental Impact Assessment and Water Use Licence Application Canyon Resources (Pty) Ltd

**Background Information Document** 

# Project background

Canyon Resources (Pty) Ltd (Canyon) proposes to develop and operate a coal loading and transportation facility within the existing Bronkhorstspruit Rail Siding in the Gauteng Province. The proposed facility will be used to receive and dispatch coal from the Khanye Colliery, located 6 km East of the siding, for approximately 17 years. The coal product will be transported by means of the existing road network to the proposed coal siding.

#### **Basic Impact Assessment**

In terms of the National Environmental Management Act (No. 107 of 1998), activities that are listed in regulations published under NEMA may not be undertaken without an Environmental Authorisation (EA). Activities listed in GNR 983 and GNR 895 require a Basic Impact Assessment to be conducted prior to commencement and activities listed in GNR 984 require a full Environmental Impact Assessment (EIA) and Scoping prior to commencement. The proposed development will trigger the following activities listed in GNR 983 and GNR 985. A Basic Impact Assessment (BA) must be conducted in order to obtain an EA from the Gauteng Department of Agriculture and Rural Development (GDARD) for the proposed development.

Activity	Description
GNR 985 Listing notice 1 Activity 19	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from- (i) a watercourse;
GNR 985 Listing notice 1 Activity 24	The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre- ( <i>i</i> ) where the existing reserve is wider than 13,5 meters; or ( <i>ii</i> ) where no reserve exists, where the existing road is wider than 8 metres; excluding where widening or lengthening occur inside urban areas.
Listing 3 Activity 4	The development of a road wider than 4 metres with a reserve less than 13,5 metres. (c) In Gauteng: iv. Sites identified as Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans; v. Sites identified within threatened ecosystems listed interms of the National Environmental Management Act: Biodiversity Act (Act No. 10 of 2004)

Activity	Description
Listing 3 12	<ul> <li>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:</li> <li>(a) In Eastern Cape, Free State, Gauteng, Limpopo, North West and Western Cape provinces: <ol> <li>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;</li> <li>Within critical biodiversity areas identified in bioregional . plans;</li> </ol> </li> </ul>
Listing 3 14	The development of- (i) canals exceeding 10 square metres in size ; (iv) dams, where the dam, including infrastructure and water surface area exceeds 10 square metres in size; (v) weirs, where the weir, including infrastructure and water surface area exceeds 10 square metres in size; (vi) bulk storm water outlet structures exceeding 10 square metres in size; (x) buildings exceeding 10 square metres in size; (xi) infrastructure or structures with a physical footprint of 10 square metres or more;
	<ul> <li>where such development occurs-</li> <li>(a) within a watercourse;</li> <li>(b) in front of a development setback line; or</li> <li>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</li> </ul>
	<ul> <li>b) In Gauteng</li> <li>iv. Sites identified as Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans; -</li> <li>v. Sites identified within threatened ecosystems listed in terms of the National Environmental Management Act: Biodiversity Act (Act No. 10 of 2004);</li> </ul>

# Project background - continue

#### Water Use Licence Application

A Water Use Licence (WUL) must be obtained for activities listed in Section 21 of the National Water Act (No. 36 of 1998) (NWA) requires). The following water uses will be undertaken as part of the proposed development project and will be applied for in accordance with NWA Section 21:

Section 21 Water Use in the NWA	Proposed activities triggering water use
Section 21 (a) – Taking water from a watercourse	Abstraction of water from boreholes for potable use
Section 21 (c) – Impeding or diverting the flow of water in a watercourse	Location of infrastructure within 500 m from a wetland. These include: • Pollution Control Dams (PCDs); • Offices and Buildings; • Berms and Trenches; • Powerlines
Section 21 (g) – Disposing of waste in a manner which may detrimentally impact on a water resource	<ul> <li>Coal Product stockpile;</li> <li>Dust suppression; and</li> <li>Pollution Control Dam (PCD)</li> </ul>
Section 21 (i) – Altering the bed, banks, course or characteristics of a watercourse	Location of infrastructure such as the diversion canal in a water course

Therefore, a WUL will have to be obtained from the Department of Water and Sanitation (DWS) prior to the commencement of the proposed development. The WUL application process will be conducted in terms of Section 41 of the NWA.

# Purpose of this document

This Background Information Document (BID) provides a summary of the information about the proposed Bronkhorstspruit coal siding development, and elaborates on the details of the legal process that will be followed in order to apply for an EA and WUL for the proposed development.

The BID is intended as a public document, available to stakeholders who wish to register as an Interested and/or Affected Party (I&AP) in order to partake in the BA and WUL processes for the proposed project.

In addition to supplying information about the project and the BA and WUL processes, this BID will also provide I&APs with the opportunity to:

- · Register as an I≈
- · Raise issues of concern or provide suggestions;
- Contribute local knowledge;
- · Comment on the BA and WUL process; and
- Inform any other person / organization that they feel should be informed about the project

# Site location and background

Canyon proposes to develop and operate a coal loading and transportation facility within the existing Bronkhorstspruit Rail Siding in the Gauteng Province. The proposed facility will be used to receive and dispatch coal from the Khanye Colliery, located 6 km East of the siding, for approximately 17 years. A BA must be conducted in order to obtain an EA for the proposed project. Moreover, a WUL must be obtained for the proposed water use activities that will be undertaken as part of the development.

The site is located approximately 1km North of Bronkhorstspruit in the Gauteng Province on the following properties:

- Portion 0, 2, 3 and 4 of Farm Die Schlosberg 505 JR
- Portion 1 and 3 of Farm Carverdale 535 JR
- Portion 2 and 209 of the farm Roodepoort 504 JR
- Portion 13, 24, 25, 64, 65, 66 and 98 of farm Hondsrivier 508 JR



### The following infrastructure currently exists at the station:

- · Railway tracks;
- · Locomotives and wagons;
- Overhead traction equipment (OHTE);
- Concrete loading area;
- · Access roads; and
- Supportive buildings.

Canyon proposes to convert the current siding and install the following infrastructure:

Rail operations

TFR Rail Operations prescribes specifically that the following two criteria will have to be adhered to after/during construction of the new siding facility:

- 1. The siding must accommodate a 100 truck train.
- Shunting to and from the Transnet Freight and Rail (TFR) Main Line will not be allowed. The placing of wagons by the TFR locomotives must only incorporate one shunt.

The southern track of the proposed loading area can accommodate 60 wagons. The northern track can accommodate 50 wagons. Therefore the siding has the capacity to ensure the above requirements will be adhered to

### Coal siding and stockpile area

Existing tracks will be upgraded to TFR specifications for the loading of coal product. No additional tracks will be constructed during this process. The coal stockpiling area will be designed to accommodate a maximum 12 000 tons of coal product. To prevent any contamination of groundwater, an appropriate barrier will be installed at the stockpile area and runoff will be diverted to a silt trap and pollution control dam (PCD).

The proposed loading area where the coal will be stockpiled is 21 m wide and the remaining area for coal stockpiling is therefore 9m wide, assuming that the coal will not be stockpiled higher than 2m. The volume of coal that the loading area can accommodate is less than 12 000 tons.

### • Gravel haul roads

Access roads and internal gravel haul roads will be upgraded and constructed for the movement of material to and from the coal loading facility.

• Pollution Control Dam (PCD)

To ensure that all potential contaminated runoff is collected and contained, Canyon Service proposes to construct a PCD. The PCD will be designed to accommodate a 1 in 50 year flood event.

### Stormwater management system

A stormwater management system for the management of stormwater and contaminated runoff around the coal stockpile and siding will be constructed. Surface water from the stockpile will be collected in concrete lined drains located within the stockpile area. The contaminated water diverted to the lined drains will pass through a silt trap located at the inlet of the PCD.

During the planning phase, it was found that the existing Stormwater infrastructure will not be able to accommodate a 1 in 50 year flood event. It was therefore decided to investigate alternatives to manage water runoff from such a flood event. The following options have been considered and will be further investigated and included in the EIA process:

- 1. The first option is to establish a cut of channel (approximately 1km in length) upstream (North) of the siding to ensure that uncontaminated stormwater flows along the northern boundary of the existing mill.
- 2. The second option is that the storm water is channelled along the northern edge of the railway siding between the railway siding and the flour mill in a concrete channel
- 3. The third option is to construct a small attenuation dam upstream of a storm water channel that runs along the northern edge of the railway siding. The dam would attenuate the inflow flood peak. The storm water is also channelled along the northern edge of the railway siding between the railway siding and the flour mill in a concrete channel.
- Loading area

BA: Basic Impact AssessmentBID: Background Information DocumentDWS: Department of Water and SanitationEA: Environmental Authorisation

EIA: Environmental Impact AssessmentGDARD: Gauteng Department of Agriculture and Rural DevelopmentI&AP: Interested and Affected PartyTFR: Transnet Freight and Rail

The BA and WUL application process	How can you be involved?
Submit application to GDARD for the BA	If you would like to participate in the BA and WUL application processes, we request that you register with us using the contact details below. Registration should reach us within 30 days of this notification.
Notification to I&APs (public participation is on-going)	It is a requirement of Sections 40 and 41 of Regulation 982 of the NEMA for all I&APs that wish to comment on the proposed project to register with the EIA consultants. Please feel free to complete and return the attached registration sheet or contact us on the details below.
Draft BA and WUL documents submitted for comments	You are requested to encourage other I&APs, whom you think may be interested in participating in the BA process, to contact us and register.
Submit final BA report and WUL documents for decision	

#### Zantow Environmental Consulting Services

<u>Contact person</u>: Karien Zantow Email: <u>info@zantow.co.za</u> Cell: 083 393 3897 Fax: 016 932 4976 PO Box 3858, Vanderbijlpark, 1911

# BASIC IMPACT ASSESSMENT AND WATER USE LICENCE APPLICATION FOR THE PROPOSED DEVELOPMENT AND OPERATION OF THE BRONKHORSTSPRUIT COAL SIDING

PLEASE COMPLETE AND RETURN WITHIN 30 DAYS BY POST, FAX OR EMAIL TO Karien Zantow PHONE: 083 393 3897 E-MAIL: info@zantow.co.za	: PO Box 3858, Vanderbijlpark, 1911 <b>FAX:</b> 016-932 4976		
Name:			
Organisation:			
Postal address:			
Tel:	_Fax:		
Email:			
Please register me as an interested or affected party so I may receive further information and notifications during the Basic Assessment Process. (Please circle applicable )			
Yes No			

I would like to receive my notifications by (Please circle applicable)

Fax / Post / Email

Any Co	Any Comments / Concerns would you like to raise at this stage of the project? (Please use additional pages, if required):					