

EIA PROCESS AND MINING RIGHT APPLICATION FOR CANYON RESOURCES (PTY) LTD

BIRMINGHAM PROJECT, MPUMALANGA PROVINCE

BACKGROUND INFORMATION DOCUMENT (BID) AND INVITATION TO COMMENT

June 2020

PURPOSE OF THIS DOCUMENT

The purpose of this document is to provide all interested and affected parties (I&APs) with information about the proposed Birmingham Project for Canyon Resources (Pty) Ltd. In addition, the document also aims to:

- Introduce and explain the Environmental Authorisation Application (Scoping and EIA) process, including the public participation process (PPP) that will be followed;
- Invite all I&APs to comment on the proposed project by raising issues of concern and/or suggestions for enhanced benefits/alternatives on any aspect related to the proposed development.

To register as an I&AP on the project please contact the following person(s):

- Mr. DuToit Wilken and/or Ms. Sonja van de Giessen
- Elemental Sustainability (Pty) Ltd.
- 084 588 2322 / 083 3884633 (Tel)
- dutoit@elemental-s.co.za and / or sonja@elemental-s.co.za

Any comments received would be forwarded to Elemental-S to be addressed.

INTRODUCTION AND BACKGROUND

Canyon Resources (Pty) Ltd. (Canyon) is in the process of applying, in terms of the Mineral and Petroleum Resources Development Act 2002 (Act No. 28 of 2002), and the Environmental Impact Assessment (EIA) Regulations (GNR 324, 325, 326 and 327 of 2017), under the National Environmental Management Act (Act No. 107 of 1998), as amended, and the National Environmental Waste Management Act (Act 56 Of 2008) for a Mining Right and Environmental Authorisation, including a waste licence, to open an underground coal mine on the remaining extent and portion 1, 3, 4, 7, 8 on the farm Boschmansfontein 182 IS, remaining extent and portions 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 15, 16, 17, 18 of the farm Boschmanskraal 184 IS, the remaining extent and portions 1 and 2 of the farm Bloemfontein 196 IS and portions 1, 2, 3, 4 and 5 of the farm Birmingham 197 IS.

Elemental Sustainability (Pty) Ltd (Elemental) has been appointed by the Applicant as the Environmental Assessment Practitioner ("EAP") to manage the application processes for the Environmental Authorisation, Water Use License and Waste Management Licence which together, would enable the Applicant to implement its Mining Right.

The proposed coal mining operation requires a Mining Right in terms of Section 22 of the Mineral and Petroleum Resources Development Act (Act No.28 of 2002) (MPRDA) and Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) for the listed activities that fall under NEMA's EIA Regulations 2014, as amended in April 2017, (Listing Notices GNR 324, 325 and 327) regulated by the DMR.

Notice is also hereby given in terms of Section 40 of the National Water Act, 1998 (Act No. 36 of 1998), that Canyon Coal (Pty) Ltd. proposes to lodge an application for various water uses as listed in terms of Section 21 (NWA) for the Birmingham Project.

LOCATION

The Birmingham Project lies approximately 6km north-west of Hendrina, Mpumalanga. The project is located in the Steve Tshwete local municipality and the Nkangala District Municipality. The central co-ordinates for the proposed Birmingham Project are approximately: 26°07'10.60"S and 29°40'13.75"E. The proposed mining right area is presented below.

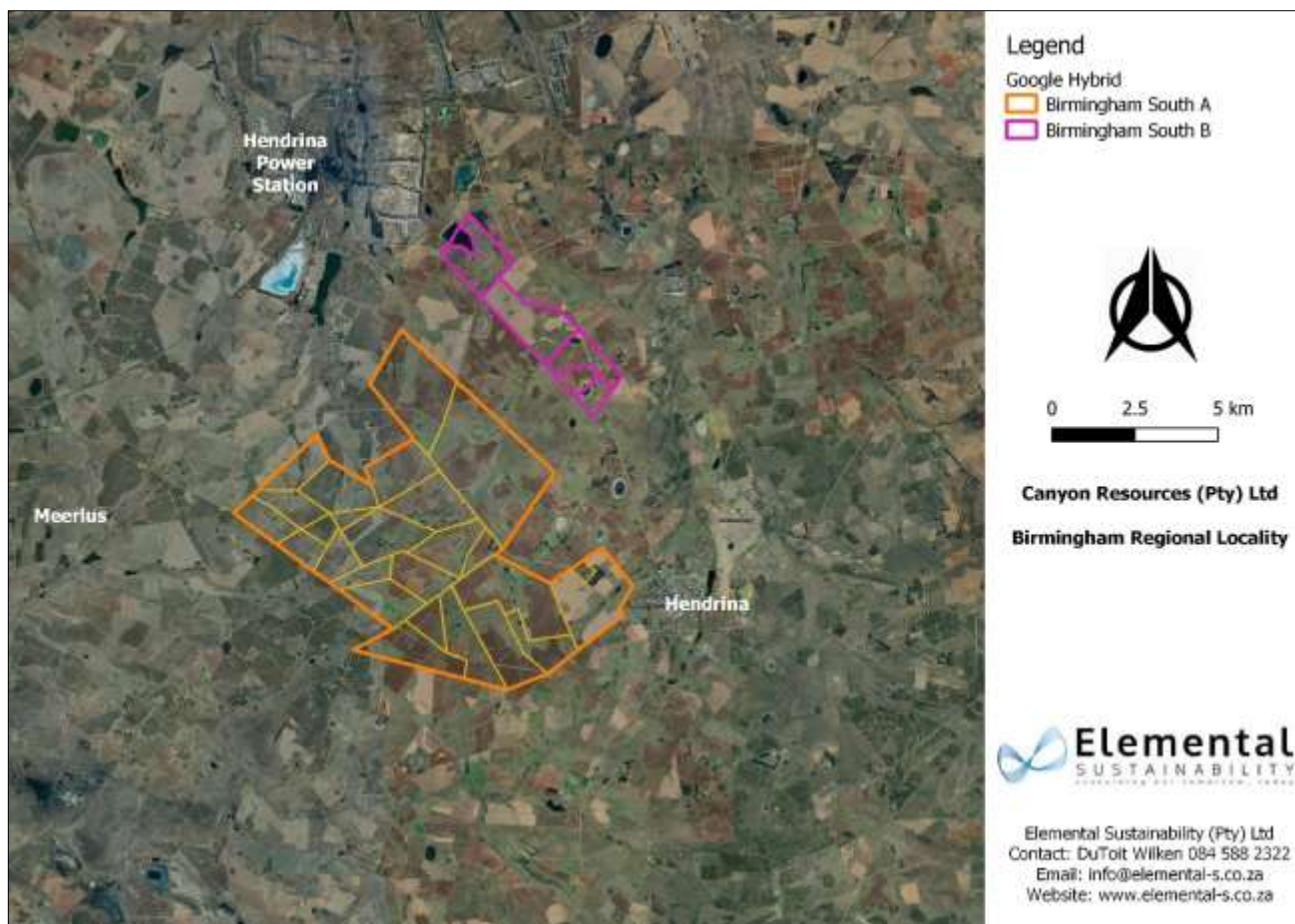


Figure 1: Locality Map

DESCRIPTION OF THE PROPOSED PROJECT

Infrastructure planned will include (but is not limited to) ventilation shafts, a powerline and substation, access roads / haul roads, Workshops and office, weighbridge, pollution control dam and stormwater management facilities, a sewage management system, a conveyor belt system (include Portions 5 and 11 of Boschmansfontein 182 IS and Re of Boschmansfontein 561 IS), an explosive magazine, a discard dump and various stockpiles.

The underground working will be accessed through two shafts. The underground mining operations will be conducted by a contractor. The underground mining method to be undertaken at Birmingham is bord and pillar mining with continuous miners (CM) and shuttle cars, supported by roof bolters for roof support.

The underground bord and pillar mining is based on the following factors:

- The planned production rate of 1.8 Mtpa; and
- Underground bord and pillar mining utilising a continuous miner with shuttle cars is a well-proven and flexible mining system, with acceptable production rates, operating and capital costs, and safe operational standards.

The mined coal from the underground workings will be transported via conveyer belts and the haul roads and stored on the Run of Mine (RoM) stockpile area. The coal will be fed into a crushing and washing plant with a conveyor after which the coal product will be temporarily stored at the product stockpile area before being transported to the newly proposed siding for distribution or directly via truck to the relevant markets. A temporary low grade stockpile will be constructed to store discard before being rewashed.

PROCESS – ACTIVITIES TRIGGERED

The proposed Birmingham Project triggers the following activities in terms of the NEMA 2014 EIA Regulations (as amended) from Listing Notice 1, 2 and Listing Notice 3:

Listing Notice 1 (GNR 327):

- Listing Notice 1 – Activity 9
- *The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water.*

Mine support infrastructure will include pipelines for potable water, storm water and dewatering of the open pits and underground mine workings.

- Listing Notice 1 – Activity 10
- *The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes.*
- Mine support infrastructure may include pipelines for transportation of sewage and for water from pollution control dams.
- Listing Notice 1 – Activity 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; or (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.*
- Substation and power transmission.
- Listing Notice 1 – Activity 13
- *The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014.*
- Water supply and storage (potable & process)
- Listing Notice 1 – Activity 22
- *The decommissioning of any activity requiring –*
 - (i) a closure certificate in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002); or (ii) a prospecting right, mining right, mining permit, production right or exploration right, where the throughput of the activity has reduced by 90% or more over a period of 5 years excluding where the competent authority has in writing agreed that such reduction in throughput does not constitute closure; but excluding the decommissioning of an activity relating to the secondary processing of a –*
 - (a) mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource; or*
 - (b) petroleum resource, including the refining of gas, beneficiation, oil or petroleum products; – in which case activity 31 in this Notice applies.*
- Rehabilitation, including closing of shafts.
- Listing Notice 1 – Activity 24
- *The development of a road— (i) for which an environmental authorization was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or (ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres.*
- Access and hauling along roads.
- Listing Notice 1 – Activity 25
- *The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of more than 2 000 cubic metres but less than 15 000 cubic metres.*
- Ablutions & change house with sewage treatment plants.
- Listing Notice 1 – Activity 28
- *Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes 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; or*
 - (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*
- Mining Infrastructure (including offices, workshops and related infrastructure).
- Listing Notice 1 – Activity 30
- *Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).*
- Mining Infrastructure (including offices, workshops and related infrastructure).

Listing Notice 2 (GNR 325):

- Listing Notice 2 – Activity 4
- *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 more than 500 cubic metres.*
- Fuel Storage
- Listing Notice 2 – Activity 6
- *The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, Pollution or effluent.*
- Permits and Licences
- Listing Notice 2 – Activity 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.*
- Topsoil & subsoil stripping & stockpiling into berms
- Listing Notice 2 – Activity 17
- *Any activity including the operation of that activity which requires a mining right as contemplated in section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including—*
 - (a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource [,]; or*

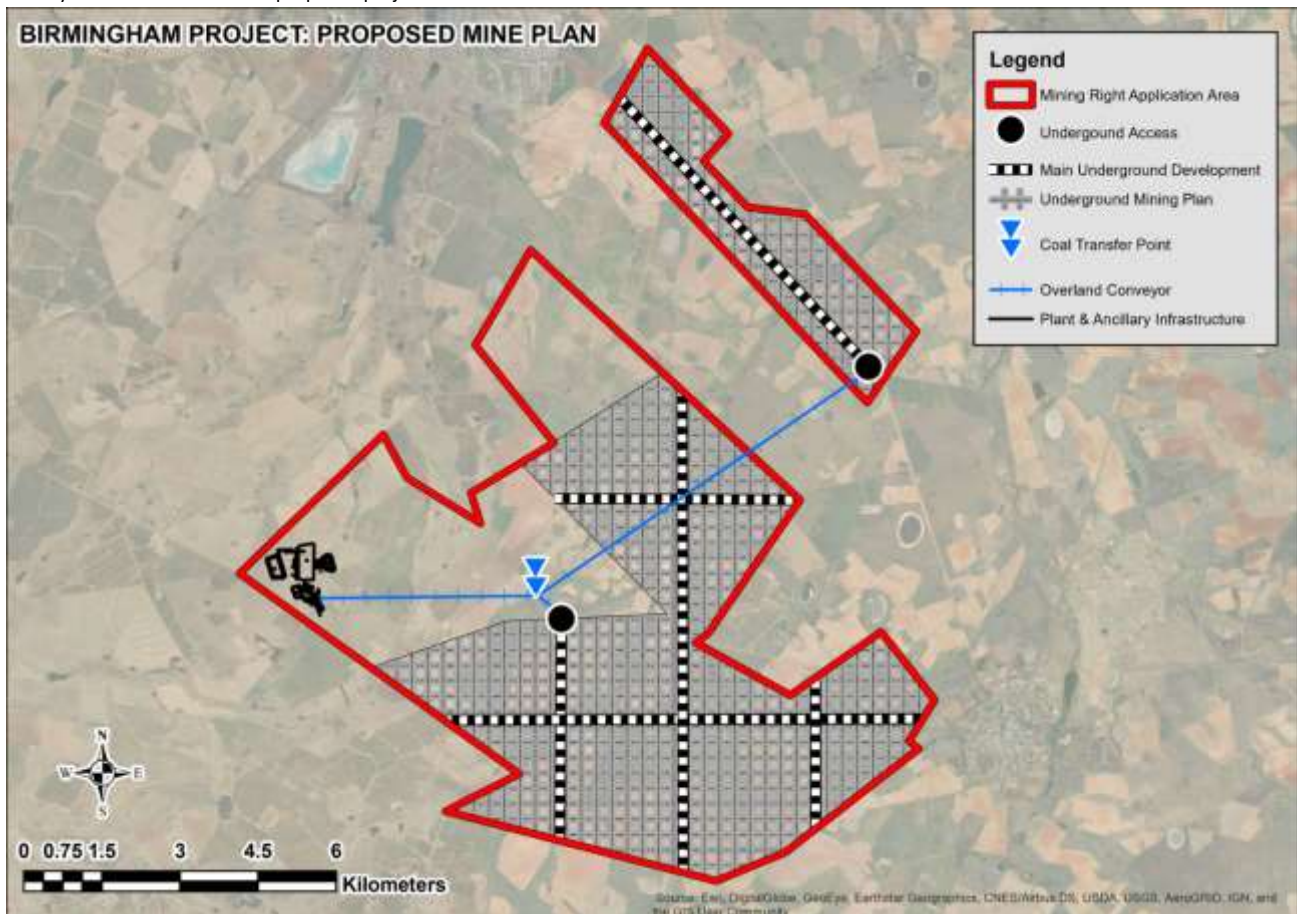
- (b) [including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)] the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing; but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies. Mining Right required for extraction of coal by underground mining including Crushing and Screening, and any other extraction and / or primary processing of a mineral.

Listing Notice 3 (GNR 324):

- Listing Notice 3 – Activity 4
- The development of a road wider than 4 meters with a reserve less than 13.5 meters
- **f. Mpumalanga**
- i. Outside urban areas: (aa) A protected area identified in terms of NEMPAA, excluding disturbed areas; (bb) National Protected Area Expansion Strategy Focus areas; (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (dd) Sites or areas identified in terms of an international convention; (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (ff) Core areas in biosphere reserves; or (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas, where such areas comprise indigenous vegetation; or Road development in Mpumalanga within sensitive areas.
- Listing Notice 3 - Activity 10
The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres. (i) outside urban areas (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans (hh) Areas within a watercourse or wetland, or within 100 metres of a watercourse or wetland.
Possible clearance of indigenous vegetation associated with the ventilation shafts or other sensitive features of the vegetation.

CONCEPTUAL LAYOUT AND DESIGN ENVISAGED

The layout associated with the proposed project is illustrated below.



PRELIMINARY ISSUES FOR INVESTIGATION

The following potential impacts are anticipated and will be assessed further during the EIAR process:

- Potential to alter the topography
- Loss of soil characteristics - erosion and compaction
- Contamination of soil
- Potential for alien invasive establishment
- Loss of biodiversity (terrestrial and aquatic)
- Impacts on nearby wetlands
- Reduced flow to downstream water catchment
- Potential pollution to water resources (surface and groundwater)
- Air quality (emissions)
- Increased noise levels
- Negative visual views
- Damage to property/infrastructure
- Potential damage to heritage sites (grave and/or archaeological artefacts)
- Positive and negative socio-economic impact
- Influx of job seekers to the area
- Increased traffic

SPECIALIST INVESTIGATIONS

Several specialist investigations will be conducted to assess the impacts associated with the project, these preliminary include:

- Biodiversity Assessment;
- Heritage Assessment;
- Socio-Economic Impact Assessment;
- Geotechnical Assessment;
- Soil, Land Capability and Agricultural Potential Assessment;
- Geohydrological Assessment;
- Hydropedological Assessment;
- Surface Water Assessment and Water Balance;
- Wetland Assessment;
- Noise Impacts Assessment;
- Visual Impact Assessment;
- Blasting and Vibration Impact Assessment;
- Traffic Impact Assessment;
- Topographic Assessment;
- Stormwater Management Infrastructure and engineering designs; and
- Closure Cost Assessment.

LEGAL REQUIREMENTS

Prior to the granting of Environmental Authorisation for the proposed project, a Scoping process and an Environmental Impact Assessment (EIA) (including an Environmental Management Programme) process must be undertaken in terms of the National Environmental Management Act (NEMA) (No. 107 of 1998), as activities which require authorisation are listed in the EIA Regulations, 2017 (Government Notice Regulation (GNR) 327, R326 and 325). A waste management licence in terms of the NEM:WA will be undertaken as part of the process.

In addition to this, a Water Use Licence in terms of the National Water Act, 36 of 1998 is required and will be undertaken in accordance with Regulations Regarding the Procedural Requirements for Water Use Licence Applications WULA's (GNR 267 of 2017). The water uses that are likely to be triggered include the following:

- 21(a): *Taking water from a water resource;*
- 21(b): *Storing water;*
- 21(c): *Impeding or diverting the flow of water in a watercourse;*
- 21(g): *Disposing of waste in a manner which may detrimentally impact on a water resource;*
- 21(i): *Altering the bed, banks, course or characteristics of a watercourse;*

- 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

The intent to mine requires the following applications and subsequent approvals prior to commencement:

Environmental Authorisation (NEMA and EIA Regulations) namely:

Legislation	Listed activities	Authorisation required and key process elements	Competent Authority
NEMA and the EIA Regulations, 2014, as amended in 2017.	Listing Notice 1 - Activities: 9, 10, 11, 13, 22, 24, 25, 28 and 30.; Listing Notice 2 - Activities: 4, 6, 15 and 17 Listing Notice 3 - Activities 4 and 10	Environmental Authorisation: application for environmental authorisation (including a Waste Licence); a Scoping (please note that the Scoping Report has already been approved by the competent authority) & EIA including an EMPr and a public participation process.	DMRE – Mpumalanga Province
NEM:WA and the Waste Management Activities thereunder, as amended in 2015	GN 633 Activities: 7, 11 and 13 GN 632 (2015)		
National Water Act, 1998 (Act No. 36 of 1998)	Section 21 water uses: Section 21 a, b, c, g, i and j	Water use license application and public participation process	DHSWS – Mpumalanga Province

To this effect, an environmental application process will be followed by means of EIA/EMPR and WULA. The public will be advised of further opportunities for public participation, including the availability of the both the Draft Scoping Report and the Environmental Impact Assessment Report for a 30-day review period respectively.

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS AND WATER USE LICENCE APPLICATION

An EIA/EMPR process typically has two phases as illustrated by the figure below.

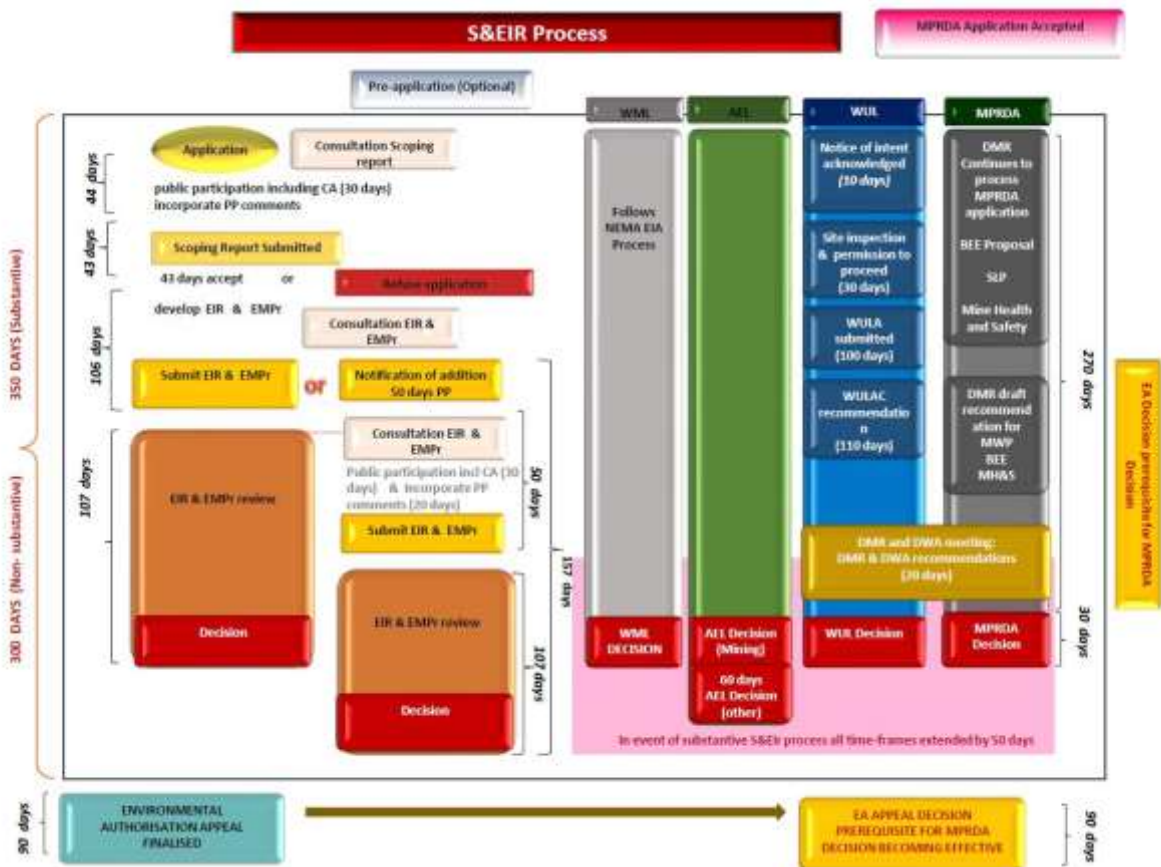


Figure 3: EIA/EMPR flow diagram

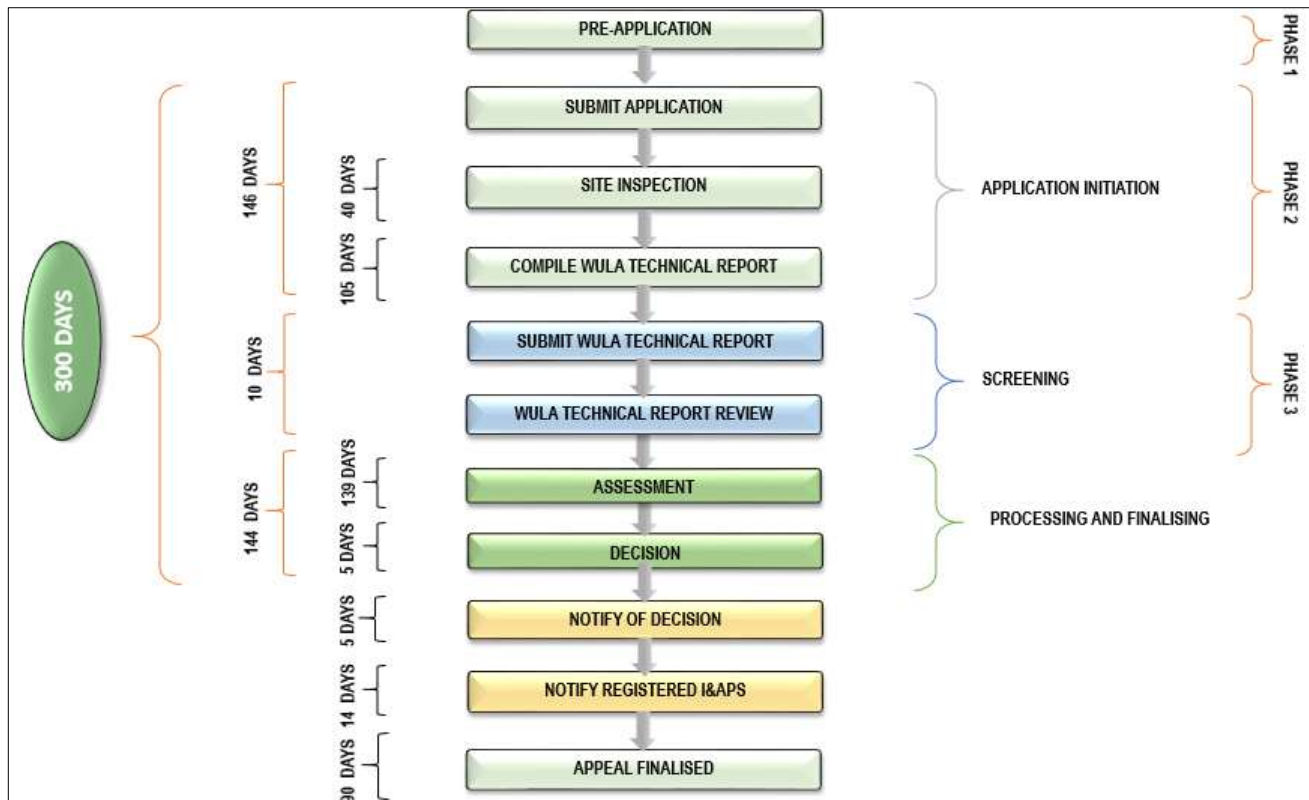


Figure 4: Water Use Licence flow diagram

HOW CAN I GET INVOLVED?

Please send Elemental Sustainability your comments/views so that these can be addressed during the environmental authorisation/WULA process. Once you register (see attached registration form), you will be informed of the availability of the reports (the Scoping Report and the Environmental Impact Assessment Report).

PARTIES INVOLVED IN THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

I&APs

- Land owners, Surrounding landowners, land users, adjacent landowners and communities;
- Non-governmental organisations and associations; and
- Parastatals

COMMENTING AUTHORITIES

- South Africa Heritage Resource Agency (SAHRA);
- Department of Roads and Transport;
- Mpumalanga Economic Development & Tourism which provides oversight role on the work of three agencies which are: Mpumalanga Economic Growth Agency (MEGA), Mpumalanga Economic Regulator (MER) and Mpumalanga Tourism and Parks Agency (MTPA).
- Mpumalanga Department: Agriculture, Rural Development, Land and Environmental Affairs; and
- Department of Agriculture Forestry and Fisheries.

DECISION MAKING AUTHORITIES

- Department of Mineral Resources and Energy (DMRE); and
- Department of Human Settlements, Water and Sanitation (DHSWS).

LOCAL AUTHORITIES / PARTIES

- Department of Environmental Affairs and Forestry;
- Mpumalanga Agriculture, Land Reform and Rural Development;
- Mpumalanga Department of Economic Development and Tourism;
- Mpumalanga Parks and Tourism Agency;
- Mpumalanga Public Works, Roads and Transport;
- Mpumalanga Department of Human Settlements;
- Department of Social Development – Provincial;
- South African National Roads Agency;
- Provincial Heritage Authority;
- Eskom;
- Steve Tshwete Local Municipality;
- Nkangala District Municipality; and
- Ward Councillors

Please let us know if there are any additional parties that should be involved.

Interested and Affected Parties (I&APs) are invited to register and provide written comments to:

- Mr. DuToit Wilken and/or Ms. Sonja van de Giessen
- Elemental Sustainability (Pty) Ltd
- 084 588 2322 / 083 388 4633(Tel)
- dutoit@elemental-s.co.za; and or sonja@elemental-s.co.za

I&APs should refer to the relevant reference number(s), and must provide their comments together with their name, contact details (preferred method of notification, e.g. e-mail address or fax number) and an indication of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below.

CANYON RESOURCES (PTY) LTD

BACKGROUND INFORMATION DOCUMENT FOR THE BIRMINGHAM PROJECT

REGISTRATION AND RESPONSE FORM FOR INTERESTED AND AFFECTED PARTIES

DATE		TIME	
PARTICULARS OF THE INTERESTED AND AFFECTED PARTY			
NAME			
POSTAL ADDRESS			
		POSTAL CODE	
STREET ADDRESS			
		POSTAL CODE	
WORK/ DAY TELEPHONE NUMBER		WORK/ DAY FAX NUMBER	
CELL PHONE NUMBER		E-MAIL ADDRESS	
PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT			
PLEASE WRITE YOUR COMMENTS AND QUESTIONS HERE			
Please return completed forms to:			
<ul style="list-style-type: none">• Mr. DuToit Wilken and/or Ms. Sonja van de Giessen• Elemental Sustainability (Pty) Ltd• 084 588 2322 /083 3884633 (Tel) and/or 087 238 7092 (Fax)• dutoit@elemental-s.co.za; and or sonja@elemental-s.co.za			